

IGT's Response to the

West Virginia Lottery

RFP FOR A

Turnkey iLottery System

SOLICITATION #: CRFP 0705 LOT2300000001



Confidential Information Statement

Per the requirements of Section 21 and Section 31 of the Centralized Request for Proposal – iLottery System, Solicitation No. CRFP 0705 LOT2300000001 (the "CRFP"), IGT Global Solutions Corporation ("IGT") has expressly excluded from this Proposal all material that IGT considers to be confidential, a trade secret, or otherwise not subject to public disclosure (collectively, "Confidential Information"), as required by the competitive bidding laws of West Virginia Code§§ 5A-3-1 et seq., 5-22-1 et seq., and 5G-1-1 et seq. and the Freedom of Information Act West Virginia Code§§ 29B-1-1 et seq.

However, IGT has noted, in specific responses throughout this Proposal, certain areas where IGT believes that the provision to the Lottery of this critical Confidential Information would be in the best interest of the Lottery and the State of West Virginia, as the Lottery's review of this Confidential Information would allow the Lottery to make the most informed decision regarding the iLottery System proposed by IGT (as well as those proposed by other Vendors) and to ensure that the State of West Virginia is receiving the most secure and technically superior iLottery System available in the market. This includes, for example, Confidential Information regarding security of the iLottery System (such as security features and security plans), which, if provided in this Proposal (and thus made publicly available as set forth in Section 21 and 31 of the CRFP), could cause significant and devastating harm to the security and operation of the iLottery System and the Lottery should IGT be awarded the Contract.

To that end, IGT has noted in those instances, where IGT believes provision of such Confidential Information is warranted and in the best interest of the Lottery and the State of West Virginia, that IGT would be agreeable to making this Confidential Information available for review by the Lottery during the Oral Presentation (assuming such Oral Presentation is not subject to the West Virginia Open Meetings Act) and/or under a separate Non-Disclosure Agreement or similar ("NDA"), whereby IGT can be assured that such Confidential Information will not be made publicly available. While IGT acknowledges that a significant factor in not including certain of this Confidential Information in this Proposal is a result of the fiduciary duty IGT owes to its shareholders to protect its trade secrets and other information that has significant commercial value to IGT and that gives IGT a business advantage over its competitors, IGT also believes that IGT has a duty to disclose, and that the Lottery should receive and review (either at the Oral Presentation or under the proposed NDA), security and other similar information (that would otherwise be protected under the Confidential Information Exemption Acts) regarding its proposed iLottery System. IGT would be happy to discuss this issue further should the Purchasing Division or the Lottery have any questions, as IGT's ultimate goal is to ensure that the Lottery and the State of West Virginia receive the most cost-effective and superior iLottery System available and that the security of such System is maintained for the duration of the Contract.

Trademark Statement

The trademarks and logos contained in this Proposal are marks owned by and/or licensed to IGT and/or its subcontractors and may not be used without IGT's express written permission. The game names and game logos in the Proposal serve as examples only, and additional analysis, including searches of third-party trademarks, may be required to determine whether use outside the scope of the Proposal is permitted and appropriate.



January 26, 2023

West Virginia Department of Administration, State Purchasing Division Attn: Toby L. Welch 2019 Washington Street East Charleston, WV 25305-0130

Re: Request for Proposals – Turnkey iLottery System:

West Virginia Lottery: Solicitation No.: CRFP 0705 LOT230000001

Dear Mr. Welch:

With this letter, IGT Global Solutions Corporation (IGT) submits its Proposal in response to the Request for Proposal – Turnkey iLottery System, Solicitation No. CRFP 0705 LOT2300000001 (the RFP).

IGT's dedicated iLottery business unit delivers world-leading solutions to lotteries on their journey to providing responsible, engaging digital gaming. The unit's award-winning, G4-certified turnkey offering comprises flexible products and diverse content, including omnichannel titles, backed by dedicated iLottery expert services. Powering the fastest growing U.S. iLotteries and 25 others worldwide, our natively integrated solution utilizes one system of record across the retail and digital channels, enabling a single player view. With the optimized and modernized player experience provided and our breadth of iLottery services, we can help the West Virginia Lottery drive the results that matter – growing revenues for initiatives that support West Virginia senior citizens, education, tourism, and state parks.

As the Lottery's strategic partner, our mission is to help the Lottery build, retain, and deepen its relationship with its players over time while incentivizing desired behaviors, enhancing brand perception, and boosting the game portfolio's revenue yield. In place of a player experience fragmented across multiple platforms (limiting the reach among players and impeding the long-term relationship), the Lottery will see the benefits of a wholly integrated iLottery System complete with a system of record for an aligned game portfolio and a single player view across the Lottery's retail and digital channels. This approach – which only IGT can offer – will save the Lottery time and money, streamline its operations, provide the performance it needs with the trusted reliability of its existing retail lottery system, and enable innovative features that modernize and expand players' retail and digital experience.

While our competitors showcase their overall sales in large markets, we focus on continued growth within markets regardless of their size. Over the past three years, the average annual Gross Gaming Revenue (GGR) growth rate of the Georgia, Kentucky, and Rhode Island lotteries (more than 126%) has significantly exceeded the comparable growth rates in Michigan and Pennsylvania (which have remained below 50%). Moreover, in FY2022, the non-IGT customer iLottery market grew Year-over-Year (YoY) +16%, while IGT-customer GGR was growing at YoY +51%.

We hope our Proposal fully demonstrates the true value of partnering with IGT. We are eager to continue working with the Lottery in these new and exciting endeavors. Should you have any immediate questions about the Proposal, please reach out to:

Thomas J. Napolitano

Sr. Director, IGT iLottery Business Development, Americas

10 Memorial Boulevard

Providence, RI 02903

Phone: 401-323-4876

Mobile: +1 401 323-4876

Email: Thomas.Napolitano@IGT.com

Thank you for this exciting opportunity to present IGT's Proposal (enclosed) to the West Virginia State Purchasing Division and the West Virginia Lottery for their consideration.

Best regards,

Joseph S. Gendron

Chief Operating Officer - Global Lottery

IGT Global Solutions Corporation

10 Memorial Boulevard

Providence, RI 02903

Phone: (401) 392-7631

Email: Jay.Gendron@IGT.com

Lottery Cover Page



Department of Administration Purchasing Division 2019 Washington Street East Post Office Box 50130 Charleston, WV 25305-0130

State of West Virginia Centralized Request for Proposals Info Technology

Proc Folder:	1100456		Reason for Modification:
Doc Description: iLOTTERY SYSTEM			
Proc Type:	Central Master Agreement		
Date Issued	Solicitation Closes	Solicitation No	Version
2022-09-28	2022-10-27 13:30	CRFP 0705 LOT230000001	1

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BID CLERK

DEPARTMENT OF ADMINISTRATION

PURCHASING DIVISION 2019 WASHINGTON STE

CHARLESTON WV 25305

us

VENDOR

Vendor Customer Code: 000000101085

Vendor Name: IGT Global Solutions Corporation

Address:

Street: 10 Memorial Boulevard

City: Providence

State: RI Country: United States Zip: 02903

Principal Contact: Thomas Napolitano

Vendor Contact Phone: 401-323-4876 Extension:

FOR INFORMATION CONTACT THE BUYER

Toby L Welch (304) 558-8802 toby.l.welch@wv.gov

Vendor

Signature X

FEIN# 05-0389840

(/17/2)

All offers subject to all terms and conditions contained in this solicitation

Date Printed: Sep 28, 2022

Page: 1

FORM ID: WV-PRC-CRFP-002 2020105

DATE:

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

(Printed Name and Title) Thomas J. Napolitano – Sr. Director, IGT iLottery Business
Development, Americas
(Address) 10 Memorial Boulevard Providence, RI 02903
(Phone Number)/ (Fax Number) <u>401-323-4876</u>
(email address) thomas.napolitano@igt.com

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that: I have reviewed this Solicitation/Contract in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation/Contract for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that this bid or offer was made without prior understanding, agreement, or connection with any entity submitting a bid or offer for the same material, supplies, equipment or services; that this bid or offer is in all respects fair and without collusion or fraud; that this Contract is accepted or entered into without any prior understanding, agreement, or connection to any other entity that could be considered a violation of law; that I am authorized by the Vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on Vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

By signing below, I further certify that I understand this Contract is subject to the provisions of West Virginia Codes § 5A-3-62. which automatically voids certain contract clauses that violate State law; and that pursuant to W. Va. Code 5A-3-63, the entity entering into this contract is prohibited from engaging in a boycott against Israel.

(Company) (Signature of Authorized Representative)	
Joseph Gendron, Chief Operating Officer – Global Lottery	
(Printed Name and Title of Authorized Representative) (Date)	
401-392-7631	
(Phone Number) (Fax Number)	
jay.gendron@igt.com	
(Email Address)	

ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: CRFP LOT23*001

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

Addendum Numbers Received:	
(Check the box next to each addendum received:	ned)
Addendum No. 1	Addendum No. 6
Addendum No. 2	Addendum No. 7
Addendum No. 3	Addendum No. 8
Addendum No. 4	
Processory .	Addendum No. 9
Addendum No. 5	Addendum No. 10
discussion held between Vendor's representa	ration made or assumed to be made during any oral tives and any state personnel is not binding. Only o the specifications by an official addendum is
IGT Global Solutions Corporation	
Company Long L. Markey	
Authorized Signature	
1/19/23	
Date	
NOTE: This addendum acknowledgement sho	ould be submitted with the bid to expedite

document processing.

Signature Page

REQUEST FOR PROPOSAL West Virginia ilottery CRFP LOT2300000001

Step 2 - $1 \times 30 = \text{Total Cost Score of } 30$

Proposal 2: Step 1- \$1,000,000 / \$1,100,000 = Cost Score Percentage of 0.909091 (90.9091%) Step 2- 0.909091 X 30 = Total Cost Score of 27.27273

6.8. Availability of Information: Proposal submissions become public and are available for review immediately after opening pursuant to West Virginia Code §5A-3-1 l(h). All other information associated with the RFP, including but not limited to, technical scores and reasons for disqualification, will not be available until after the contract has been awarded pursuant to West Virginia Code of State Rules §148-1-6.3.d.

By signing below, I certify that I have reviewed this Request for Proposal in its entirety; understand the requirements, terms and conditions, and other information contained herein; that I am submitting this proposal for review and consideration; that I am authorized by the bidder to execute this bid or any documents related thereto on bidder's behalf; that I am authorized to bind the bidder in a contractual relationship; and that, to the best of my knowledge, the bidder has properly registered with any State agency that may require registration.

IGT Global Solutions Corporation
(Company)
Joseph S. Gendran
Joseph S. Gendron, Chief Operating Officer – Global Lottery
(Representative Name, Title)
401-392-7631
(Contact Phone/Fax, Number)
1/19/23 (Date)



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4.1

Project Goals and Mandatory Requirements

The goal of this RFP is to provide the Lottery with a tum-key iLottery program which includes software, hardware, an internal control system, a central gaming system, a relationship and promotion management program and robust game content that allows the Lottery to offer games for sale via the Internet to build its player base, incentivize current customers and attract the next generation of players. Vendor should describe its approach and methodology to providing the service or solving the problem described by meet the goals/objectives identified below. Vendor's response should include any information about how the proposed approach is superior or inferior to other possible approaches.

The Lottery has the following goals and objectives for issuing this RFP and entering into a Contract for an integrated iLottery System Solution:

- A. Increase gross Lottery sales and profitability through a robust iLottery System with game content that appeals to existing players and attracts new players by utilizing innovative product channels.
- B. Maintain the highest standards for responsible gambling including player spending limits and rigorous age verification software.
- C. Maintain the highest standards for geo-location verification of players within the boundaries of the State of West Virginia.
- D. Enhance existing retail partnerships and generate new partnerships with the Lottery to cross-promote product lines and ensure mutual growth.
- E. Obtain and develop an iLottery platform system and services that are operationally sound; incorporate the highest level of integrity and security; and minimize risk for the Lottery, its customers, and the State of West Virginia.
- F. Obtain solutions that provides high standards for player satisfaction and which are designed to meet the Lottery's evolving needs.

IGT has read, understands, and complies with this requirement.

As the West Virginia Lottery Commission (the Lottery)'s current traditional lottery system contractor, IGT Global Solutions Corporation (IGT) has enjoyed the opportunity to develop a strong, collaborative working relationship with you. From our 13 years as a full-service partner to the Lottery – encompassing both the lottery system and services as well as Scratch-Off services – we've developed an understanding and appreciation of your strategic objectives, business practices, and dedication to your mission of generating revenues to support education, senior citizen programs and services, tourism and state parks, and other initiatives to benefit the people of West Virginia.



Your iLottery System CRFP represents a pivotal next step in support of this mission. We know that you're looking for a strategic partner in this endeavor. This Proposal represents IGT's application to be that partner. We look forward to renewing and extending our efforts in support of the Lottery with a technology and services offering that meets each of your goals and objectives for an integrated iLottery System solution.

A Strategic Partner at Your Service

Starting a new eCommerce operation as a new line of business within an organization, market, and regulatory framework as complex as that of a lottery is a particularly nuanced endeavor. Launching and sustaining a successful program that will serve a holistic West Virginia Lottery brand requires an experienced hand to act as your strategic partner.

IGT currently supports 10 full iLottery installations worldwide. These installations include three in the U.S. (Georgia, Kentucky, and Rhode Island), as well as seven for mature international jurisdictions (Belgium, the Czech Republic, Finland, two in Italy, Poland, and New Zealand). We were the first solution provider to offer U.S. players the ability to purchase individual Draw Games (DG) online and remain the only one to offer true

IGT is the only solution provider to offer true digital Keno through an iLottery solution (in Georgia, Kentucky, and Rhode Island). digital Keno through an iLottery solution (as we do in Georgia, Kentucky, and Rhode Island). Further, we provide our next-generation eInstant game content to 13 jurisdictions worldwide.

Combined with our unmatched experience providing traditional lottery systems to the largest global customer base for more than 40 years, this global footprint and track record of iLottery success means you can be assured that we will meet your objective for an iLottery System that is operationally sound; incorporates the highest level of integrity and security; and minimizes risk for the Lottery, its customers, and the State of West Virginia.

Our experience also enables us to provide a player-centric, holistic approach to strategy and implementation. Among all Vendors, IGT is best equipped to provide true omnichannel solutions to match the Lottery's preferred strategy of offering players a seamless, convenient brand experience across the digital channel mix. Only IGT's solution (which will fully integrate the iLottery System with the Lottery's flexible and adaptable AuroraTM retail gaming system) can bridge the retail and digital channels for innovative new player experiences while providing the Lottery with player-level data on retail transactions.

As evidenced though the pandemic, there is a growing need for convenient, contactless access to consumers' favorites products; lottery products are no exception. IGT's proven formula of a reliable iLottery System, engaging and diverse game content, innovative products and player-engagement features, and expert services has proven to be the best option for lotteries looking for significant Year-Over-Year (YOY) sales growth.

Only IGT can provide a true omnichannel solution complete with player-level data on retail transactions.



A Record of Success to Support Your Growth Objectives

We are keenly focused on your objective of increasing gross lottery sales and profitability. While our competitors showcase their overall sales in large markets, IGT focuses on continued growth within markets regardless of size. Over the past three years, the average annual Gross Gaming Revenue (GGR) growth rate in Georgia, Kentucky, and Rhode Island (more than 126%) has significantly exceeded the comparable growth rates in Michigan and Pennsylvania.

Over the past three years, the average annual GGR growth rate in Georgia, Kentucky, and Rhode Island (more than 126%) has significantly exceeded that of Michigan and Pennsylvania.

Moreover, IGT is the only Vendor providing the same player experience in-store and digitally. When a player plays the digital versions of Keno or IGT's proprietary Cash Pop™ ("CA\$H POP" in West Virginia), it is the exact same experience they get at retail. Plus, our eDraw portfolio provides results: Georgia and Kentucky experienced a YOY growth of 37%. Since their digital launch in 2022, Kentucky's digital Cash Pop product accounts for 20% of retail DG sales.

In the eInstants sphere, the picture is similar. IGT's U.S.

eInstant YoY sales growth of approximately 45% in Calendar Year (CY) 2022 far outpaced the 6% growth of U.S. eInstants as a whole. Our customers are setting the pace for the eInstants category because we offer them the most diverse game-mechanic library supported by expert portfolio-management services. With more than 120 dedicated studio professionals, the ability to deliver omnichannel content, and an extensive licensed portfolio (including the world's most popular brand, Wheel of Fortune), IGT's eInstants team ensures that its content appeals to the widest range of players to help our customers drive player acquisition and retention and revenues for good causes. With our data-driven game design and portfolio management expertise, we understand what games and play types resonate with different player segments. We will partner with you to leverage game performance data and our eInstant formula for success to develop games and assist you in building the most robust, value-driving portfolio.

Recently, IGT's iLottery business unit was awarded SBC North America "Lottery Supplier of the Year 2022." We won this award on the strength of our iLottery products and services, including our quality eInstants library – with a focus on variety, omnichannel content, cloud innovation, an award-winning app, and, most important, dedication to our customers.

Other components of our turnkey iLottery System have achieved distinction in recent years. In 2021, IGTs mobile lottery app – which has more global deployments than that of any other Vendor – was awarded "Lottery Product of the

IGT's iLottery business unit was named SBC North
America "Lottery Supplier of the Year 2022," while its mobile lottery app was awarded "Lottery Product of the Year" at the International Gaming Awards in 2021.

Year" at the International Gaming Awards. Meanwhile, our loyalty and second chance programs have generated strong results in player acquisition. After IGT converted the Tennessee Education Lottery's loyalty and second chance system, Tennessee experienced a player acquisition increase of approximately 70% within the first year over their previous provider.



Enduring Commitment to Responsible Gaming

Our company-wide commitment to responsible gaming and Corporate Social Responsibility (CSR) has underscored our approach to digital gaming since entering this space. We understand the complexities of providing an enjoyable digital gaming experience that doesn't infringe on players' safety and security.

As the industry has grown, we've steadily increased our commitment to minimize any risk that may adversely affect players. We have achieved the highest accreditations available, including:

- Global Gambling Guidance Group (G4): In 2019, G4 recognized IGT with its responsible gaming certification, making IGT the first company to hold certifications for digital and gaming operations. In 2020, our G4 certification was attained for another three years.
- WLA Responsible Gaming Standards for Associate Members –
 Level 4: Achieved for all areas of IGT operations, the Seven Responsible
 Gaming Principles serve as the foundation for the WLA Responsible
 Gaming Framework (RGF). Level 4 (the highest level, for continuous
 improvement) certifies that members are implementing specific programs
 into their day-to-day operations and are continuously improving those
 programs.

These efforts are reflected in our iLottery System's progressive mix of player- and lottery-defined responsible gaming controls (including player spending limits) and expert age-verification services. Throughout the Contract term, IGT will fully support your objective of maintaining the highest standards of responsible gaming.

Turnkey Solution to Power Your iLottery Business

IGT's stand-alone, turnkey iLottery System represents a one-stop shop for extending the West Virginia Lottery brand and sales to the digital space and selling your DGs and Keno games (as well as eInstant games

The Lottery will benefit from a wholly integrated iLottery System – complete with a single system of record for your entire business, enabling an aligned game portfolio and a single player view across the retail and digital channels.

and any other digital game types you may choose to offer in the future) via mobile app and web browser. It includes every platform, business tool, and support service required to deliver innovative new player experiences and manage all aspects of your iLottery business.

As your strategic partner, our mission is to help you build, retain, and deepen your relationship with players over time while incentivizing desired behaviors, enhancing brand perception, and boosting your portfolio's revenue yield. In place of a player experience fragmented across multiple platforms (limiting the reach among players and impeding the long-term relationship), the Lottery will benefit from a wholly integrated

iLottery System – complete with a single system of record for your entire business, enabling an aligned game portfolio and a single player view across the retail and digital channels.



Unique Benefits of IGT's Provision of a Single System of Record

Beyond the omnichannel capabilities outlined later in this section, IGT's unique ability to provide the Lottery with a single system of record for your entire lottery business will provide extraordinary efficiencies when compared to the solution of any other Vendor. In fact, all the procedures you currently perform will fully suffice to cover the new iLottery-channel wagers, as well. No new processes or steps are necessary.

For example:

- All wagers (no matter their channel of origin digital or retail) will be merged on the system of record, combining all Lottery sales in real time.
- You'll have a single liability pool spanning wagers from all channels without having to wait for the completion of draw-close activity.
- Drawing and winner-entry procedures only need to be performed once, just as they are today.
- Only the same, single transmission of system of record files to the Internal Control System (ICS) and MUSL will be required.
- Game changes only need to go through a single quality assurance process.

With any other Vendor, the Lottery will need to manage multiple Systems of Record (and vendors) and thus duplicate related procedures across – effectively – two separate lines of business. With IGT, you'll have a unified lottery ecosystem, freeing your staff and resources to devote their time to business-driving activities.

In addition, IGT can maximize the continuity of your players' experience. For instance, we'll simply expand your existing mobile app to enable iLottery wagering while upgrading (rather than replacing) the existing convenience features. Further, we'll bring all of your existing DGs (including Cash Pop) and Keno games to the digital channel upon launch of the iLottery System. These advantages will immediately and efficiently bring the entire West Virginia Lottery experience to the digital channel.

In summary, IGT will save you time and money, streamline your operations, provide the performance you need with the trusted reliability of your existing retail lottery system, and enable innovative features that modernize and expand players' retail and digital experience.

Our solution represents a holistic offering of player-engagement activities and tools supported by expert marketing services, providing benefits in the following areas:

- **Player Experience**: Integrates all Draw, Keno, and eInstant games and services to provide a seamless player experience on both the mobile app and web browser, complete with value-added play experiences (eSubscriptions, Group Play, jackpot triggers, and more).
- **Brand**: Encourages a positive, modern perception of the Lottery with convenient and flexible play and engagement offerings.
- Cost: Provides an expandable offering with lower overall cost and faster time to market.
- Marketing: Provides optimized player acquisition and retention with marketing communications leveraging a single player view, advanced analytics, and robust rewards and promotional capabilities.



Preconfigured for your market, the iLottery System provides innovative features to acquire, activate, and retain players, helping you maximize the value of each engagement with your players while providing players with an increasingly personalized and relevant experience by:

- Enabling the front end (web and mobile app) with content and services that engage players with fun and entertaining West Virginia Lottery offerings.
- Seamlessly delivering engaging game content (including industry-leading eInstants from IGT and third parties) that appeals to existing players and attracts new players, supported by expert design teams and refined game-development protocols to quickly develop both purely digital bespoke games and digital versions of the Lottery's Scratch-Off instant tickets.
- Providing a modern data architecture and next-generation player data analytics platform that ingests and synthesizes data from disparate sources, enabling advanced analytics such as Artificial Intelligence (AI) and Machine Learning (ML) to drive insights and decision making.
- Leveraging the wealth of accumulated player data to sort players into groups, thereby maximizing the personal relevance of player communications, campaigns, and rewards.
- Quickly defining and deploying the most appropriate and relevant promotions, bonuses, and rewards with a highly configurable promotional engine.
- Incentivizing desired behaviors (including driving iLottery players to retail) and rewarding players via one account across all channels a key benefit of IGT's Connected Play omnichannel capabilities, further discussed later in this section.
- Reaching West Virginia players with automated transactional and marketing messaging (push, Short Message Service (SMS)/text, email, app/portal inbox) when and where it's most valuable and timely.
- Rigorously adhering to the most advanced standards and practices for responsible gaming controls and player-data protection.
- Providing a web-based back-office administrative User Interface (UI) to monitor your iLottery program's performance and react quickly to insights provided by personalized dashboards.

Our iLottery System facilitates a single player registration, account, and Player Wallet, as well as delivery of all digital services – all with one point of accountability. It records and consolidates all player actions, enabling you to focus on acquiring players and retaining them by building and growing the relationship. A successful player-engagement program integrates the elements of the player journey into a coherently designed experience, providing a new holistic shape for engagement with the Lottery.

In this way, you can leverage a single 360-degree view of your players to create a brand-aligned experience complete with a progressive mix of highly configurable Lottery- and player-defined responsible gaming controls and complying with the highest standards of age, identity, and geolocation verification.

IGT's iLottery System meets all CRFP requirements and features an architecture that will enable you to add features and functionality at your own pace in alignment with your business objectives.



Connected Play: Enhancing Retail Partnerships with Digitalized Retail Player Services

IGT can enhance West Virginia players' retail and digital lottery experience – and provide the Lottery with a wealth of powerful new data sets to build relationships with those players – due to our unique ability to fully integrate the iLottery System with your existing retail-lottery gaming system.

All applications across your lottery ecosystem will work together via defined calls over a modern Application Programming Interface (API) platform and supported by a unified data architecture. This coming together will unlock a set of digitalized retail features that we call Connected Play. It will enable you to realize the full power of "omnichannel" in alignment with consumers' demands for a convenient, paperless, cashless, contactless, and personally relevant and rewarding brand and shopping experience.

This creates a circle of value based on Connected Play's three strategic pillars:

- A digitalized consumer experience at retail: Mobile-centered retail
 modernization enables digital services in your retail outlets (cashless retail
 payments, account-linked digital play slips, scanning tickets and
 redeeming winnings to their Player Wallet, and more).
- Player-level data capture on retail behaviors: Digitalized interactions transform anonymous players and transactions to individualized datagathering on known players, continually adding to player profiles for evermore-defined and granular data analysis and player segmentation.
- Targeted marketing opportunities: Creating action from the insights afforded by enhanced data collection, you can leverage Customer Relationship Management (CRM) tools to provide players with personalized and relevant communications, promotions, and rewards.

By bridging the retail and digital channels in a single, seamless business ecosystem, IGT will provide the Lottery with the historically elusive 360-degree view of each player across all channels with player-level data capture on retail transactions.

For details on Connected Play, please see Section 4.18, Retailer Support.

Expert Services to Maximize Value

Initiating a new iLottery business is a challenging proposition, with all manner of technical and regulatory hurdles to surmount on the way to a smooth launch and sustained success. We know – because we've

Our player marketing services will help you, acquire, retain, and deepen your relationship with your players. been there, having helped a number of lottery customers do just that in diverse markets and regulatory climates. That's why we're focused on easing the burden on you, coming in with the right solutions for West Virginia on day one.

To help you successfully extend your brand into the digital space, we marry our innovative technological offerings with end-to-end service offerings. Our iLottery experts will provide a host of operational and marketing services to bring the right players to your site, deliver a great experience every time, and maximize your technology investment.



These services include:

- Player Marketing: Bringing extensive experience supporting customers in Georgia, Kentucky, Rhode Island, and in Europe, IGT's full-service, in-house player marketing services team will help you successfully launch your iLottery program, covering the entire player-marketing scope from strategic planning to operational execution, throughout the player-conversion funnel and across the player life cycle. Helping you acquire, retain, and deepen your relationship with your players, this team will focus on optimizing the player journey through the Lottery ecosystem. Throughout the Contract term, we'll provide highly motivated professional resources to drive the best strategies for your program, leveraging proven iLottery B2C marketing best practices, benchmarks, and analytical tools for your benefit.
- **Portfolio Management**: We understand that a key to a successful eInstants game program is the provision of games that continually attract and excite players. Our portfolio management services, building upon decades of experience in gaming markets worldwide, will help you maintain and continually refresh optimized game portfolios for your market and business needs. We will collaborate with you to thoroughly understand your unique needs, players, and market. By choosing a provider who can *optimize* your content, rather than simply *supply* it, you can best assure the profitability and overall success of your program.
- Player Support: Modern hotline technology with a human voice.... We take seriously our responsibility to represent the Lottery with every hotline interaction. Our Customer Support Center (CSC) will provide West Virginia iLottery players with access (via a toll-free phone number, email, and live chat) to fully-trained professional resources who'll have all player data at their fingertips and who'll know your solutions inside and out ready to answer every type of player inquiry (account registration, products, promotions, payments, technical issues, responsible gaming, geolocation, etc.).
- Payment Services: Managing payments is about much more than a platform and technology it's also about the people who provide the service. IGT's payment services are provided by a customercentric team with specialized staff and processes tailored to support the Lottery's payment business operations in five key a la carte areas: merchant of record, management of bank accounts, funds, dormant accounts, and risk. This team of payments and risk management experts support nine U.S lottery and four gaming/sports betting customers that process more than \$750 million in deposits and 23 million deposit transactions annually.
- Implementation: The success of your iLottery program will depend on its initial launch. With more major system implementations than all other Vendors combined (and the most iLottery System deployments), no Vendor is more prepared than IGT to take on this project and get it right the first time, on time. Our mature Global Project Management Organization will provide the highest level of support for project delivery, which will be led by a highly experienced Project Manager and a dedicated project team working with IGT's West Virginia team for maximum quality, transparency, collaboration, and accountability.
- Agile Software Support: We'll be by your side, proactively addressing your needs with agility and quality so you can focus on driving your business. Our Agile approach to solution development and delivery reflects our understanding of iLottery and digital-channel market dynamics. From implementation, during Go Live, and throughout the Contract term, the Agile methodology will keep your iLottery program fresh and aligned with the latest iterations of IGT's solutions and everchanging market dynamics by optimizing:
 - **Speed to Market**: Reduces the linearity from the development process and enables faster delivery of software.



- Collaboration: Team-oriented methodology facilitates customer involvement throughout the development process.
- **Software Quality**: Frequent testing allows the development team to catch and remedy any quality issues quickly and efficiently.
- Adherence to Certifications: Agile's flexible, highly adaptive design allows it to be seamlessly molded into Capability Maturity Model Integration (CMMI) and other certifications.

Together, these service offerings help lotteries minimize overhead and focus on revenue-driving efforts.

Security Standards

IGT recognizes that a strong security program ensures a lottery's integrity and viability. Just as the Lottery is accountable to its players for ensuring that trust, IGT will be responsible for enforcing security safeguards across your iLottery program, aligning with the latest in eCommerce, gaming, and technology security standards. Throughout this Proposal, we detail the scope of industry-standard certifications we have achieved across every area – from major systems to payment systems to privacy and data protection and much more. Our best practices provide preemptive checks on potential fraud attempts, while our comprehensive Incident Response Program ensures orderly, transparent, and rapid resolution to any issues or service disruptions.

Aligned Visions for an Evolving Player Experience

IGT is committed to helping the Lottery overcome any barriers to responsible, sustainable growth – to start off on the right foot with your new iLottery program and grow it sustainably and holistically aligned with your traditional lottery operations. You know your business – we're here to provide proactive, responsive support to help you sustain a brand that will bring fun, excitement, and benefits to West Virginians for decades to come. Our job is to provide you with the tools and services to make your job easier.

As your strategic partner, we'll continue to act as corporate citizens of the Mountain State, aligning our business culture to prioritize you and your stakeholders in all we do. With IGT, you'll have a dedicated partner that:

- Values your business and its mission.
- Proactively addresses and continually communicates with you about our support for your goals and concerns.
- Sees transparency as a necessity to maintain a collaborative and successful partnership.
- Shares your commitment to responsible gaming.
- Includes built-in partnership via system and software testing, with checks in place to minimize mistakes in the production environment.
- Prizes accountability, knowing that you shouldn't pay the price for your contractor's mistakes.



We take seriously our commitment to act as a responsible team member in the continued stewardship of the West Virginia Lottery brand, and to ensure that all your games and your operations remain in accordance with the highest levels of dignity and integrity. Working at your direction, we will ground our support in the maintenance of the public's trust and confidence in the Lottery. Our service will be commensurate with the crucial role you play as a major state benefactor.

As the Lottery continues to evolve the lottery-player experience in West Virginia, IGT looks forward to showcasing its solutions, building upon our long-term relationship, continuing to prioritize player satisfaction with the West Virginia Lottery, and aligning with the Lottery's evolving needs. Our aligned visions for the iLottery marketplace provide a strong opportunity to take our relationship to the next level for the ultimate benefit of the people of West Virginia.

4.2

System Summary

The proposed System must support existing Lottery games (e.g. Multi-state, in-state, and fast draw games) and other non-traditional games, through various Portals and act as a distribution gateway for digital purchases. Section 4 describes the technology and services specifications for the System. Prior to the detailed responses to each sub-section of this RFP, Vendors must respond to the following summary level issues:

IGT has read, understands, and will comply with this requirement.

4.2.A Overview

Present an overview of the System's design. Describe the proposed System with respect to existing production operations.

IGT has read, understands, and complies with this requirement.

IGT's comprehensive turnkey iLottery System proposed for the West Virginia Lottery is based on our more than two decades of experience providing iLottery solutions in the domestic and international markets, experience we've used to build a player-first, U.S.-centric iLottery System. Based on these diverse global deployments, our iLottery System has evolved to include the robust features and functionality that align with what modern digital consumers expect.

With our iLottery System and industry expertise, we can bring your players the ability to play anytime, anywhere within the state of West Virginia via our mobile app and portal solutions. The increased engagement you'll have with your players will generate tremendous data, yielding substantial insight through our player data platform from which we can work with you to hyper-personalize the player experience.

We know what it takes to make an iLottery program successful, and our proposed iLottery Player Marketing Services team will deliver that success, in conjunction with our other expert service teams.

The diagram that follows illustrates the major software components of our iLottery System. It also shows how our proposed System uniquely includes integration with your current IGT-provided AuroraTM retail gaming system, enabling an aligned game portfolio and a single player view across the retail and digital channels:

System Summary 4.2 – 1



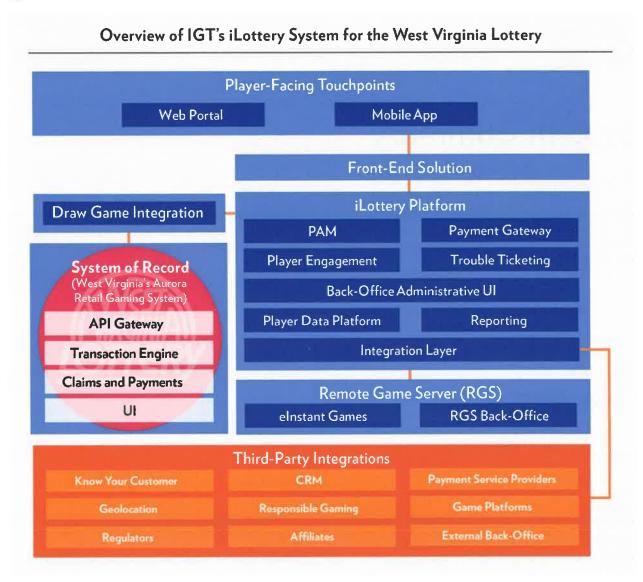


Figure 4.2 - 1.

IGT's iLottery Platform

Via its core platform, the iLottery System records and consolidates all player actions, enabling you to focus on acquiring and retaining players by building and growing the relationship. Authorized users can manage and monitor the performance of all aspects of your digital business via the platform's web-based back-office administrative User Interface (UI), shown in the center right of the diagram above. You'll always have ready access to a complete view of your iLottery business.

4.2 – 2 System Summary



Following is a high-level snapshot of the platform's major features and components:

Player Management Features

The core platform provides everything a lottery needs to manage the entire player life cycle with a single player view, including:

- Player Account Management (PAM) database: This database provides a single location for all player data. It captures all account-based player interactions (including those at retail due to our iLottery System's full integration with your Aurora retail gaming system (as shown at left in the above Overview diagram) and provides access to this data for lottery operators, customer support staff, and analytics and marketing personnel.
- Flexible registration: The iLottery System makes it easy to configure player registration levels and the player-data attributes associated with each level. It includes two levels of registration: a marketing level and full registration (which further unlocks fully digital iLottery purchases). This optimizes the registration experience and eases player adoption by asking players to provide only the data required for the level of functionality they desire.
- Responsible gaming controls: Designed and continually refined in line with the needs of our
 customers worldwide who are operating in some of the most mature digital gaming markets, our
 iLottery System offers a diverse and progressive mix of highly configurable lottery- and playerdefined responsible gaming tools.
- Player Wallet & payments: Each registered player is assigned a Player Wallet with which they can fund their account using credit, debit, Automated Clearing House (ACH), prepaid gift cards, and other well-established online payment options. Registered players can pay for games via the Player Wallet pending system queries to verify that sufficient funds are available and have winnings deposited directly into their Player Wallet according to player preferences and in adherence to lottery-operator rules. Our iLottery System's payment gateway serves the System by processing payment transactions through integrated Payment Service Providers (PSPs) and managing player payment instructions used for transacting.
- **Player-support & trouble-ticketing**: Tailored for the B2C world, the iLottery System's player-support and trouble-ticketing solution is player-centric full contact history is maintained across all support channels. Because the solution is fully integrated with the PAM system, all player data is readily accessible to player-support staff so they can help players navigate any issues they're having.

Advanced Integration/Content Aggregation Layer

IGT's dedicated integration layer uses clean, well-documented Application Programming Interfaces (APIs) to expose all iLottery platform functionality to third parties (game providers, platforms, regulators, service providers, Know Your Customer (KYC) and responsible gaming databases, geolocation services, etc.) for efficient, one-time integration and consolidated portfolio management across all integrated games.

System Summary 4.2 – 3



Game Support Services

The platform makes all Draw Games (DGs), Keno, and elnstant games available for purchase via the internet and mobile app. DG and Keno purchases will be entered into the same wager pools as purchases made at retail by exposing the services through APIs that connect to your Aurora retail system's quad-plexed Aurora transaction engine configuration, which will serve as the transaction-processing engines for the iLottery System.

Our solution brings your DGs and Keno games to the digital channel with value-adding play features including eSubscriptions, Group Play, "win again" low-tier winnings reinvestment, jackpot triggers, and more.

To ensure that only players physically located within West Virginia boundaries can access wagering features, IGT works with a major provider of Geo-Location Services (GLS) and is well acquainted with the various complex technologies and methodologies as they pertain to the gaming realm.

A Single System of Record for Your Entire Business

Via the integration of the iLottery System with your current Aurora retail system, the Lottery will have a single system of record – configured with West Virginia Lottery game rules, specified draw processing, Claims and Payments (CAP) processing, and connecting with your Internal Control System (ICS), etc. – to process, record, and designate all wagers (iLottery as well as retail purchases) in the exact manner that the Lottery does today, maximizing efficiency and continuity.

The integration will ensure that all DG and Keno wagers placed on the iLottery System are entered into the same common wager pools as those purchased at retail – combining all sales in real time and allowing for single instances of liability pools that span both the retail and digital channels without having to wait for the completion of draw close activity.

Further, the integration of your retail and iLottery systems will vastly simplify all manner of West Virginia Lottery system processes, including drawing and winner procedures, by enabling you to simply continue with existing operational processes and MUSL interactions. With other vendors' systems, all such procedures would need to be performed twice (once for both the retail and digital channels), requiring the Lottery to effectively manage (and devote resources to) duplicate operations.

4.2 – 4 System Summary



Player Engagement Services

With an end-to-end player-engagement suite, our iLottery System includes powerful tools to vastly enhance the Lottery's opportunities to acquire, engage, and retain players.

These tools include:

- Player segmentation: The Lottery can leverage the wealth of data collected by the iLottery System using the Player Groups functionality as a filter for searches and for targeted and increasingly personalized promotions, notifications, reports, and more. With our iLottery System's light-registration capability, you can engage players with non-transactional features such as second chance draws, and more easily on-board new registered players and thus capture player-specific data for use in targeted, personalized marketing communications and campaigns.
- Marketing communications: The Lottery can use our built-in Customer Relationship Management (CRM) features to communicate with players via a variety of channels with personalized messages to incentivize engagement. Further, because we integrate with best-of-breed third-party automated marketing tools, you'll be able to manage all marketing and communications in a centralized manner, automating campaigns where it makes sense to do so. You'll be able to engage with players with efficient, timely, and relevant messaging and content and optimize your relationship with them.
- **Promotions, rewards, and bonusing**: With support for a wide array of reward and promotion types (including 90 bonus campaign parameters), you can quickly configure and deploy campaigns via the digital channel, including cross-channel promotions, rewards targeted to player segments, automated and trigger-based bonuses, and much more.
- Second chance: With a second chance engine, compatibility with all player devices, flexible program
 capabilities, and expert marketing support, the iLottery System includes fully integrated second
 chance capabilities, which provides another means for onboarding new registered players. IGT's
 second chance solution can enable you to flexibly offer second chance drawings for all DGs, ScratchOff games (i.e., via scanning with the mobile app), and (when paired with our loyalty system) pointsbased entries.
- Player loyalty: The highly configurable loyalty engine can provide you with the means to flexibly set
 up a robust loyalty program. Further, because the iLottery System will be fully integrated with your
 current Aurora retail gaming system, your loyalty program can cross the retail and digital channels,
 leveraging data accumulated on player-specific behavior at retail and providing your players with
 engaging ways to earn and redeem points.

Expert Services to Maximize Value

We supplement this iLottery System solution suite with expert services (including player marketing, player support, payment services, portfolio management, and operations) that will ensure you maximize your technology investment and value for your iLottery program.



Reporting, Business Intelligence, and Data Analytics

Our state-of-the-art reporting and business intelligence solution delivers comprehensive insights into the iLottery business, as well as in-depth analysis that helps answer crucial business questions and drive player growth. Our modernized framework can provide you with simplified, user-friendly access to all data within your iLottery System and a powerful, advanced toolset that maximizes the value of that data.

Our solution includes:

- Advanced analytics: IGT's player data platform is an enterprise-wide, cloud-based data analytics solution built by IGT experts specifically for the lottery industry. With its 360-degree player view and Artificial Intelligence and Machine Learning (AIML) models, it enables advanced analytics, business intelligence, reporting, player profiling and personalization, data discovery, and predictive insights. This empowers lotteries with a data-driven decision-making process that saves time and staffing costs, improves processes, and maximizes marketing budgets to responsibly increase acquisition, retention, and sales.
- Operational reporting: The iLottery System provides its own data warehouse with direct access to an extensive array of tabular and graphical reports.

IGT's eInstants Game Content & Delivery Platform

IGT's philosophy is to create games that resonate with different player segments to engage a broad audience and foster sustainable growth for our customers. You'll have a robust content pipeline to keep pace with any launch strategy you desire. Your players will enjoy an appealing and intuitive play experience characterized by modern innovative designs, advanced animations, and an extraordinary range of fun, fast-paced, and entertaining games.

With our library of more than 130 games – and at least 30 new titles produced annually – the Lottery can select a portfolio of games that engage players with their favorite styles of play while introducing new ones into the mix. We design our game to capitalize on the latest industry and player trends. They offer an array of price points, game styles and themes; fast-reveal game mechanics; alternative approaches to top prizes (including merchandise); rich and varied play experiences; enhanced focus on bonus rounds, and more.

Each game has a thoughtful design, engaging bonus games, plus captivating animations, music, and sounds. Players will enjoy the fun surprises built into the games. We'll also ensure the right mix of games based on your player segments. Through continued game and player analysis, IGT will recommend, in concert with the Lottery, a rich portfolio of games to responsibly attract and engage players. With access to licensed and proprietary brands, we can work together with you to offer your players a one-of-a-kind elnstants offering.

IGT's Remote Gaming Server (RGS) provides efficient delivery of all IGT library and bespoke eInstant game content as well as integrated third-party content. Plugging seamlessly into an existing back office, one integration makes IGT's game library instantly available to players. It includes an intuitive back-office administrative interface designed to facilitate the management and branding of game content. It supports quick configurability of enforceable jurisdiction rules based on your regulatory framework. It will enable you to quickly and efficiently complete game-approval steps. We remain committed to leveraging our iLottery System's robust content-aggregation capabilities to integrate third-party providers with robust game libraries featuring content with strong potential in the West Virginia market.

4.2 – 6 System Summary



Our RGS is the industry's only content-delivery platform that is live and proven as a cloud-based infrastructure (in Kentucky, Georgia, and Rhode Island, with further deployments coming soon in Poland, Belgium, New Zealand, and other jurisdictions). We thus bring lessons learned, proven performance, feedback from customers, and experience adding new games to our platform in the Microsoft Azure cloud. We will be ready on *day one* to implement a smoothly functioning cloud-based solution for the West Virginia Lottery.

iLottery Front-End Solution

IGT's award-winning mobile app and web portal solutions, collectively, power more lottery solutions than those of any other Vendor. We led the industry's transition to a mobile-first framework, ensuring that players could be self-sufficient on the mobile app without having to visit the portal. And we maintain our focus on an engaging portal experience that's responsive and adaptive to the varying player devices on the market.

Our front-end solution will provide players with access to your full iLottery product suite. The web portal and mobile app solutions are compliant with Americans with Disabilities Act (ADA) and Apple/Google guidelines. They are also fully user tested as we relentlessly test our designs and final portal and mobile app implementations to meet Level AA of the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines.

Our Content Management System (CMS) is powered by Adobe Experience Manager (AEM), which consistently ranks as a leader in the *Agile Content Management Systems* report by Forrester Research. Highly parametrical and configurable, it will provide the Lottery with exceptional control over all player-facing content to ensure that any changes or updates can be made in real time. The flexible, user-friendly, browser-based CMS allows for easy authoring, editing, and publishing of content without the user having any prior technical knowledge or being dependent on any technology team to fulfil these tasks. Convenient features such as drag-and-drop functionality, single-click activation, and advanced user access controls ensure that you will always have full control of your front end.

Components such as marketing banners or promotional areas of the web portal and mobile app can be updated through AEM's self-administered, web-accessible tool to keep content fresh every time a player logs in.

We know this market will continue to be dynamic at an extremely aggressive pace. Accordingly, we are continually tweaking our roadmap so that our mobile and portal solutions stay ahead of the curve and continue to provide the best player experiences.

Supporting Your Retailers with Player-Centric Digitalized Retail Services

Our digitalization capabilities don't stop with iLottery. With the full integration of the iLottery System with the Lottery's current Aurora system, IGT alone can converge the Lottery's retail and digital channels to provide players with digitalized services at retail.

This Connected Play approach will open opportunities for players to, for example, fund their account when at a retail location and have quick, easy access to their Player Wallet for retail purchases through a player card. And that's only the beginning of the opportunities for retail digital expansion. Our iLottery System is more than just a way to get West Virginia players to play digitally – it represents the foundation for realizing a single player solution for your entire player base.

For further detail on our omnichannel capabilities, see Section 4.18, Retailer Support.

System Summary 4.2 – 7



4.2.B

Flexibility of the System

Describe how the System is flexible, can grow, and can adapt to the business needs and rules of the Lottery. These are critical factors since the iLottery environment can be expected to evolve over the course of the Contract. As such, the solution must position the Lottery to sell its products, including any multi-jurisdictional games.

IGT has read, understands, and complies with this requirement.

We support your long-term view of remaining quickly adaptable to technological and operational changes. Our technology solutions are open and designed for interoperability, leveraging IGT's industry leadership in standardized Application Programming Interfaces (APIs) as well as cloud, Software as a Service (SaaS), and Infrastructure as a Service (IaaS) initiatives to maximize flexibility across your business.

Our iLottery System uses advanced, open, and modular architecture that will provide you with flexible deployment, upgrade, expansion, and integration options based on your business needs and risk profile. It will easily accommodate the growth and evolution of your business, including changing regulations, market size, product mix, payments, player communications, and more, over the term of the Contract.

We designed our iLottery System around player and lottery operator needs — in particular, the need for quick adaptability to evolving gaming and technological environments. We've leveraged our unmatched experience as a lottery provider (for both the traditional retail and digital channels) to endow our iLottery System with the comprehensive range of configurable parameters that lotteries need to maximize their business — and we continually evolve our solution based on feedback from our customers across the most mature iLottery markets in the world.

With the ability to be tailored to your business needs and rules, our iLottery System is scalable to meet your growing traffic needs without degraded performance – and to adapt to your evolving needs should you wish to expand your digital offerings in the future.

The supporting infrastructure (hardware, servers, and virtual machines) is built with the same philosophy. Virtualization maintains full redundancy while maximizing flexibility, ease of service, and cost-effectiveness.

Cloud Efficiencies

Our iLottery System is deployed in the Microsoft Azure cloud (with the exception of the required in-state Player Wallet transaction processing), leveraging Microsoft's best-of-breed technology, infrastructure, and standards while freeing us to focus on business-critical solutions and delivery.

Our cloud-based infrastructure (with solutions hosted on a remote server and always accessible through a web browser) will speed time to market and enhance the efficiency of the initial deployment, upgrades, expansions, and scalability – all while leveraging the cloud providers' provision of consistent hardware updates and maintenance as well as secure service access.

In particular, you'll benefit from the scalability – whether horizontally (such as increasing volume capacity by adding virtual machines) or vertically (such as increasing speed by increasing the Central Processing Unit [CPU] memory) – to build on-demand systems that react (through machine-learning DevOps) to adjust automatically during times of peak load and then settle back down to the standard configuration thereafter.

4.2 – 8 System Summary



Backed by the cloud model's enhanced system stability, this approach vastly minimizes barriers to growth and expansion while minimizing maintenance and operating expenses. It eliminates the need to invest in and deploy new servers in a specific data center, and systems needn't be built on day one with capabilities for 10 years down the road; rather, the available capacity is virtually limitless and systems can grow over time in alignment with the Lottery's needs. (For instance, if you needed to massively level up the number of tickets you're selling – such as for a large-jackpot run – the cloud solutions can scale to it.) It removes bottlenecks, so Lottery initiatives are less likely to be limited by system capacities down the road.

In addition to the advantages of cloud hosting, the Lottery can be assured that IGT's cloud-based solutions adhere to World Lottery Association (WLA) standards for security, integrity, availability, and performance. IGT's parent company has attained the WLA's Security Control Standard: 2020 (WLA-SCS:2020) Level 2 dual security certification. This certification's updated security standards include new compliance measures for cloud environments used to host gaming systems.

Designed to Integrate

Today, API-based integration and extension are essential for data integration, product integration, and building on top of delivered solutions. Our iLottery System is designed with integration as a fundament. The System exposes a rich set of clean, well-documented APIs – each serving a different purpose and with each having a clear separation of responsibility from the others – for consumption by critical customer systems. In this way, all functionality is exposed.

Each module is designed and developed independently, while advanced APIs and legacy support enable integration between modules. Changes to the front-end User Interfaces (UIs) can be made independent of one another and the back end. This architectural approach:

- Separates core features so that product updates can be rolled out quickly while site-specific configurations remain unaffected.
- Provides the ability to add different digital channels without any additional server coding.

For every API that IGT uses, we create comprehensive, detailed documentation, including all API features and functionality and how they integrate into products and services. For integrations into third-party products or services, we can also provide the documentation to the third-party vendor.

API Industry Leadership

IGT has been performing integrations between its lottery gaming systems and third-party systems and devices for more than 40 years. We are the global API leader with a 75% market share and have produced tremendous results for our customers. Our standardized APIs (allowing for simplified integrations with yet-to-be-known future solutions) will also keep the iLottery System open and able to accept new systems and interfaces throughout the Contract term. While knowing what the future will bring is out of the grasp of any lottery solution provider, building now for the future is key to any the Lottery's ability to adapt to tomorrow's opportunities.

System Summary 4.2 – 9



Service-Oriented Architecture (SOA)

We use SOA design principles and methodologies for designing and developing software in the form of interoperable services. With SOA, any type of API integration can be achieved. This approach affords tremendous scalability and flexibility in terms of ongoing development – making modifications, adding new features, and evolving the solution quickly to meet business needs.

The open architecture is designed for:

- Working with third parties.
- Standard-based interfaces for easy integration.
- High performance.
- High availability.
- · High security.

The SOA creates separate, independent applications that provide unique services. Those services are then glued together through an orchestration process that allows for the site's specific business logic to be implemented.

Product Roadmaps for Ongoing Enhancements

We follow a "product first" approach in developing our iLottery System and its modular solutions. That is, we create a roadmap for a product that is continually influenced by ideas and feedback from our customers. New features are then designed using this input and made available to all customers that have the product. We would be happy to keep the Lottery apprised of the roadmap and solicit its input through forums such as meetings and workshops.

The advantages of the product roadmap approach are that:

- You won't be faced with a solution that becomes outdated over time.
- Rather than spending our time and resources maintaining custom solutions, our development team works to add new features and enhance existing ones to optimize the baseline product for all customers.
- You'll spend less time testing new releases and more time getting new features to your players.
 Working with IGT's deployment team, you can ensure timely upgrades of your iLottery System so that you have the latest features.

4.2 – 10 System Summary



4.2.C Data Center Placement

Vendor must submit proposal for Primary and Backup Data centers that meet all federal, state and multi-jurisdictional regulatory requirements (e.g. MUSL Rule 2), as well as any applicable regulations or standards. The Primary Data Center (PDC) and Backup Data Center (BDC) must be located anywhere in the Continental United States.

The primary data center must also conform to any relevant PCI requirements or security requirements imposed by the Lottery and any associations (e.g., MUSL) that provide game oversight. The Vendor may provide this solution through a Lottery approved co-location facility that at a minimum meets Tier II standards as defined by the Uptime Institute (Exhibit B) and MUSL Rule 2.

The backup data center shall conform to all federal and state regulatory requirements and shall be located in the continental United States. The backup data center must also conform to any relevant PCI requirements or security requirements imposed by the Lottery and any associations (e.g., MUSL) that provide game oversight. The backup data center must be located in an area that minimizes and separates risk of concurrent failure with the primary data center, such as isolation on separate power grids. Additionally, the backup data center must be tested every six (6) months for readiness in a planned fail over

IGT has read, understands, and will comply with this requirement.

For details on our proposed data centers, please see Section 4.2.1, iLottery System Configuration, and its sub-requirements, as well as Section 3.5, Physical Security, which describes both the in-state and cloud data centers.

4.2.D Certified Equipment

The proposed equipment provided the Lottery must be inspected for safety and approved by a reputable testing laboratory, and all proposed equipment must be in compliance with regulations applicable for devices of the class proposed for the Lottery (e.g., FCC, CE, TUEV, etc.). Alternatively, if the devices proposed are new models, and not yet inspected and/or certified, Vendors must commit to providing a document showing certification as of the Contract signing.

IGT has read, understands, and will comply with this requirement.

All proposed IGT equipment for the Lottery has been routinely and thoroughly tested, inspected for safety, and approved by reputable testing laboratories such as Underwriter's Laboratory (UL). Alternatively, for any devices proposed that are new models not yet inspected and/or certified, we will submit a document demonstrating certification of any devices outstanding as of the Contract signing.

In addition to independent testing, we will perform extensive software testing and Quality Assurance (QA) on all hardware and software before it is released. We will also integrate these products before releasing them for general availability. Our stringent QA processes will ensure that the software and system are operationally sound and ready to be deployed in the critical production environment.

System Summary 4.2 – 11



4.2.E

Current Equipment

All equipment must be current and new, and its hardware must be supported by its manufacturer. Equipment proposed must be compliant with electronic technology manufacturing standards and be currently manufactured by that Vendor or its suppliers. All hardware models and software versions installed at start-up must represent the then-current equivalent or better version in case a proposed offering is phased out or superseded.

Equipment must be supported and maintained for the life of the Contract and upgraded as soon as new hardware models and software versions become available, as approved by the Lottery.

IGT has read, understands, and will comply with this requirement.

4.2.F

Functionality Testing

All equipment and software used in conjunction with operating iLottery Games shall meet, as a minimum testing requirement, the standards set forth in the latest version of the GLI-19 Standards for Interactive Gaming Systems (See Exhibit F) in addition to § 179-1- 10 and any requirements adopted by the Lottery. The Vendor will be responsible for the cost of third-party testing and certification of this functionality by a Lottery approved independent testing laboratory.

IGT has read, understands, and will comply with this requirement.

Our professional system technicians and software engineers will leverage our mature best practices to continually ensure that all equipment and software is working as it should at all times — and proactively and responsibly address any issues as they arise.

Performance and volume tests are accomplished with the use of simulation tools. The intent of the tests is to monitor iLottery System and software behavior under a large transaction volume. Testing will include a mix of transaction types and be repeated with various levels of volume. System response time and behavior will be monitored. Anomaly situations, e.g., takeover tests, may also be performed while the System is under load.

Tests include the following:

- Load Test: Tune the System to optimize response times, capacity, and resources while meeting performance criteria.
- Stress Test: Run a given hardware and software configuration under the maximum possible load (e.g., stressing CPU or throughput, whichever peaks first) and noting the System's maximum performance capabilities.
- Soak Test: Ensure the stability of the System over a prolonged period of sustained load test.
- Anomaly Test: Verify the resiliency of the System while simulating failure of specific components in the transaction path. The test is performed under a sustained load.

4.2 – 12 System Summary



4.2.1 iLottery System Configuration

The Lottery requires a configuration capable of handling the immediate and long-range needs to support iLottery operations, as defined in the following sections. The Lottery is seeking to establish data centers that are resilient and capable of supporting the on-going operation of the system in the event of service disruptions. If a data center is housed in a collocation center, then the Vendor shall propose a facility that at minimum meets Tier II standards as defined by the Uptime Institute (Exhibit B). The Lottery may request after year four move to a Cloud Base system that, at a minimum meets Tier II standards as defined by the Uptime Institute and shall be compliant with MUSL Rule 2 Section 2.23 (Exhibit C) Cloud Hosting and including any future updates made to MUSLRule2.

NOTE: Responses must depict the configuration in detail, including configuration diagrams. Hardware and software items should be identified by its manufacturer, product name, and model number, as applicable. For software, application ID's and version numbers should be provided. Any deviations from the suppliers' standard hardware and software products should be disclosed and an explanation provided. (Installation of any such deviations would require prior approval of the Lottery.)

Per Addendum No. 3, the Lottery has changed this requirement to read:

The Lottery requires a configuration capable of handling the immediate and long-range needs to support iLottery operations, as defined in the following sections. The Lottery is seeking to establish data centers that are resilient and capable of supporting the on-going operation of the system in the event of service disruptions. If a data center is housed in a colocation facility, then the Vendor shall propose a facility that at minimum meets Tier II standards as defined by the Uptime Institute (Exhibit B). A Cloud Base system is required at the start of the contract, that at a minimum meets the Uptime Institute Tier II standards and complies with federal, state and multi-jurisdictional regulatory requirements (e.g. MUSL Rule 2 Section 2.23 (Exhibit C) Cloud Hosting), as well as any applicable lottery regulations or standards. The Vendor shall have at least one staff member, as defined by MUSL RULE 2 Section 2.23, available during the life of the contract to act as the subject matter expert for their cloud environment.

NOTE: Responses must depict the configuration in detail, including configuration diagrams. Hardware and software items should be identified by its manufacturer, product name, and model number, as applicable. For software, application ID's and version numbers should be provided. Any deviations from the suppliers' standard hardware and software products should be disclosed and an explanation provided. (Installation of any such deviations would require prior approval of the Lottery.)

IGT has read, understands, and will comply with this requirement.

In support of the Lottery's objective of receiving an iLottery System that is robust and flexible to meet the Lottery's evolving requirements, we are proposing to fully integrate the proposed iLottery System with the Lottery's current Aurora retail gaming system – an integration that will provide the Lottery with a single system of record covering the entire business (both the retail and digital channels). This combined approach is capable of handling, as required, the immediate and long-range needs to support iLottery operations, as defined in the following sections.

System Summary 4.2 – 13



IGT understands that the Lottery is seeking to establish data centers that are resilient and capable of supporting the on-going operation of the iLottery System in the event of service disruptions. IGT will provide a cloud-based system that, from the start of the Contract, meets, at a minimum, the Uptime Institute Tier II standards and complies with federal, state, and multi-jurisdictional regulatory requirements (e.g., MUSL Rule 2 Section 2.23 (Exhibit C) Cloud Hosting), as well as any applicable lottery regulations or standards.

To view a system configuration diagram of the major iLottery components, please refer to the insert entitled **IGT's iLottery Configuration Diagram**, which can be found at the end of this section. The insert shows the iLottery Primary Data Center (PDC) infrastructure. The iLottery Backup Data Center (BDC) infrastructure will mirror it. The diagram includes all the major hardware and software items and the manufacturer, product name, and model number as applicable. For software, version numbers are provided. IGT understands that any deviations from the supplier's standard hardware and software products, and installation of any such deviations, will require prior approval from the Lottery.

IGT will also have at least one staff member, as defined by MUSL RULE 2 Section 2.23, available during the life of the Contract to act as the subject matter expert for the cloud environment.

4.2.1.1

Configuration at the Primary Data Center

All configurations must be illustrated to the Lottery within the Vendor's response. Any configurations must be approved by the Lottery prior to implementation. The following list includes topics that are intended to establish minimum requirements. Vendors are encouraged to propose solutions that exceed these requirements while preserving the intent of the stated requirements.

IGT has read, understands, and will comply with this requirement.

For the cloud-based data center operations, our Microsoft Azure hosting site in Virginia is designated as the iLottery PDC. IGT has chosen Microsoft Azure as the cloud provider for the iLottery infrastructure. Microsoft Azure offers protection from both facility-level and region-level outages. The iLottery site located in their US Central region will act as the iLottery BDC. Both data centers comply with key industry standards, including International Organization for Standardization (ISO) 27001:2013 and Payment Card Industry Data Security Standards (PCI DSS), for security and reliability.

Ready to Grow with the Lottery

Cloud computing is playing an increasingly important role in the operation of organizations of all sizes and in all industries around the world. The proposed Azure data centers are enabled to drive operations at optimum high availability. Azure availability zones are physically separate locations within each Azure region that are tolerant to local failures. Azure is also built on leading security technologies to help manage and control user identity and access, and offers resiliency through high availability, disaster recovery, and backup. By leveraging this continuously expanding technology, the Lottery will be well positioned for the next 10 years with a flexible solution that will support your business needs.

4.2 – 14 System Summary



4.2.1.1.1

Transaction Processing, Databases, Player Services, Wallet, Games Administration Servers

Servers providing mission-critical gaming support shall supported by protective redundancy for high availability processing. Data storage redundancy shall also be ensured. A component failure in one (1) system must not cause a failure in any other system. Additionally, a component failure in one (1) system must not result in the loss of a transaction. To meet this requirement, records of sold transaction data on the CGS shall exist in not fewer than two distinct locations to process (i.e. minimally log) transactions as approved by the Committee [see Rule 2.18]. Each location shall receive and acknowledge transaction board data prior to a ticket being allowed to print.

Per Addendum No. 3, the Lottery has changed this requirement to read:

Servers providing mission-critical gaming support shall supported by protective redundancy for high availability processing. Data storage redundancy shall also be ensured. A component failure in one (1) system must not cause a failure in any other system. Additionally, a component failure in one (1) system must not result in the loss of a transaction. To meet this requirement, records of sold transaction data on the CGS shall exist in not fewer than two distinct locations to process (i.e. minimally log) transactions as approved by the Committee [see Rule 2.18]. Each location shall receive and acknowledge transaction board data prior to a ticket being allowed to be created.

IGT has read, understands, and will comply with this requirement.

All iLottery transactions will be immediately and securely logged across multiple disks – i.e., the Master Journal File (MJF) and Backup Journal File (BJF) on each Aurora transaction engine (thus providing redundant logging) within your Aurora retail gaming system which will be integrated with the iLottery System, as stated above.

To ensure high-performance, minimize service interruptions, and prevent loss or corruption of data from a hardware or software failure and loss of processing capability from a component failure, we will provide a proven fail-safe operation with fault-tolerant hardware, software, and networking hardware at both of the data centers. A component failure in one PDC system will not cause a failure in any other.

As noted in Section 4.2.1.1.6, Disaster Recovery, (and mentioned just above under 4.2.1.1), our proposed digital data centers – the iLottery PDC and BDC – support availability zones and are enabled to drive operations at optimum availability while supporting disaster recovery and business continuity strategy needs. The Azure availability zones are physically separate locations within each Azure region that are tolerant to local failures. To ensure high availability, three separate availability zones are present within the primary region. Disaster recovery is achieved by the continuous copying of data on the backup region using services provided by Azure.

System Summary 4.2 – 15



4.2.1.1.2 Failover

In case of a failure in an active server at primary, the remaining systems must immediately provide access to players and other system users, assuming the load without loss or corruption of any data and transactions received prior to the time of the failure.

IGT has read, understands, and will comply with this requirement.

Please refer to Section 4.5.3, System Disaster Recovery and Business Continuity Plan, where we describe how we ensure continuity of the iLottery System, operations, services, and games.

The Azure Recovery Services contribute to our customers' business continuity plan strategies, to keep their data safe and apps and workloads online when either planned or unplanned outages occur.

Azure Site Recovery helps ensure business continuity by keeping business apps and workloads running during outages. Site Recovery replicates workloads running on physical machines and Virtual Machines (VMs) from the Virginia-based cloud PDC to the cloud BDC. When an outage occurs at the PDC, we failover to a secondary location, and access apps from there. After the PDC is running again, we can fail back to it.

4.2.1.1.3 Operations Procedures

Procedures and expectations for computer operations staff, especially regarding failure situations, will be straightforward. In addition to operator-controlled failover, the System shall be able to recover from failures without operator intervention ("autofailover").

IGT has read, understands, and will comply with this requirement.

Procedures for the operations staff are straightforward and outlined in a checklist format. The checklists are maintained in a database and reviewable online by supervisors and managers. There are checklists to perform daily, nightly, and emergency activities that ensure System and data integrity as needed. Situations include day-end processing, failovers, nonfatal failures and recoveries, component recovery, Local Area Network (LAN) recovery, and file recovery. In addition to operator-prompted failover, the System will be able to recover from failures without operator intervention ("autofailover").

4.2 – 16 System Summary



4.2.1.1.4 Secure Connections

There shall be no capability to connect into any system from a remote terminal or computer equipment without Lottery approval. Any such capability, such as remote monitoring, or diagnosis of equipment or software, shall employ stringent security mechanisms. Connections to other remote systems and terminals shall be protected by firewalls, encryption, and/or other means. Any routers shall route traffic only to addresses defined in their routing tables as valid. The acceptability of any security approach shall be subject to Lottery approval.

IGT has read, understands, and will comply with this requirement.

Azure's secure system-networking approach will route iLottery data securely between the PDC and the BDC. The iLottery System will be secure against outside attacks by a non-retailer terminal or other unauthorised devices through the use of a multi-layered system of firewalls and other hardware, encryption, and security programs, all of which are continually updated as new outside threats emerge.

Azure's online services employ multiple strategies for securing its network boundary, including automated detection and prevention of network-based attacks, specialized firewall devices, and Exchange Online Protection (EOP) for anti-spam and anti-malware protection. In addition, Microsoft online services separate their production environments into logically isolated network segments, with only necessary communication permitted between segments. Network traffic is secured using additional network firewalls at boundary points to help detect, prevent, and mitigate network attacks. Please refer to Section 4.7, Communications Network Requirements, where we describe network security in greater detail.

IGT understands and agrees that the Lottery must approve any proposed security approach prior to implementation and that:

- Any remote monitoring or diagnosis of equipment or software will employ stringent security mechanisms.
- Connections to other remote systems and terminals will be protected by firewalls, encryption, or other means.
- Routers will route traffic only to addresses defined in their routing tables as valid.
- All remote activities performed on the iLottery System will be logged in detail and fully auditable.

4.2.1.1.5 Time-Synchronizing

All servers must have a time-synchronizing mechanism to ensure consistent time recording and reporting for events and transactions. Such synchronization must utilize an external time source, or sources.

IGT has read, understands, and will comply with this requirement.

All systems provided by IGT will be time-synchronised to ensure consistent time recording and reporting for events and transactions. Time synchronization ensures that all transactions and logs across the systems have synchronised time stamps. The data is synchronized from a time-stamped perspective. Synchronization will utilize an external time source.

System Summary



4.2.1.1.6

Disaster Recovery

In the event of irreparable damages at the primary data center, or of an unplanned, extended abandonment of the primary data center, the Vendor must provide, at no additional cost, those servers, facilities, and other components necessary to resume under an operational scenario using two (2) data centers. Such servers, facilities, and other components must be furnished, installed, and operational within thirty calendar days after the irreparable damage. Until a permanent primary data center can be re-established, substitute facilities must meet Lottery-approved environmental and security measures.

IGT has read, understands, and will comply with this requirement.

Our proposed iLottery cloud data centers – the PDC and BDC – support availability zones and are enabled to drive operations at optimum availability while supporting disaster recovery and business continuity strategy needs. The Azure availability zones are physically separate locations, within each Azure region, that are tolerant to local failures. To ensure high availability, three separate availability zones are present within the primary region. Disaster recovery is achieved by the continuous copying of data on the backup region using services provided by Azure.

For disaster recovery of the Aurora transaction engines, the process of passing operations between the current West Virginia land-based PDC and BDC also ensures high availability.

For business continuity in terms of people, resources, and business processes and to ensure continuity of operations, the resumption strategy options are transfer of work, re-location, and co-location to ensure the disaster recovery response can be met.

4.2.1.2

Configuration at the Backup Data Center

4.2.1.2.1

Backup Servers

The Vendor shall provide two or more remote backup systems that can take over for the primary data center systems, if necessary. Data transferred to and recorded at the remote backup systems shall always contain the most recent transactions, thereby allowing a takeover. The backup data center shall be configured to allow for manual data center switch. The wide-area-network (WAN) connection shall provide routing of transactions to the backup as well as the primary data center. Games administration functions shall be available at the backup data center, as well as being available remotely by communications from the primary data center. The Vendor shall demonstrate on a scheduled basis that the backup data center is fully functional by operating in production from that site at a minimum of twice a year or upon request of the Lottery. All productions functions shall be available during this failover. This includes but not limited to Lottery (PDC and BDC) connectivity related to Back Office, Testing, Dashboard, Databases, SFTP, etc.

IGT has read, understands, and will comply with this requirement.

4.2 – 18 System Summary



As with IGT's proposed PDC cloud data center, the BDC also supports availability zones and is enabled to drive operations at optimum high availability while supporting disaster recovery and business continuity strategy needs.

The Azure availability zones are physically separate locations, within each Azure region, that are tolerant to local failures. To ensure high availability, three separate availability zones are present within the secondary region. Disaster recovery is achieved by the continuous copying of data at the backup region using services provided by Azure.

With your Aurora retail system's quad-plex transaction engine configuration, data transferred to and recorded at the remote backup systems will always contain the most recent transactions, thereby allowing a takeover. The BDC will be configured to allow for manual data center switch. The Wide Area Network (WAN) connection will provide routing of transactions to the BDC, as well as the PDC. The primary Aurora transaction engine and the live iLottery system are always in communication. Games administration functions will be available at the BDC, as well as being available remotely by communications from the PDC. IGT will demonstrate, on a scheduled basis, that the BDC is fully functional by operating in production from that site upon request of the Lottery.

4.2.1.2.2 System Backup Sizing

The remote backup systems shall at a minimum be of the same processing capacity, configuration, storage capacity and architecture as the primary data center systems. They should be a "mirror" of the primary.

IGT has read, understands, and will comply with this requirement.

4.2.1.2.3 Secure Connections

This section has the same specification as Section 4.2.1.1.4 - Configuration at Primary Data Center and the response may reference that response, if identical.

As noted above, in our Section 4.2.1.1.4, Secure Connections within the Configuration at the Primary Data Center response, all systems will have the same connectivity specifications.

System Summary 4.2 – 19



4.2.1.2.4

Time Synchronizing

This section has the same specification as Section 4.2.1.1.5 - Configuration at Primary Data Center and the response may reference that response, if identical.

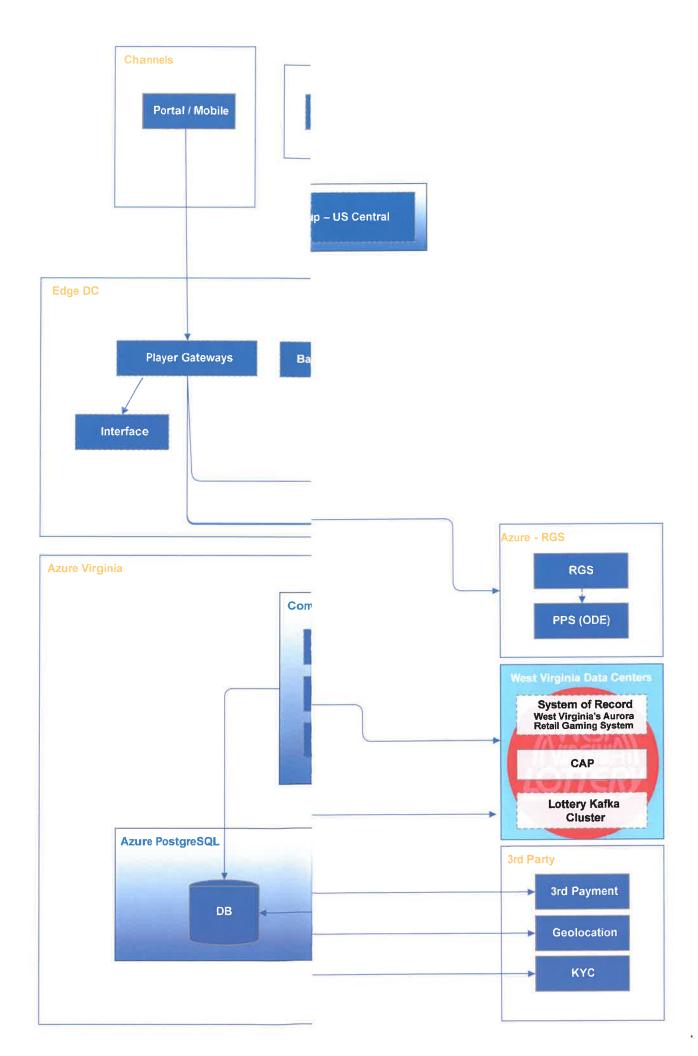
As noted above, in our Section 4.2.1.1.5, Time-Synchronizing, within the Configuration at the Primary Data Center response, all systems will have the same time synchronizing specifications.

4.2.1.2.5 Disaster Recovery

This section has the same specification as Section 4.2.1.1.6 - Configuration at Primary Data Center and the response may reference that response, if identical.

As noted above, in our Section 4.2.1.1.6, Disaster Recovery, within the Configuration at the Primary Data Center response, all systems will have the same disaster recovery specifications and business continuity strategies.

4.2 – 20 System Summary



4.3

Environments

4.3.1 Centralized Gaming System

4.3.1.1 Open Integration Architecture (CGS)

The Vendor shall provide an open integration architecture within the System that supports the quick deployment of iLottery Games and related features, known as Centralized Gaming System ("CGS"). CGS will support the operational requirements for all iLottery Gaming activities that are dependent on the System. This includes, but is not limited to, centrally hosted technology to log player activity, handle funds, manage tax-reported prizes, and the ability to provide customer service related to a game and associated promotions.

IGT has read, understands, and will comply with this requirement.

Systems integration is a core IGT competency. IGT has served as the systems integrator for its customers since our company's inception more than 40 years ago.

IGT is also an industry pioneer in the development of clean, well-documented Representational State Transfer (REST) and Simple Object Access Protocol (SOAP) Application Programming Interfaces (APIs). Designed with integration in mind, our proposed iLottery System features a dedicated integration layer using these proven integration protocols. The layer exposes a rich set of clean, well-documented APIs – each serving a different purpose and having a clear separation of responsibility from the others – for consumption by critical customer systems, for example, third-party platforms and systems including but not limited to:

- Game content providers and game engines.
- Know Your Customer (KYC) databases.
- Geolocation services.
- Responsible gaming databases.
- Customer Relationship Management (CRM)/marketing-cloud services.
- Regulatory systems.
- Affiliate systems.
- Administration and reporting systems.
- Business intelligence systems.
- External back-office systems.



Through the APIs in this dedicated layer, all functionality is exposed.

The iLottery System's integration layer enables efficient plug-and-play integration with third-party game content (eInstants or other digital content the Lottery may choose to adopt in the future, regulations permitting). By aggregating content from multiple game engines, the layer enables consolidated portfolio management integrated with the iLottery System's player account management and player-engagement functionality.

Using this means, we will ensure that:

- All of the various modules and components are securely integrated into the Lottery's technological
 ecosystem, supporting all sales channels and all types of user profiles (players, Lottery
 management, regulators, etc.).
- The Lottery will have centrally hosted technology to log player activity, handle funds, manage tax-reported prizes, provide customer service related to a game and associated promotions, and all other processes and services to run an efficient, end-to-end iLottery program.

Standardized APIs

Furthering our focus on adaptability, our standardized integrations (allowing for simple integrations with yet-to-be-known future solutions) also help us realize the goal of openness and acceptance. Our iLottery System's APIs are standardized across delivery channels and leverage a modern API-management platform to enable maximum reusability and faster time to market when adding new channels.

While knowing what the future will bring is out of the grasp of any lottery solution provider, building now for the future is key to any modern lottery's sustained success. With IGT, the West Virginia Lottery will have a partner with the proven ability to effectively integrate the best systems, services, and content providers available.

4.3.1.2

Integration with Third-Party Gaming Systems

CGS should integrate with any third party gaming system. All gaming system transactions should be recorded in two independent locations before a response is provided to the player.

IGT has read, understands, and will comply with this requirement.

We have integrated Instant Win Gaming (IWG) in New Zealand, and are in the process of doing so in Kentucky and Georgia.



4.3.1.3 (A-D) Exposed Functionality

Vendor should deliver the CGS in a manner that allows third-parties to offer iLottery Games, player loyalty programs, access to second chance drawings, or other programs as directed by the Lottery, using System functionality that is securely exposed via API's. API services necessary to accomplish this include but are not limited to the following:

- A. Services to interface with PAM capabilities (e.g. Base Wagers, Incremental Wagers, Wager Pooling, login, registration, geolocation, responsible gaming, etc.).
- B. Services to interface with RWT capabilities.
- C. Services to interface with Engagement Features.
- D. Services to interface with promotion capabilities.

At the Lottery's option during the Term of the Contract, Vendor will be required to develop and support additional integration methods that securely expose other areas of the System to third-parties.

All API requests from the production environment shall be logged and available within back office reporting systems.

Should technologies advance and API services are no longer prominent in developer communities, then Vendor will be required to implement new integration technologies upon the Lottery's request at no extra charge to the Agency.

IGT has read, understands, and will comply with this requirement.

As outlined above and further detailed in Section 4.13, iLottery Games & Game Integration Services, the iLottery System's integration layer exposes clean, secure, well-documented APIs to enable an efficient, one-time integration effort for third-party game providers and other systems, fully supporting all required API services.



4.3.1.4 CGS Environments

Vendor shall make the CGS available to third-party game developers through standardized API's available in several different development environments including an exploratory environment, a development / testing environment, a quality assurance environment, an acceptance testing environment, and a production environment.

The exploratory environment should be constructed to allow authorized game developers (including Vendor) to prototype games and wager types, play features and other functionality as it relates to the System without the need for ongoing consultation or involvement by the Lottery and/or Vendor. As such, Vendor is required to offer easily accessible documentation, code samples, FAQ's and other resources to facilitate the rapid incubation of game prototypes by game developers in the exploratory environment. A portion of the exploratory environment should be visible to the Lottery in order to view prototypes that have been finalized by third-party developers and/or Vendor.

The Vendor testing environment is for games selected by the Lottery for inclusion as an iLottery Game. Vendor will be required to manage all functions necessary, in cooperation with approved game developers, in order to test iLottery Games integration with the System. Testing of new iLottery Games shall be completed by Vendor within a twenty-one (21) day period. Testing of any updates to existing iLottery Games shall be completed by Vendor within a fourteen (14) day period.

The Lottery shall have access to the acceptance testing environment for acceptance testing, review and approval of all iLottery Games prior to deployment. Vendor shall provide, and make available / accessible, the acceptance testing environment at no cost to the Lottery.

The production environment is for iLottery Games which have been approved by the Lottery and are available for wagering by players that are connected to the System.

iLottery Games, once in an approved status, shall be easily interchangeable through Portals. The deployment of iLottery Games into Portals shall be completed by Vendor within three (3) days from the Lottery approval after acceptance testing formal sign off.



4.3.2

Quality Assurance (QA Environment)

The Vendor shall construct and utilize a separate QA Environment, available exclusively to the Vendor, third-party integrated suppliers, the Lottery, and for testing by a Lottery approved independent testing laboratory. Costs related to testing by the independent testing laboratories shall be the responsibility of the Vendor. Using this environment, the Vendor development team and the Lottery development team shall collaborate and perform test cycles prior to releases to the Lottery for CAT.

Vendor should provide a QA environment that is stable, without outages and defects, whereby third-party integrated suppliers (e.g., portal developer, third-party game suppliers, etc.) can perform unimpeded work to integrate their software with the System. Vendor should provide up to date documentation to support efforts required by third-parties.

The Lottery shall have the ability to access the QA environment for the purposes of reviewing the progress of third-party integrated deliverables. Vendor shall perform quality testing related to third-party integrated suppliers, including third-party games, and shall complete those tests in a timely manner as set forth by Lottery in each project charter.

IGT has read, understands, and will comply with this requirement.

All third-party integration will be supported in the CAT environment before it is enabled in the production environment. Appropriate API documentation will be provided as needed when integration activity is introduced to the systems.

4.3.3

Vendors QA & Development Environments

The Vendor should not conduct software development or its own quality assurance activities on any of the Lottery production or testing environments, but rather, it should employ separate Development and Quality Assurance Environments.

IGT has read, understands, and will comply with this requirement.

4.3.4

Production Environment

The Production Environment is for iLottery Games and related features that have been approved by the Lottery and are available to players who are connected to the System. iLottery Games, once in an approved status, should be easily interchangeable through Portals. The deployment of iLottery Games into Portals should be completed by the Vendor within three calendar days after Lottery approval after CAT (Customer Acceptance Testing) formal sign off.



4.3.5

Lottery Test Environments

The Vendor should provide two testing environments for the Lottery. In addition, any of the above development and production systems should be available for testing/use by the Lottery, with full support from the Vendor. (The Lottery and the Vendor should work together to identify and assess any possible risks or impacts on production operations.)

IGT has read, understands, and will comply with this requirement.

4.3.5.A Availability

The Vendor should provide a separate system for testing by the Lottery that is available to it 24 hours per day and 7 days a week. This test environment should always be available to Lottery staff and cannot be taken down or updated without Lottery permission.

IGT has read, understands, and will comply with this requirement.

4.3.5.B Access

The Lottery Testing Environment should support testing from Lottery Headquarters or other Lottery-approved locations.

IGT has read, understands, and will comply with this requirement.

4.3.5.C System

Components of the Testing System should be identical to the production system, but protective redundancy is not required.



4.3.5.D Scripts

Vendor should provide the Lottery with scripts that have already been tested and verified to work via their own testing mechanism.

IGT has read, understands, and will comply with this requirement.

4.3.5.E Integrated Environment

The Vendor should provide a Lottery-accessible testing environment(s), for all components of the System. Third-party provided features and integrations should also be replicated in this testing environment.

IGT has read, understands, and will comply with this requirement.

4.3.5.F Portal Testing Environment

Vendor should provide a Lottery-accessible testing environment(s) for all content implemented into Portals. Any third-party integrations should also be replicated in the Portal Testing Environment.

IGT has read, understands, and will comply with this requirement.

As part of our Proposal, IGT will supply the Lottery with a CAT environment that will support portal and mobile testing, be Lottery-accessible, and be a place to test any new content releases before they go to production. Third-party suppliers (geolocation, KYC providers, and payment service providers), which are offered via IGT and part of our Proposal, will also have similar support for a testing environment. Any third-party contracts that are not part of our standard Proposal will need to be evaluated to ensure they can offer the same level of support.

4.3.5.G Management Tool

Vendor should provide the Lottery with a management tool, centralized logging, and track defects pre and post go-live during the acceptance testing phase. Vendor should provide defect management meetings, assign critical defects and entertain where they are in the requirements.



Once the software development life cycle is complete, the formal testing phase will begin. During format testing, we will perform System Integration Testing (SIT) and support the Lottery's CAT process.

Our software team will work closely with Lottery personnel daily to ensure productive testing. Any software defects discovered will be formally documented and tracked via the Partner-JIRA issue-tracking software we use. Partner-JIRA is a web-based interface for submitting, documenting, and managing an upgrade or enhancement request. We will share our version of Partner-JIRA with the Lottery. Our team will also work with the Lottery to schedule any software application updates during CAT.

To ensure the local IGT team and the Lottery understand a software request, the following activities will take place for each request submitted, before planning the release and beginning any software modification:

- The request will be logged (and then tracked electronically from submission to completion).
- Impact/risk analyses will be conducted to evaluate the scope and implications of the proposed change(s).
- Acceptance criteria will be captured to further understand the request.
- Alternative solutions will be considered and a final recommendation made.
- The priority level will be assigned in conjunction with the Lottery.

4.3.5.H Testing Equipment

The Vendor should provide the Lottery with devices that match 80% or more of market device penetration within the state, not to exceed ten unique devices, based on the Lottery's analytics reporting systems ("Device Coverage"). This includes but not limited to phones, tablets, and PC's.

IGT has read, understands, and will comply with this requirement.

We perform extensive testing with every version of our mobile application in our Mobile Device Testing Lab. We use a combination of the most popular physical iOS and Android devices with their most recent and applicable operating system versions.

IGT's Mobile Device Testing Lab

We recognize the importance of giving players a high-quality experience that's consistent across devices and in line with their expectations for brand engagement.

Testing significantly impacts the success of a mobile app. Our mobile apps, as consumer-facing apps, need to go through comprehensive QA before launch into app stores.

In addition to the normal course of developing and testing an app's features, it is critical to constantly validate that an app is performing at the highest level in the dynamic digital environment. App development is complex enough. Adding to that are the many device vendors and operating systems with large user bases in existence. To make things even more difficult, most Android-device vendors customize the Android operating system such that the application looks and behaves slightly differently in some situations based on the operating system and device combination.



In response to these challenges, IGT created its Mobile Device Testing Lab. The lab leverages cloud solutions to assess a broad spectrum of the most popular devices on the market to provide a solid test bed. The lab uses a variety of industry-standard tools and processes to perform compatibility, performance, and security testing.

4.3.6 Quantitative Performance Criteria

4.3.6.A Initially Support 50,000 Concurrent Internet Players

The System shall initially support fifty thousand (50,000) concurrent Internet players and provide a scalable solution to handle increased player capacity.

IGT has read, understands, and will comply with this requirement.

IGT's proposed iLottery System will initially support 50,000 concurrent internet players. The System's fully virtualized and redundant deployment-infrastructure is highly flexible and scalable to meet your performance criteria and maintain high volumes of site activity without degraded performance. Because it is a cloud-based solution, enhancing the architecture – whether horizontally, such as by increasing volume capacity by adding virtual machines, or vertically, such as by increasing speed by increasing Central Processing Unit (CPU) memory – requires less time and resources than ever before.

4.3.6.B

Expand to Accommodate 200,000 Concurrent Players

The ability to expand the System to accommodate up to two hundred thousand (200,000) concurrent players shall be available, should such an expansion opportunity be desired by the Lottery.

IGT has read, understands, and will comply with this requirement.

As described in Section 4.3.6.A, our proposed iLottery System is scalable as growth is needed and will be able expand to accommodate up to 200,000 concurrent players when such support becomes necessary.

Environments



4.3.6.C

Initially Handle 50,000 Continuous Sales Transactions per Minute

The System shall initially be capable of handling up to fifty thousand (50,000) iLottery sales transactions per minute on a continuous basis and provide a scalable solution to handle increased player capacity.

IGT has read, understands, and will comply with this requirement.

Our proposed iLottery System will initially have the capability to handle up to 50,000 iLottery sales transactions (i.e., a wager or bet) per minute on a continuous basis. A scalable solution, it will also be able to handle increased player capacity as your business grows.

4.3.6.D

Support Up to 10,000,000 Unique Wager Accounts

The System shall support up to ten million (10,000,000) unique wagering accounts.

IGT has read, understands, and will comply with this requirement.

As described in Section 4.3.6.A, our proposed iLottery System is scalable as growth is needed and will be able to expand to support up to ten million (10,000,000) unique wagering accounts when such support becomes necessary.

4.3.6.E iLottery Wagers Response Time

Response time for iLottery Wagers shall be less than five (5) seconds from enter-to-send until the Wager is confirmed for the player.

IGT has read, understands, and will comply with this requirement.

Our iLottery System will have a response time for iLottery wagers that is less than five (5) seconds from enter-to-send until the wager is confirmed for the player during an immediate purchase request from the player. Other purchase requests (for example subscriptions or group play) would be placed at a later date than during the initial player request.

4.3 – 10 Environments



4.3.6.F

Recovery from PDC Server Failure

Recovery from a server failure at the primary data center shall be accomplished in no more than two (2) minutes without loss of any transactions.

IGT has read, understands, and will comply with this requirement.

Our iLottery System will recover from server failure at the Primary Data Center (PDC) in no more than two (2) minutes without loss of any transactions.

4.3.6.G BDC Availability from PDC Failure

Backup data center availability from a primary data center failure shall be accomplished in no more than ten (10) minutes without loss of any transactions.

IGT has read, understands, and will comply with this requirement.

Our iLottery System will provide Backup Data Center (BDC) availability from a PDC failure in no more than ten (10) minutes without loss of any transactions.

4.3.7 Systems Management & Monitoring

Systems management and monitoring capabilities should be available at both the primary and backup data centers. Systems management tools should create visual and/or audible alarms to provide warnings of problems with components. The Vendor should provide the Lottery notifications of any warnings or problems with components within 1 hour of the incident.

IGT has read, understands, and will comply with this requirement.

IGT will use a combination of Azure Native, such as Azure Monitor, and third-party solutions to provide realtime monitoring of the various metrics of systems or components. This approach will deliver a comprehensive solution for collecting, analyzing, and acting on telemetry from our cloud environments. The information obtained will help us understand how your applications are performing and proactively identify the issues that affect them and the resources they depend on.

Environments



Examples of what you can do with Azure Monitor include:

- Detect and diagnose issues across applications and dependencies.
- Correlate infrastructure issues.
- Drill into our monitoring data for troubleshooting and deep diagnostics.
- Support operations at scale.
- Create data visualizations.
- Collect data from monitored resources.
- Investigate change data for routine monitoring or for triaging incidents.

4.3.8

Operating Hours

The Vendor shall accommodate continuous operations. This means the System shall operate 24 hours per day, 7 days a week, and 365 days a year. Maintenance windows that result in planned service outage should be negotiated with the Lottery and shall not impact draw times.

IGT has read, understands, and will comply with this requirement.

IGT will work with the Lottery to identify the maintenance windows for planned service outages that do not impact draw times.

4.3.9

Compliance with ADA Requirements

The Vendor and all third-party vendors shall provide a solution that is compliant with the Americans with Disabilities Act of 1990 (Pub. L. No. 101-336, 104 Stat. 328 (1990)) ("ADA") requirements. Vendors should describe their current capabilities that support ADA accessibility guidelines.

The Vendor shall facilitate an ADA audit every twelve months after program launch, report audit findings to the Lottery, remediate any barriers that are identified, and provide timely solutions to these issues that are readily achievable.

IGT has read, understands, and will comply with this requirement.

IGT's proposed front-end solution complies with Americans with Disabilities Act of 1990 (Pub. L. No. 101-336, 104 Stat. 328 (1990)) ("ADA") guidelines. Content is accessible to a wide range of people with disabilities – including blindness and low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, speech disabilities, photosensitivity, and combinations thereof – making it more usable by older individuals with changing abilities due to aging and often improving usability for users in general.

4.3 – 12 Environments



The player portal is compatible for screen readers and keyboard navigation and is developed following the guidelines based on World Wide Web Consortium (W3C) Web Content Accessibility Guidelines (WCAG) 2.0 – Level AA. W3C is the main international standards organization for the World Wide Web, responsible for developing protocols and guidelines that ensure long-term growth.

Our proposed front-end solution and all customer implementations are designed, developed, and validated for the four guiding principles of making content:

- Perceivable (e.g., text alternatives, time-based media, adaptable, distinguishable).
- Operable (e.g., all UI and navigation are keyboard accessible, allow enough time, are attentive to preventing seizures, and easily navigable).
- Readable (e.g., readable, predictable, and offer input assistance).
- Robust (e.g., widely compatible).

All web pages are properly titled for smooth user navigation, with all non-text content across the player functions ensured with text alternatives and text-based descriptions.

The front-end solution also maintains the site's colors throughout, in compliance with brand guidelines, while maintaining the correct contrast.

We use a third-party software tool called Total Validator to analyze our app's compliance with the WCAG. Total Validator performs the following tasks:

- Check: Checks websites to help ensure accessibility, use of valid HyperText Markup Language (HTML) & Cascading Style Sheets (CSS), lack of broken links, and freedom from spelling mistakes.
- Assist: Helps meet regulations, make content easier for users, and improve the app.
- WCAG: Analyzes compliance with WCAG (Level AA).

The following figure highlights the different certification levels. As shown, IGT recommends and adheres to Level AA.

WCAG Certification Levels

Level A Level AA Level AAA (ADA recommended) (IGT recommended) (not recommended) Minimal baseline Provides prudent approach Gives up significant look/usability control for accessibility and usability and flexibility across all devices · Limited colors and design elements due to high-contrast-ratio requirement Difficult to achieve due to high complexity AAA often not possible without significant changes and adaptations that lower app quality

Figure 4.3 - 1.

IGT will facilitate an ADA audit every 12 months after program launch, report audit findings to the Lottery, remediate any barriers identified, and provide timely solutions to these issues that are readily achievable.

Environments 4.3 – 13



4.3.10 Vendor Error Liability

The Vendor is liable for any specific financial obligations arising as a result of errors or faults by the Vendor's staff, Sub-Vendors, and the System. These cases include, but are not limited to, errors in entry or posting of winning numbers or winning outcomes by System operators; software or hardware errors that create unwarranted payout liabilities; and apparent winning wagers. In the case of apparent winning wagers or outcomes issued by the Vendor's System and presented for redemption which are identified as valid winning outcomes by the Vendor (although it may not be), the Vendor shall pay all replacement or prize costs for such occurrences, and shall pay any additional costs incurred by the Lottery.

4.4

System Security

The Lottery expects the iLottery System to be of the highest security and integrity. This requires the Vendor to maintain confidential, high-level security protocols throughout its entire operation. The Vendor shall maintain a comprehensive approach to security controls aligned with GLI-19 and other applicable standards and frameworks.

IGT has read, understands, and will comply with this requirement.

A strong security program ensures the West Virginia Lottery's integrity and viability, guarding the Lottery's reputation and the trust its players have in the games offered and the systems that make those games possible.

IGT's Information Security Management System (ISMS), established and maintained by our Information Security Group, ensures our data security complies and aligns with the latest in gaming and technology industry standards. The ISMS ensures confidentiality, integrity, availability, authenticity, authorized use, and privacy of information in all forms and during all exchanges. It also ensures that data is protected with complex password controls, communication firewalls, and end-to-end encryption.

IGT's Comprehensive Approach to Security

IGT's adherence to a comprehensive, interconnected set of security standards ensures that we will always meet or exceed the Lottery's security requirements. Our methodology for security controls incorporates requirements specified by respected technology entities. The entities and their controls include, but are not limited to:

- Payment Card Industry Data Security Standard (PCI DSS) for our payment-gateway cashier solution.
- Gaming Laboratories International (GLI)-19 standards for digital gaming systems.
- The National Institute of Standards and Technology (NIST) (800-53) security compliance standard.
- The Control Objectives for Information and Related Technology (COBIT) framework for managing Information Technology (IT) infrastructure and service systems.

IGT's application of these security control standards – via our Corporate and global adherence to the International Organization for Standardization (ISO) 27001 and World Lottery Association Security Control Standard (WLA-SCS) standards to which we are also certified – follows a centralized process like those of other multi-national businesses. We also follow the guidance of the Open Web Application Security Project (OWASP), a nonprofit foundation that works to improve the security of software.

System Security 4.4 – 1



IGT is well prepared to aggressively meet security challenges to the iLottery System, including cyber threats and protection of sensitive information throughout the life of the Contract. Such protected information includes, but is not limited to, personal identifiable information, all game-related transactions and data, security codes, reports, security controls, retailer data, and player data such as subscriptions, player cards, and Player Wallets.

All data communications external to secured facilities – including but not limited to those between the primary site, backup site, and the Lottery – will be encrypted using the Advanced Encryption Standard (AES) – 256 bit. The commercially available AES cryptographic algorithm is nonproprietary and aligns with current international and lottery-specific security standards.

Data will be classified according to its sensitivity. It will then be handled according to that classification to ensure compliance with West Virginia laws. Protection of data in IGT solutions will include the encryption of data at rest and in-transit over networks (in accordance with the data's classification or the type of transaction in process) and state data archived for backup purposes.

4.4.1 Security Program

Vendors shall submit with their Proposals a proposed written security plan (Security Program) for the entire iLottery System. The Vendor's Security Program will be subject to formal approval of the Lottery at least sixty (60) days prior to the Go-Live Date and be updated, reviewed, and approved annually by the Lottery during the term of the contract.

IGT has read, understands, and will comply with this requirement.

IGT's Operations Security plans, i.e., the Security Program, are living documents. They are periodically reviewed. If needed, they are modified with a plan of action and milestones for updates or adding new security controls. The review-and-modification process will ensure the ongoing integrity and security of your System.

A critical aspect of our Operations Security plans is to review, update, and maintain them in a timely, orderly manner for each customer. An IGT security team – typically composed of a local site's Account Development Manager (ADM), Operations Manager, information security personnel, physical security personnel, and technology project or program manager – creates and reviews the initial plan for the customer. Once the plan is completed, it is delivered, in the required timeframe, to the customer for their final review and approval. Thereafter, the plan is reviewed annually or at a frequency determined by the customer.

We propose following the above process to create the West Virginia Lottery's Operations Security Plan/Security Program. Furthermore, our security team – based on their analysis of changed circumstances – will, during the reviews, recommend any changes that should be made to the Lottery's plan to ensure consistency with actual operations. IGT managers will implement any changed circumstances (such as hardware or software changes, Contract changes, user requirements, etc.) as they are approved. This will ensure continual synchronization between the Operations Security Plan/Security Program and the policies and procedures of the Lottery.

4.4 – 2 System Security



Security Program

With the understanding that IGT's entire response to the Lottery's solicitation will be a public document (please see our **Confidentiality Statement** at the beginning of the Proposal), we have provided an outline of our Security Program for the entire iLottery system within this section.

IGT will submit a detailed Security Program to the West Virginia Lottery, which will be subject to formal approval of the Lottery at least sixty (60) days prior to the Go Live date. Further, we understand that the Security Program will be updated, reviewed, and approved annually by the Lottery for the term of the Contract. IGT will adhere to relevant Information Technology (IT) security policies and standards and common and best practices.

Below we provide an outline of a proposed Security Program for the entire iLottery System:

- Executive Summary
- Foreword
- Scope
- Audience
- Contacts
- Section 1 PLAN OBJECTIVE
- Introduction
- Security Maintenance Statement
- Security Plan Objective
- Security Procedure Objectives
- Hardware and Software System Objective
- Training and Administration Objectives
- Escalating and Auditing
- Physical Security for IGT Staff
- Guidelines
- Section 2 BUSINESS IMPACT ANALYSIS
- Introduction
- Business Impact Analysis
- Section 3 RISK MANAGEMENT
- · Risk Analysis and Risk Assessment
- Section 4 BUSINESS RECOVERY PLAN
- Introduction
- Business Recovery Planning Process
- Section 5 SECURITY STRATEGY
- Introduction
- Roles and Responsibilities
- Inter-Relationship with Other Plans
- Security Philosophy



- Section 6 PERSONNEL SECURITY PRACTICES
- Introduction
- IGT Organization Structuring, Positions and Staffing
- Hiring Practices
- Employment Application Pre-Screening
- Opportunities with a Candidate
- In accordance with Federal and State statutes, IGT requires proof of eligibility to work in the United States from prospective candidates
- Compliance with Lottery Required Security Procedures
- IGT Background Checks
- Employee Code of Conduct
- Conflict of Interest/Ethical Conduct Agreements
- Confidentiality Agreements
- Training and Performance Appraisals
- Personal Data Changes
- · Alcohol, Drug and Weapon Abuse
- Reporting Security Violations
- Identification Badges
- Disciplinary Actions
- Termination Procedures
- IGT Vendor/Subcontractor Procedures
- Section 7 PHYSICAL SECURITY
- Introduction
- Facility Characteristics
- Control Room Security
- Closed Circuit Television (CCTV)
- Intrusion Annunciation
- Remote Intrusion Alarm Monitor
- Card Access System
- Fire Detection/Suppression/Alarm Notification
- Segregation of Duties
- Visitor Identification/Authorization/Recording
- Standby Emergency Power
- Environmental Controls
- Facility Location and Layout
- Access Control
- Electrical Controls
- Inspection and Monitoring of Environmental Controls



- Section 8 ACCESS MANAGEMENT
- Introduction
- New User Request
- Roles & Permissions
- User Termination
- Section 9 DATA SECURITY
- Introduction
- Data Security Policy Statement
- Storage of Backup Copies
- Data Accuracy
- Audit Trail
- Access Control Techniques
- Media Protection
- Virus Protection Methods
- Change Control Methodology
- Section 10 SYSTEMS SECURITY
- Introduction
- Operating System Security
- Linux/UNIX OS Security
- Section 11 NETWORK SECURITY
- Introduction
- Network Management
- Network Equipment Control and Location
- Tampering Prevention
- System Access Control
- Recording and Monitoring of Access [Business LAN]
- Control and Use of Remote Access
- Section 12 APPLICATION AND DATABASE SECURITY
- Introduction
- Unauthorized Access
- Version Control
- Protection Against Application Compromise or Service Disruption
- Section 13 SECURITY VULNERABILITY AND PATCH MANAGEMENT
- Introduction
- Security and Patch Information Sources
- · Patch Prioritization and Scheduling
- Patch Testing
- Release Management



- Change Management
- Patch Installation and Deployment
- Consistency
- Section 14 INCIDENT RESPONSE
- Introduction
- Incident Handling Procedure
- Turnover Log Database
- Section 15 PROTECTION OF SOFTWARE & OTHER COPYRIGHTED MATERIAL
- Introduction
- · Copyrighted Material
- Employee Compliance
- Protection of Software
- Section 16 PLAN EVALUATION
- Introduction
- Plan Compliance
- Section 17 SECURITY AWARENESS/TRAINING
- Introduction
- New Employee Orientation
- Continuing Education
- Security Awareness Training
- Section 18 PLAN MAINTENANCE
- Introduction
- Maintaining the Plan
- Introduction
- Appendix A Business Impact Analysis
- Appendix B HVA and Business Recovery Threats and Risks Table
- Appendix C Organization Chart
- Appendix E Handling Confidential Material and Personal Computer Use
- Appendix F Offsite & Escrow Authorization List
- Appendix G Virus Detection Run Time Schedule & Protection for Non-Production PCs
- Appendix H LAN/WAN Design Configuration
- Appendix I Access Control Form
- Appendix J Incident Management Online
- Appendix K Incident Report Samples
- Appendix L Escalation Procedure and Site Profile
- Glossary of Terms and Acronyms



Security Program Review

IGT understands that the Security Program will be annually updated, reviewed, and approved by the Lottery.

In addition to our data and physical security reviews, our information security program will be used to assess the security condition of the site on an on-going basis. At IGT, a controlled self-assessment by each site determines compliance with the requirements of ISO 27001, the Statement on Standards of Attestation for Engagements No. 18 (SSAE-18), as well as those of the WLA, MUSL, and the Payment Card Industry (PCI) (where applicable). The sites complete the self-assessment, and then our Information Security Group evaluates the results. The Group also conducts site reviews and facilitates the external audit process. Our sites are either audited by our Internal Audit department or through external security and/or SSAE-18 audits. Physical security is included in these assessments.

4.4.2 Revised Security Program

Understanding that the Security Program submitted with the Proposal will require updating after the development process begins, the Vendor shall present a revised Security Program ready for approval by the Lottery under the timeframe noted above.

IGT has read and understands, and will comply with this requirement as follows.

Understanding that the Security Program submitted with this Proposal will require updating after the development process begins, IGT will present a revised Security Program that is ready for your approval within the timeframe noted in our requirement 4.4.1, Security Program, response above.

System Security 4.4 – 7



4.4.3 (A-K) System Security

At a minimum, the proposed Security Program shall include the following sections:

- A. Business Impact Analysis
- B. Risk, Threat and Vulnerability Analysis
- C. Security Strategy
- D. Personnel Security Practices
- E. Physical Security
- F. Data Security
- G. Telecommunications Operational and Physical Security
- H. Telecommunications Access Security
- I. Protection of Software and Other Copyrighted Materials
- J. Plan Evaluation and Maintenance
- K. Security Awareness/Training

The Security Program shall (i) include thorough incident response procedures (e.g., in case of an electronic intrusion); (ii) include at least annual audits of components to ensure compliance as specified in section 4.5.5.1; (iii) include quarterly meetings with the Lottery to review and discuss Security Program performance and potential changes; and (iv) comply with multijurisdictional security requirements (e.g., MUSL rules).

IGT has read, understands, and will comply with this requirement.

4.4.4 System Configuration

Vendors shall provide information on System Security as noted below. Security represents a critical component of the Vendor's role in ensuring the integrity of the System. The following security requirements apply to the Vendor's primary and backup data center configurations:

IGT has read, understands, and will comply with this requirement.

IGT understands the critical role we play, of which security is a critical component, in ensuring the integrity of our proposed iLottery System and of the Lottery itself. The security controls, procedures, processes, and measures we describe in the following subsections apply to our primary and backup data center configurations.

4.4 – 8 System Security



4.4.4.A System Access Approval

All systems and users requiring access shall be approved by the Lottery. The System should support controls and procedures that allow the Lottery to audit all System access. The System should provide the ability for the Lottery to administer Lottery user access to user functions within the System including, but not limited to content management, player management/back-office system, games management, customer service software, and other functions that Lottery users access.

IGT has read, understands, and will comply with this requirement.

All systems and users requiring access will depend on approval by the Lottery. Our proposed iLottery System will support controls and procedures that allow the Lottery to audit all System access.

IGT's System will provide the ability for the Lottery to administer Lottery user access to user functions within the System including, but not limited to, content management, player management/back-office system, games management, customer service software, and other functions that Lottery users access. Please see Section 4.20, Back Office Systems, in particular, Section 4.20.1.D, User Management, for information on administering user access.

4.4.4.B

Authentication, Authorization, and Access Controls

The Proposal shall clearly identify controls related to user authentication, authorization and access controls for using and operating the System.

IGT has read, understands, and will comply with this requirement.

The System's control mechanisms allow an authenticated user (who has the proper credentials and necessary security authorizations) to process all administrative functions for the System applications, including:

- Entering and managing IDs and passwords.
- Managing the different entity functions (user, group, role).
- Allowing or prohibiting a user to modify his or her profile.

In addition, our security mechanisms allow a system administrator to control the applications that a user can access, as well as the functions a user can perform within those applications. Application permissions define which elements of the System's applications users can view, modify, and, in the case of buttons, click. The system administrator assigns permissions to roles and then assigns roles to groups. The group to which a user is assigned determines whether he or she can view and/or modify information in each application.

System Security



4.4.4.C

Principle of Least Privilege

System users shall be granted access only to the operating system functions and file systems needed to perform their job functions.

IGT has read, understands, and will comply with this requirement.

To ensure security in the event of remote monitoring, IGT applies the Principle of Least Privilege to ensure control-function users, whether remote or on location, have access only to the operating system functions and file systems essential to perform their job functions.

4.4.4.D

Compliance with Security Requirements

The System shall be compliant with all requirements accepted as operating principles by the Lottery. The System shall be compliant with all requirements promulgated by all multi-jurisdictional game organizations of which the Lottery is a member. Vendors should include any security compliance/certifications, including third-party penetration testing or certifications of the System configuration.

IGT has read, understands, and will comply with this requirement.

IGT's proposed iLottery System will be compliant with all requirements accepted as operating principles by the Lottery. Further, the System will be compliant with all requirements promulgated by all multi-jurisdictional game organizations of which the Lottery is a member.

In March 2022, IGT officially received two WLA Security Control Standard: 2020 (WLA-SCS:2020) Level 2 certifications – one for our retail lottery system and services and one for iLottery and mobile gaming solutions. The WLA-SCS:2020 certification combines an assessment of controls for lottery and mobile gaming solutions with the information security management standard of the ISO and International Electrotechnical Commission (IEC), referred to as ISO/IEC 27001. This achievement of this latest version of the WLA-accredited security standard represents our dedication to continuously improving the security of our systems and services to exceed industry standards for the safety of our customers.

Updated ISO 27017 Controls

The main updated security standards required of organizations like IGT that are WLA-SCS:2020 certified include the introduction of a new control that requires ISO/IEC 27017 compliance for cloud environments used to host gaming systems. This new control can assure the Lottery that IGT is prepared to deliver to a cloud-based iLottery solution that adheres to the most up-to-date industry security standards.

4.4 – 10 System Security



Our Information Security Group will remain up to date on the security controls released through the WLA and on seeking certification to ensure a safe, fun experience for our customers' players now and in the future.

IGT's Certifications: Setting the Standard

Adherence to industry security standards and practices is an IGT guarantee. We maintain and comply with the most up-to-date certifications, standards, audit reports, and practices in all pertinent lottery operation areas. The principles embodied in the standards listed in the following table form the basis for the policies, processes, and practices we use to fulfill our obligations as the lottery industry's leading technology vendor.

IGT Certifications

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Certification	Description
International Organization for Standardization (ISO) 9001:2015	A Quality Management System Model and internationally recognized benchmark standard. IGT is certified to this standard for the design and development of lottery terminals, instant ticket vending machines, instant-and-draw vending machines, and associated peripheral devices
ISO/ International Electrotechnical Committee (IEC) 27001:2013	Comprises information security standards published jointly by the ISO and IEC. The ISO/IEC 27001:2013 is an international standard that specifies the requirements for establishing, implementing, operating, monitoring, reviewing, maintaining, and improving a documented Information Security Management System (ISMS) within the context of an organization's overall business risks
The World Lottery Association's Security Control Standard: 2020 (WLA-SCS:2020) Level 2	The WLA-SCS:2020 Level 2 dual certification combines an assessment of controls for lottery and mobile gaming solutions with information security management standards from the ISO and IEC. (The standards represented by the latter two organizations are often referred to as ISO/IEC 27001.)
	This certification is awarded to organizations that demonstrate adequate and proportionate security controls that give confidence to interested parties by protecting information assets. It stipulates that the requirements of ISO/IEC 27001 are met, together with the additional security requirements set forth by the WLA including the lottery- and gaming-specific security and integrity controls. These WLA security requirements are subject to the following scope:
	 Design and development of systems and services for lotteries in accordance with the Statement of Applicability version 3.0 2021-DEC-10 IGT's Lakeland Printing Facility: Design, development, and delivery of instant tickets in accordance with the Statement of Applicability version 4.1 2021 NOV-12
IGT's WLA-SCS:2020 certificate for internet lottery and mobile gaming solutions	This certification stipulates that the requirements of ISO/IEC 27001 are met, together with the additional security requirements set forth by the WLA including the lottery- and gaming-specific security and integrity controls. These WLA security requirements are subject to the following scope: The development and management of IGT Internet gaming and mobile application solutions in accordance with the Statement of Applicability version 3.0 2021-DEC-10
Statement on Standards for Attestation Engagements (SSAE) 18	This set of rules defines the standards used to conduct security audits. The standards have evolved from the older SAS70 standards and require more complete documentation from the organization that is being audited
NASPL Certification	The NASPL Standards Initiative (NSI) is a collaborative effort among lotteries, retailers, and lottery suppliers. These stakeholders work together to develop standards, best practices, and certification programs that benefit the lottery industry



IGT Certifications

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Certification	Description	
ISO 14001:2015	Widely recognized as a "generic environmental management system standard" that can be applied to any organization, large or small, whatever its product or service. The standard provides guidance to an organization to minimize harmful effects on the environment caused by business activities and achieve continual improvement of environmental performance	
ISO 20000:2011	This international standard recognizes an organization's conformance to globally accepted benchmarks to maintain the highest level of quality management for customer-facing IT services and products. Achievement of ISO/IEC 20000-1:2011, a Service Management System (SMS) standard, specifies requirements for the service provider to plan, establish, implement, operate, monitor, review, maintain, and improve an SMS	
Global Gambling Guidance Group (G4) – Responsible Gaming Certification	In October 2017, IGT became the first gaming supplier to achieve responsible gaming accreditation for its land-based casino and lottery segments from the Global Gambling Guidance Group (G4). G4 aims to minimize the impact of problem gambling by promoting a worldwide accreditation program for operators and suppliers in the gaming industry	
Leadership in Energy and Environmental Design (LEED) – Certificate of Eligibility for IGT Reno	IGT's Reno manufacturing facility is Nevada's first LEED Gold-certified combined office, data processing, and manufacturing facility. In 2015, the Reno facility was certified LEED Gold until 2025	

Figure 4.4 – 1.

4.4.4.E

Protection Against Unauthorized Access or Service Disruption

The Vendor shall ensure that the System is not vulnerable to unauthorized access. The Proposal should specify the methods by which data center systems are protected against unauthorized access, Malware, Ransomware, and other threats.

IGT has read, understands, and will comply with this requirement.

The proposed iLottery System will be protected from external threats, such as unauthorized access, Malware, Ransomware, and other threats, using security measures including, but not limited to, the following:

- MUSL-approved Advanced Encryption Standard (AES) used to encrypt all data communications external to and/or from secured facilities.
- Encryption for data at rest, or Personally Identifiable Information (PII) is achieved using Password Based Encryption (PBE) with Message Digest 5 (MD5) and Data Encryption Standard (DES).
- Internationally recognized encryption methods to protect the transactions themselves, including AES and BSAFE and JSAFE encryption toolkits.
- Restricting network connection between trusted and untrusted networks by isolating systems supporting the data center from unsolicited and unauthenticated network traffic.

4.4 – 12 System Security



- PCs that interface with the System will have an anti-virus utility installed so that the utility is run each time the PC is logged on.
 - All PC users will be instructed in anti-virus techniques. No one will bring storage or removable data from outside the facility to use on in-house PCs. No one will download information or files from the internet.
- Protecting the network and the transaction engines against Distributed Denial of Service (DDOS) and other attacks through the continued use of trusted intrusion detection and prevention methods.

4.4.4.F

Collocation Data Center Security Requirements

If an Vendor proposes the use of a collocation-based data center as an option, then the following requirements should be described:

IGT has read, understands, and will comply with this requirement and its sub-requirements a through f.

IGT has chosen Microsoft Azure as the cloud provider for the System infrastructure. Microsoft Azure offers protection from both facility-level and region-level outages. The site located in Virginia will act as the Primary Data Center (PDC), while the Backup Data Center (BDC) located in the Microsoft Azure US Central Region will serve as the digital disaster recovery data center. Both co-located data centers comply with key industry standards, including ISO 27001:2013 and NIST SP 800-53, for security and reliability.

IGT will ensure the following security requirements -4.4.4. F (a-f) – are met. Detailed information regarding the security of our proposed data centers can be found in Section 4.5, Physical Security.

4.4.4.F.a Physical Separation of Hardware

The physical separation of hardware from other customers in that data center.

Hardware is physically separated from other customers in the data center with locked server racks ensuring System infrastructure security.

Physical/hard keys are checked out to specific personnel by matching the person's access badge to the physical key. A person must have the appropriate access level in the tool to check out specific keys. Keys are not allowed off site.

More information about the physical separation of hardware can be found in Section 4.5.2.C, Shared Facility.

System Security 4.4 – 13



4.4.4.F.b Surveillance Controls and Alarms

Surveillance controls and alarms.

The Security Operations Centers (SOCs) use video surveillance along with integrated access control systems to monitor the data center facilities. Cameras are strategically positioned for effective coverage of the facility's perimeter, entrances, shipping bays, server cages, interior aisles, and other sensitive security points of interest. As part of the multi-layered security approach, any unauthorized entry attempts detected by the integrated security systems generate alerts to security personnel for immediate response and remediation.

Microsoft data centers utilize alarm monitoring systems that provide real-time alarm and video monitoring. Data center doors have alarms that report on each opening and when they remain open past a programmed length of time.

4.4.4.F.c Access Controls

Access Controls.

Access to our proposed Microsoft data center facilities is tightly controlled by outer and inner perimeters with increasing security at each level, including perimeter fencing, security officers, locked server racks, integrated alarm systems, around-the-clock video surveillance, and multi-factor access control.

Microsoft's Data Center Management (DCM) team has implemented operational procedures to restrict physical access to only authorized employees, contractors, and visitors. Temporary or permanent access requests are tracked using a ticketing system. Badges are either issued or activated for personnel requiring access after verification of identification. Physical keys and temporary access badges are secured within the Security Operations Center (SOC).

Microsoft data centers are subject to a least privileged access policy, meaning data center access is restricted to personnel with an approved business need, with no more access than necessary. Access requests are time-limited and are only renewed if the requestor's business need remains valid.

Data center access records are maintained in the form of approved requests. Requests can only be approved by the DCM team, and visitor access requests to datacenters are recorded and made available for any future investigations.

4.4 – 14 System Security



4.4.4.F.d Remote Access Security Procedures

Remote access security procedures if remote access is used for task such as server administration.

Remote access to any part of the iLottery System by any party will require: 1) Lottery authorization and 2) Operations staff to enable such access on a per-incident basis.

All remote access will be via multi-factor authentication and will be protected by complex passcodes.

4.4.4.F.e Intrusion Detection Mechanism

Intrusion detection mechanism.

As prior stated, unauthorized entry attempts detected by the integrated security systems generate alerts to security personnel for immediate response and remediation.

4.4.4.F.f Compliance with Multi-Jurisdictional Game Requirements

Comply with all requirements promulgated by any multi-jurisdictional game organizations of which the Lottery is a member.

IGT's Information Security Group has implemented an Information Security Management System (ISMS), as stated above, to protect assets and ensure system and information security compliance and alignment with international gaming and technology industry standards. This includes fault tolerance requirements promulgated by respected multi-jurisdictional associations. Our ISMS integrates controls selected from the following standards:

- National Institute of Standards and Technology (NIST).
- MUSL Rule 2.
- ISO/IEC 27001:2013.
- WLA Security Control Standard (WLA-SCS).
- NASPL NSI.
- SSAE 18.

System Security



We also follow the guidance of the Open Web Application Security Project (OWASP). The following table outlines the other compliance standards being provided at the proposed data centers.

Proposed Data Centers' Compliance Offerings

Primary Data Center (PDC)

Backup Data Center (BDC)

Global Compliance: Center for Internet Security (CIS) Benchmark; Cloud Security Alliance (CSA); Security, Trust, Assurance, and Risk (STAR) Attestation; CSA STAR Certification; CSA STAR Self-Assessment; ISO 20000, ISO 22301, ISO 27001, ISO 27017, ISO 27018, ISO 27701, and ISO 9001; SOC 1, SOC 2, and SOC 3; Web Content Accessibility Guidelines (WCAG) 2.0

Global Compliance: CIS Benchmark, CSA STAR Attestation, CSA STAR Certification, CSA STAR Self-Assessment, ISO 20000, ISO 22301, ISO 27001, ISO 27017, ISO 27018, ISO 27701, ISO 9001, SOC 1, SOC 2, SOC 3, WCAG 2.0

Industry Compliance: Content Delivery and Security Association (CDSA), Commodity Futures Trading Commission (CFTC) 1.31, Payment Card Industry Data Security Standards (PCI DSS)

Industry Compliance: CDSA, CFTC 1.31, PCI

Figure 4.4 - 2.

4.4.4.G

General System Security Controls

The Proposal shall provide additional information on systems security components and implemented controls, including, but not limited to, the following:

IGT has read, understands, and will comply with this requirement and its sub-requirements a through e.

In the following subsections, IGT provides the additional information on systems security components and implemented controls.

4.4.4.G.a **Operating System Hardening**

Operating system hardening.

IGT's hardening guidelines and security testing are based on security principles and standards from the National Institute of Standards and Technology (NIST), Open Web Application Security Project, Center for International Security (CIS) Benchmarks, ISO (the 27001 standard), WLA (the WLA-SCS), etc.

System hardening is achieved using several well-established and strictly followed procedures.

4.4 - 16System Security



4.4.4.G.b Login and Password Controls

Login and password controls.

Our solution provides security using passwords for authentication before the operating software, applications, routers, and servers can be accessed. Entries of passwords or security codes will not be displayed as clear text on the user's screen. Further, an audit trail will be provided for all user login attempts, both attempted and approved.

4.4.4.G.c System Security Log Management

System security log management.

IGT's solution for system security log management is a Security Information and Event Management (SIEM) platform that detects and prioritizes alerts across the entire organization.

This comprehensive cybersecurity product collects log data from an enterprise, its network devices, host assets and operating systems, applications, vulnerabilities, and user activities and behaviors.

4.4.4.G.d Patch and Policy Management

Patch and policy management for application(s), database(s), server operating systems, firmware, etc. to protect against vulnerabilities.

IGT's change management and patch management policies and procedures, spanning from the application to the infrastructure layer, are aligned with the ISO 9001 and ISO 27001 standards to ensure our iLottery platform follows market standards in terms of capabilities, serviceability, and security.

Our Operations teams, working closely with our Patch Management Team (the PMT) and Information Security and Program Management staff, monitor IGT systems and software deliveries for vulnerabilities and identify needed patches and updates using automatic or manual scanning tools.

The Patch Management team will work with the applicable vendors to ensure that all delivered software remains in good standing. For Original Equipment Manufacturer (OEM) support, IGT uses Information Technology Infrastructure Library (ITIL) best practices for configuration management, starting with documenting and identifying all system components either with version and release numbers, patch numbers, or model and serial numbers. Recognizing the importance of maintaining the integrity of your production and test systems, we have built automation that continually monitors the versions of system components, including the application and gaming software. Reports are generated for our Operations staff to monitor OEM and third-party software for notification of upgrades and patches.

System Security 4.4 – 17



4.4.4.G.e Penetration Testing

Penetration Testing.

Penetration tests can be performed to identify weaknesses in a system taken as a whole and exploit known and/or still unknown vulnerabilities on target systems, services, and applications. Penetration testing is an operative process that simulates a malicious user attack in order to assess the security of a system.

The analysis includes focusing on different stages and:

- Identifying the security weaknesses of target systems.
- Information gathering about the vulnerabilities that have allowed the simulated unauthorized access.

Penetration tests are performed by internal teams or by specialized suppliers according to standards such as OWASP. We will work with the Lottery to identify a suitable frequency of testing.

4.4.5 Logical Security

Stringent security measures are required for all System components that support games or contain Lottery Sensitive Information. Vendors shall describe in detail how the configuration of the System will meet or exceed the following requirements:

IGT has read, understands, and will comply with this requirement.

In the following subsections, IGT describes how the configuration of the System will meet or exceed the following requirements.

4.4.5.A Data Security

The equipment and communications systems and services involved in storing, using, or transmitting all Data, including Lottery Sensitive Information, shall be secure and protect all Data from unauthorized access, disclosure, modification, or destruction. The Vendor shall specify what Data will be encrypted when at rest and what encryption technique(s) will be employed.

IGT has read, understands, and will comply with this requirement.

The equipment and communications systems and services involved in storing using, and transmitting all data, including the West Virginia Lottery's sensitive information, will be secure and protect all data from unauthorized access, disclosure, modification, or destruction.

4.4 – 18 System Security



Encryption for data at rest, or PII, is achieved using Password Based Encryption (PBE) with MD5 and DES. We will look to the Lottery to define the PII data to be encrypted.

Please see Section 4.4.4.E, Protection Against Unauthorized Access or Service Disruption, above, which includes detail on the protection of all data through securely managed equipment, communications systems and services management, and data encryption.

4.4.5.B Vulnerability Management

Vulnerability management controls shall be performed to ensure known vulnerabilities are evaluated and mitigated in a timely manner. The Vendor shall describe the practices it will employ for network enumeration, vulnerability scanning and vulnerability patching for the Program, and any related limitations.

IGT has read, understands, and will comply with this requirement.

IGT protects all hardware and software from security threats with a management system that evaluates and mitigates potential vulnerabilities quickly and effectively.

Network Enumeration and Vulnerability Scanning

IGT uses vulnerability management and network enumeration methods such as Static Application Security Testing (SAST) and/or Dynamic Application Security Testing (DAST) to test vulnerability and code level security.

Vulnerability Patch Management

Our patch management process is an important security and operational tool for asset and vulnerability identification, for analysis of vulnerabilities, and for testing and prioritizing remediation before deployment and during the entire life cycle of the production systems.

IGT's Patch Management Team (PMT), working closely with the Operations team, has the overall responsibility of monitoring vulnerability databases for predefined software profiles or identifying needed patches and updates using automatic or manual scanning tools.

An initial assessment is performed by the PMT and then reported to the Information Security (InfoSec) Group on a weekly basis, or as quickly as possible if a new vulnerability has been initially assessed as critical. Once approved by the lottery customer, the PMT only downloads software patches, fixes, and updates from trusted and recognized sources approved by the InfoSec Group. All patch software that comes with a digital signature must have its digital signature positively verified prior to being installed. During this phase, a thorough analysis is performed by the PMT with the collaboration of the InfoSec Group. The result of this analysis provides enough information to assign a level of criticality and urgency in the deployment of a patch.

System Security 4.4 – 19



4.4.5.C

Operating System Hardening

The Vendor shall provide information on operating system hardening for System components.

IGT has read, understands, and complies with this requirement.

Please see Section 4.4.4.G.a, Operating System Hardening, above, for details on operating system hardening for System components.

4.4.5.D

Protection Against Internal Software Threats

The System shall not be vulnerable to unauthorized manipulation or access. The Vendor shall specify the methods that will be used to protect against internal software tampering.

IGT has read, understands, and will comply with this requirement.

IGT's proposed Security Program does not allow unauthorized software manipulation or access. We will require that the Lottery approve all software loaded on the System prior to installation.

Recognizing the importance of maintaining the integrity of production and test systems, we have built-in automation that continually monitors the versions of internal system components, including the application and gaming software. Reports are generated for our Operations staff to monitor OEM and third-party software for notification of upgrades and patches. For maintenance, should any patches or upgrades be recommended (for security fixes, for example), we seek approval for a change to be made through our disciplined change management procedures.

4.4.5.E

Intrusion Detection/Prevention

The System shall implement appropriate intrusion prevention and detection capabilities, including but not limited to tracking unauthorized access, attempts to access the Lottery's Data, and attacks on the Vendor's infrastructure that supports the Lottery's Data.

IGT has read, understands, and will comply with this requirement.

Our System will include implement appropriate intrusion prevention and detection capabilities including, but not limited to, tracking unauthorized access, attempts to access the Lottery's data, and attacks on our infrastructure that supports the Lottery's data.

To monitor access to the network, we use the extensive capabilities and features of a trusted firewall, which includes integrated intrusion prevention and detection functionality. We will surround the trusted zone of the data center network with a redundant pair of firewalls. The firewalls will constantly update profiles or signatures of events that indicate a potential network intrusion.

4.4 – 20 System Security



4.4.5.F External Threats

The System shall not be vulnerable to external threats. The Vendor shall specify the methods by which the System will be protected against malware, spyware, denial of service, and other external attacks.

IGT has read, understands, and will comply with this requirement.

Our proposed System will not be vulnerable to external threats. Please see Section 4.4.4.E for information on the methods by which the System will be protected against malware, spyware, denial of service, and other external attacks.

4.4.5.G Audit and System Logs

The System shall support controls and procedures allowing the Lottery to audit all access to the System. Logs shall be auditable and readily available to the Lottery. The Vendor shall describe its log management practices.

IGT has read, understands, and will comply with this requirement.

All events and transactions can be audited from several different audit and log files that are maintained. All application login attempts, whether successful or not, are logged. The System supports limiting the number of unsuccessful login attempts. When a limit of unsuccessful login attempts has been reached, an alert is flagged for the system administrator to investigate. All transactions representing modifications to the transaction engine are logged and protected by verification steps. As blocks of transactions are written, Secure Hash Algorithm (SHA)-256 (cryptographically strong hash) is appended as a "seal." Any attempt to change a written transaction will affect the seal.

The system administrator monitors the above traceable events. Any suspicious activity will be investigated, and appropriate action taken immediately. Notification of the finding to the Lottery designee will be made either personally or by telephone immediately upon the discovery of the incident followed by a written report.

The transaction engines will execute a checksum program automatically every day and transfer this to the Lottery.

Internal and External Auditing

Numerous internal and external audits are performed to validate the integrity of our software, systems, and processes. Authorized Lottery staff can audit and check – from several audit and log files – all events and transactions, including additions, deletions, and modifications to all records. IGT will follow Lottery guidelines for record retention of the audit trail logs.

These audit and log files include:

- Operating system logs.
- Transaction Engine logs.
- System-console logs.
- User command logs.



4.4.5.H

Mobile Computing Devices and Removeable Media

The Vendor shall not load the Lottery's Data onto portable computing devices or portable storage components or media unless necessary to perform its obligations under the contract. With Lottery approval, the Vendor may allow such Data transfer if adequate security measures are in place (e.g., policy on physical security for such devices, anti-virus software, personal firewalls, password protection, and encryption). The Vendor shall maintain an accurate inventory of all such devices and the individuals to whom they are assigned.

IGT has read, understands, and will comply with this requirement.

We understand the importance of preventing the Lottery's data from being loaded onto portable computing devices and storage components, or other removable media, e.g., tape drives, removable hard drives, and USB data storage devices. Such loading will not be performed unless it is necessary to carry out Contract responsibilities, and we will seek your approval and provide assurances that data will only be loaded to a portable storage device if adequate security measures are in place (i.e., physical security procedures for such devices, antivirus software, personal firewalls, password protection, and encryption).

IGT will accurately record an inventory of devices and their assigned individuals. No personal laptops or unapproved portable computing devices will ever be allowed to access the West Virginia Lottery network.

4.4.6 Information Security Management System (ISMS)

The Vendor shall implement, maintain, regularly review and revise, and comply with a comprehensive Information Security Management System (ISMS), the purpose of which shall be to take reasonable steps to protect the confidentiality, integrity, and availability of personal identifying information of players, and shall contain administrative, technical, and physical safeguards appropriate to the size, complexity, nature, and scope of the operations and the sensitivity of the personal information owned, licensed, maintained, handled, or otherwise in the possession of the Vendor. The Vendor shall describe its corporate security organization and approach to managing all aspects of security and information security pertaining to its lottery operations and System development. The Vendor shall ensure that solutions and practices are compliant with recognized information security standards.

IGT has read, understands, and will comply with this requirement.

IGT's Information Security Group, as noted near the start of this section, provides the guidance and resources needed to formulate strategy and direction for the safeguarding of IGT's information assets. Its Information Security Management System (ISMS) provides policy direction, information security advocacy, and the assurance that our Technology and Operations groups have implemented security controls that align with it.

4.4 – 22 System Security



Corporate Security Organization

Also as noted early in this section, IGT has established a security organization comprising the Information Security Council, Information Security Group, and GSA which form the structure through which we protect our customers from current and emerging threats. The Information Security Group has implemented an ISMS, as noted previously, to protect Company assets and ensure information security compliance with both international gaming and technology industry standards.

The following figure illustrates our information security management process.

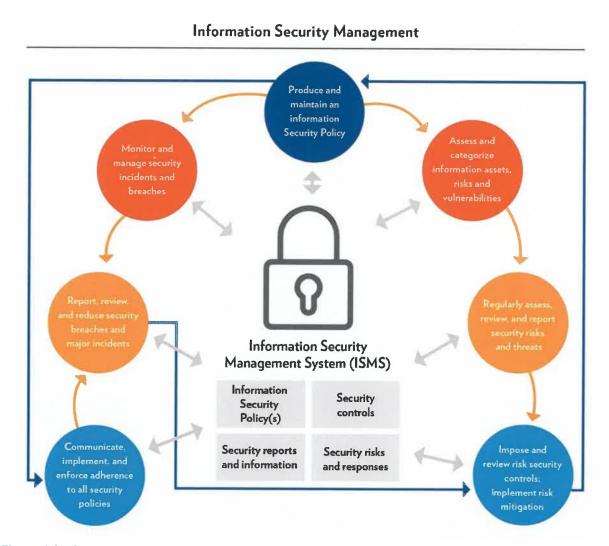


Figure 4.4 – 3.

IGT's centralized security solution protects assets and ensures security compliance with all pertinent industry standards.

System Security 4.4 – 23

4.5

Physical Security

The Vendor shall implement stringent security measures to prevent unauthorized entry and activity at each site as well as comply with any applicable federal, state and local fire and safety regulations. The Vendor is responsible for ensuring that its staff understands and adheres to such policies and procedures. At minimum, the physical Security Program shall:

IGT has read, understands, and will comply with this requirement.

Our physical security program will comply with requirements 4.5 (A-D).

Our current in-state West Virginia data centers comply with all applicable federal, state, and local fire and safety regulations, as well as Multi-State Lottery Association (MUSL) standards. Please note that these data centers support the Lottery's existing AuroraTM retail lottery system and host the related Operations team. While the iLottery System infrastructure will be hosted at the cloud regions discussed in the next paragraph, iLottery System monitoring and any necessary related operations will take place in the in-state data centers.

IGT has chosen two data centers operated by Microsoft Azure public cloud services to house our iLottery System infrastructure:

- The Microsoft Azure US East 2 data center, located in Virginia, will function as the cloud Primary Data Center (PDC).
- The second facility, located in the Azure US Central region, in Iowa, will host the cloud Backup Data Center (BDC).

Both facilities will comply with industry standards regarding overall security and reliability. These standards include the International Organization for Standardization (ISO) 27001:2013 (data-management and information-security best practices), the National Institute of Standards and Technology (NIST) SP 800-53 (security controls for federal information systems and organizations), and the System and Organization Controls (SOC 1) (financial controls) and SOC 2 (controls related to availability, security, processing integrity, confidentiality, and privacy).

Physical Security 4.5 – 1



4.5.A

Prevent Access by Unauthorized Persons

Prevent unauthorized persons from accessing the facilities.

IGT has read, understands, and will comply with this requirement.

In-State Data Centers

Access to our secure in-state PDC and BDC facilities is electronically controlled and restricted to allow authorized individuals only. Visitors and utility/service personnel are admitted only by prior arrangement and with authorization from IGT. Access to computer rooms by service personnel, such as cleaners, is restricted to the specific times and days that access is required. The facilities are equipped with a Hirsch access-control system, video surveillance, and an intrusion detection system.

Cloud Region Data Centers

Access to the proposed cloud data center facilities is tightly controlled by outer and inner perimeters with increasing security at each boundary, including perimeter fencing, security officers, locked server racks, integrated alarm systems, around-the-clock video surveillance, and multi-factor access control. Only required personnel are authorized to access these data centers. Logical access to infrastructure, including customer data, is prohibited within the data centers.

The Security Operations Center uses video surveillance along with integrated access control systems to monitor the cloud data center facilities. Cameras are strategically positioned for effective coverage of the facility perimeter, entrances, shipping bays, server cages, interior aisles, and other sensitive security points of interest. As part of the multi-layered security approach, any unauthorized entry attempts detected by the integrated security systems generate alerts to security personnel for immediate response and remediation.

Microsoft's Datacenter Management (DCM) team has implemented operational procedures to restrict physical access to the data centers to only authorized employees, contractors, and visitors. Temporary or permanent access requests are tracked using a ticketing system. Badges are either issued or activated for personnel requiring access after verification of identification. Physical keys and temporary access badges are secured within the Security Operations Center.

Microsoft data centers are subject to a "least privileged" access policy, meaning data center access is restricted to personnel with an approved business need, with no more access than necessary. Access requests are time-limited and only renewed if the requestor's business need remains valid.

4.5 – 2 Physical Security



4.5.B Record of All Entries/Exits Available to Lottery

Provide a record of all entries and exits from each facility available to the Lottery upon demand.

IGT has read, understands, and will comply with this requirement.

In-State Data Centers

IGT will continue to provide a record of all entries and exits from our in-state data centers to the Lottery on demand.

IGT keeps records of all persons entering and exiting its West Virginia facilities and computer control rooms, which will continue to be available to the Lottery upon demand. All entries and exits are monitored and recorded electronically via sign-in/sign-out logs. Our electronic card-access system can generate access and egress reports for all secured doors within the facilities, including those for visitors.

We have established levels of access for the in-state data centers, and any person not specifically identified on the list is denied access to our facility, the computer rooms, the control room, and other sensitive areas, unless authorized and escorted.

Cloud Region Data Centers

As our proposed cloud data centers host clients other than IGT, we will work with Microsoft to ensure that a record of all entries and exits specifically regarding access to the West Virginia iLottery System infrastructure can be provided to the Lottery upon demand.

Microsoft data center access records are maintained in the form of approved requests. Requests can only be approved by the DCM team, and visitor access requests to data centers are recorded and made available for any future investigations.

Physical Security 4.5 – 3



4.5.C

Monitoring System That Meets MUSL Requirements

Provide a system to monitor all activities at entrances/exits, computer rooms and all other high security/sensitive areas. Monitoring system shall meet all MUSL requirements.

IGT has read, understands, and will comply with this requirement.

In-State Data Centers

Our in-state data centers in West Virginia will continue to be monitored remotely by our IGT Corporate security team, the IGT Global Security Affairs (GSA) group.

We will continue to operate a digital camera system with enough capacity to monitor all sensitive facility areas, as approved by the Lottery's Office of Security. Cameras will provide tilt, pan, and zoom features and be accessible by Lottery Security with a minimum history of 45 calendar days.

Cloud Region Data Centers

As mentioned in Section 4.5.A, video surveillance of all activities at entrance/exits, computer rooms, server cages, interior aisles, and all other high-security/sensitive areas of the cloud region data centers will be monitored by security officers at a dedicated Security Operations Center.

4.5.D

Complete Access by Specified Lottery Personnel

Provide for specified Lottery personnel to have complete access at all times to the Vendor's facilities, including, but not limited to, office, computer, warehouse, offsite storage, and maintenance facilities.

IGT has read, understands, and will comply with this requirement.

In-State Data Centers

Specified Lottery personnel will continue to have complete access to our in-state data centers.

Cloud Region Data Centers

IGT's Information Security Group will work with the West Virginia Lottery and our proposed iLottery System infrastructure host, Microsoft, to develop a secure plan regarding access to Microsoft's data center facilities for specified Lottery personnel.

4.5 – 4 Physical Security



4.5.1 **Primary Data Center Security**

Vendors are responsible for proposing a Primary Data Center that can facilitate the contracted services. This includes describing the physical controls, data loss prevention measures, and environmental controls, which, along with the staffing, combine to constitute the security solution. Please identify both systems security and physical security in the description.

IGT has read, understands, and will comply with this requirement.

IGT's Information Security Group provides the guidance and resources needed to formulate strategy and direction for safeguarding the Company's information assets. The Group established an Information Security Management System (ISMS) as a formal structure to provide the Company with policy direction, information security advocacy, and the assurance that our Technology and Operations teams have implemented security controls that are aligned with the ISMS. The Group will oversee the planning implementation of the physical security aspects of your security program (including physical controls, data loss prevention measures, and environmental controls) and will collaborate with Microsoft to ensure their facilities also meet the measures outlined in Sections 4.5.1(A-I), and Sections 4.5.2 (A-C).

Please refer to Section 4.4, System Security, of our Proposal for details regarding systems security measures related to our iLottery Solution.

4.5.1.A Location

Please see Section 4.2 - System Summary - C. Data Center Placement for the location of the Primary Data Center. The primary data center must be located in an area that minimizes and separates risk of concurrent failure with the backup data center, such as isolation on separate power grids.

IGT has read, understands, and will comply with this requirement.

In-State Data Centers

Our in-state PDC is located in Charleston, on a separate power grid than the in-state BDC.

Specifically, the locations of the in-state data centers are as follows.

- West Virginia PDC
 1700 MacCorkle Avenue SE
 5 South
 Charleston, WV 25314
- West Virginia BDC
 64 Sterling Drive
 Bridgeport, WV 26330

Physical Security 4.5 – 5



Cloud Region Data Centers

Our proposed Microsoft Azure hosted US East 2 PDC is located in Virginia, and the BDC is in the US Central region, located in Iowa, on a separate power grid.

4.5.1.B Code Compliant

All construction and furnishings must comply with fire, safety, building, and ADA codes. Any upgrades, servicing, or replacement required to maintain compliance with such codes are the obligation of the Vendor.

IGT has read, understands, and will comply with this requirement.

4.5.1.C Doors

Locking devices must be installed on all doors or other entry points. Emergency exits must be provided and equipped with alarms.

IGT has read, understands, and will comply with this requirement.

In-State Data Centers

We install mechanical, magnetic, and/or electronic locking devices on all doors and other entry points. This includes receiving and shipping areas. All perimeter emergency-egress doors will be wired with door contacts that will provide a local audible alarm at the site and alert the IGT Global Security Affairs command and central-alarm-monitoring centers.

Cloud Region Data Centers

In addition to 24x7 on-site security, the Microsoft data centers use monitoring systems that provide real-time alarms and video monitoring. The data center doors have alarms that report on each opening and when they remain open past a programmed length of time. The monitoring system will display live video image when a door alarm is triggered. Access-cards and biometric readers are programmed and monitored via the monitoring system. Alarms are responded to 24x7 by the Control Room Supervisor who utilizes the cameras in the area of an incident being investigated to give the responder real-time information.

4.5 – 6 Physical Security



4.5.1.D Electronic Access System

An electronic access system must be installed at entrances to the computer room(s), media library and other secure areas that include logging of who accessed the data center Facilities and when access occurred. The access list will be reviewed and/or authorized by the Lottery.

IGT has read, understands, and will comply with this requirement.

In-State Data Centers

We will continue to use a two-factor electronic access system at the entrances to the computer room(s), media library, and other secure areas; it includes logging of who accessed the data center facilities and when the access occurred. The access list may be reviewed and/or authorized by the Lottery.

Cloud Region Data Centers

Access requests and entrance/exit events are logged and retained as part of an electronic audit trail, allowing "after the fact" data interrogation and reconciliation. Access control system reports and data analysis allow further anomaly detection to identify and prevent unnecessary and unauthorized access.

IGT's Information Security Group will work with the West Virginia Lottery and data center host, Microsoft, to develop an access list to be reviewed and/or authorized by the Lottery.

4.5.1.E Digital Camera Security System

The Vendor must operate a digital camera system with enough capacity to monitor all sensitive facility areas, as approved by the Lottery's Office of Security. Cameras must have tilt, pan, and zoom features and must be accessible by Lottery Security with a minimum history of forty-five calendar days.

IGT has read, understands, and will comply with this requirement.

The digital camera systems at both our in-state and cloud data centers are described in Sections 4.5.A and 4.5.C, above.

IGT's Information Security Group will work with the West Virginia Lottery's Office of Security and data center host, Microsoft, to give Lottery Security reasonable camera surveillance access. Microsoft Azure hosted data centers retain surveillance recordings for a minimum of 90 days.

Physical Security



4.5.1.F

Fire Suppression

The computer room(s) must be protected by an automatic fire extinguishing system based on FM-200 or another Lottery-approved method. The system must be installed and maintained by applicable National Fire Protection Association (NFP A) guidelines. When triggered, the automatic fire extinguishing system must be equipped with alarms that sound locally and at an off-site security center as well.

IGT has read, understands, and will comply with this requirement.

4.5.1.G (A-E) Fire Resistance

Construction must support fire safety as noted in NFP A guidelines, or otherwise:

- A. Computer room(s) with mission critical equipment must be separated from the other areas by non-combustible materials having at least a one-hour fire resistance rating.
- B. Walls must be extended from structural floor to structural floor (or roof) above.
- C. Fire doors must be provided on all entrances into the computer room with a fire resistance rating at least equal to the wall in which the door is located.
- D. Penetrations through the computer room floor, wall or ceiling must be tightly sealed with material equivalent to existing floor, wall or ceiling construction to prevent passage of heat, smoke and water.
- E. Fire and smoke dampers must be provided in ducts that pass through the computer room walls, floor or ceiling

IGT has read, understands, and will comply with this requirement.

4.5.1.H HVAC

The heating, ventilation and air conditioning system (HV AC) must have sufficient capacity to maintain a stable environment within original computer equipment manufacturer specifications. A HV AC failure detection mechanism must be provided. The HV AC system(s) must be interlocked to shut down upon activation of the fire extinguishing system or the automatic system must compensate for loss of extinguishing agent through operation of the HV AC systems. The HV AC system must be maintained according to its manufacturer's specifications.

IGT has read, understands, and will comply with this requirement.



4.5.1.I Uninterruptible Power

The Vendor must provide power conditioning equipment for the computer room(s) and provide an Uninterruptible Power System ("UPS") with both battery backup and electrical generator. Must a utility power failure occur, the UPS must provide at least 150% of the capacity for full capacity operation. During the Contract, the batteries, transfer switch, and generator must be exercised for extended periods on a Lottery-approved schedule, and the generator must be maintained according to its manufacturer's recommendations.

IGT has read, understands, and will comply with this requirement.

4.5.2 Backup Data Center

Vendors are responsible for proposing a remote Backup Data Center where System transactions are logged and processed. Vendors should identify proposed location(s).

IGT has read, understands, and will comply with this requirement.

Our in-state BDC is located in Bridgeport.

Our proposed cloud region BDC is located in the Microsoft Azure US Central Region in the U.S.

4.5.2.A Location

Please see Section 4.2 - System Summary - C. Data Center Placement for the location of the Primary Data Center. The Primary data center should be located in an area that minimizes and separates risk of concurrent failure with the backup data center, such as isolation on separate power grids.

IGT has read, understands, and will comply with this requirement.

Please see Section 4.5.1.A for the locations of our PDCs and BDCs.

Physical Security 4.5 – 9



4.5.2.B Security of Primary

The Backup Data Center should be operated under the same safety and security requirements followed by the Primary Data Center. (See 4.5.1, B-I).

IGT has read, understands, and will comply with this requirement.

4.5.2.C Shared Facility

If the Backup Data Center is in a Vendor facility that shares other business operations of the Vendor, then subject to the prior written approval of the Lottery, any Lottery equipment should be physically and logically separated and secure from all other Vendor operations.

IGT has read, understands, and will comply with this requirement.

Regarding our proposed cloud region BDC, hardware is physically separated from other customers' equipment with locked server racks ensuring the security of all West Virginia Lottery equipment.

Physical/hard keys are checked out to specific personnel by matching the person's access badge to the physical key. A person must have the appropriate access level in the tool to check out specific keys. Keys are not allowed off site.

The hard keys and badges are kept under strict control by Microsoft and are audited daily. Microsoft also mitigates risks by implementing strict assignment of access levels, as well as controlled distribution and management of keys. The primary access methods at the data centers are electronic access badges and biometrics, which allows for immediate revocation of access as required. Microsoft has procedures in place for all lost keys to determine the appropriate action commensurate with the risk. The appropriate action could require the rekeying of a single-server rack or door all the way up to the rekeying of the entire data center facility.

4.5 – 10 Physical Security



4.5.3 System Disaster Recovery and Business Continuity Plan

4.5.3.1 Provide and Update the Plan

The Vendor should provide and annually update a Disaster Recovery and Business Continuity Plan (the "Plan") for the data centers and any other sites it uses for this Contract. The Plan should be developed and maintained and should ensure that the computing infrastructure, which supports critical business activities, be restored in accordance with the requirements of Lottery business functions and legal mandates.

IGT's in-house tool, Business Continuity in the Cloud, facilitates our compliance with important industry standards such as ISO 22301 and ISO 27001. IGT has read, understands, and will comply with this requirement.

IGT will keep the Lottery's iLottery System running smoothly with a Business Continuity and Recovery Plan – or as we refer to it, the Business Recovery Plan (BRP) – specifically designed for the Lottery. The plan will be developed utilizing our tool for collecting and organizing Business Continuity (BC) data called BC in the Cloud (BCIC). This tool facilitates IGT's compliance with important industry standards such as ISO 22301 and ISO 27001/WLA.

A Proven-Effective Business Recovery Plan (BRP)

Our BRP will outline our measures for restoring the Lottery's business operations as quickly, efficiently, and safely as possible following a disaster or any interruption that prevents the successful completion of critical gaming functions. Our strategy is to work hand in hand with you in all aspects of disaster recovery, from the creation of documents and procedures through to testing and crisis management. This includes contact and escalation lists, information exchange procedures, and discussions on test results to improve mutual communication and operation of the system.

Physical Security 4.5 – 11

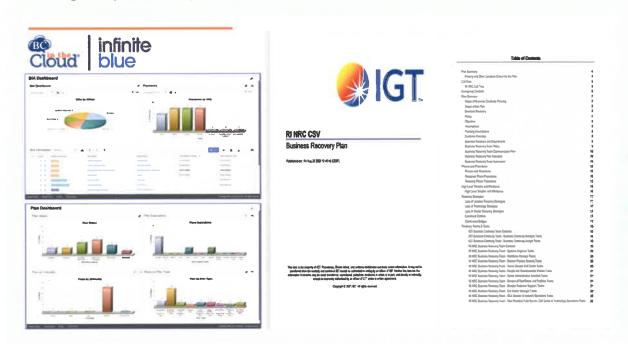


BC in the Cloud – IGT's Comprehensive Continuity Solution

Speedy, successful business recovery is essential to maintaining a lottery's operation in times of disaster. To ensure we provide the best plan for the Lottery, we use a tool for collecting and organizing data called BC in the Cloud (BCIC) from Infinite Blue. It combines a systematic out-of-the-box product with IGT's base of extensive historical information related to continuity planning. Though this solution is built around a standardized structure, it has the flexibility to integrate information relevant to every aspect of the business recovery plan we will develop for the Lottery.

Within BCIC, our Hazard and Vulnerability Assessment (HVA) is specifically designed for analysis of different types of events, and our Business Impact Analysis (BIA) is used to analyze the most critical elements of business and its recovery. In addition, BCIC facilitates compliance with important industry standards such as ISO 22301 and ISO 27001/WLA. As an added benefit, the tool helps foster cooperation and collaboration through a store of contacts and documentation that will enable the Lottery and IGT to perform mutual exercises such as mock tabletop tests.

To ensure integrity, BCIC ensures strict access management, confidentiality, and redundancy. The below graphic displays a snapshot of the BCIC tool as well as the resulting final product, a specialized Business Recovery Plan.



For the BRP that IGT develops for the Lottery, we will use our automated and customized business continuity planning system to perform a comprehensive Business Impact Analysis (BIA) and Hazard and Vulnerability Assessment (HVA) to determine hazards that can affect the specific business operations, based on the configuration proposed for the Lottery's environment. The business continuity planning system enables business recovery capability by combining crisis management and business continuity planning into a single resource that can be used in response and recovery.



Based on the analyses we conduct; we will prepare a comprehensive BRP with procedures to meet your unique requirements.

The comprehensive BRP will:

- Establish guidelines and standards to protect Lottery business operations.
- Define the requirements and time frames for recovery of business functions at the Primary Site
 and Secondary Site and determine a strategy for recovery that meets those business requirements.
- Develop awareness among IGT employees of recovery procedures, roles, and responsibilities.
- Provide IGT business units with a documented plan that, when executed, permits efficient, timely resumption of interrupted business operations.
- Provide for the timely and orderly restoration of business functions.
- Test disaster recovery/failover procedures on a periodic basis with IGT staff (time frame to be established with the Lottery).
- Complete HVA and BIA assessments of both the Primary Site and Secondary Site.
- Be reviewed regularly with the Business Recovery Team and we test the BRP at least annually.

The plan will outline our measures for restoring the Lottery business operations within a reasonable time frame following a disaster or any interruption that prevents the successful completion of critical gaming functions

4.5.3.2 Provide and Update the Plan

The Plan should be analyzed on an ongoing basis to ensure alignment with the Lottery's then current business objectives and requirements.

IGT has read, understands, and will comply with this requirement.

4.5.3.3 Lottery Approval and Testing of the Plan

The Plan should be approved by the Lottery and tested semi-annually. Testing standards and objectives should be developed for testing the Plan. The test results should be documented and provided to the Lottery. The Plan should be updated as needed.

IGT has read, understands, and will comply with this requirement.



4.5.3.4 (A-G) Delivery Date and Contents of the Plan

The Plan should be delivered by the start-up date and should minimally provide the following:

- A. Account for disasters caused by weather, water, fire, environmental spills and accidents, malicious destruction, acts of terrorism, cyber-attack response, ransomware protection and recovery provisions, and contingencies such as strikes, epidemics, etc.;
- B. Continuity of the System and the Lottery's games;
- C. Safe, secure, off-site storage of backup data and programs;
- D. The Vendor's key staff contact information;
- E. Recovery procedures and documentation;
- F. Coordination with the Lottery's own disaster recovery and business continuity plan; and
- G. If implementation of any portion of the Plan becomes necessary, all costs associated with the same is the responsibility of the Vendor.

IGT has read, understands, and will comply with this requirement.

4.5.3.5 Additional Plan Contents/Coordination with Lottery

The Plan shall provide contact information and detailed recovery procedures and documentation and shall coordinate with the Lottery's disaster recovery plan. It shall also include planning for its additional infrastructure necessary to provide continuous support for the Lottery. For example, the Vendor's software development and support facilities are critical for the term of the contract.

IGT has read, understands, and will comply with this requirement.

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4.5 - 15

4.5.3.6 Sample Disaster Recovery Plan

Vendors should provide a sample proposed Disaster Recovery Plan which includes a representation of the level of detail that the Lottery can expect to receive in its own iLottery plan.

IGT has read, understands, and complies with this requirement.

We have included the table of contents of a sample BRP, generated with the BCIC tool, with our proposal. Please see the insert entitled, **Sample Business Recovery Plan TOC**, at the end of this section.

As previously mentioned, IGT's Disaster Recovery Plan is specialized for each customer and is part of our overall Business BRP, which also includes business continuity procedures.

4.5.4 Vendor Corporate Protection Plan

The Vendor should also produce a Corporate Protection Plan for its own additional facilities and capabilities necessary to support the Lottery. For example, the Vendor's software development and support facilities are critical for the Term of the Contract. This Protection Plan will be due at start-up.

IGT has read, understands, and will comply with this requirement.

Physical Security



BC/DR Plan Template - Sample Business/Location CSV

Business Recovery Plan

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Sample Business Recovery Plan TOC

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4.6

Right to Audit

4.6.1

Audit All Contract-Related Facilities, Processes, Procedures

The Lottery reserves the right to audit all Vendor and Sub-Vendor facilities, processes, and/or procedures, as they relate to the Contract, using Lottery employees, its designees, the West Virginia State Auditor's Office, or other approved employees of the State of West Virginia.

IGT has read, understands, and will comply with this requirement.

4.6.2

Maintain Records and Evidence Regarding Contract Fulfillment

The Vendor and all its Sub-Vendors under the Contract shall maintain records and supporting evidence pertaining to the fulfillment of the Contract obligations in accordance with generally accepted accounting principles and other procedures specified by the Lottery.

IGT has read, understands, and will comply with this requirement.

4.6.3

Availability of Such Records and Materials

Vendor and any Sub-Vendors shall make all such records and materials available at its offices at all reasonable times during the term of the Contract and for five (5) years after the date of final payment under the Contract, for inspection by the Lottery, by any authorized representative of the Lottery and/or the State of West Virginia Auditor of State's Office ("State Auditor"), and copies thereof shall be furnished to the Lottery and/or the State Auditor by the appropriate entity, at no cost to the Lottery or the State Auditor, if requested by the Lottery or the State Auditor.

IGT has read, understands, and will comply with this requirement.

Right to Audit 4.6 – 1



4.6.4

The Lottery's Right to Perform Audits

The Lottery reserves the right, at its sole discretion, to perform additional audits, which may include but are not limited to the following: financial, compliance, security, economy/efficiency, program results, and limited scope audits. The Lottery reserves the right to inspect any of the Vendor's third-party auditor's reports and management letters. Unless the audit would be impaired, any audit by the Lottery will only be conducted with reasonable prior notice to the Vendor, and subject to all security, quality, and other procedures which may be in force at the Vendor site. In the case of an audit indicating non-compliance with the terms of the Contract, the Lottery may pursue any and all available remedy as specified in the Contract, including terminating the Contract due to the Vendor's default.

IGT has read, understands, and will comply with this requirement.

4.6.5 Audit Requirements

4.6.5.1

Annual Audited Financial Statements

The Successful Vendor shall provide, as soon as it is available, to the Lottery on an annual basis a copy of its audited financial statements for such year. The Lottery requires (and will retain) an electronic and hardcopy of an annual third-party audit of the Vendor's which includes, but is not limited to, SSAE 18 (SOC I) type 2 & SOC II Type 2 audits reports (or the latest version of such audits as defined by American Institute of Certified Public Accountants (AICPA)). The Lottery also requires a SSAE 18 (SOC 1) Type 2 & SOC II Type 2 report from any sub service organizations.

IGT has read, understands, and will comply with this requirement.

4.6.5.2

Annual System Integrity and Security Assessment

The Vendor shall perform an Annual System Integrity and Security Assessment conducted by an independent professional. The selection of the independent professional is to be done by the Vendor, subject to the approval of the Lottery. The first assessment should be completed within 90 days of commencing operations and annually thereafter.

IGT has read, understands, and will comply with this requirement.



4.6.5.3 (A-G) Scope of Assessment

The scope of the Annual System Integrity and Security Assessment is subject to approval of the Lottery and shall include, at a minimum, all of the following:

- A. A vulnerability assessment of digital platforms, mobile applications, internal, external, and wireless networks with the intent of identifying vulnerabilities of all devices, the computer servers, and applications transferring, storing, and/or processing personal identifying information and/or other sensitive information connected to or present on the networks.
- B. A penetration test of all digital platforms, mobile applications, internal, external, and wireless networks to confirm if identified vulnerabilities of all devices, the computer servers, and applications are susceptible to compromise.
- C. A review of the firewall rules to verify the operating condition of the firewall and the effectiveness of its security configuration and rule sets performed on all the perimeter firewalls and the internal firewalls:
- D. A technical security control assessment against the provisions defined by the standards adopted by the Lottery (The standards that should be used are GLI-19 and ISO27001.);
- E. If the Vendor utilizes a cloud service provider, an assessment performed on the access controls, account management, logging and monitoring, and over security configurations of their cloud tenant;
- F. An evaluation of information security services, player banking services, gee-location services, and any other gaming services which may be offered directly by the vendors or involve the use of service providers against the provisions adopted by the Lottery; and
- G. Any other specific criteria or standards for the integrity and security assessment as prescribed by the Lottery.

IGT has read, understands, and will comply with this requirement.

4.6.5.4 (A-F) Assessment Report

The full Independent professional's report on the assessment shall be submitted to the Lottery no later than thirty (30) days after the assessment is conducted and shall include all the following:

- A. Scope of review:
- B. Name and company affiliation of the individual(s) who conducted the assessment;
- C. Date of assessment;
- D. Findings;
- E. Recommended corrective action, if applicable; and
- F. The Vendor's response to the findings and recommended corrective action.

IGT has read, understands, and will comply with this requirement.



4.6.5.5

Remediation and Risk-Mitigation Plans

If the Independent professional's report recommends corrective action, the Vendor shall provide the Lottery with a remediation plan and any risk mitigation plans which detail the Vendor's actions and schedule to implement the corrective action. Once the corrective action has been taken, the Vendor will provide the Lottery with documentation evidencing completion.

IGT has read, understands, and will comply with this requirement.

4.6.5.6

If Successful Vendor Is Cloud Service Provider: System Certified and Audited

If the Successful Vendor is a Cloud Service Provider, they should provide assurance that their System has been certified and audited for security testing and compliance standards, i.e., FedRamp Certified or other certification standards provider.

IGT has read, understands, and complies with this requirement. Our iLottery System has been certified and audited for security testing and compliance standards.

4.6.5.7 Qualified Audit Firm(s) Approved by the Lottery

The Vendor should select the appropriate and qualified audit firm(s), subject to the Lottery's written approval, and shall bear the cost of such audits. Such audit(s) should be in such form and in compliance with standards and agreed upon procedures as approved by the Lottery. Such audit(s) may be required to be conducted within the first ninety (90) days of the successful Vendor's launch of the iLottery System.

IGT has read, understands, and will comply with this requirement.

4.6 – 4 Right to Audit



4.6.5.8

Vendor to Fully Cooperate with Audit Firm(s)

The Vendor shall also fully cooperate with any audit firm(s) as contracted by the Lottery and/or the State Auditor's Office with respect to any audit to be performed involving the Vendor's operations, as required by law or as desired by the Lottery and/or the State Auditor's Office. The Lottery also holds the right to audit the Successful Vendor's applications and assess security vulnerabilities through penetration testing and other reviews.

IGT has read, understands, and will comply with this requirement.

4.7

Communication Networks

Vendors shall propose a design for a communications network to serve the iLottery System, which addresses all of the subsections of Sections 4. 7.1 and 4. 7.2. As part of the Vendor's Security Program, Vendor shall include a detailed network security and transaction integrity plan, which shall provide for potential devices and networks to be connected to the iLottery System. The Vendor is responsible for seeing that the design is implemented and operated in compliance with RFP specifications, including the responsibility for network management.

IGT has read, understands, and will comply with this requirement.

Our communications network solution for the West Virginia Lottery comprises a mixture of cloud and on-premise components. Specifically, our Player Wallet solution and the iLottery System interface will be implemented on-premise, i.e., at the Lottery's Primary and Backup Data Centers (PDC and BDC) in West Virginia, while all other iLottery components will be hosted in the Microsoft Azure public cloud.

Connectivity Overview

IGT's Player Wallet instances, which will be implemented on-premise, as noted above, will have fixed Internet Protocol (IP) addresses exposed in the IGT internal network. The Player Account Management (PAM) system will connect to the IP addresses, both of which will be hidden under the load balancers that distribute traffic. This will allow the PAM and Player Wallet to be decoupled.

Network Traffic

Upon purchase, the PAM system – which will be cloud-hosted – will generate traffic to and communicate with the player's Player Wallet. Azure's ExpressRoute service will enable a direct connection to the PAM, allowing the transaction to traverse the IGT MultiProtocol Label Switching (MPLS) network and reach the West Virginia data centers. This ExpressRoute service will be managed by IGT's network team, and provide a throughput of 500Mbps, with the ability to scale to 1Gbps as traffic dictates. We will achieve stable network throughput and minimal latency with a dedicated fiber connection, to which only IGT has access.

The ExpressRoute service will be used in place of Virtual Private Networks (VPN), as it provides more flexible network parameters and stronger security than a typical VPN can provide.

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Network Security and Transaction Integrity Plan

The most up-to-date firewalls will be used to ensure the highest level of security and integrity between networks. The firewalls will perform stateful packet inspection, "interrogating" each packet to ensure that only authorized users and applications are accessing the network. Only IGT-required application ports will be able to pass through the firewall.

IGT's network solution includes redundant cloud components to achieve technological diversity. These components include dual firewalls to protect ingress to our systems and also route traffic to/from the Wide Area Network (WAN) and CORE network. Our firewalls are configured using network segmentation utilizing the latest Next-Generation Firewall (NGFW) features to control traffic within and between the different network zones. Our Server Load Balancing (SLB) features sit behind the firewall and are supplied by A10 Networks, using a pair of virtual A10 load balancers.

Our network solution will operate in compliance with all CRFP specifications, and we will be responsible for network management.

IGT's goal is to support the Lottery's iLottery channel without adding complexities through the provision of an efficient, less data-heavy network solution using normal payload encryption.

4.7.1

Network Design and Implementation

Vendors are provided wide latitude as to the topology and technologies proposed for the network. The design should cover at a minimum:

IGT has read, understands, and will comply with this requirement.

IGT's proposed network infrastructure will connect to the Lottery's network and other Lottery sites, as required. The implemented solution will provide inter-site connections between the data centers.

4.7.1.A

Player Internet Interface

Players shall access the System through a Portal. Depending on configuration status, players may be serviced through the primary or at the backup data centers.

IGT has read, understands, and will comply with this requirement.

West Virginia iLottery players will be able to access the proposed iLottery System through a portal that's described in the next section, Section 4.8, iLottery Portal Development and Integration Services. Depending on the configuration status, players may be serviced through the PDC or BDC.



IGT has extensive experience providing communication networks for the deployment of internet-related products and services to state and national lottery entities, both domestically and internationally. California, Georgia, Kentucky, Missouri, New Jersey, New York, Oregon, Rhode Island, and Virginia, are examples of our U.S. experience. Internationally, we support customers in the following countries:

- · Veikkaus (Finland).
- Camelot (UK).
- Norsk Tipping (Norway).
- Lottomatica (Italy).
- Loterie National (Belgium).
- National Lottery (Ireland).
- Loterie Nationale (Luxembourg).
- New Zealand Lottery (New Zealand).

IGT has implemented player-facing connectivity as follows:

- Mobile web browsing (Mweb).
- Mobile app.
- Internet portal.

Servers will be active at either the primary or backup locations, depending on the active configuration, for portal access. Internet-service-provider redundancy will be provided via diverse, high-bandwidth access circuits. In addition, the SLBs will manage a cluster of front-end web servers to ensure a robust, self-healing portal connection for all internet customers.

4.7.1.B Inter-Site Connections

Since transactions should be logged at both data centers on a real time basis, the Vendor should provide inter-site links for control and data flow.

IGT has read, understands, and will comply with this requirement.

Our plan is to provide resilient 500Mbps of bandwidth between our in-state data centers in West Virginia to allow for the Lottery's inter-site data center communications. The solution can also easily scale to 1Gbps when necessary. All communications across the data centers will be encrypted.

All data center aggregate circuits will include Telco cloud Point-Of-Presence (POP) diversity. These MPLS circuits will be provided in a Closed User Group (CUG) configuration for additional security and data segregation of all West Virginia Lottery traffic. They will allow for dynamic routing between all of our nodes for automatic failover between circuits.

Termination of these connections will occur with redundant routers at both in-state data centers.



4.7.1.C

Games Management Network

The design should accommodate connections for games administration by the Vendor and by the Lottery, which includes connections from both the primary and backup data centers to Lottery PDC and BDC.

IGT has read, understands, and will comply with this requirement.

The network's design will accommodate other connections for games administration by IGT and the Lottery. These will include connections from the Azure Public Cloud to the Lottery and connections to the Internal Control System (ICS). Each data center will contain the games-management network and be connected via redundant, high-bandwidth links to ensure that all transactions are logged at both data centers.

In addition, all external communications will be encrypted using an encryption key that can be changed frequently to ensure proper security. The data encryption employed in the proposed network will be point-to-point Advanced Encryption Standard (AES) or greater. All data will be encrypted from the point of transmission to the point of receipt.

As we do with the inter-site connections, we use redundant firewalls to verify all external connections. Switches and routers will be interconnected via dedicated and redundant links, providing adequate bandwidth for all West Virginia Lottery applications.

Our solution also includes an access firewall that will protect the in-state data center and cloud-based components from any threats that originate from external back-office and/or operations systems.

4.7.1.D

Data Center Local Area Networks

Within the data centers, there should be multiple LAN connections dependent upon the Vendor's configuration.

IGT has read, understands, and will comply with this requirement.

To ensure the Lottery's network remains stable, regardless of transaction traffic, IGT proposes implementing multiple LANs with the appropriate switches, firewalls, intrusion detection systems, and load balancing necessary to support your network.

IGT's multiple-LAN approach will be especially important for the production LAN. We will provide physically and functionally separated LANs that operate with 25Gbits/sec CORE access and 1Gbits/sec WAN access capability, minimizing the risk of failure impacting the systems. In fact, no single point of failure can take our systems offline. Our design allows for a catastrophic data center failure with automatic network failure from the venue controllers to the remaining data center and associated systems. The LAN design can easily be adapted from a layer 3 data center design to a flat layer 2 data center solution.



Our resilient core 25G switching layer is delivered using Arista switches. Our inter-site communications interfaces to the core stack are via resilient layer 2 Metro-Ethernet, so no single point of failure stops communications with either data center. L3 traffic across data centers is encrypted via secure tunnels through the firewalls. We offer a speed of 1Gbps between the data centers with low latency.

4.7.1.E Interface to the Games

The System shall always manage game functions for the players, but is not required to provide game content. The System should be compatible with thirdparty game content as required by the Lottery.

IGT has read, understands, and will comply with this requirement.

Our iLottery System will always manage game functions for your players through its integration layer. The System is compatible with third-party game content; in fact, we've already integrated many third-party game providers – NeoGames and IWG, for example.

The iLottery System's integration layer functions as both the System's integration/content-aggregation layer and Customer Relationship Management (CRM) platform. Through the provision of a set of clean, well-documented Application Programming Interfaces (APIs) – each serving a different purpose and maintaining a clear separation of responsibility from the others – the integration layer handles integration between IGT's System and third-party-game and PAM systems (both digital and retail), business intelligence tools, regulatory and compliance systems, identity verification systems, and more.

With our iLottery system, a simple, one-time integration process conveniently makes content and software upgrades available to all IGT customers that have our integration layer. Another advantage of our solution is that the integration layer includes our promotion and notification capabilities, which allows for a single component to provide features above and beyond a standard game integration solution. And while our System hosts some assets, many of the game assets are hosted by the third parties who provide the games as a Software as a Service (SaaS).

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4.7.1.F

Data Centers, Back-Office, Third-Party Connections

Lottery Data Centers/Back Office Connections and/or other third-party connections.

IGT has read, understands, and will comply with this requirement.

IGT will provide connections to the Lottery data centers, back-office connections, and/or other third-party connections. Our data centers have internet exchange connectivity in place, and delivery to the Lottery will include four cross-connects to internet exchanges. The data centers connect over a 500Mbps bandwidth, low-latency resilient layer 2 with layer 3 overlay network. All communications across the proposed network will be encrypted.

IGT will provide the following links to the Lottery:

- Inter-Site Links (links between data centers): Resilient 1Gbps of bandwidth will be provided between our proposed data centers to allow for inter-data-center communications.
- Internet Links/Communications: 100Mbps of bandwidth will be provided at each data center to allow ExpressRoute communications to:
 - Azure virtual hubs.
 - Lottery back-office.
 - Other third-parties, as necessary.

All data packets will be transported over IP in International Organization for Standardization (ISO) Layer 4 via Transmission Control Protocol (TCP).

4.7.1.G

Internal Control System (ICS)

Internal Control System (ICS) application as described in Section 4.14.

IGT has read, understands, and will comply with this requirement.

We will use a dedicated communications link to send transactions to the ICS. The ICS will be able to connect to any of the Aurora transaction engines in the Aurora retail gaming system's transaction-engine configuration. Transactions will be recorded first on those transaction engines and then sent over the secure, dedicated communications link to the ICS for independent processing and auditing.

The ICS connects to the transaction engines and requests the data. This is a client-server TCP connection where ICS is the client, establishes the connection, and requests data from the transaction engine. Per MUSL rules, the transaction engine does not make any direct connections to the production ICS server(s).

Please see Section 4.14, iLottery Internal Control System, for more on the ICS and the transaction engines.



4.7.1.H West Virginia Lottery Digital Platforms

West Virginia Lottery digital platforms-www.wvilottery.com and mobile apps.

IGT has read, understands, and will comply with this requirement.

We will provide the necessary network access for any of the Lottery's digital platforms (such as www.wvilottery.com) and mobile applications. Communications to the website and mobile apps will be encrypted using 128-bit Secure Sockets Layer (SSL), which is the industry standard for providing secure websites. In addition, the websites and mobile apps will be protected from external attacks via a pair of redundant firewalls. All external transactions will be encrypted using AES.

IGT has years of experience posting lottery data to lottery websites. Our integration layer has existing APIs exactly for that reason. Data that can easily be posted to the Lottery's website are winning numbers, current jackpots, next draw dates, high-tier prizes remaining in eInstant games, and much more. Further, since we are using modern interface standards, the information can equally easily be posted to your mobile app or lottery website.

4.7.1.I Player Account Management Control

Player Account Management Control.

IGT has read, understands, and will comply with this requirement.

The network can access the IGT PAM solution via the IGT CORE network. We achieve this via an additional VPN tunnel from the data centers to the public cloud, from which access to cloud services will be made available.

4.7.2 **Network Operations Features**

Communications facilities should be designed with monitoring, redundancy, diversity, and security features to reduce the possibility that a disruption could impact the network and the iLottery System.

IGT has read, understands, and will comply with this requirement.

IGT's proposed communications facilities will be designed with monitoring, redundancy, diversity, and security features to reduce the possibility that a disruption could impact the network and iLottery System. All configuration items (i.e., switches, firewalls, routers, etc.) will have redundant backups, and we will provide real-time monitoring to ensure that potential disruptions are addressed immediately.

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4.7.2.A Fault Tolerance

The Proposal should show how the proposed configuration is robust regarding single points of failure, major points of failure afflicting a large proportion of the network, and bottlenecks, (For example, these could include single telephone company central offices, trunk circuits, satellites, or satellite ground stations). The network design should provide for redundancy and diversity that limits the impact of outages.

IGT has read, understands, and will comply with this requirement.

IGT's proposes a network design featuring 500Mbps bandwidth, low latency resilient layer 2 with layer 3 overlay network that's fully resilient to automatically recover to a single point of failure.

In addition, the iLottery System offers fault tolerance through redundancy in every aspect, including software, providing for fail-safe operations. Each West Virginia on-premise data center – primary and backup – will be connected via redundant, high-bandwidth links to log all transactions at both data centers. We will provide inter-site links for game control and data flow.

We understand the impact outages can have upon both revenue and retailer satisfaction. The IGT network design will provide redundancy and diversity that eliminates single systemic failures, major points of failure afflicting a large proportion of the network, and bottlenecks that could potentially remove service from players.

An IGT system-redundancies action plan is built into our network design based on a careful analysis of published communications-link reliability for each type of network link. And the proposed network includes diverse, independent communications links between the data centers, and LAN and WAN access points.

Failover Capabilities

Should a catastrophic failure cause either the in-state PDC or any cloud components to go offline, we have procedures and processes in place to ensure a smooth and immediate failover to the BDC. Our network and infrastructure teams, in maintaining and monitoring both the in-state data centers and cloud infrastructure, will leverage a script that provides the commands necessary for failover when a critical fault is detected at the PDC. From the PAM point-of-view, as long as it remains connected to the on-premise Player Wallet at either data center, service will resume as normal.

Major Potential Points of Failure

Major potential points of failure include carrier and network components not managed by IGT such as telco and carrier central offices, telco-provided routers, and the electrical power grid supplying the telcos.

Potential Bottlenecks

IGT's solution, especially our backbone, over which all Lottery traffic will be aggregated, is designed with redundancy, self-healing, and alternate path diversity to avoid any potential bottlenecks.

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4.7.2.B Fault Notification

System components should be able to notify the network monitor or System monitor of significant transmission failures or outages as soon as possible after occurrence of the network outage.

IGT has read, understands, and will comply with this requirement.

The System components/network devices will notify the Network Monitoring System (NMS) of significant transmission failures or outages as soon as possible after the occurrence.

4.7.2.C Secure External Transactions

Data communications external to secured facilities should be encrypted. All data should be encrypted from point of transmission to point of receipt, including any data transmitted directly from the primary systems to the remote backup system, to the Lottery regional offices and other remote locations. Protected information includes but is not limited to plays, validations, security codes, reports, and downloaded software. Commercially available encryption mechanisms are acceptable if approved by the Lottery and any multi-jurisdictional associations of which the Lottery may be a member.

IGT has read, understands, and will comply with this requirement.

IGT's iLottery System uses encryption at every stage of a transaction. This includes any data transmitted directly from the primary systems to the remote backup systems in-state, to Lottery regional offices, and other remote locations. IGT understands that when a lottery system is interfacing to the internet, security must always be key in data transmissions. To provide the needed network security, IGT complies with or exceeds all industry standards.

Between the data centers, remote locations, and third parties, IGT will use Azure's ExpressRoute for connectivity and security.

All IPsec ExpressRoute configurations require an IP Security (IPsec) policy and an Internet Key Exchange (IKE) policy. Each IKE policy includes at least three key components:

- 1. Diffie-Hellman algorithm/group minimum 16 with 4096-bit Modular Exponent (MODP).
- 2. Encryption algorithm minimum Advanced Encryption Standard (AES)-256.
- 3. Hashing algorithm minimum Secure Hash Algorithm (SHA)-384.



4.7.2.D

Protocol for Incomplete Transactions

On incomplete or unresolved transactions between the central servers and the player devices, there should be mechanisms for reconciliation. These may include retries, logging for reporting, and error messages to the players, System operators, and the Lottery.

IGT has read, understands, and will comply with this requirement.

IGT's N-Plexing logic prevents data loss over our inter-site link. N-plexing is an IGT proprietary method of logging all gaming activity on multiple central servers (transaction engines) to achieve a fault-tolerant system that's capable of processing hundreds of thousands of transactions per minute on a continuous basis and in a completely secure manner, where "N" represents the number of identical transaction engines required to ensure fail-safe operations.

4.7.2.E

Commercially Available Communications Protocols

The Vendor should enhance the open systems aspect (e.g. a communication protocol that is not proprietary) of the System by using widely used commercially available communications protocols.

IGT has read, understands, and will comply with this requirement.

IGT will provide secure communications protocols across the iLottery System. Administrative interfaces as well as various application-to-application interfaces communicate using secure protocols such as Secure Shell (SSH), Secure File Transfer Protocol (SFTP), and Hyper Text Transfer Protocol Standard (HTTPS). All remote access for administrative support of systems requires multifactor authentication.

4.7.2.F Strong Network Security

Network security should be given a high priority and should employ stringent security mechanisms. Connections to other systems and networks shall be protected at a minimum by firewalls, intrusion detection systems, strong cryptography for sensitive data transmission, use of security protocols for data transmission (e.g., SSL/TLS, IPSEC, VPN, etc.), device and system logging, router access control lists (ACL), or other Lottery-approved methods. Connections are expected between the iLottery System and other systems and networks such as the Internet, third-party systems, Lottery office network, Lottery QA system, and the Vendor's administrative support system and development/QA system. The iLottery System shall be protected from, and protect, those connections.

IGT has read, understands, and will comply with this requirement.



Our layered approach to security ensures that only authorized users access the network and guarantees that only valid transactions are logged. Proactive network management, intrusion detection, and firewalls for stateful inspection of traffic, together, provide the base layer of our network security. "Stateful inspection" is a firewall architecture that works at the network layer; it lets only authorized traffic through to specified systems and peripherals on a network.

4.7.2.G Network Device Access

All systems and users requiring access (for any purpose) to the network devices utilized in supporting gaming operations shall be approved by the Lottery. Network devices shall support controls and procedures that allow the Lottery to audit related network device access. Interfaces that permit access to the System environment shall be physically and/or logically secured when not in use. The network shall be configured such that unauthorized devices may not be connected to the network and granted access without the prior approval of the Lottery.

IGT has read, understands, and will comply with this requirement.

Network device access is controlled by Lightweight Directory Access Protocol (LDAP) and a Terminal Access Controller Access-Control System (TACACS). IGT will not allow users or systems (for any purpose) to access the network devices used in supporting iLottery System operations without prior approval by the Lottery.

4.7.2.H Principle of Least Privilege

Networks related to gaming operations should be designed on this principle. Network access controls should be utilized to allow only the required network services needed by specific servers or networks to be routed. Unneeded administrative protocols shall be unavailable.

IGT has read, understands, and will comply with this requirement.

With our solution, network-access controls will allow routing of only those network services needed by authorized transaction engines. Users of our iLottery System will be given System access based on their job responsibilities and need to know, and on the principle of least privilege (i.e., access only to areas that apply to their business functions). Users will be assigned a one-time login password, which they will be required to change upon login.

An authorized System Administrator will analyze the audit journal files on each transaction engine to determine if intrusion attempts have been made and investigate any suspicious entries.

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4.7.2.1

Compliance with Security Requirements

All network connectivity involving the networks related to gaming operations, as well as connectivity made between these networks and any other systems or networks that are not private and dedicated to gaming transaction processing (such as WAN connections to the Lottery and the Successful Proposer's administrative support system and development/QA system) shall comply with standards and guidelines accepted as operating principles by the Lottery or promulgated by any multi-jurisdictional (e.g., MUSL) game organization of which the Lottery is or may be a member.

IGT has read, understands, and will comply with this requirement.

All network connectivity that involves networks related to gaming operations – as well as connectivity made between those networks and any other systems or networks that are not private and dedicated to gaming transaction-processing, such as WAN connections to the Lottery and to our administrative support system and development/quality assurance system – will comply with standards and guidelines accepted as operating principles by the Lottery or promulgated by any multi-jurisdictional (e.g., MUSL) game organization of which the Lottery is or may be a member.

4.7.2.J

Protection Against Unauthorized Access or Service Disruption

The Vendor shall ensure that network devices are not vulnerable to unauthorized access, denial of service attacks and similar security threats.

IGT has read, understands, and will comply with this requirement.

IGT will ensure that network devices are not vulnerable to unauthorized access, denial of service attacks, and similar security threats. The network devices will be secure against outside attacks by unauthorized devices through the use of a multi-layered system of firewalls and other hardware, encryption, and security programs, all of which are continually updated as new outside threats emerge.



4.7.2.K Bandwidth

The Vendor should supply a high bandwidth network to support rapid access and transaction processing for large numbers of players. Vendors should identify the bandwidth provided by each communications medium proposed for the System, and an estimate of the traffic it is expected to carry.

IGT has read, understands, and will comply with this requirement. Players will access the network via the Azure Internet path (i.e., the public cloud), and will therefore have no bandwidth limitations.

IGT's proposed network will provide high bandwidth and support rapid access and transaction processing. We will provide adequate aggregate bandwidth at all points in the network.

Our network solution will also support any increased communication volume caused by any activity growth or additional communication caused by a new type of game, rapid software and data downloads, as well as transaction processing with no system performance degradation.

4.7.2.L

Connections to Systems Not Dedicated/Private

Any connection made between the System that processes games transactions, and any other systems or networks that are not private and/or dedicated to Lottery gaming transaction processing, (such as the Lottery administrative system and the Lottery's administrative support system and development/QA system), shall be effected through devices that detect and block or filter out unnecessary and unauthorized traffic. Traffic shall be supported only from authorized nodes. Software transfers shall be secured.

IGT has read, understands, and will comply with this requirement.

Any time two networks are interconnected, security breaches such as unauthorized users accessing the networks are possible. To mitigate these risks, connections between the LAN maintaining IGT's gaming equipment and third-party access or venue WAN are made through a firewall that filters unnecessary traffic between LAN segments and bad packet traffic, and limits access to authorized nodes and other hardware.

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4.7.2.M

Other Network Security Controls

The Vendor shall provide additional information on the network security components and controls that will be implemented for the System LAN s and the proposed WAN connections including firewall and IPS/IDS protection, network access controls, network device hardening, login and password controls, network device log management, etc. The acceptability of all network security controls will be subject to Lottery approval.

IGT has read, understands, and will comply with this requirement.

Intrusion Detection/Prevention System

To monitor access to the network, we propose to use the extensive capabilities and features of the best-in-class firewalls, which includes integrated Intrusion Prevention System (IPS) functionality. We will surround the data center network with a redundant pair of firewalls. As stated, this pair of firewalls forms a data center security perimeter against the network and a second against the back-office/operations systems and networks.

The firewall will constantly update profiles or signatures of events that indicate a potential network intrusion. These events could include malicious packets potentially containing a virus or causing an abnormal action such as shunning and reset, which can cause a service interruption.

IGT will initially choose common and atomic signatures. Atomic signatures trigger on a single event and:

- They do not require the IPS feature to maintain stateful information.
- The entire inspection can be effectively accomplished at high speed.
- They do not require any knowledge of past or future activities.

These features allow the firewall to be configured to send a TCP reset-and-shun packet from the offending IP address to protect against any network attacks. Firewalls are continually updated as new features or fixes are published, and we fully test them within the Architectural Performance Lab (APL) at our West Greenwich, Rhode Island, facility. Once updates have been reviewed and approved by the Lottery, a scheduled update is planned. These firewalls support these IP versions: IPv4 and IPv6.

User Access

Network-access controls will allow routing of only those network services needed by authorized transaction engines. All iLottery System users will be provided system access that's based on their job responsibilities and need to know, and on the principle of least privilege, as noted above. They will be assigned one-time login passwords that they will be required to change upon login.

The System Administrator will analyze the audit journal files on each transaction engine to determine if intrusion attempts have been made and investigate any suspicious entries. If there are anomalies, the System Administrator will create, for the IGT Operations Manager and Lottery designee, an incident report of the results of all intrusion detection sweeps.

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Network Device Hardening

System security relies on the configuration of the internal network firewall rules to limit access to only authorized systems.

- To prevent intrusion, we use a hardware network appliance (firewall) with stateful policies, which adhere to the principle of least privilege.
- Other hardening that takes place includes firewall management via HTTPS and SSH, while router and switch management is restricted to SSH. All other management protocols are blocked from the devices.
- All firewalls that protect the iLottery System employ an IPS system with the latest signatures.

Network Log Management

We employ a centralized logging solution for all data center firewalls. The system log (syslog) application can retain these logs for up to two years.

Login and Password Controls

Our solution provides security using passwords for authentication before the operating system, applications, routers, and servers can be accessed. Entries of passwords or security codes will not be displayed as clear text on the user's screen. Further, an audit trail will be provided for all user login attempts, both attempted and approved.

Password Enforcement

Our password security measures include complex passwords, a minimum/maximum password life, and limits on reuse. We provide a dictionary password list to prevent users from creating common word passwords, single-character passwords, or other unsecure password types. In addition:

- Entries of passwords or security codes are never displayed as clear text on a user's terminal.
- An audit trail is provided for all user logins, successful and unsuccessful. Passwords are always system-generated and emailed to users.

4.7.3

Network Administration Services

The Vendor shall be responsible for network administration and management. These services include:

IGT has read, understands, and will comply with this requirement.

IGT will be responsible for network monitoring and management. These services include:

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4.7.3.A

Configuration Management

Configuration changes and asset records should be managed, including utilizing an inventory of network resources and operating parameters. Change management control procedures and online storage of network component configuration files are required.

IGT has read, understands, and will comply with this requirement.

Network configuration management will be part of overall configuration management process within the Service Management System. IGT will maintain an inventory of network resources and their operating parameters. Knowledgeable communications personnel will maintain this database so it can be referenced at any time.

4.7.3.B Fault Management

Fault management consists of actions toward detection, isolation, and correction of faults in the network.

IGT has read, understands, and will comply with this requirement.

When developing a communications network, fault management is a priority. We build redundancy and diversity into every aspect of our networks to eliminate single systemic failures, major points of failure afflicting a substantial proportion of the network, and bottlenecks that could potentially remove service completely.

Furthermore, our network professionals continually analyze the entire system infrastructure for detection, isolation, and correction of faults within the network. Constant scanning of the elements that run daily operations makes fault management a proactive process, rather than reactive one, thus minimizing or negating downtime.

IGT proposes an enterprise-class Network Monitoring System (NMS) with tools that will:

- Perform network and protocol monitoring and analysis (and that can monitor thousands
 of interfaces and elements concurrently).
- Record events.
- Show the status of the network including data communications at any given time, authorized operators will know the full status of the network.
- Determine whether a failure has occurred in the equipment at the data centers or indicate a WAN issue for the Lottery.
- Provide real-time alerts including automated audible, visual, text and email alarms regarding significant transmission failures or outages.

As stated above in Section 4.7.3.B, Fault Management, a system-redundancies action plan is also built into our network design.

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4.7.3.C

Performance Management

Performance management implies monitoring network utilization and managing resources to maximize capacity and minimize contention.

IGT has read, understands, and will comply with this requirement.

Performance management is part of our overall capacity management process. The purpose of this process is to ensure we maintain adequate capacity to meet current and future customer requirements. Central to the process is the development and maintenance of a capacity management plan via our Capacity Management Information System (CMIS). A high-level diagram of our capacity management process and how we make assessments based on performance and future needs is shown next.

Capacity management is an ongoing process that minimally addresses:

- Current and projected capacity and performance requirements.
- Timelines, thresholds, and costs for capacity-related service upgrades.
- Evaluation of the effects of anticipated service upgrades, requests for changes, and new techniques and technologies on capacity.
- Predicted impact of external changes, e.g., legislative.
- Data and processes to enable predictive analysis.
- Methods, procedures, and techniques to monitor and tune service capacity and performance.

Capacity management is a focal point for all performance and capacity issues.

Review current capacity & performance Information System (CMIS) Improve current service & component capacity Assess, agree & document new requirements & capacity Plan new capacity Capacity Management Information System (CMIS) Capacity & performance reports & data Forecasts Capacity plan Capacity plan

Figure 4.7 - 1.

4.7.3.D Carrier Interface

The Vendor should interface with the communications carriers to arrange for network maintenance, installations, and to maintain service quality. The Vendor shall be responsible for working communications problems to resolution through the common carriers/external suppliers.

IGT has read, understands, and will comply with this requirement.

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4.7.4

Network Monitoring and Fault Resolution

The Vendor shall detect and resolve problems with the network. In addition, based on the likelihood that iLottery will grow in complexity and connectivity over the duration of the contract, the Vendor shall be prepared to meet cyber security threats to the iLottery throughout the term of the contract.

IGT has read, understands, and will comply with this requirement.

4.7.4.A Network Monitoring System

Communications test and monitor capability shall be available at both the primary and remote backup data center sites. Network monitoring tools shall be able to interface and analyze protocols, view transaction data for analysis, and create visual and/or audible alarms to provide warning of problems. The capability shall be included to determine whether failure has occurred in the equipment at the central or remote backup site or within the wide area communications network.

IGT has read, understands, and will comply with this requirement.

Our NMS tools will be available to interface and analyze protocols, view transaction data, create visual/audible alarms to provide warning of problems, and determine whether a failure has occurred in the equipment at the cloud-level, primary or remote backup site within the WAN. We describe the tools we use to achieve this, throughout the following sub-requirements.

4.7.4.B Network Event Recording

Communications testing and monitoring equipment shall have recording and recall/reporting capability. The standards for the types of events recorded and the period of retention should be developed jointly with the Lottery. The Vendor should provide reports in an agreed upon format to allow the Lottery to evaluate communications network performance.

IGT has read, understands, and will comply with this requirement.

Our proposed and highly configurable NMS tools have comprehensive recording and recall/reporting capabilities. They can be configured to meet your specific needs and requirements. Parameters (e.g., types of events, sensitivity levels, and period of retention) can be individually set. We will provide reports in an agreed-upon format to allow the Lottery to evaluate communications network performance.



4.7 - 19

4.7.4.C Network Monitoring Protocols

Communications test and monitor capability shall be available at both the primary and remote backup data center sites. Network monitoring tools shall be able to interface and analyze protocols, view transaction data for analysis, and create visual and/or audible alarms to provide warning of problems. The capability shall be included to determine whether failure has occurred in the equipment at the central or remote backup site or within the wide area communications network.

IGT has read, understands, and will comply with this requirement.

As stated just above, our proposed NMS tools have comprehensive monitoring, recording, and recall/reporting capabilities and are highly configurable. They can be configured to your specific needs and requirements. Parameters such as types of events, sensitivity levels, and period of retention can be individually set, and will be determined jointly with the Lottery. In addition to network-layer monitoring tools, our operations team will also utilize robust, configurable, API-based website uptime tools for our websites. These tools can set up daily/weekly and alerting reports for various distribution groups.

As noted above, our NMS tools can monitor thousands of interfaces and elements concurrently. At any given time, authorized operators will know the full status of the network, including automated audible, visual, text and email alarms regarding significant transmission failures or outages.

4.7.4.D Communications Expertise

Communications technicians trained in the use of testing and monitoring equipment should be present at the active System site whenever the iLottery System is operational and whenever the Lottery requests such support for test purposes.

IGT has read, understands, and will comply with this requirement.

IGT will uses best-in-class tools, processes, and personnel to detect and resolve problems with the Lottery network. An experienced operations manager will oversee the functions of the control room at all times.

4.7.5

Quarterly Network Vulnerability Scans

Internal and external network vulnerability scans shall be run at least quarterly and after any significant change to the iLottery System or network infrastructure.

IGT has read, understands, and will comply with this requirement.

IGT will run both internal and external vulnerability scans as required. Our product development team follows a comprehensive security process to identify and mitigate vulnerability issues before they become widespread.

Communication Networks



4.7.5.A

Verification of Quarterly Scans

Testing procedures shall verify that four quarterly internal and external scans took place in the past twelve months and that re-scans occurred until all "Medium Risk" (CVSS 4.0 or Higher) vulnerabilities were resolved and/or accepted via a formal risk acceptance program. Internal scans should be performed from an authenticated scan perspective. External scans can be performed from an uncredentialed perspective.

IGT has read, understands, and will comply with this requirement.

4.7.5.B

Performance of Quarterly Scans

The quarterly scans may be performed by either an Independent professional or via a qualified employee of the Vendor.

IGT has read, understands, and will comply with this requirement.

4.7.5.C

Verification Submitted to Lottery, Including Mediation & Risk Management Plans

Verification of scans shall be submitted to the Lottery on quarterly basis and shall include a remediation plan and any risk mitigation plans for those vulnerabilities not able to be resolved.

IGT has read, understands, and will comply with this requirement.

4.7 – 20 Communication Networks

4.8

iLottery Portal Development & Integration Services

4.8.1 Lottery Branded Website & Applications, or Other Portals

The Lottery desires the broadest distribution across digital channels in order to maximize player access and convenience. In order for a unified experience for retail and iLottery players, the Vendor should create a Lottery specific branded website linked to the Lottery's existing website, and Lottery branded applications for both iOS and Android, or other player optimized and ecommerce driven portal, to replace current applications for the launch of the Program. The Vendor should contract a Third Party Vendor, approved by the Lottery, to design, create, and maintain the portal website, apps, and other portals deemed necessary for access.

IGT has read, understands, and will comply with this requirement.

IGT's front-end web portal and mobile app solution power more lottery solutions than that of any other Vendor, with the most global app deployments. Fully compliant with Americans with Disabilities Act (ADA) and Apple/Google guidelines, the front-end solution is fully user-tested and will provide players with access to your complete suite of iLottery products. Powered by the recognized leader in content management systems, the app provides players with an intuitive, optimized experience ultimately driving revenues for good causes.

Enhanced Efficiency by Expanding the West Virginia Lottery Mobile App to iLottery Wagering

Among the efficiencies afforded by IGT's proposed solution is that IGT can effectively expand the Lottery's existing mobile app to enable iLottery wagering. We can simply upgrade, rather than replace, the app's convenience features – vastly speeding the required testing period and maximizing continuity for your players.

The design of the front-end User Interface (UI) attracts players across all demographics, while its fully tested ease-of-use ensures they'll return to their iLottery accounts for their lottery needs. The UI is simple enough to avoid confusing new players while offering intuitive functionality for regular players to reduce the time it takes them to complete their desired actions.



It is also:

- Fully configurable to meet your integration requirements with an eCommerce-driven West Virginia Lottery-branded iLottery website and iOS and Android mobile app.
- Powered by a Content Management System (CMS) that allows authorized Lottery users to update content (text, images, banners, etc.) in real time without requiring any technology support.
- Expandable to adapt to the regulatory landscape and any new games or game verticals the Lottery
 may choose to adopt in the future.
- Flexible to provide access to those features from convenience features to iLottery wagering that are available to players depending on whether (and to what extent) they have provided information to establish a Lottery account.

We relentlessly test our designs and final implementations of the portal and mobile app to meet Level AA of the World Wide Web Consortium (W3C) Web Content Accessibility Guidelines (WCAG), which is the internationally recognized benchmark for building accessible digital products. Our solution is also compliant with Operating System (OS) requirements and adheres to Apple and Google guidelines. We know this market will continue to be dynamic at an extremely aggressive pace. Accordingly, we continually tweak our roadmap so that our mobile app and portal solutions stay ahead of the curve and continue to provide the best player experiences.

Continually Improving Upon an Industry-Leading Solution

After our mobile app was named "Lottery Product of the Year" at the International Gaming Awards in 2021, we set our sights on its next evolution. IGT has further developed its mobile solution and is now offering its latest release, introducing a fresh design, improved navigation, and feature enhancements to keep pace with evolving consumer demands.

Following the latest best-design practices and ADA-compliance guidelines, our UI experts focused on offering a neutral interface to create a modern, clean design while providing players with a content-focused experience. By incorporating interactive animations and boosting the use of in-app gestures, the player's attention is drawn to what is important: the content.

Key to our approach to the mobile app's evolution is reliance on player-behavior data, continually studying and analyzing how players actually interact with the app. By aggregating the various interactions across multiple player sessions using various data sources, tools like Google Analytics (GA), and player research feedback, our mobile development team redefined player journeys and flows and addressed any unexpected player behaviors that were observed.

Using this data, the team redesigned the home screen to prominently display the next available jackpot draw game, jackpot amount, and a countdown for the next draw, followed by the most recent winning numbers, a scrolling game carousel, and a retailer locator. The new bottom navigation bar and the positioning of content on the homepage are configurable, which means the Lottery will have the flexibility to promote features based on its players' needs.

Verifying the results of our redesign, IGT conducted usability interviews in April 2022 with a mix of current retail and online lottery players. Users reported that they found the app easy to navigate, user friendly, and simple to use, allowing them to easily create plays and scan tickets.

These efforts underscore our commitment to ongoing innovation and enhancements that will benefit the West Virginia Lottery and its players throughout the Contract.



IGT's Approach to User Interface/User Experience (UI/UX) Design

The UX/UI of our mobile app is the result of years of work in the field, using player and operator feedback to constantly improve our product baseline.

Our approach to UI/UX is based on three guiding principles that are deeply ingrained in our processes and design decisions:

- We design user-centric for players: We rely on UX research tools to stay aligned with player needs and behaviors in all phases of the product life cycle, from UX/UI design to continual UX health-monitoring and evolution. From focus groups to split and multivariate testing, usability testing, and behavioral analysis via analytics, we use the right UX research tool in every phase of the design process. A fundamental enabler of our design approach is our broad experience in the field and our access to market and player data. Leveraging the availability of 360 degrees of user data, we apply the insights coming from behavioral analysis of usage patterns to drive continual improvement of the UI/UX of our products.
- We design seamless, integrated experiences for all channels: We strongly believe in the importance of providing a single, integrated UX in the retail and digital channels in order to offer players a more relevant, personalized, and rewarding experience.
- We design for accessibility: We design for inclusivity and aim to ensure our digital products and touchpoints are accessible to a wide range of people with permanent and temporary disabilities, including blindness and low vision, deafness and hearing loss, learning disabilities, cognitive limitations, limited movement, speech disabilities, photosensitivity, and combinations of these. In addition to following WCAG 2.0 to the AA level, we support assistive technologies and can provide a specific high-contrast option to support compliance to the WCAG AAA accessibility-level standard.

Through constant evaluation of our digital offerings, our content creators, UI designers, visual identity designers, and infrastructure developers apply best practices and avoid commonly made mistakes throughout the life of our products.



4.8.2

End-to-End Portal Services

Vendor should provide end-to-end services necessary to deploy Portals. This includes developing all graphical user interfaces (GUis) and functionality necessary to expose portions of the iLottery System to players (e.g. player account management, games, geo-location, etc.) in order to conduct iLottery sales. Vendor will be required to integrate and deploy iLottery Games within Portals. As directed by the Lottery, Vendor should update Portals with new content and functionality for the Term of the Contract. Portals shall include a secure upload and download site for exchange of documents between the player and Lottery within the System.

IGT has read, understands, and will comply with this requirement.

We will provide end-to-end services to develop, deploy, and maintain portals, including all graphical user interfaces and player-facing functionality to deliver iLottery games and conduct iLottery sales. We will collaborate with the Lottery to determine new content and functionality, and update the portals as directed by the Lottery.

IGT's iLottery System will deliver a single and integrated web (desktop, tablet, and mobile) and app experience to provide all iLottery solutions, including player account management, Draw Games (DGs), and eInstant content. All player-facing solutions will be fully integrated and will allow players to access all functionality, such as registration, deposit, games (DGs, Keno, and eInstants) ticket purchase, and responsible gaming controls (including player spending limits) across devices. In addition, the solution supports all functionality required to ensure responsible iLottery sales and adherence to Lottery rules (including rigorous age verification and geo-location).

Our front-end solution includes a portal and mobile app that is available on all device types (mobile device, tablet, laptop, desktop computer) for a consistent experience regardless of the device they use.

We will include a secure upload and download center for the exchange of documents between the player and the Lottery. The next screenshot shows our secure upload center used by customer support staff:

Document Management Upload Screen

DOCUMENTS ය අ ල Document Status Document id Document Status Upload Date Contact Number Contract Number Contract Status Type p5473892 Driver's License with our Loaded 01/17/2019 5:30 AM 1000000476 Validated 01/17/2019 5:30 AM 455 1000000476 Validated 8434 Social Security Number Loaded Government issued ident Loaded 01/16/2019 7:34 AM 450 1000000471 Validated Hdhdhd263737 01/16/2019 7:34 AM 450 1000000471 Hshssh2727 W-2 Form Loaded Validated 1000000469 223244 01/16/2019 2:06 AM Validated 24242424 Oriver's License with our Clear 01/15/2019 2:06 AM 448 1000000469 01/16/2019 2:06 AM **6** 448 1000000469 Validated 1313 W-2 Form Clear

Figure 4.8 - 1.



4.8.3

Integrating Current Lottery Features & Functionality into Vendor-Created Portals

Vendors should describe their approach and solution to integrate current Lottery application features and functionality into the Vendor created portals. At a high-level, describe the role and responsibilities of Vendor, and any third-parties. Vendor will be required to integrate with any third-party providers (e.g. loyalty website Vendor) as necessary to deliver a unified user experience to players.

IGT has read, understands, and will comply with this requirement.

Integration is one of IGT's core strengths, as our experience providing and consuming integration endpoints is substantial and continually growing across our customer base. We've performed integrations between our lottery systems and third-party systems for many years, and, as the industry has moved toward open systems and standards, integrations are becoming less complex.

Further, having developed and deployed the Lottery's existing mobile application, we are intimately familiar with its functionality and the requirements for integration.

Our experience means that we understand what it takes to conduct a smooth integration process: collaboration between parties, technical exchange and planning, and, most important, the availability of clear, concise documentation of Application Programming Interfaces (APIs), technical specifications, and business rules.

IGTs approach to API technology and solutions ensures that each API is secure, scalable, and written in a developer-friendly manner to allow for a safe, simple integration into each of the systems involved. Each of our APIs is provided in an easy-to-use format, over standard internet solutions, thus making it usable by most modern connected devices. Each API exposed is written as Representational State Transfer (RESTful) services. The RESTful interface supports the JavaScript Object Notation (JSON) message format.

All APIs written for IGT adhere to the following guidelines:

- A single global API repository.
- A strict standard for API design.
- A well-defined process for adding new services.
- Secure access and authentication.

Additionally, IGT will make available/expose software services and publish documentation for those software services that would enable third-party developers to create apps for public access. While we wouldn't make the API-specification documents available in the public domain, they will be shared with Lottery-selected third parties who will create player-facing applications on top of our APIs.



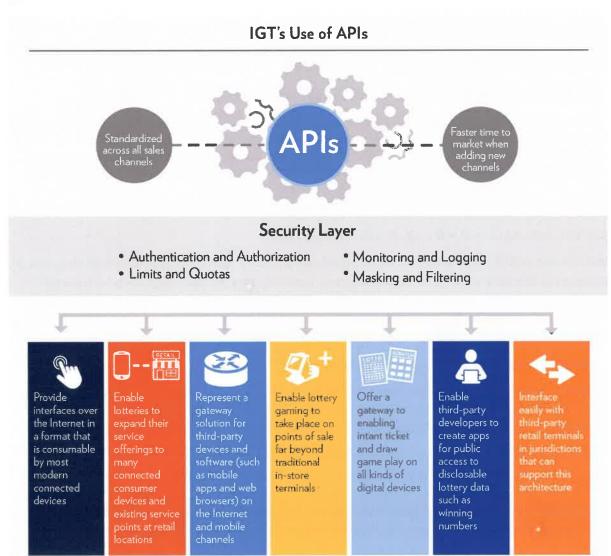


Figure 4.8 – 2. Speed and Flexibility: IGT's API-based infrastructure simplifies the integration process to enhance speed to market.



4.8.3.1

Additional Portal Deployments to Engage Players

Vendors may provide additional portal deployments that can engage players on additional device types (e.g., smart TVs, smart watches, etc.) that can help to increase player convenience and access to iLottery. Any additional portal deployments offered should be outlined over a twelve-month Channel Mix plan/roadmap that includes release dates for future Channel Mix introductions as part of the Marketing Plan as referenced in Section 4.14.2 and upon approval by the Lottery.

Per Addendum No. 3, the Lottery changed this requirement number from 4.8.3 to 4.8.3.1.

IGT has read and understands this requirement.IGT continually monitors the consumer market and device development for their potential application to the lottery industry and our product roadmap. We will continue these efforts through the Contract Term, apprise the Lottery of any upcoming opportunities and product developments that could be advantageous to the Lottery in the West Virginia market, and mutually define requirements and timelines for their deployment.

4.8.4 Portal Requirements per the Lottery

Portals will be required to have compliance with certain browser types, browser versions, and plug-in controls (especially the latest and most popular versions) as directed by Lottery. All recommendations for portals should specify which platforms, browsers or operating systems will be supported. For example, which minimum operating systems are supported for iOS or Android.

IGT has read, understands, and will comply with this requirement.

All functionalities will be accessible to players through the Lottery's website from all popular computer and mobile Operating Systems (OSs) and web browsers. Our standard support model is for the latest two versions of the web browsers. For mobile apps, iOS is supported for the latest and two versions backwards while Android is supported from latest version and four versions backwards.

4.8.5 Mobile App Updates Reviewed & Approved by Lottery

The Vendor should submit any Mobile App software updates to the Lottery for review and approval. Updates should be released when requested by the Lottery.

IGT has read, understands, and will comply with this requirement.



4.8.6 Portal Single Sign-On

The Vendor shall implement a solution across approved portals that enables a player to authenticate and to move between third-party controlled portions of the portals while remaining logged in. Vendors should describe their solution for each portal type (e.g., website, mobile app) to achieve a single sign on while maintaining the highest level of security possible.

IGT has read, understands, and will comply with this requirement.

Lottery players will be able to log into the site one time and remain logged in throughout the entire experience; that includes any Lottery-maintained or third-party portions of the site. The Lottery and its players will enjoy a single secure portal – one site for all marketing, account, wagering, and other features.

When the player submits a wager for purchase, the iLottery System determines if the player is logged in and correctly geolocated within the boundaries of the state of West Virginia. If the player is not logged in or is not appropriately geolocated, the System informs the player that he or she must login to purchase the wager and must be within the bounds of the state.

A play experience characterized by simplicity and convenience stands atop our iLottery System design principles, and is largely why our proposed iLottery System uses an industry-standard OAuth-based player authentication and authorization solution. With this solution, your iLottery players can log in a single time and be managed via configurable session-management features. They'll have an optimal player experience while you'll have complete control over all security regulations.

Providing a seamless player experience throughout the Lottery-managed portion of the site and any third-party portion is central to player retention. We provide such an experience with a standard pass-through authentication mechanism to share login and player information with external systems and a customized authentication method to meet all third-party needs.

When a player leaves the iLottery portion of the site to visit other areas, our solution will extend the player's session up to the regulatory limits. We'll achieve this by providing a simple API. Of course, a player session cannot be extended indefinitely due to potential regulatory, system performance, and security issues. Thus, our solution limits the amount of inactive time a player spends on the site through player session-management configuration options.

When a player is inactive for the default (or a pre-configured) amount of time, the session is terminated and a message is displayed to the player, noting their session has ended. The player can log right back in if they wish to do so.

Our inactivity solution is based on an OAuth solution and HyperText Transfer Protocol (HTTP)-based sessions. Combined, they provide players with a smooth, effortless experience and the Lottery with the industry standard.

The iLottery System additionally provides complete tracking of player login and logout sessions, which will enable you to determine player behaviors and provide call center representatives with the necessary information to help players when the situation arises.



4.8.7 Web Portal Setup

Vendor should deliver a web-based solution that can link from the Lottery's existing website to provide a unified and seamless player experience. This includes all necessary domain name system ("DNS") configurations, provisioning of secure socket layer ("SSL") certificates, and any other necessary requirements in order to support iLottery portal components.

IGT has read, understands, and will comply with this requirement.

Our front-end solution is a robust, player-facing web portal offering players a singular, integrated experience alongside a powerful payment solution. It includes:

- A modular design that integrates seamlessly with any other portal required by the Lottery.
- Doman Name System (DNS) configurations, fool-proof security with Secure Socket Layer (SSL) certificates, and several layers of security within the data center infrastructure.

IGT will maintain the domain and certificate ownership. In addition, we can leverage the existing Lotteryowned domains and certificates.

4.8.8 Web Portal Components and Integration

Vendors should provide responsive website user interface components for each player-facing portion of the iLottery system such as the ability to register, deposit, withdraw, claim, participate in promotions, play demonstration games, and play iLottery games.

All iLottery responsive website user interface components should be responsive to different screen sizes in accordance with standards that match the existing responsive website which currently includes mobile, tablet, and desktop viewports.

Vendors should describe their solution to meet these requirements by describing the methods which the Lottery, and its agency partners, would use to maintain a responsive website player experience.

Vendors should describe each user interface component and provide sample screenshots, designs, or wireframes.

IGT has read, understands, and will comply with this requirement.

We will provide fully responsive UI components for each player-facing feature of the iLottery System.

Player-Facing UI Components

Our front-end solution enables myriad UI components for player consumption, all of which will be integrated into the Lottery's website with complete responsiveness and adherence to Accessibility and Americans With Disabilities Act (ADA) compliance guidelines.



The following player-facing components will be available on the Lottery's website and mobile app, ensuring a seamless player experience across all channels:

- Player/account registration.
- Player login including forgot-username and password functionality.
- My Account section for player profile management.
- Cashier functionality for players to deposit and withdraw winnings.
- All DGs, eInstants, and Keno games with respective games lobby and UI, including the ability to
 play both real and demonstration games and purchase games.
- All jackpot feed tickers, winning numbers, draw time counter, etc.
- Transaction history:
 - Payments: money in and out.
 - Games played with all wager details.
- Available promotions and promotions history.
- Player loyalty area.
- · Player communications area.
- Player settings and configuration areas:
 - Message/notification preferences.
 - Responsible gaming controls.

These dynamic front-end components are generated from our back-end and game engines. We will enable these components with baseline layouts alongside branding and themes that meet your brand requirements.

Efficient and Flexible UI Component Delivery

For maximum efficiency and flexibility in the delivery of player-facing features, we will deploy front-end functionality from an easily extendible, fully customizable, and reusable UI component library on our infrastructure. The library is a centralized location housing our complete range of functionality represented in widgets – stand-alone web applications built using the same code base and business intelligence of our baseline components.

Our use of discrete and nimbly deployable widgets will provide the Lottery – throughout the Contract Term – with the ability to structure its front-end environment with the content and functionality of its choice, picking and choosing from IGT's ever-evolving and -expanding library of components, exposing those library features when it wants. Available widgets include jackpots, DG results, winning numbers (including search for past winning numbers), ticket checker, responsible gaming features, and much more.

Widgets can be deployed and embedded directly into your front-end solution. Each widget provides an embeddable script (JavaScript embed code) that can be copied and applied directly into your web page. Once the script has been embedded, it can be rendered in an iFrame or within the page itself that calls the common widget app with your stored configuration.

j



IGT's Component Library: Benefits and Features

Benefit	Feature Feature
Seamless Player Experience	Each widget can adhere to the existing UI's look and feel, ensuring they match your brand's visual identity
Responsive Design	Widgets are built and tested to be fully responsive to ensure the best experience across different player devices (mobile, tablet, PC), device sizes, and screen orientations
Flexibility and Configurability	 Multiple widgets can be embedded on a single page, enabling the Lottery to add functionality where it wants No coding is necessary; widgets are built using the React framework and can be embedded using JavaScript into any HTML Each widget has its own bundle that can accept custom configurations Single sign-on between widgets and back-end platform with a simple token

Figure 4.8 - 3.

We will continually work with you to apprise you of the latest developments and functionality in our component library and help you determine those widgets that best address your goals and the needs of your players.

Responsive Design for Multi-Target-Device Capability

With multi-target-device capability, the website's responsive design allows the pages to adapt to the screen of the device a player is using, i.e., displaying on multiple devices of different sizes in both orientations (portrait and landscape).

The following list describes the ways in which a page can respond to changes in viewport size:

- Grid Layout: Includes a responsive, mobile-first, fluid grid system that appropriately scales up
 as the device or viewport size increases; this enables layouts to be controlled in an ordered and
 easy fashion across all devices. Uses a single-column layout for smaller viewports and multiplecolumn layouts for larger viewports.
- Text Size: Uses larger text size (when appropriate, such as in headings) in larger viewports.
- Content: Includes only the most important content when displaying on smaller devices.
- Navigation: Provides device-specific tools for accessing other pages.
- Images: Serves image renditions that are appropriate for the client viewport according to the dimensions of the window.

To implement responsive design, we use the following areas of work in our portal development:

- Media queries.
- Fluid grids.
- Adaptive images.

The IGT mobile web solution is a HyperText Markup Language version 5 (HTML5)-, JavaScript-, and Cascading Style Sheets 3 (CSS3)-based product. It is more a "web app" than a website, being mostly JavaScript and CSS3, which allows for dynamic animations. This gives it a more native-app-like feel, moving away from the conventions of desktop web.



IGT follows a "mobile first" strategy, which is able to scale up to provide an engaging experience on larger screens (i.e., tablet and desktop), providing the same overall experience with a display tailored to each screen size and orientation.

Portal Samples

(Please note that the player-facing screens throughout this section are examples only from our product baseline. The implemented solution will align with West Virginia Lottery design guidelines.)

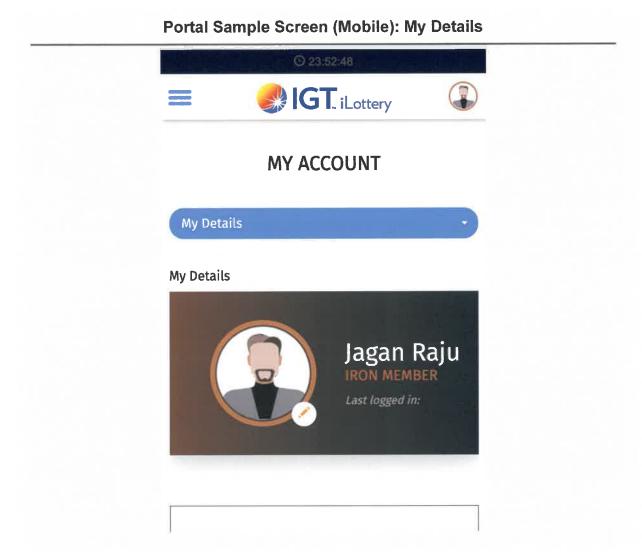


Figure 4.8 - 4.



Portal Sample Screen (Desktop): My Details (Change Password)

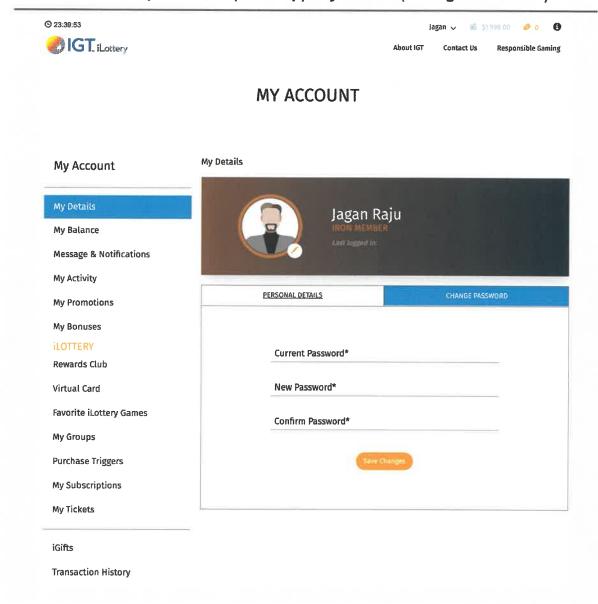


Figure 4.8 - 5.



Portal Sample Screen (Mobile): Buy Ticket

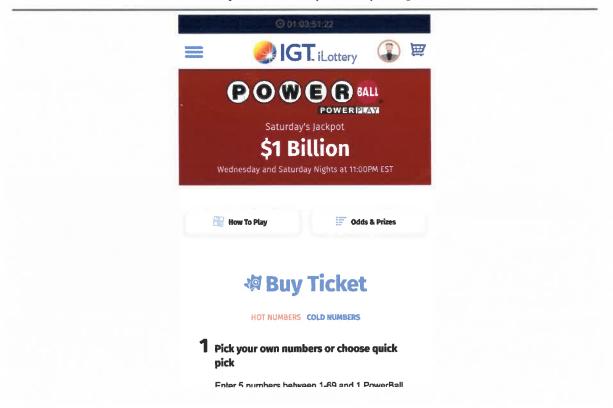


Figure 4.8 – 6.



Portal Sample Screen (Desktop): Buy Ticket

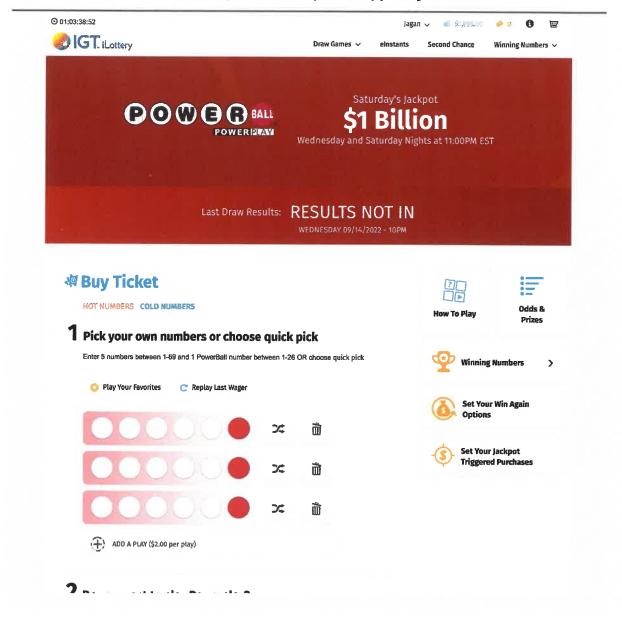


Figure 4.8 - 7.



Portal Sample Screen (Mobile): My Messages

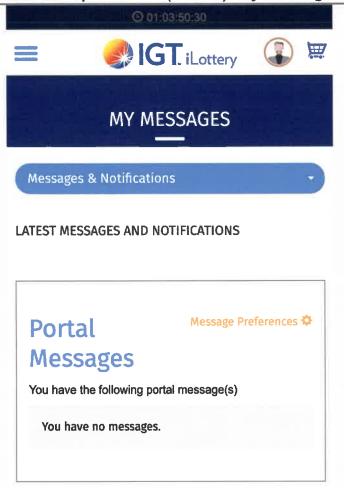


Figure 4.8 – 8.



Portal Sample Screen (Desktop): My Messages Jagan V S 51,998.0

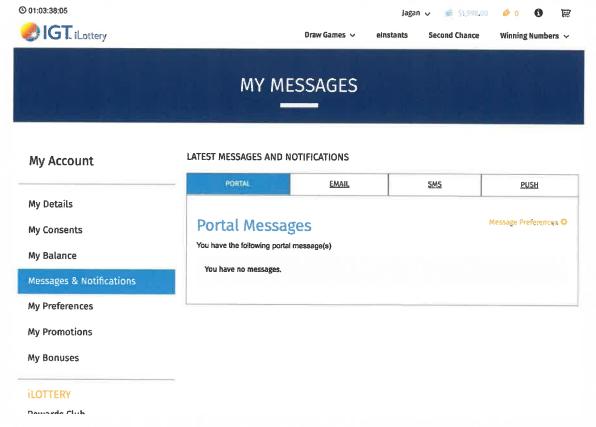


Figure 4.8 – 9.



Portal Sample Screen (Desktop): Responsible Gaming Limits

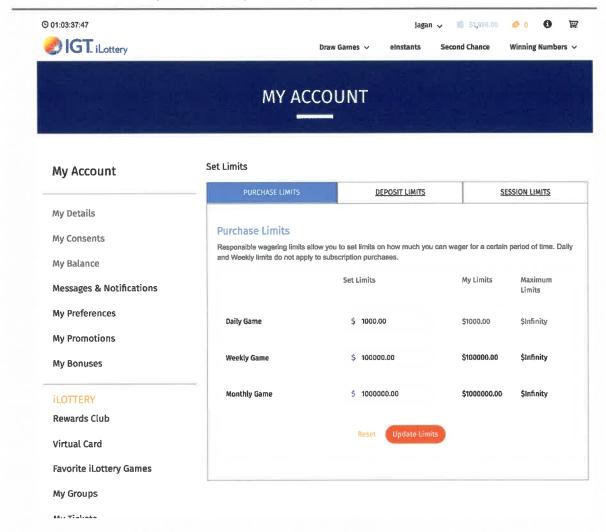


Figure 4.8 – 10.

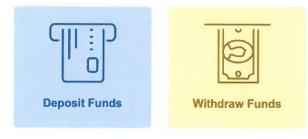


Portal Sample Screen (Mobile): Cashier App (Deposit & Withdrawal)



Manage Funds





Registered Payment Methods



Figure 4.8 - 11.



Portal Sample Screen (Desktop): Cashier App (Deposit & Withdrawal)

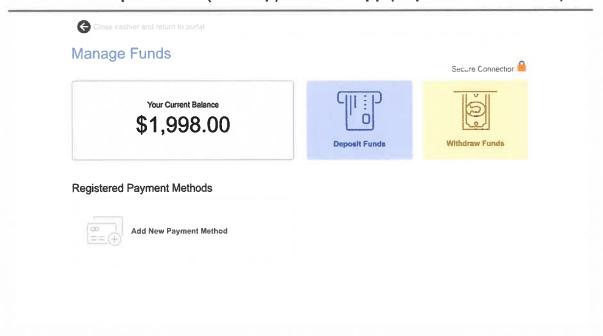


Figure 4.8 – 12.



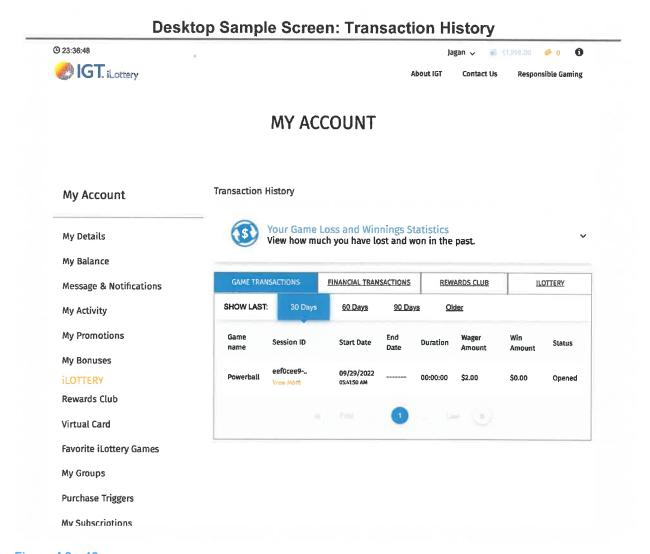


Figure 4.8 – 13.

Maintaining the Website Player Experience

The Lottery will be able to manage areas of the portal solution using the CMS themselves, including the positioning of content, updating of text and images, and adding new components. This flexibility will enable the Lottery to control and author app content and publish changes live and in real time. These changes are made in an independent author instance and, after review, can be immediately published to the live site.

For details, please see Section 4.8.12, Content Management System (CMS).



4.8.9

Web Portal Software Update Process

The Vendor should provide software updates on a frequent delivery schedule that supports constant innovation and improvements to the player experience. Vendors should describe their proposed delivery process and cadence for updates to the responsive website portal, excluding those updates managed by CMS configurations.

IGT has read, understands, and will comply with this requirement.

IGT will provide software updates to the front-end solution through both batch releases and major releases. Batch releases are typically quick releases, spread over several sprints. Major releases are delivered over a few months.

Portal software comprises two major pieces: one for the functional code and the other for content. Functional code – also called the App – is a set of UI components, Web Content Management (WCM) components, service handlers, and more.

Content changes can be made directly in production and approved and published either momentarily or at a scheduled time. Content changes include changes to the text, styles, and graphics throughout the portal. These changes will go through our Software Development Life Cycle (SDLC) and either be in service-batches releases or major releases based on the priority and level of the changes.

Our approach to software and quality engineering is based on our SDLC, which incorporates requirements, systems engineering and architecture, software development, design, and quality control from our Integrated Delivery Model (IDM) disciplines.

A critical component of the SDLC, as it relates to the software development and quality engineering process, is our Build-Test-Correct (BTC) methodology. BTC is an iterative approach to creating software in cycles. The purpose of an iterative approach is to measure progress across the software development schedule and verify against the approved business requirements to ensure defects are corrected as early in development as possible. As a best practice, we typically configure and enhance the more complex areas of the system in the earlier BTC cycles.

Integration and Testing

Our BTC process is designed to meet your requirements and eliminate defects as quickly as possible.

Software development and integration will be managed by a dedicated Software Project Manager (SPM), and the Quality Engineering process by the Quality Assurance (QA) Lead. These two team leads will work collaboratively with our System Engineer throughout the SDLC to produce a deliverable that aligns with your requirements and is ready to begin the first of multiple test phases. At the conclusion of these test cycles, the IGT team will support the Lottery throughout its Customer Acceptance Test (CAT) phase.

CAT of all software, sales devices, peripherals, and interfaces with external systems will encompass these milestones:

- CAT Entry/Exit/Suspension/Resumption Criteria Defined.
- CAT Test Plan Defined (includes Test Data Requirements).
- Functional CAT Test Case Construction Complete.



- Business Cycle (28-day MUSL Requirements) Script Defined.
- CAT Environment (Infrastructure) Complete.
- CAT Entry Meeting (Decision to Start CAT).
- Software Install and Shakedown Complete (Initial and Any Subsequent Defect Releases).
- Operations (Backups at Day Start Before Any Data Entry).
- CAT Test Data Creation Complete.
- Operations (Backups at Day End of Day 0, After Data Entry).
- Functional CAT Test Case Execution Complete.
- System/Data Restore Complete.
- Data Conversion Complete.
- Business Cycle (28-day MUSL Requirements) Script Complete.
- CAT Exit Meeting (System Software Acceptance Decision).

The mobile app is distributed for testing outside of the Play Store and app store ecosystem (enterprise distribution). The last tests before submission are conducted using the built-in mechanisms for the respective platforms, such as Testflight for iOS.

Development, Testing, and Installation of Software

As stated above, software development and integration testing will be managed by a dedicated SPM and quality engineering by the QA Lead. They will collaborate with our Systems Engineer throughout SDLC. Your IGT Project Team will develop, test, and install all software ahead of the Go Live date, working alongside your team to ensure your business needs are met.



The following figure depicts the iterative BTC process.

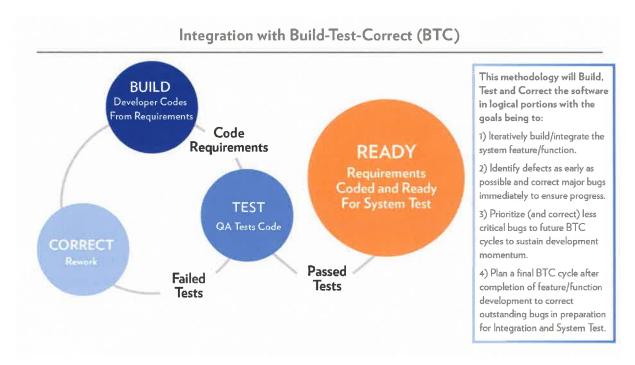


Figure 4.8 – 14. Integration and Testing: Our BTC process is designed to ensure the software meets your requirements and to eliminate defects as quickly as possible.

4.8.10

App Components and Integrations

The Vendor should provide iLottery user interface components comparable with the Lottery's existing iOS and Android mobile applications. All user interface components should be delivered and maintained, over the term of the contract, in a manner that complies with guidelines set forth by the app store providers (e.g., Apple) or that provides a widely-accepted route for players to install an application outside of the app stores (e.g., side-loading an Android application).

The App should integrate with the lottery Traditional System at minimum, so that players can create digital play slips, check winning numbers, scan traditional lottery tickets to see if it is a winner, and to be able to cash winning tickets. The vendor should describe any abilities for any animated draws to engage players.

iLottery mobile app user interface components should be responsive with different screen orientations (e.g., portrait, landscape) and varying screen sizes such as mobile and tablet. Vendors should describe their solution to meet these requirements by describing the methods which the Lottery, and its agency partners, would use in order to maintain a responsive app experience.

Vendors should describe each user interface component and provide sample screenshots, designs, or wireframes and should specify the components (e.g., shopping cart, document upload, etc.) to be developed with technologies (e.g., Swift for iOS).

IGT has read, understands, and will comply with this requirement.



Lottery players will enjoy enhanced functionality and an entire West Virginia Lottery ecosystem at their fingertips – complete with full account functionality and iLottery wagering features, with the ability to easily scale as you expand your digital offerings in the future. Our award-winning mobile application is available across both iOS and Android platforms and provides features and functionality to players for account setup, funding, purchases for game tickets, withdrawal of funds, and much more.

IGT uses data to understand player behavior, yielding insights that drive our app design. Our mobile app has been fully user tested and includes an optimized player experience, making it easier for players to register, deposit, and play their favorite games. Using Google Analytics (GA) and multi-jurisdictional app data, the homepage of the mobile app prominently displays the most popular features and functionality including the next available jackpot DG, jackpot amount, a countdown for the next draw and most recent winning numbers.

Following best design practices and ADA compliance guidelines, our mobile app optimizes how players interact with features, introducing a fresh approach to the design and navigation were key focus areas. As always, IGT adheres to Apple and Google app guidelines to ensure compliance and continue our strong relationships with these platform providers.

Player-Facing Components, Responsive Design, and Maintaining the App Player Experience

The mobile app will share the same player-facing components, responsive design, methods for maintaining and updating content, and efficient extendibility via IGT's UI component library as described for our portal solution in Section 4.8.8, Web Portal Components and Integration. They are both managed via the same Content Management System, which is described in Section 4.8.12, Content Management System (CMS).



Mobile App Samples

Mobile App Sample Screens: Login and Registration/Sign Up

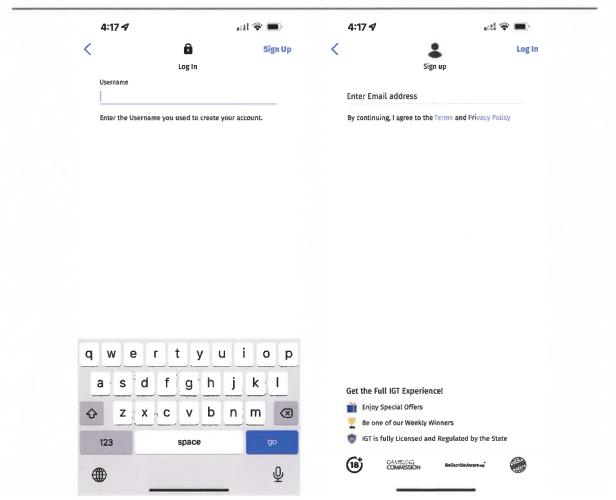


Figure 4.8 – 15.



Mobile App Sample Screens: Digital Play Slip & Confirm Purchase

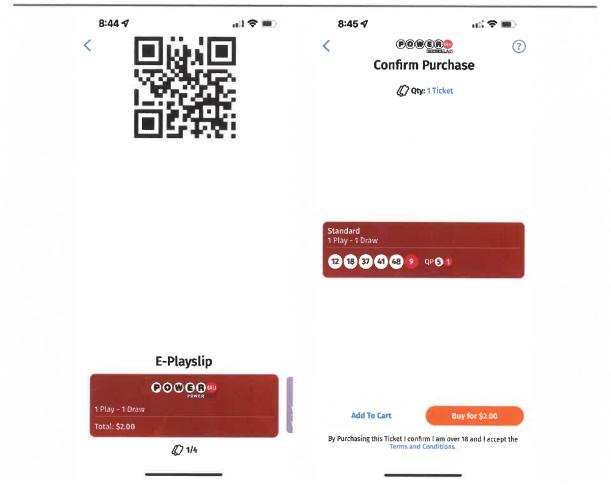


Figure 4.8 – 16.



Mobile App Sample Screen: Shopping Cart



Figure 4.8 – 17.

Animated Draws to Engage Players

Players can search for and see both which numbers were winners in recent draws and recent winners. The app can even show the date and location of each jackpot won. Once entered, the player simply clicks on Click To Watch to see an animation of the winning numbers being selected. (Players can opt to see winning numbers without animation.)

Similarly, Keno Go players can watch the draw proceed in animated real time. The show has a countdown to the next draw, which triggers a message to players 30 seconds out to join in watching the show. The show can serve as the Keno game's landing page to offer players the opportunity to generate play slips or save favorites while awaiting the show.



Mobile App Example Screens: iKeno

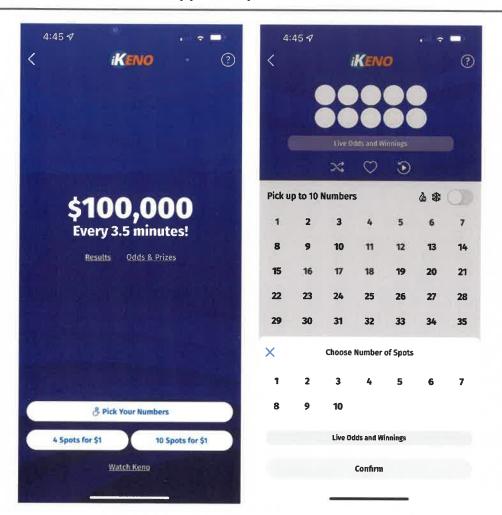


Figure 4.8 – 18.



Mobile App Example Screens: iKeno (continued)

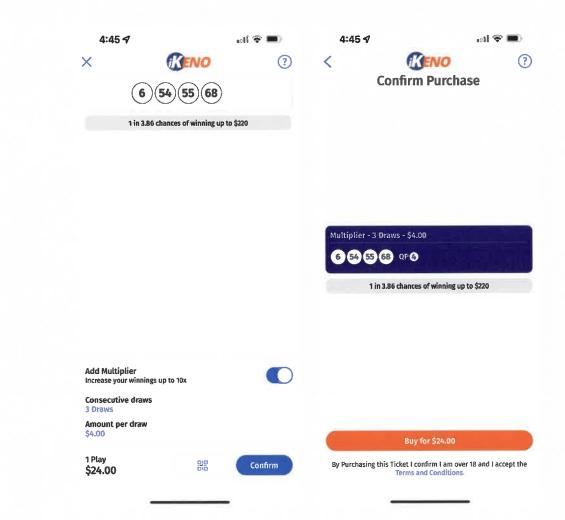


Figure 4.8 – 19.



Mobile App Example Screens: iKeno (continued)

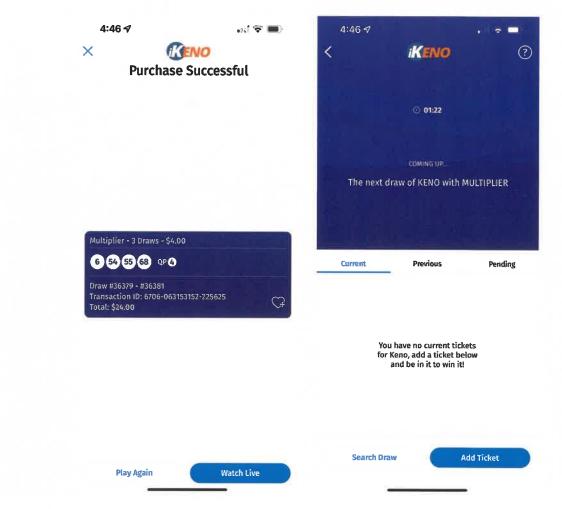


Figure 4.8 - 20.

IGT's Processes for Developing an Easy-to-Use, Fun-to-Look-At Mobile App

IGT's process for design and development is to constantly interrogate the design, test the code, and innovate on features across the board. The design process is fully integrated in our agile development process, ensuring the UX and UI evolution is continuous and goes hand in hand with the product life cycle. Starting from research, and through all the life cycle phases, we make sure that the right user-experience research tools are used to optimally support the design:

- Personas and experience maps are used to map the user journey across multiple channels, to
 make sure players enjoy a fully integrated and seamless experience across the digital and retail
 touchpoints.
- Prototyping is used to quickly iterate and explore innovative solutions and identify the best possible experiences.



- Usability testing, A/B testing, focus groups, and user feedback are utilized to refine user-friendly journeys, craft engaging content, and fine-tune playful, fun-to-look-at experiences for players.
- Reporting, analytics, and behavioral data provide new learnings and actionable insights that drive continuous improvement of the UX.



Figure 4.8 – 21. Seven Phases: We constantly interrogate the design, test the code, and innovate on features to ensure players enjoy an integrated, seamless experience across the digital and retail touchpoints.

The design of the baseline mobile app considers future trends and technology, allowing flexibility for individual customer requirements and specific end-user needs.

At project inception, we will provide the Lottery with extensive documentation and expert support to customize the baseline product to its needs. Our design team carefully analyzes the lottery branding and builds a style guide to ensure there's continuity and consistency across all existing and proposed digital products for an optimal user experience.

New requirements and change requests to the baseline product are audited with our Product, Marketing, and Technology teams to become part of the evolutionary roadmap of the product.



The Importance of Mobile Apps: IGT's Lottery-Industry Leadership

Mobile is increasingly at the center of the consumer experience, inspiring IGT's mobile-first product-development philosophy. We led the industry's transition to a mobile-first framework, ensuring that players could be fully self-sufficient on the app alone, without having to visit the portal.

The mobile space is extremely complex. Handsets and operating systems rapidly evolve. Navigating this dynamic environment requires a continuing and substantial investment on our part to track upcoming releases, test them, and obtain approvals for public release from relevant app stores so that we can keep our mobile solutions fresh and relevant for customers such as the Lottery.

IGT has led the transformation to mobile in the lottery industry. We've deployed and currently support more lottery convenience and wagering applications than any other vendor in the industry, including applications for the West Virginia, Kentucky, Florida, Georgia, Indiana, Missouri, New Jersey, Rhode Island, Tennessee, Texas, and Wisconsin lotteries. In most jurisdictions, more than 75% of player activity occurs via the mobile app.

We were also the first company in the U.S. to:

- Launch a mobile app that allows players to responsibly purchase lottery tickets.
- Be approved as compliant with Apple's 4.7 guideline change in 2019 that had prevented the use of HTML5 game content within the mobile app.

We continually work with our customers to maximize the power and reach of mobile apps within the regulatory climate in which they operate.

IGT's continued leadership in this area was recognized in September 2021 as "Lottery Product of the Year" at the International Gaming Awards. This global awards program recognizes excellence across gaming, lottery, and iGaming sectors as judged by gaming professionals who noted our mobile app's adaptation to the post-COVID-19 world by enabling anytime, anywhere lottery engagement via mobile devices.

Today's marketplace includes many competent app providers. However, few of them truly understand the lottery business. IGT, as a long-time lottery-industry leader, delivers mobile solutions that work with our and others' lottery solutions to provide an optimal player experience. We've provided these services globally through downloadable full-wagering applications and a variety of player engagement tools.

Native App Components and Integrations

Our front-end solution includes a cross-platform mobile app built using React Native.

With HTML5 as our base, we can use any number of industry-leading multi-platform tools to quickly turn any HTML code into an app. Contemporary smartphones and tablets are fully HTML5-compliant and support all features we have developed.

The IGT mobile app uses a "write once, build anywhere" methodology by employing a hybrid solution using React Native. However, this solution has its limitations in providing the optimal player experience, which is why in key areas we use native operating system functionality.



Native Operating System Functionality

Functions	Rationale for Use
Push Notifications	On both iOS and Android, the native push functionality is used to provide messages to players
Deep Links	To allow for key areas of the application to be opened via an email or another URL, the application employs Universal Links on iOS, and deep links on Android. Currently the mobile app supports the following deep links, but others can be added: Verify Email Reset Password Draw Games
Camera API	IGT's barcode scanner uses the native camera API for optimal performance
Biometric	On both iOS and Android, fingerprints can be used for logging into the application and, on iOS, FaceID is also supported
Brightness Adjustment	Sometimes a device's lighting conditions are not optimal to scan digital play slips. For this reason, we increase the brightness of the screen during the presentation of the QR code to ensure the terminal can read it effectively
Rate Us Feature	On iOS, the native application rating feature provides a way to elicit player feedback
Various Hardware Sensors	The application uses the phone's various sensors to enable a player to pick random numbers just by shaking the phone
Social Sharing	Android and iOS expose a native solution that allows a player to share content via any of the apps available on their device that support sharing. This reduces the number of custom implementations and gives the player the ability to share via social channels that are important to them, such as Facebook, Twitter, a simple email, or another social media channel
Native Network Calls	For enhanced security when appropriate, such as for scratch-off scanning, we use the network libraries to make explicit HTTPS calls
Page Transitions	For some additional flair to the UI, native application transitions are used to speed up transitions versus manipulating the application web page for a transition
Firebase Analytics	Integration with the GA Software Development Kit (SDK) for iOS and Android is provided via their respective native libraries

Figure 4.8 – 22.

Components Developed with Technologies

IGT has a device automation lab with a large device inventory that tests all Android and iOS beta releases to ensure compliance and UI compatibility. IGT reviews all Apple and Google store guideline updates to ensure adherence and compatibility. IGT has more than 20 lottery applications in the Play Store or App Store, so ensuring compliance to guidelines is a top priority to be able to get approval for new app releases.

We utilize the following language technologies:

- Objective-C/Swift iOS Programming Language(s) for Native Components.
- Java Android Programming Language for Native Components.
- JavaScript/HTML5/CSS3 WebView Feature Languages.
- Build Tools Proprietary NodeJS Command Line Interface.



Native components include:

- Scanning Tickets for Potential Winnings (Barcode Scanner Overlay and Symbology Decoding).
- Delivering Push Notifications Firebase Cloud Messaging.
- Wagering Geo Fencing GeoComply SDK.
- Logging into an Account FaceID (iOS), TouchID (iOS), Fingerprint Scan (Android).
- Uploading Documents Native File Upload API.
- Winner Notification Push Notifications.
- Social Sharing Component Android/iOS Social Sharing Integration.
- Analytics Firebase Analytics.
- WebView.

4.8.11

App Software Update Process

The Vendor should provide software updates on a frequent delivery schedule that supports constant innovation and improvements to the player experience. Vendors should describe their proposed delivery process and cadence for updates.

IGT has read, understands, and will comply with this requirement.

We will provide software updates to the mobile app through both batch releases and major releases. Batch releases are typically quick releases, spread over several sprints. Major releases are delivered across a few months.

Typically, app store approvals take a few weeks, and recently Google has also allowed license to wagering apps in the Play Store, which IGT has also supported with other installations.

Our approach to software and quality engineering is based on our Software Development Life Cycle (SDLC), which incorporates requirements, systems engineering and architecture, software development, design, and quality control from our Integrated Delivery Model (IDM) disciplines. A critical component of the SDLC, as it relates to the software development and quality engineering process, is our Build-Test-Correct (BTC) methodology. For details on these mature processes, please see Section 4.8.9, Web Portal Software Update Process.



4.8.12

Content Management System (CMS)

The Vendor should implement a solution whereby iLottery portal components can be easily updated by non-technical Lottery users through a content management system ("CMS").

Vendors should describe their solution to provide CMS controls that support rapid updates to the iLottery portal components across all channels (e.g., web, mobile app). Include specific details and screenshots in relation to user roles, workflows, environments supported, and general capabilities. Vendor should act as the primary creator and developer of content with the Lottery providing approval or additional content as required by Lottery.

Vendors should also provide explicit details on the following:

IGT has read, understands, and will comply with this requirement.

Our front-end solution features a CMS powered by Adobe Experience Manager (AEM), which consistently ranks as a leader in the *Agile Content Management Systems* report by Forrester Research.

The flexible and user-friendly CMS is a browser-based tool that allows for easy authoring, editing, and publishing of content in real time without the user having any prior technical knowledge or being dependent on a technology team to fulfil these tasks. Convenient features such as drag-and-drop functionality, single click activation, and advanced user access controls ensure that you will always have full control of your front end.

AEM's CMS will enable the Lottery to have full control of all player-facing content to ensure that any changes or updates can be made in real time. Components such as marketing banners or promotional areas of the web portal and mobile app can be updated through AEM's self-administered, web-accessible tool to keep content frequently updated every time a player logs in.

The Lottery can benefit from the following advantages of our CMS:

- Modular framework for developing and managing player-facing content.
- User-friendly interface with colored tagging in code, assisted HTML coding, and a site-map tree view with user-friendly navigation.
- What You See Is What You Get (WYSIWYG) rendering for making seamless content changes.
- Ability to define and implement workflows for creating, editing, and publishing content.
- Support for structured template documents that indicate how text will conform to a specified format.
- Support for advanced personalization and segmentation while enforcing corporate design standards.
- Management of a repository of digital assets such as images, videos, and documents.
- Digital marketing features including Search Engine Optimization (SEO) and analytics.
- Re-usable templates and components library, enabling re-use of content without authoring on multiple pages.

Featuring a single database that holds content for the entire digital offering, you can use search queries to quickly find content no matter where it is stored in your organization, with the ability to organize digital assets and web pages via tagging.



Mobile app and website content development and delivery are managed with the same AEM content management system. Design mock-ups and HTMLs are ported on the AEM platform. The solution integrates with back-end systems to provide the visualization of the servers to the player.

The front-end solution also supports integrated analytics to trace, engage, and convert players. It is fully integrated with Google Analytics (GA) to ensure that you can always track player behavior. The powerful, flexible, and easy-to-use features of GA allow you to see and analyze data in new ways and determine the most effective marketing initiatives.

4.8.12.1 Provider of CMS Software

Specify whether the CMS is software developed by Vendor, or if a third-party company will provide. In the instance of third-party software, indicate the company name and company website address.

IGT has read, understands, and complies with this requirement.

The CMS, Adobe Experience Manager, is a product of Adobe: https://business.adobe.com/in/products/experience-manager/adobe-experience-manager.html

4.8.12.2 Portal Areas: CMS-Managed or Development Required

Describe the areas, or elements, of each Portal that can be managed by the CMS while also expressing the limitations specific to key areas (e.g. registration pages) that would require custom software development in order to modify.

IGT has read, understands, and will complies with this requirement.

Front-end content is developed and presented in the following ways:

- Static Content: Marketing banners, all images and text, help pages, and FAQs.
- Semi-Dynamic Content: Error messages, button labels, Calls to Action (CTAs), and page titles.
- Dynamic Content: Back-end-related API data, e.g., winning numbers and DG results.

Authorized users have access to author all static and semi-dynamic content across all channels. Dynamic content that is entirely driven from the back end will not be authorable. Semi-dynamic content (such as error messages) can also be authored directly via the CMS.



The following figure shows examples of homepage areas that can be authored:

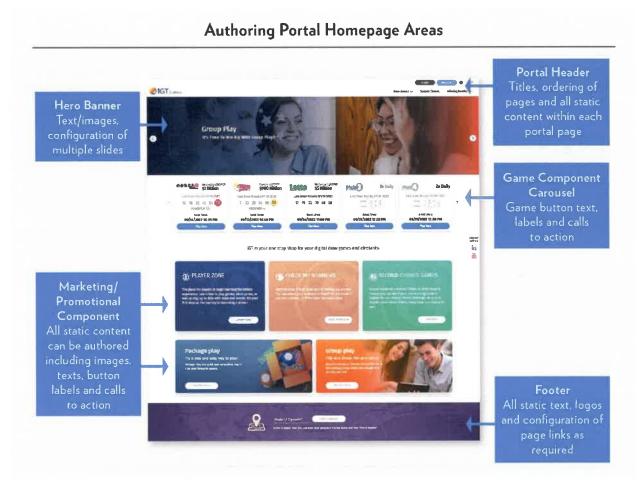


Figure 4.8 - 23.

The front-end's Session Management feature enables this seamless transition across the entire Lottery site. Session management holds the key for the navigation of a user that has come back, not only to check winning numbers, but also may want to purchase a Powerball ticket.

Semi-dynamic content (such as error messages) can also be authored directly via the CMS.



Authoring Semi-Dynamic Content

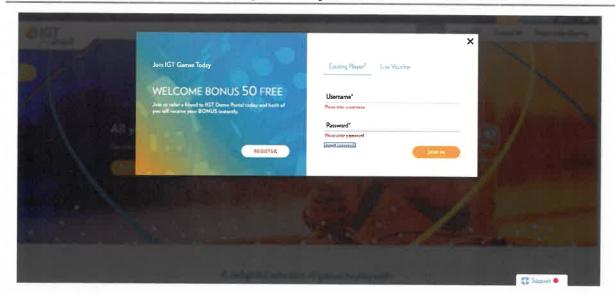


Figure 4.8 - 24.

There are no limitations that would require custom software development.

4.8.12.3 CMS Process for Basic Content Changes

Describe the end-to-end process for making basic content changes via the CMS.

IGT has read, understands, and will complies with this requirement.

Publishing pages and implementing content changes occurs through the AEM workflow functionality. The AEM Content Author generates the content that will be published to the website and executes the workflow process to publish the content.



Adobe Experience Manager — Updating Content

Step 1

Access AEM authoring tool and select the page that you wish to author from the site admin

Step 2

Once the page is selected,
AEM will open the
respective page in authoring
mode where content can be
authored directly on the page

Step 3

After all content changes are made, content authors simply activate the page to the production instance from the sidekick menu







Figure 4.8 – 25. Authoring Made Easy: Users can update content directly on the authoring-instance page, then activate it on the production instance.

Workflow models consist of a series of steps. When a workflow starts, that new workflow instance advances through these steps. Such workflows can pass through automated process steps or manual participant steps and follow rules and trigger sub-workflows. This functionality is configured on organizational processes, including steps such as approval and sign-off by various participants.

To implement basic content changes in AEM, the Content Author makes the necessary changes within the appropriate web content management area. The workflow is executed, and the updated content is pushed out to the necessary reviewers for approval. Once the updated content makes it through the workflow process, the Content Author publishes the updated content.

Templating and Versioning

AEM allows operators to version and store all CMS content in a template structure. It supports content versioning and the templating of different pages. The versioned content can be retrieved at any time and rolled out on the platform. AEM also supports multiple versions for entire content, and the gaming platform can switch to any preferred version.

The portal-development solution is separated with content, graphical elements, HTML, and Cascading Style Sheets (CSS) templates. The component code in AEM is for functionality and the integration layer. The content can seamlessly be ported or replicated from one environment to another. The site can also offer inheritance of components and content onto multiple areas of the site. For example, promotional content can be reused across the site rather than having to rewrite new content.



WYSIWYG Editing

IGT's web CMS supports What You See Is What You Get (WYSIWYG) editing. The web content is rendered for the end user in standard HTML format as a standard web page via a web server. Web pages authored in AEM adapt to any type of page template with respective CSSs of the page. The functional components on the pages (such as banner, text, text with images, etc.) are rendered with the underlying CSS of the page template. CMS structure is offered in explorer-type navigation.

4.8.12.4 CMS Testing and Preview Capabilities

Describe the testing and preview capabilities of the CMS.

IGT has read, understands, and will complies with this requirement.

AEM is deployed on multiple virtual machines in the production environment. One set contains the Published instance, and the other contains the Author instance.

The Published instance is accessible to the public internet. The Author instance is only accessible to authorized users – essentially, it is a draft. Edits can be made in the Author instance at the content layer of the application only. The Author instance allows you to modify content on the page directly, rather than on pages served via publisher on a webserver (e.g., game ordering on lobby or other content changes).

Author instance is fully integrated with the same back-end system as the Published instance and has all the functionality – with additional capability to edit the page – as seen by the end user, with editable content marked. In addition, it comes with the ability to "preview" the page as seen by the end user. Changes in the Author instance are only for front-end content or component configuration, which does not change any of the back-end integration. As a result, the application and web pages can be previewed and tested in the Author mode and will represent exactly what players will see once the changes are moved to the Published instance.

A/B and Multivariate Testing

A/B testing (sometimes called split testing) and/or multivariate testing is the comparison between two or more versions of a web page to see which performs best. We compare two or more web pages by showing the two variants (let's call them A and B, or MVT) to similar visitors at the same time. The one that gives a better conversion rate wins. We provide end-to-end solutions from creating the test case to final release of the portal version. This service includes planning, hypothesizing, suggesting changes, and making improvements. This is an optional tool based on an additional fee and the amount of work that needs to be done.



4.8.12.5

Screenshots of CMS Web-Accessible Tools

Provide key screenshots of the CMS web-accessible tools if already developed.

IGT has read, understands, and will complies with this requirement.

Authorized users can manage content via the AEM sign-in portal. Following are key screenshots from the AEM CMS.

AEM Sign In (via auth.igtilottery.com)



Figure 4.8 - 26.



AEM Home Page

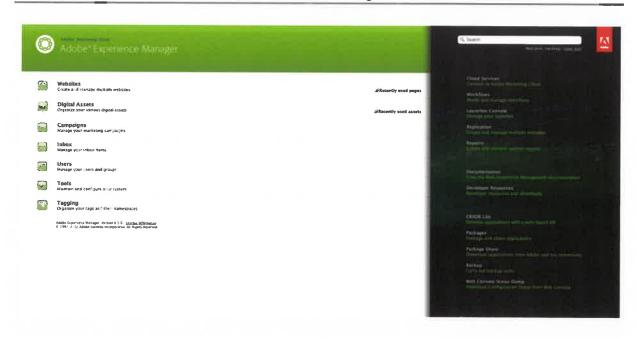


Figure 4.8 – 27.



AEM Authoring Page

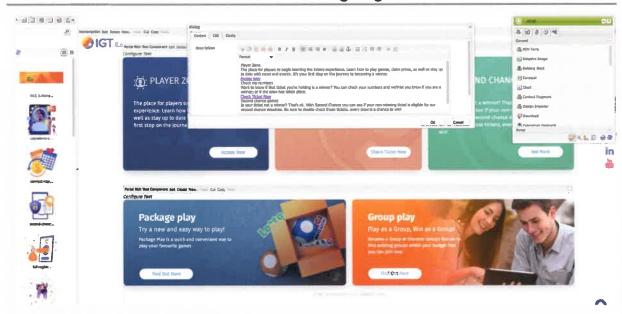


Figure 4.8 - 28.

4.8.12.6

CMS User Management

Describe the management of users within the CMS. Be specific if privileges can be administered and the degree of flexibility that is available (e.g. user "X" may only access functions "Y and Z" and objects "A and B").

IGT has read, understands, and complies with this requirement.

As it does for players, the front-end solution provides Single Sign-On (SSO) for back-end users, providing:

- Authentication: The process of identifying and verifying a user.
- **Authorization**: The determination of whether a user is allowed to take action on specific areas within the system. For example, a user can be authorized to read or update a specific page.

AEM has a defined set of actions that help in managing permissions and Access Control Lists (ACL). The actions are: Read, Modify, Create, Delete, Read ACL, Edit ACL, and Replicate. The Replicate action helps move content to other environments (such as moving content from Author instance to Publish instance). Users and groups will be created based on business needs and license agreements.

Once permissions are established, authorization is managed using a series of entities:

User: Users access a system using their user accounts. A user models either a human user or an
external system connected to the system. The user account holds the details needed for accessing
AEM; a key purpose of an account is to provide the information for the authentication and login
processes, enabling a user to login.



- **Groups**: A group is a collection of users and/or other groups. A change in the permissions/privileges assigned to a group is automatically applied to all users in that group. All users are members of the Everyone group. In addition, users can belong to several other groups. Even if the group Everyone is deleted, all users remain part of the group because of the indirect relationship between users/groups and authorization. See the content included within the "Privileges" bullet below, for more information.
- AEM Actions: AEM actions are performed on a resource. For example, a user can read, edit, or delete a page, among other actions.
- **Permissions**: A permission allows a user to perform an action on a given resource within the repository. Permissions are stored, and can be seen, at the resource level within the repository.
- Privileges: Privileges allow access to functionality available within the application; for example, replication of a specific path or the ability to update the page hierarchy (including creating new pages). Privileges are always granted or denied to principals rather than to users or groups. The link between users and groups and the authorization is indirect; there is always a principal associated with a user or group.
- Resources: Resources define the functionality to be accessed. .

4.8.12.7 Maximum Number of CMS Users

Identify any limits regarding the number of unique users (i.e. maximum number of users) available within the CMS.

Vendors should describe if its CMS is a unified system for the management of all Portals, or if there are unique CMS's necessary for certain Portals or groups of Portals (e.g. management of mobile app content vs. web content).

IGT has read, understands, and complies with this requirement.

As indicated earlier in this section, AEM is a unified system for the management of all portals and mobile apps. There are no limits to the number of unique users available within the CMS. In general, we recommend granting access only to content authors who will be regularly using the software rather than providing blanket access to a larger group.

4.9

Player Account Management (PAM) Software & Services

The Lottery currently offers player registration services in the Player's Circle program whereby users receive email communications ("Basic Account"). Basic Accounts do not undergo a third-party identity verification process. The Lottery has also collected data from third party vendors that may also be integrated into a basic account. Basic accounts should provide player access to demonstrations games, checking tickets, winning numbers, and play slip creation. Vendor should offer a seamless experience to upgrade from a Basic Account to a Wagering Account.

The Vendor should provide accounts that enable funding electronic wallets, wagering on iLottery games, receipt of winnings, and participation in digital and non-digital promotions ("Wagering Account").

All Player data is property of the Lottery and MUST not be shared or sold.

IGT has read, understands, and will comply with this requirement.

We will integrate existing Player's Circle data as Basic Accounts. Such players will be able to continue using the same convenience features they use today. Meanwhile, our iLottery System will provide players with the means to easily upgrade from a Basic Account to a Wagering Account, complete with Know Your Customer (KYC) identity verification.

Representing a one-stop shop for all digital solutions (IGT's and those of third parties), our iLottery System facilitates:

- A single player registration, account, and Player Wallet.
- Delivery of all digital services including wallet funding, iLottery wagering, receipt of winnings, and participation in digital and non-digital promotions all with one point of accountability.

The iLottery System records and consolidates all player actions, enabling you to focus on acquiring players and retaining them by building and growing the relationship.



As shown in the following figure, the iLottery System enables all digital features and player engagement (and will grow with your digital offering over time) by putting the player at the heart of everything:

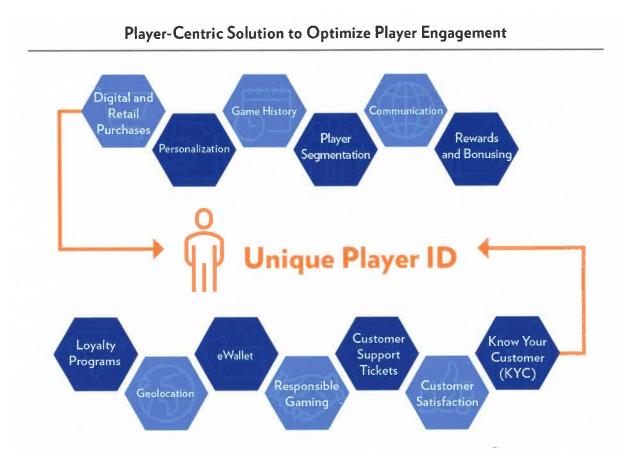


Figure 4.9 – 1. One Player, Expanded Opportunities: Our iLottery System provides a vastly expanded range of powerful, data-driven functionality centered on a single 360° view of each player.

IGT understands and acknowledges that player data is the property of the Lottery. IGT will never share or sell such data.



4.9.1 Player Accounts & Player Data

4.9.1.1 Player Account Migration and Upgrades

The Vendor should migrate Basic Accounts into their system for startup. All existing separations of functions should be maintained for each type of account level with tailored upgrade capabilities. For example, Basic Accounts should not be allowed to perform wagering activities but a logged in user that attempts to do so, should be prompted with an invitation to upgrade to a Wagering Account with any existing player information already pre-populated.

IGT has read, understands, and will comply with this requirement.

Further details are provided via our responses to the following requirements.

4.9.1.1.A Disabling & Resetting Player Accounts

iLottery systems should disable a player's account after three failed login attempts and require strong authentication to recover or reset a password or username.

IGT has read, understands, and will comply with this requirement.



4.9.1.1.B (a-d) Mechanism for Placing Account in Suspension Mode

Vendor should employ a mechanism that places an iLottery account in a suspended mode:

- a. When requested by the player for a specified period of time, which should not be less than 72 hours;
- b. When required by the Commission;
- c. Upon a determination that a player is a prohibited iLottery participant;
- d. When initiated by the Vendor who has evidence that indicates:
 - 1. Illegal activity
 - 2. A negative player account balance;
 - 3. Failed ACH deposit attempts as provided for m Subsection 4.8.2.3(A); or
 - 4. A violation of the terms and conditions.

IGT has read, understands, and will comply with this requirement.

The iLottery System includes locking services that:

- Blocklist/un-blocklist players i.e., lock players from access to the player portal or their player account. Players can be blocklisted for any of the criteria identified in this CRFP requirement.
- Block access to specified services for the indicated player.
- Manage players' locked accounts.

4.9.1.1.C (a-f) System Activities When Account in Suspension Status

When an iLottery account is in a suspended status, the system should:

- a. Prevent the player from placing wagers;
- b. Prevent the player from depositing funds
- c. Prevent the player from withdrawing funds from his or her player account, unless the suspended status was initiated by the player;
- d. Prevent the player from making changes to his or her player account;
- e. Prevent the removal of the player account from the system; and
- f. Prominently display to the player that the account is in a suspended status, and notify the player of the restrictions placed on the account, as well as any further course of action needed to remove the suspended status.

IGT has read, understands, and will comply with this requirement.

The iLottery System can be configured to allow or restrict access to features and functionality based on the tool used (e.g., a responsible-gaming control such as a game ban, KYC check, etc.) to suspend a player.



The general principle we follow is that we only restrict the functionality that needs to be restricted to meet the Lottery's needs and regulatory obligations. We will configure the iLottery System to prohibit players from effecting any of the actions identified in this CRFP requirement and to prominently display the account's suspended status to the player, along with notification of the account's restrictions and the steps required to remove the suspended status.

4.9.1.1.D Notification of Player When Account Suspended or Closed

Unless the suspension was a result of a player's self-exclusion, the Vendor should also notify the player account holder via electronic mail, regular mail, or other method approved by the Director, whenever his or her account has been closed or placed in a suspended status. Such notification should include the restrictions placed on the account and any further course of action needed to remove the restriction.

IGT has read, understands, and will comply with this requirement.

4.9.1.1.E (a-d) Restoration of Suspended Account

A suspended account may be restored

- a. Upon expiration of the time period established by the player;
- b. When permission is granted by the Director;
- c. When the player is no longer a prohibited person; or
- d. When the Vendor has lifted the suspended status

Vendor should describe any relevant experience associated with migrating player accounts, and other relevant information from a Lottery system or partner vendor into a new iLottery deployment. Vendor should provide a high-level plan, including roles and responsibilities, to complete the migration from Lottery's system(s) into the Vendor's System.

IGT has read, understands, and will comply with this requirement.

IGT's Experience Migrating Player Accounts

We bring extensive experience with player data migration, including for the California Lottery, where we converted more than 1.2 million players from a legacy system to IGT's system in 2013 (and a later conversion of 3.2 million to our current system) for the world's largest second chance program. We also migrated 1.5 million player accounts for the Georgia Lottery in 2021.



High-Level Plan to Complete Player-Account Migration

IGT understands how critical it is for your new system to start up on day one with completely accurate data. Executing a successful data conversion requires a carefully planned strategy based on collaboration, attention to detail, and proven processes. The data migration we perform will convert all existing player account data. In addition, active loyalty promotions, drawings, and features will be migrated to be available in the new iLottery System, with no disruption on the front end. Players will be able to continue entering all available tickets for earning points in the Player's Circle program. Previously entered codes will be excluded from entry and the appropriate error messages will be displayed, based on messages developed according to the Lottery's criteria.

Initial Configuration

Data initialization – setting up the initial configurations – is the first part of data conversion. The new system will start up "out of the box" with this base configuration before any data migration process begins. This facilitates agile testing by establishing a rollback point that allows restarts, as desired, to optimize test scenarios and increase resource efficiency.

IGT can roll back to this starting point on demand, as needed. This approach ensures a reliable, pre-defined starting point every time.

Conversion of Historical Data

The second part of the data conversion process is the actual data migration. This involves all data within a predetermined time frame.

The data conversion involves the following phases:

- **Data identification**: IGT will work closely with the Lottery to identify the appropriate data elements needed for conversion during the Scope phase, which is used to quantify the effort and objectives. We will review and finalize with the Lottery the data that will need to be ported over to the new iLottery System.
- **Data extraction**: Our typical process for converting foreign systems is to work with a lottery's current contractor to identify the data we'll require from the legacy system and agree upon an intermediate file format in which the current contractor will provide the data to us. We will follow this process for any data files that are provided by the Lottery.
- **Data transfer**: IGT will transfer the data from the legacy system to the new system, either by electronic transfer or by another secure means agreed upon with the Lottery.
- **Data load**: Once we transfer the data to the new system, the Project Team will load the data into the files and databases set up earlier in the data-initialization phase.
- Data Balancing: We will customize a set of balancing tools to compare the data on the new system to the data on the legacy systems. Applicable production reports will be used to perform balancing and verify the integrity of the conversion data. Additionally, we will provide a suite of custom conversion reports and ad hoc queries to supplement and enhance our balancing process, ensuring the most thorough and accurate testing possible.



Management of the Data Conversion Process & Data Hygiene

To ensure the accuracy of the data conversion process, IGT will perform as many trial runs of data conversions as possible during the development and testing cycles, so that the process is stable as we enter Customer Acceptance Testing (CAT), after which we will perform the "real" data migration prior to Go Live.

Apprising Players of the Transition

At the right time, and in a coordinated campaign developed in conjunction with the Lottery, we can notify players of the transition to the new iLottery System using our notification tools.

Data Migration: A Team Effort

Transitioning data from one system to another is always a challenge. It requires full participation from the previous contractor, the new contractor, and the customer to work together through challenges and overcome them with a concentrated effort on ensuring the best overall player experience post-migration. Without a doubt, there will be circumstances that require concession on all sides to maintain adherence to the top priority: putting the player first. IGT looks forward to working with the Lottery throughout this process and having an open dialog through workshops and other means to meet our commitments to West Virginia's players.

4.9.1.2 Player Registration

The Vendor should provide centralized player registration services on behalf of the Lottery. As a matter of clarity, any new user registrations created after iLottery launch will have to be able access to any features currently contained within Basic Accounts and may upgrade to Wagering Accounts at any time.

IGT has read, understands, and will comply with this requirement.

The iLottery System includes centralized player registration services, including flexible registration levels to ensure that new user registrations created after iLottery launch will have access to any features currently contained within Basic Accounts and may upgrade to Wagering Accounts at any time.

Flexible Account Registration Levels

IGT understands that many consumers are initially wary of providing organizations with their personal information. The iLottery System makes it easy to configure player registration levels and player-data attributes associated with each level.

The most common registration levels, which we recommend are:

- Light registration.
- Second chance registration.
- Full registration.



This design allows the registration pages to collect only those player-information fields necessary for a particular registration level, thus optimizing the registration experience and easing player adoption (and aligning with recognized best practices for eCommerce organizations). The selection of data fields required for a new player account, and the resulting player privileges and associated account functionality, are configurable. We will work with the Lottery to define the precise fields required for each level of registration.

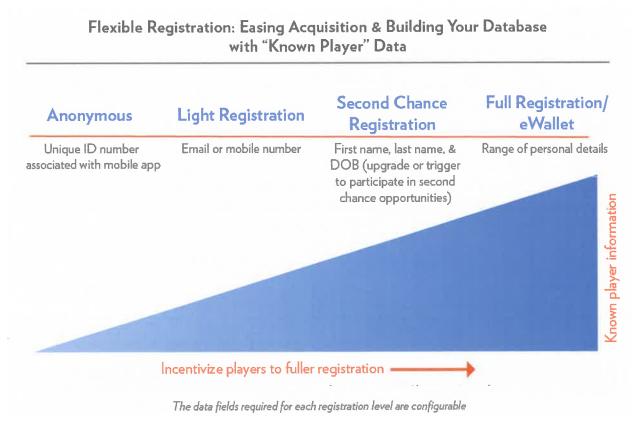


Figure 4.9 - 2.

Should a player attempt to engage in a process (such as purchasing an iLottery wager) that is beyond the scope of their existing registration level, they will receive a configurable invitation to immediately upgrade their registration level.

Moreover, once players have light-registered to establish an account, you now have invaluable player information to use for notifications and marketing campaigns as another means to encourage opted-in players to purchase other Lottery products (subscriptions, etc.) or join programs (Special Promotions, etc.), promoting their benefits as a strong value proposition to players in exchange for providing additional details about themselves.



Ensuring Digitalized Player Services at Retail

Alone among Vendors, IGT will provide the Lottery with the added value of a truly omnichannel ecosystem by fully integrating its iLottery System with the Lottery's existing retail gaming system. With this solution, when a player registers at any level (light to second chance to full registration), their unique player ID is represented on the mobile app by a Virtual Player Card.

Players can then scan this card to initiate a player session at retail, which unlocks the digitalized retail capabilities that we call Connected Play, detailed in Section 4.18, Retail Support.

4.9.1.2.A (a-j) Creation of Electronic Player File

In order to establish a wagering account, the Vendor shall create an electronic player file, which, at a minimum, shall include

- a. The player's legal name;
- b. The player's date of birth;
- c. The entire or last four digits of the player's Social Security number, if voluntarily provided or the equivalent for a foreign player such as a passport or taxpayer identification number;
- d. The player's wagering account number;
- e. The player's residential address (a post office box is not acceptable);
- f. The player's electronic mail address;
- g. The player's telephone number;
- h. Any other information collected from the player used to verify his or her identity;
- i. The method used to verify the player's identity; and
- j. The date of verification.

IGT has read, understands, and will comply with this requirement.

A "single-player view" implies your ability to associate a unique identity with a particular player that carries across all channels. With our iLottery System, each player that downloads the Lottery's mobile app and/or registers at any level will be associated with a unique identification number (electronic player file) and, thus, their engagement with the Lottery will be trackable in granular detail. Because the player-identifying data points are completely configurable, the Lottery can capture the exact elements required to meet regulatory and marketing needs simultaneously.



Out of the box, our solution comes configured with the following elements:

- Player ID.
- Legal name.
- Residential address.
- Telephone number.
- Mobile number.
- Email address.
- Username/password (password is hashed for security).
- Date of birth.
- Partial social security number (last four digits) if voluntarily provided, or the equivalent for a foreign player such as a passport or taxpayer identification number.
- Account status information and history, including date of verification and the method used for verification.
- Account registration data (i.e., all data collected from the player).
- Marketing communications opt-in data and preferences.
- Security questions and answers.

Additionally, custom fields support additional player information that can be captured at the time of registration or post-registration under the player profile's "My Account" section. These fields are generally used as additional information specific to market- and player-related data.

4.9.1.2.B (a-c) Encryption of Electronic Player File Information

The Vendor shall encrypt all information contained in an electronic player file including the following:

- a. The player's Social Security number or the equivalent for a foreign player such as a passport or taxpayer identification number;
- b. The player's password and/or personal identification number or PIN; and
- c. Any credit card numbers, bank account numbers, or other personal financial information.

IGT has read, understands, and will comply with this requirement.



4.9.1.2.C (a-c) Information That Must Be Recorded

The Vendor shall record

- a. The player's acceptance of the Lottery's terms and conditions to participate in iLottery;
- The player's certification that the information provided to the Vendor by the player who registered is accurate;
- c. The player's acknowledgement that the legal age for iLottery is 18 years of age or older and that he or she is prohibited from allowing any other person to access or use his or her wagering account; and

IGT has read, understands, and will comply with this requirement.

4.9.1.2.D Player Notification of Account Establishment

The Vendor shall notify the player of the establishment of the account via electronic mail or regular mail.

Players do not need to be within the State of West Virginia to access a Wagering Account. Players shall be restricted from wagering activity if not physically within the State.

IGT has read, understands, and will comply with this requirement.

4.9.1.3 Player Account Services Management Solution

Vendors should describe their solution for player account management services, while providing explicit details on the following:

IGT has read, understands, and complies with this requirement.

We provide end-to-end PAM services for 11 customers worldwide. With PAM at its core, the iLottery System:

- Controls full player-life-cycle management with a single player view.
- Provides access to a player's complete account and gaming history, recording every round played in every game for auditing, reporting, and customer-service purposes.
- Ensures that all KYC and geologation verification are enabled.
- Provides an individual Player Wallet by which each player can pay for digital games pending
 System queries to verify that sufficient funds are available and have winnings deposited directly into their Player Wallet, according to player preferences and in adherence to Lottery rules.



- Includes robust Lottery- and player-defined responsible gaming controls, including financial limits, time limits, and exclusion periods.
- Fosters insights into players' behavior and preferences with data-driven intelligence, enabling you
 to drill down to each individual transaction and gaming activity and to segment your player base
 for strategic marketing.

Account Security Features

The iLottery System includes a wide range of standard account-security features. (In addition to those listed immediately below, further security features are included in our discussion of player payments later in this section.)

Moreover, with our unmatched experience providing lottery (and iLottery-specific) solutions to WLA customers worldwide and developing our solutions accordingly, we will ensure that the iLottery System always meets the World Lottery Association's Security Control Standard (WLA-SCS) requirements from day one and as they evolve throughout the Contract Term. IGT's parent company recently attained WLA-SCS: 2020 Level 2 dual security certification. (This certification's updated security standards include new compliance measures for cloud environments used to host gaming systems.)

4.9.1.3.A Identity Verification Services/Methodology

Describe the assurances and reliability of verifying a user's identity with the highest degree of accuracy. See Section 4.8.1.5 for further explanation.

IGT has read, understands, and complies with this requirement.

Our KYC verification methodology encompasses two techniques:

- Independent Third-Party Verification: Any time a player registers an account or changes their personal data, the registration process validates their information through external KYC processing. Our KYC verification is designed to be easily customized to integrate Application Programming Interfaces (APIs) exposed by any third-party player identification provider. We'll work with you and your selected KYC vendor. We've integrated with IDology, among others, for advanced identity processes. Our verification partners use advanced identity process algorithms to check against external databases or national registries to stop banned individuals or underage players from registering.
- Player Self-Certification: As part of registering an account, players must accept your Terms and Conditions (T&Cs) and privacy policy, which will be tracked and monitored by a player-consent management solution. The self-certification states that players confirm they are at least 18 years of age, the owner of the accounts, and located within West Virginia. The T&Cs would be *yours*; we'd work with you to define them to meet your requirements. The T&Cs management component would allow for version control and forced acceptance, i.e., a player must agree in order to continue using your services.



Any registration attempt that fails to meet our KYC component's stringent age and identity verification controls is denied or put on hold according to your rules. For those cases in which registration fails – due to a player's name change, address change, or other reason for which automatic KYC checks result in failed verification – the iLottery System provides the means for exception handling via manual intervention. IGT will work with the Lottery to ensure that its settings are optimally balanced between maintaining appropriate security levels while avoiding excessive rejections.

4.9.1.3.B

Age Verification Services/Methodology

West Virginia law permits lottery wagering for players that are eighteen years of age and older. Describe how age is verified with total assurance that underage gaming will be prevented. See Section 4.8.1.5 for further explanation.

IGT has read, understands, and complies with this requirement.

IGT's age-verification services and methodology are the same as those described above for identity verification.

4.9.1.3.C

Techniques for Detecting Duplicate Registrations

The Vendor shall allow one Wagering Account per verified identity and the System should have controls to ensure this requirement is met. Each wagering account shall be non-transferable, unique to the player who establishes the account, and distinct from any other account number that the player may have established with the Lottery.

IGT has read, understands, and will comply with this requirement.

During registration, the PAM validates key parameters, like name, email, and other pertinent unique player attributes and checks for account duplication. If any of the details are duplicated, the registration will not be allowed. At any time, only one account will be allowed for a person.

In addition to avoiding unintentional account duplications, preventing players from creating duplicate accounts represents an important player protection measure to prevent problem gambling. The Lottery will be able to add, remove or amend criteria against which potential duplicate accounts are flagged for review.



4.9.1.3.D **Exception Handling**

Exception handling (e.g., failed registration due to a recent change of last name) will be managed by the System and how legitimate cases are then corrected while maintaining player convenience.

IGT has read, understands, and will comply with this requirement.

The iLottery System includes functionality for manually handling exceptions in those cases in which registration attempts – due to a player's name change, address change, or other reason – results in a failed verification from our KYC solution. In such cases (and in accordance with the Lottery's criteria), players may be asked to provide certain documentation (such as driver's license, passport etc.).

Using the mobile app or web portal, players can securely transfer documents for review and management. Should follow-up player-provided documentation fail to meet KYC verification, the player's registration may be denied. However, if you decided, based on your business rules, to allow a player to proceed with registration, you can manually approve a player.

4.9.1.3.E Techniques to Minimize Player Drop-off

Techniques being recommended to minimize player drop-off (i.e., player begins registration and then willfully quits) during the registration process.

IGT has read, understands, and complies with this requirement.

Our simple, fully automated, real-time player registration minimizes registration abandonment by making it as easy as possible for players to securely register. We leverage our experience implementing player portals and digital solutions (in Belgium, Czech Republic, New Zealand, Italy, California, Georgia, Kentucky, Tennessee, New Jersey, and Rhode Island, among others) to deliver an optimal registration process that quickly gets players up and running with their lottery account, adding funds to it, and purchasing tickets.

As discussed earlier in this section, our configurable system and flexible registration-level capabilities allow registration pages to collect only those player-information fields necessary for a particular registration level, aligning with eCommerce best practices.



Registration Flow

The following screenshots show a player-registration process on our mobile app. The registration flow is optimized based on meticulous User Interface (UI) research. (Also note that our iLottery System's capability for rapid registration via scanning of a driver's license – discussed later in this section – further speeds the registration process.)

(Please note that the player-facing screens throughout this section are examples from our product baseline only and are included here to demonstrate the flow of the registration process. The implemented solution will align with the Lottery's design guidelines and agreed-upon data fields.)

Establish Account via Email and Password

17:17 Log In Enter Email address igt@ilottery.com By continuing, I agree to the Terms and Privacy Policy Agree and Continue 17:17 17:17 17:17 17:17 Sign up Choose a password Pick a password with at least 8 letters and numbers and at least 1 symbol Continue

Get the Full IGT Experience! Enjoy Special Offers Be one of our Weekly Winners IGT is fully Licensed and Regulated by the State GAMBLING COMMISSION BegambleAware us

Figure 4.9 - 3.



Account Verification



Account created.

Verify now!

Check your email and click on verification link to gain access to Light account features. If you want to play online or make the most of the wagering features you need to upgrade to Full Account after email verification.

Ok

Figure 4.9 – 4.



Privacy Policy and Terms & Conditions

17:21

all 🗢 🐠

17:22

11 7 46

Privacy Policy

Accept the privacy notice to start the registration process

Full Player: Our commitment to you As a world's leading end-to-end gaming company, International Game Technology, PLC and its subsidiaries ("IGT") is committed to data privacy, and we recognize the responsibility we have to protect the privacy rights of all individuals whose personal information is within our custody and management in accordance with applicable data protection laws and regulations.

As used in this Privacy Notice, terms such as "we" or "our" or "us" refer to IGT and its current and future subsidiaries.

The term "personal information" used throughout this policy means any information relating directly or indirectly to a specific individual. Personal Information includes, among other information, an individual's name, postal address, email address, telephone number, and credential information. Please note that although personal information is used throughout this document, "personal data" would have the same meaning and as such could replace the term "personal information".

We may revise this Privacy Notice from time to time as we deem appropriate consistent with the principles described in this notice, our commitment to you, our evolving business needs, or changes in applicable laws or regulations. Please check this Privacy Notice frequently to ensure that you are in agreement with any change.

Privacy Information We collect and process your personal information for the purposes of registering and creating an account on interactive.igtgames.com. For this purpose, we will be collecting:

* Personal and contact details, such as title, full name, contact details and contact details history * Gender * Date

Terms and Conditions

You should carefully read the following terms and conditions. Your purchase or use of our products implies that you have read and accepted these terms and conditions.1. LICENSEOur website grants you a nonexclusive limited license to use the web templates and other products sold through our web site by independent content providers (the "products") in accordance with these Terms and Conditions (the "license") issued by our company.A. LIMITED USAGE GRANTEDYou may only use each individual product for a single website, belonging to either you or your client. You have to purchase the same template once more in order to make another project with the same design.B. MODIFICATIONSYou are authorized to make any necessary modification(s) to our products to fit your purposes.C.

Unauthorized USEYou may not place any of our products, modified or unmodified, on a diskette, CD, website or any other medium and offer them for redistribution or resale of any kind without prior written consent from our company.D. ASSIGNABILITYYou may not sub-license, assign, or transfer this license to anyone else without prior written consent from IGT.E. OWNERSHIPYou may not claim intellectual or exclusive ownership to any of our products, modified or unmodified. All products are property of independent content providers.Our products are provided "as is" without warranty of any kind, either expressed or implied. In no event shall our juridical person be liable for any damages including, but not limited to, direct, indirect, special, incidental or consequential damages or other losses arising out of the use of or inability to use our products.1. OUR REFUND POLICYSince our company is offering non-tangible irrevocable goods we do not issue refunds after the product is shipped, which you are responsible for understanding upon purchasing any article at our site. Please make sure that you have carefully read the "sources available" section. We only make exceptions with this rule when the product appears to be not-as-described on a case by case basis in agreement of the parties concerned. The deadline for any refund claim is one week after the delivery date.2.

ANTIFRAUD CHECKCustomer purchase can be suspended for manual antifraud check for 10-20 minutes

Figure 4.9 - 5.



Once a player has registered and verified their account, they can complete the sign-up process to enable all wagering features and functionality:

"Complete Signup" & Personal Details 11 🗢 (46) all 🗢 🐠 17:23 17:24 \Diamond $\not\cong$ Menu Upgrade The full experience awaits! First Name We still need some more information from you John Last Name Complete Sign Up Appleseed Cash \$0 Continue Bonus \$0 Points 0 PLAYING IS ONLY THE BEGINNING! Gifts Sroup play t i **Hot and Cold** У u 0 p q е f k d h a S g Activity Loyalty Z b m **(X)** 公 C ٧ n Χ My Tickets Package Play **(2)** 123 space \Diamond 霝 (3) 0

Figure 4.9 – 7.



Personal Details (continued)

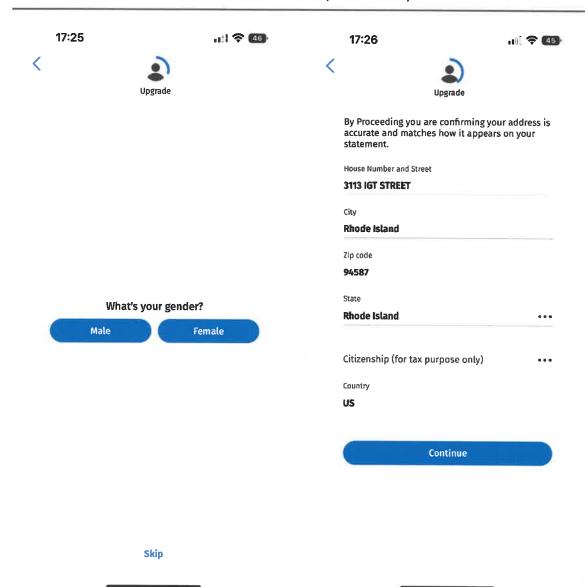


Figure 4.9 – 8.



Personal Details (continued)



1	2 ABC	3 DEF
4 6ні	5 JKL	6 mno
7 pors	8	9 wxyz
	0	\otimes

		Done	
1	2	3 DEF	
4 6HI	5 JKL	6 mno	
7 PORS	8	9 wxyz	
+ * #	0	⊗	
(11)			

Figure 4.9 – 9.



Personal Details (finalized) & Data-Usage Opt-Ins

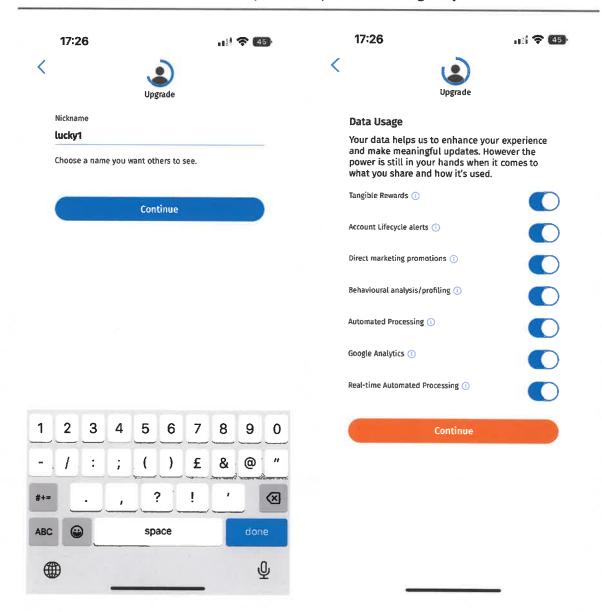


Figure 4.9 - 10.



Confirm Personal Details

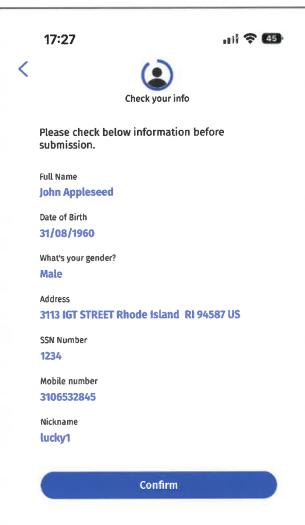


Figure 4.9 – 11.



4.9.1.3.F Registration Across Portal Types

Tailored approaches used to optimize the registration process across various portal types. For example, the ability to scan a driver's license within a mobile app in order to expedite the registration process.

IGT has read, understands, and will comply with this requirement.

Using the camera on their mobile device, players can use the mobile app to capture the barcode information

on their driver's license. The data from the barcode is then populated into the registration screen for the player to review for accuracy.

The player then only needs to complete any outstanding fields (last four Social Security Number digits, opt-ins, etc.). Once the information is reviewed, verified, and submitted for registration, the KYC process ensures the player has provided accurate details and is eligible to play.

Scan for Rapid Registration



Figure 4.9 - 12.



4.9.1.4

Player Authentication

The Vendor should provide a solution that achieves secure player authentication and single sign on across third-party environments in all portal types (e.g. web, app, etc.).

Authentication should include core iLottery services such as blocking login for self-excluded players, sharing accounts, or restricting the activity of users based on account status, such as Basic Accounts, or geolocation status. Vendors should describe their solution to provide player authentication in a seamless manner while notating any differences in techniques or practices for varying portal types.

The Lottery requires two factor authentications. Such factors are typically classed as:

- 1. Something-you-have (e.g., device ID, smartphone)
- 2. Something-you-know (e.g. password, PIN, answer to a security question)
- 3. Something-you-are (e.g., fingerprint)

For example, the player may enter a unique number as a result of registration, and also enter a PIN. This would combine something-you-have plus something-you-know (the PIN). As another example, the System may log and retain the unique ID of a smartphone and is supplemented by entering a PIN. Again this is something-you-have (phone) and something-you-know (PIN). The additional credentials qualify as a 2nd factor. An approach that utilizes a tokenless 2nd factor is acceptable.

It is preferred to employ more than one (1) type of authentication versus two (2) factors of the same type. Thus two (2) of something-you-have is less preferred than something-you-have plus something-you-know.

IGT has read, understands, and will comply with this requirement.

Players use a single registration and log-in for access to player-based offerings. The Single Sign-On (SSO) functionality enables a player log in to launch game sessions, whereby the player is authenticated (verifying identity) and authorized (enabling specific actions). SSO uses the PAM database as the source for player information, authenticating player credentials and issuing a session token that is used to authorize all subsequent requests. (For further details, please see Section 4.8.6, Portal Single Sign-on.)

Authentication will adhere to all applicable iLottery services, including restricting access to an account or specific account-related services related to self-exclusion, account status (suspended, etc.), geolocation status, violations of the Lottery's Terms & Conditions, etc. Authentication will leverage the iLottery System's blocklist capabilities.

Players can also opt into a "strong authentication" as part of their player account. With this one-time, token-based solution, the iLottery System will send a one-time password to the player that they must enter to continue.



4.9.1.5 Geo-Location Services (GLS)

The Vendor shall provide software and services that can precisely recognize the physical location of a player attempting to access the System and place a wager, from any connection type such as cellular or IP-based, using the most stringent standards. The Vendor GLS solution(s) shall be tested and certified by a Lottery approved independent testing laboratory.

Third-party certification of any geo-location services ("GLS") being utilized prior to launch and on a recurring basis is required.

GLS shall be configurable to create and adapt boundaries as directed by the Lottery during the Term of the Contract. GLS should provide web-accessible reporting to the Lottery, which provides performance reporting, tracking and other information. The System shall only allow players that are verified to be physically located within the State of West Virginia, less any exclusion zones, to access wagering features and capabilities.

Non- wagering features (e.g. profile updates, withdrawal requests, and basic account functions) are not to be restricted by the physical location of the player. Vendors should describe their solution for GLS while providing explicit details on the following:

IGT has read, understands, and will comply with this requirement and all its sub-requirements below.

Via integration with an experienced and trusted GLS provider, our iLottery System will ensure that only players physically located within the State of West Virginia will be able to access wagering features and capabilities required to be controlled by geolocation technologies.

IGT understands the various complex technologies and methodologies as they pertain to the gaming realm. IGT deployed the industry's first U.S. iLottery solution, and we've continued to provide the required geolocation services for iLottery and iGaming jurisdictions worldwide. We are thus intimately familiar with the evolution of the regulatory landscape and technical challenges in this area. We will ensure that the Lottery and its iLottery program are operating within all applicable regulations.



4.9.1.5.A

Process to Locate Player's Physical Location & Monitor/Block Attempts Outside State Boundaries

The process that is utilized to locate a player's physical location and to monitor and block unauthorized attempts to access the system in order to place a wager when the player is not within the boundaries of the State of West Virginia.

Describe any differences based on portal type (e.g., website, mobile app, etc.) and indicate any user steps or requirements necessary to enable the GLS technology. If applicable, specify any Sub-Vendor being utilized in the process along with their role(s).

Our geo-compliance solution enables the construction of virtual perimeters (geofences) around U.S. state boundaries (inclusion zones) and any designated non-play locales within the jurisdiction (exclusion zones). Once the boundary is configured, we take another step to configure the parts of the iLottery System that require geolocation enforcement checks. Non-wagering web application pages (such as profile updates, withdrawal requests, basic account functions, etc.) that are not subject to compliance checks will not be restricted.

Geo-compliance perimeter checks are performed for wagering scenarios where device access is via static – Internet Protocol (IP)/Wi-Fi – and mobile connections. Geolocation techniques applied leverage multiple data sources including IP, Wi-Fi, GPS, GSM, and HyperText Markup Language version 5 (HTML5) location data.

For GLS, we work with GeoComply, the industry-leading location services aggregator. GeoComply's location, compliance, and threat-detection solution is considered the gold standard for location compliance for U.S. regulated markets. It meets the demands of U.S. federal- or state-level gaming legislation and is regularly tested by regulatory agencies in jurisdictions such as New Jersey, Nevada, Delaware, West Virginia, and Georgia to ensure its continued performance for location compliance.

4.9.1.5.B GLS Flexibility

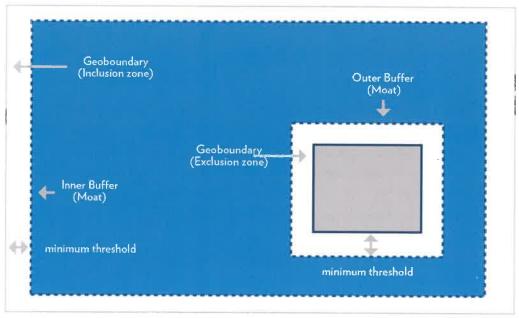
How the GLS can be flexible to create and adapt boundaries.

To prevent out-of-jurisdiction participation, we provide software and services that use current techniques to recognize the physical location of a player accessing the system, from any access channel mix, using stringent standards. This is done by creating a digital map of the jurisdiction's boundaries and applying an inner buffer zone to that boundary. This creates three areas: outside the boundary, within the inner buffer zone, and inside the boundaries (but not within the inner buffer zone).

Real-world usage data aids in adjusting and fine-tuning the virtual perimeter settings. In essence, a "moat" can be formed along the inner buffer or outside any designated exclusion zones (outer buffer). For jurisdiction boundaries, the area inside the inner buffer is considered the "safe zone wagering sandbox" wherein wagers may be accepted, as noted in the following figure.



Geolocation - Inner and Outer Buffer Moat



Note: Minimum distance to boundary used in conjunction with radius threshold and minimum threshold setting to effectively create a moat inside an inclusion zone or outside an exclusion zone.

Figure 4.9 – 13. Wagering Sandbox: Mobile wagering is only allowed within the boundary limits, which are based on state borders and inner buffer zone threshold settings.:

Only players determined to be inside the jurisdiction boundary area and not within the inner buffer zone are allowed to play. The size of the inner buffer zone is configurable by location data source – Global Positioning System (GPS): 10 meters; Wi-Fi: 25 meters; Global System for Mobile Communications (GSM): 100 meters; etc.

The player-device location's plotted circle (based on returned latitude, longitude, and accuracy radius location data) must completely reside within the wagering sandbox for the wager to be accepted. If the plotted circle (accuracy radius) overlaps the inner buffer zone area the player's wager request shall be rejected.

4.9.1.5.C GLS Utilization

GLS shall be utilized when wagering, deposit, and promotion activities occur. Vendors may propose that GLS be utilized for other transactions.

While IGT recommends no other player restrictions relating to GLS, we recommend using GLS in to support push messaging services.



4.9.1.5.D

List of Known Vulnerabilities

A list of known vulnerabilities, fraud attempts or threats that can be utilized to circumvent accurate geolocation detection and indicate how the GLS solution offers technology or services that can detect and thwart any such attempts while maintaining Lottery integrity.

Our geolocation solution will secure the Lottery against player attempts to place wagers outside of West Virginia (i.e., by masking or spoofing their actual location).

GeoComply's suite of threat controls are configurable and detect:

- Access via Virtual Private Networks (VPNs), proxy servers, remote desktops, and Virtual Network Computing (VNCs).
- Presence of malware and tampered device platforms.
- Use of mocked locations with Android devices.
- Presence of torrents such as the Onion router and Virtual Machines (VMs).

IGT's solution factors in reasonable design (for compliance with the Unlawful Internet Gambling Enforcement Act [UIGEA]), accuracy, time to locate, threat detection, and security for providing geolocation of static and mobile connections. IGT leverages GeoComply's back-office rules engine capabilities, which secure customers against cybercrime and fraudulent activity that target online and mobile devices by profiling the device and performing policy-based risk analysis.

4.9.1.5.E

Lottery Approval of GLS Solution

The GLS solution is subject to final approval by the Lottery and should be replaced, at the Vendor's sole expense, if it does not meet or exceed the highest level of standards as established by the Lottery.

The GLS solution shall ensure that any patron is located within the boundaries of the State of West Virginia when placing any wager and shall be equipped to dynamically monitor the patron's location and block unauthorized attempts to access the iLottery system in order to place a wager throughout the duration of the patron session.

IGT has read, understands, and will comply with this requirement.



4.9.1.6 Identify and Age Verification Services

The Vendor shall provide software and services that can precisely recognize the identity and age of a player. The Vendor shall obtain Lottery approval of any third-party services to be utilized to verify identity and age. The Vendor's solution(s) shall be tested and certified by a Lottery approved independent testing laboratory prior to launch and on a recurring basis during the Contract as defined by the Lottery. Vendors should describe their solution for identity and age verification.

IGT has read, understands, and will comply with this requirement.

As described above in Section 4.9.1.3.A, Verification Services/Methodology, we bring proven, rigorous procedures (as well as experience integrating with industry-leading KYC providers) to precisely recognize a player's identity and age. We will obtain Lottery approval of any third-party services to be utilized to verify identity and age and ensure that the solution is tested and certified by a Lottery-approved independent testing laboratory prior to launch and on a recurring basis during the Contract as defined by the Lottery.

4.9.1.6.A Remote Multi-Source Authentication

The Vendor shall verify the player's identity in accordance with methodology for remote multi-sourced authentication, which may include third party and governmental databases, as approved by the Commission.

IGT has read, understands, and will comply with this requirement.

As noted in Section 4.9.1.3.A, Verification Services/Methodology, we have integrated with IDology, among others, for advanced identity processes. Our verification partners use advanced identity process algorithms to check against external databases or national registries to stop banned individuals or underage players from registering.

4.9.1.6.B Verify Player Not Prohibited

The Vendor shall verify that the player is 18 years of age, not self-excluded, on an exclusion list, or otherwise prohibited from participation in iLottery.

IGT has read, understands, and will comply with this requirement.



4.9.1.6.C

Player Identity Compromised

The Vendor shall periodically re-verify a player's identification upon reasonable suspicion that the player's identification has been compromised.

IGT has read, understands, and will comply with this requirement.

4.9.1.7 Player Database

The Vendor should maintain all current and historical player and transactional information. The player database should include, but is not limited to:

IGT has read, understands, and will comply with this requirement.

As detailed in response to the following requirements, the iLottery System will maintain all current and historical player and transactional information in the PAM database.

4.9.1.7.A Player Data

The System should support a player database, central to iLottery management functions. Database elements should include, but are not limited to, player ID, name and address, telephone number, e-mail address, bank account information required for EFT transactions, credit and debit card information, status and history, any identity or location verifications, W-2G(s), Federal and Lottery reporting information, deductions for Child Support and State Debt, account status, and any debts required by law. Any changes to player data should be logged in the System with associated details such as date, timestamp, Portal type being accessed, and logging the user making changes (e.g. Vendor employee, Lottery employee, or player- initiated change).

IGT has read, understands, and will comply with this requirement.

The PAM solution provides a single location for all player data – representing a central platform for player-related administrative information and data (master data). It captures all player interactions with the iLottery System. In turn, it provides access to this data for lottery operators, customer support staff, and marketing personnel. The aforementioned iLottery System integration to your current retailer system's Claims and Payment (CAP) application will support the Lottery requirements around debt set-off withholdings.

(Further, because the iLottery System will be fully integrated with your existing retail gaming system, it will also capture all retail player interactions that are associated with their unique player ID, providing a single, omnichannel view of all player activity. IGT is the only Vendor that can provide this truly omnichannel single-player view. For further details on IGT's Connected Play digitalized retail services, please see Section 4.18, Retailer Support.)



Player Attributes: Single-Player-View Management

The back-office administrative UI places all player attributes and player history at Lottery users' fingertips – including all gaming and Player Wallet transactions. You'll also be able to manage all player-related attributes, with the ability to contact the player directly.

A few examples are:

- Player details such as name, address, contact details, etc.
- Player account information.
- Player responsible gaming and self-exclusion controls.
- Players' financial accounts (for adjustments, etc.).
- Player bonuses (e.g., to award a one-time bonus, etc.).

Flexible and easy to use, the intuitive UI and navigation will allow Lottery staff to administer, manage, and track a successful iLottery program. Users can find players easily with a variety of search options and user-friendly interface. The next screenshot provides a sample view of an individual player's profile. Note both the details available in the opened "Player Details" screen and the other "Player Info" menu categories on the left.

Username: -Account Status: Validated Last Login Date: 11/07/2022 4:58 PM Player Dashboard Player Info ↑ Player Account Info → Personal Info GMS player ID 2712 Date Last Pl Check 09/24/2022 3:30 PM KYC Status Player Friends Brand 25 Needed To Confirm PI External Account Link Partner Reminder Update P Sent Username Customer Account Update Gender Nickname MyNickname1765443776 Player Groups SSN Type Service Parameters Groups Contract ID 1000000088 SSN Number Linked Account List Player Status Financial Location Identifie Game Account Status Responsible Gaming Jesse First Name Communications Last Name Saccoccio Registration Level **Full Registration Level** Citizenship RESIDENT Favourite Currency Residence Country Player's Account Locked? Residence Level 2 West Greenwich Player Abuser Residence Address 1 55 Technology Way Player Blocklist Residence Postal 02817 Code

View of Player Profile in Back-Office Administrative UI

Figure 4.9 - 14.



Tracking Your Players: Complete View and Control of the Entire Player Life Cycle

Where many PAM systems are game-centric, we designed ours from the ground up to be player-centric. It doesn't matter what gaming vertical or touchpoint the player is engaging with – all player engagements with the Lottery are tracked. You'll have a complete player-activity audit log and the ability to track a comprehensive set of metrics including game transactions, deposits, purchases, winnings, claims, session times, loyalty activity, promotional rewards, and communications.

Principal Player-Tracking and Player-Management Capabilities

Area Tracking and Management Functions		
Area		
Account Management	 Search players View player attributes and identifying information (player ID, address, email, phone, etc.) View player account status and status history View/manage player profile information Manage player passwords View/create player notes and alerts Player deposits, withdrawals, and other financial activity Linked accounts (e.g., bank account, credit/debit card, etc.) KYC (age/identity) and geolocation verifications Legal/tax info (W-2Gs, Federal and Lottery reporting information, deductions for Child Support and State Debt, legally required debt offsets, etc.) 	
Communications	 View/manage player's communication preferences Leverage communications opt-ins to send notifications to players and player segments View/manage all communications/notifications sent to players 	
Campaigns, Bonusing, and Rewards	 Track/manage promotional campaigns and participation View rewards including loyalty points and Promo Dollars View rewards history Manage player's rewards preferences – opt-in/opt-out Opt-in/out of player's non-mandatory rewards notifications Trigger reprocessing of rewards points Manually adjust players' rewards balance 	
Transactions & Engagement	 View players' game-play and wager history View player session times and durations View players' vouchers Reprocess vouchers to support voucher errors Manually adjust Player Wallet 	
Responsible Gaming	 View/manage players' responsible gaming preferences and settings, including: Login session limits Transaction limits Deposit limits Manage self-excluded players; reset self-exclusion date 	
Locking Services	 Block access to specified services for the indicated player Manage players' locked accounts Blocklist/un-blocklist players (lock players from access to the player portal or their player account) 	
Geolocation	 Track where the player is playing by capturing the GPS coordinates and/or retailer ID 	

Figure 4.9 – 15.



Tracking these behaviors makes it easier to personalize the players' engagement with your brand, as detailed later in this section's discussion of the iLottery System's player-engagement features.

As player engagement grows over time and the amount of captured data builds, you'll have a complete player-activity trail with the ability to track additional metrics for each player. This facilitates deep data mining and analysis to identify both aggregate and individual-player trends. These insights will propel your 360-degree marketing efforts.

4.9.1.7.B Account Creation

The System should record the date and time anytime an account is created or terminated.

IGT has read, understands, and will comply with this requirement.

4.9.1.7.C Funds Transfer Activity

The System should record all internal and external funds transfers including transaction type, amount, date, timestamp, applicable fees, funding source and funding destination.

IGT has read, understands, and will comply with this requirement.

4.9.1.7.D Wager and Winnings Activity

When a player purchases a Wager or wins a prize, the account record should maintain a history of the player's Wagers and prizes. Non-winning results and expired Wagers may be removed subject to expiration policies set by the Lottery.

IGT has read, understands, and will comply with this requirement.



4.9.1.7.E **Promotions History**

The System should record all promotion offers issued through the system. When a player receives a promotion offer from the Lottery the System should reflect the activity in the database. Such history shall provide the information necessary to audit compliance with the terms and conditions of current and previous offers. Promotions may be removed subject to expiration policies set by the Lottery.

IGT has read, understands, and will comply with this requirement.

For details on our iLottery System's promotion tools, please see Section 4.16, Promotion Capabilities.

4.9.1.7.F Responsible Gaming Activity

The System should record all changes made to responsible gaming controls.

IGT has read, understands, and will comply with this requirement.

For details on our iLottery System's robust toolset for supporting responsible play, please see Section 4.12, Responsible Gaming Controls.



4.9.1.7.G Survey Attributes

The player database application should store and report player responses to surveys and other research activities.

IGT has read, understands, and will comply with this requirement.

IGT's iLottery System includes a built-in survey tool that allows for the collection of player satisfaction metrics. Lottery users can thereby measure and view detailed quantitative and qualitative reporting on player satisfaction. All data captured by the survey will be stored and reported to the Lottery as requested.

This sample screenshot shows the player view of a survey from our Penn National Gaming deployment.

The tool enables the configuration of recipients for a survey request. Questions, scores, and weighting of scores can all be customized, along with the appropriate reporting. In addition, configurations can be made to target surveys to specific player segments, and to ensure that players only receive a particular number of requests per calendar month, per channel.

Player Survey

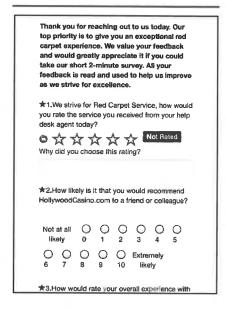


Figure 4.9 - 16.

4.9.1.7.H Data Conversion

As directed by the Lottery, the Vendor may be required to convert existing player database(s) in order to maintain common sign-on credentials for current players.

IGT has read, understands, and will comply with this requirement.

As directed by the Lottery, we will convert existing player databases via the processes detailed in Section 4.9.1.1, Player Account Migration and Upgrades.



4.9.1.7.I Signature Capture

The application shall store a digitized signature for the player.

IGT has read, understands, and will comply with this requirement.

4.9.1.7.J Reporting and Download

The System should support real-time queries and reporting on the player database, and downloads of player database information to approved users.

IGT has read, understands, and will comply with this requirement.

For further details, please see Section 4.20, Back Office Systems.

4.9.2

Player Banking Services

Vendors should provide comprehensive banking services in order to support the payment transactions enabled on the system. The description should address the following:

IGT has read, understands, and will comply with this requirement.

To support the payment transactions enabled on IGT's proposed iLottery System, we will provide banking services, including a payment gateway. Our comprehensive banking services combine a comprehensive, market-proven architecture with industry-leading partners and experienced IGT services staff to support all banking functions, which we describe throughout the following subsections.

4.9.2.A

Merchant of Record

The Vendor should act as the Merchant of Record and is responsible for all payment acceptance, dispute resolution handling, indemnification of payment fraud and all expenses associated with these services.

IGT has read, understands, and will comply with this requirement.

IGT will act as the Merchant of Record and assume responsibility for all payment acceptance, disputeresolution handling, payment fraud indemnification and expenses associated with these services. We will also negotiate and enter into payment provider contracts on behalf of the Lottery.



4.9.2.B Bank Account for All Player Wallet Funds

The Vendor should have capabilities to establish a bank account that holds all Player Wallet funds and should meet any requirements as designated by the Lottery. The bank account should be FDIC insured and held in trust of the Lottery. The Lottery may, at the Director's discretion, require the Vendor to be bonded and/or provide collateral for the account balance above the FDIC insured amount. All fees associated with the collateral and/or bond are the responsibility of the Vendor. The bank account will be utilized for reconciliation between the Lottery and the Vendor in order to conduct any financial transfers owed to the Lottery. Reconciliation between the Vendor and the Lottery should occur weekly through electronic means. Any State or Federal Taxes or offsets should be reconciled daily with the Lottery.

IGT has read, understands, and will comply with this requirement.

To provide the Lottery with comprehensive banking services, we combine a market-proven architecture with industry-leading partners and experienced IGT services staff to support all banking functions, including:

- Federal Deposit Insurance Corporation (FDIC)-insured player accounts.
- A range of payment options for the consumer to maximize sales opportunities.
- A flexible payment gateway to support integration to alternative card-acquiring partners or alternative payment providers.
- Management of daily settlements with payment networks and all bank account fees.
- Coverage of all merchant and banking fees.
- Fraud management and indemnification.
- Financial dispute research and resolution.

IGT's banking services offering also includes establishing and administrating program bank account(s) in an FDIC-insured bank. We recommend that one distinct bank account hold the balance of all outstanding Player Wallet funds and be held in trust for the Lottery's players. This would ensure that FDIC protection is at a perplayer level. The iLottery System would provide reporting for Player Wallet funds reconciliation. A second IGT-administrated bank account would also be established in an FDIC-insured bank, held in trust for the Lottery. This bank account would be utilized for reconciliation and weekly settlement between the Lottery and IGT and any daily reconciliations regarding State or Federal tax offsets.

IGT will serve as the Merchant of Record for processing payment transactions for your program.



4.9.2.1

Responsibility of Payment Fees

The Vendor should be responsible for all fees, processing or otherwise, associated with the acceptance and transfer of payments to players, including fees associated with any future payment methods added to the System. Vendor should be responsible for payment processing fees related to remote cashing of tickets as described within Cashing Accounts in this CRFP.

IGT has read, understands, and will comply with this requirement.

IGT will be responsible for all fees, processing or otherwise, associated with the acceptance and transfer of payments to players, including fees associated with any future payment methods added to the iLottery System. IGT will be responsible for payment-processing fees related to remote cashing of tickets as described within Cashing Accounts in this CRFP.

4.9.2.2

Payment Acceptance

Vendors should describe in detail the features, capabilities, configurable parameters, and operational support related to payment acceptance. The description should address the following minimum requirements:

IGT has read, understands, and will comply with this requirement.

At a high level, the payment gateway slots into our iLottery System's products stack, including the PAM, as the primary gaming-accounts holding system. It enables players to fund their Player Wallets, so they can play and withdraw winnings when they want. It is a monetary link between the Player Wallet and integrated Payment Service Providers (PSPs) or retail vouchers. The iLottery System's features, capabilities, and configurable parameters specific to financial reconciliation, fraud and security are detailed in Section 4.9.2.6, Player Compliance and Risk Requirements. Throughout this subsection, we provide several diagrams related to payment acceptance, including diagrams that demonstrate several different methods through which players can fund their Player Wallets.

Our full description of services and the structure of payment acceptance follows.



4.9.2.2.A Payment Processing Services

The System should provide all necessary components and services in order to accept financial transactions from players and to issue financial payments to players.

IGT has read, understands, and will comply with this requirement.

IGT will be responsible for all fees, processing or otherwise, associated with the acceptance and transfer of payments to players, including fees associated with any future payment methods added to the iLottery System. IGT will also be responsible for payment processing fees related to remote cashing of tickets, as described within Cashing Accounts in this CRFP.

Our solution will provide you with all the necessary components and services to accept financial transactions from your players and issue financial payments to them.

Payment Services

IGT's Payment Services team will provide end-to-end payments management. Managing payments is about much more than a platform and technology – it's also about the people who provide the service. Our Payment Services team comprises experienced professionals who manage the third-party payment processors, player and lottery funds, and payment risk- and compliance-related functions that are required with any payments program. Our team will help you minimize overhead and focus on revenue-driving efforts.

Leveraging our understanding of the digital-payments landscape, we can help you manage the financial and administrative aspects of iLottery across three broad areas:

- Merchant management services.
- Funds management services.
- Fraud management services.

Merchant Management Services

IGT's merchant management services include IGT acting as the Merchant of Record, whereby IGT will negotiate and subcontract with all third-party payment processors on behalf of the Lottery. Our assumption of this responsibility relieves you of time-consuming due-diligence obligations and contractual review and negotiation responsibilities.

Additionally, merchant management services involve the day-to-day management required with third-party payment vendors. Our Payment Services staff will work directly with payment processors on all setup and change requirements. In addition, our staff will escalate with the payment processor any applicable issues during delivery and ongoing operations.



Funds Management Services

Our funds management service eliminates the need for you to allocate time and resources to the day-to-day operational accounting and financial aspects of digital payments.

Our staff will set up and manage the necessary bank accounts on behalf of you and your players, including:

- One distinct bank account to hold the balance of all outstanding Player Wallet funds and be held in trust for the Lottery's players. This ensures that FDIC protection is at a per-player level. The iLottery System will provide reporting for Player Wallet funds reconciliation.
- A second IGT-administrated bank account, established in an FDIC-insured bank, that will be held in trust for the Lottery. This account will be used for reconciliation and monthly settlement/transfer between the Lottery and IGT.

In addition, we'll monitor, reconcile, and report all financial transactions to the Lottery, including:

- Reconciliations of IGT's iLottery System and the payment processers' systems, resolving any discrepancies as applicable.
- Reconciliation and settlement statements for monies owed to/from the Lottery to IGT or the player account.
- Reconciliation and pass-through invoicing for all third-party payment processing transaction costs and player chargebacks.

Fraud and Risk Management Services

IGT's fraud and risk management service supports players from the registration process through any funding or payout issues. Our Payment Services team will monitor and review all player activity at all stages in a player's relationship with the Lottery (registration, funding, and game play) to maintain the integrity of the iLottery System, minimize risk, and protect your brand. We employ a comprehensive Know-Your-Customer (KYC) approach, facilitated by automated security and fraud-control routines. Additionally, we offer a value-added service for manual KYC management, which aims to handle exception scenarios through documentation requests and review.

Through the IGT payment gateway, Payment Services staff members will monitor financial transactions on the platform, with the objective of detecting fraud or suspicious activities. IGT will review transactions identified high risk or suspicious as identified through the configurable thresholds manually agreed upon with the Lottery.

Our fraud management personnel will take the following actions, when necessary, to minimize risk:

- Restrict, suspend, or execute other applicable limitations against suspicious accounts.
- Review and recommend on appropriate product changes.

Supplementing the payment gateway's compliance and risk capabilities, our Payment Services staff will monitor, investigate, and challenge chargebacks as deemed necessary to maintain acceptable fraud and chargeback thresholds set by card brands and minimize associated costs. The staff will also track chargeback trends to identify potential patterns of fraud and verify through financial disputes that system controls are functioning as expected.



4.9.2.2.B

Backup and Failover Capabilities

The payment acceptance system should be configured in such a way that it can easily switch to additional services providers (e.g. payment processor, acquiring bank, etc.) in order to maintain uninterrupted payment operations.

IGT has read, understands, and will comply with this requirement.

From the point of view of backup and failover of PSP platforms and acquirers, the Play+ prepaid card method acts as a backup to the primary PSPs. Players can register their cards, bank accounts, and PayPal accounts directly or via a Play+ wallet. Primary PSPs include Worldpay, Global Payments, PayPal, and Apple Pay. In addition, our roadmap is continuously evolving and includes planned future integration of other major PSPs.

That said, experience with the primary PSPs over the last few years has been such that there was virtually no need for any backup capabilities; also, players have been choosing Play+ for some of its unique value-added features.

4.9.2.3

Player Wallet Funding Methods

Vendors must describe in detail the methods by which a Player Wallet may be funded. Vendor must employ a mechanism that can detect and prevent any player initiated wagering or withdrawal activity that would result in a negative balance of an iLottery player's account.

IGT has read, understands, and will comply with this requirement.

All payment methods recommended throughout this section (cards, ACH, PayPal, Play+) support funding of (deposits to) player accounts.

IGT will employ a mechanism that can detect and prevent player-initiated wagering and/or withdrawals, resulting in a negative balance in the player's account. We achieve this via configuration settings within our Player Wallet solution that will prevent the player's account and Player Wallet from reaching a negative balance.

The iLottery System supports highly flexible payment/funding methods via our payment gateway, which is also the iLottery System's Payment Service Provider (PSP)-aggregator product. The payment gateway, which is PCI-DSS certified, has been used by many of IGT's lottery customers worldwide. The payment gateway has been integrated with more than 30 PSPs worldwide.

In the U.S., our baseline product includes the following PSPs that we recommend for the Lottery's player wallet funding methods:

- Payment Cards Processing: Worldpay U.S. eCommerce platform:
 - Cardholder details saved on WorldPay side from player browser using eProtect protocol
 - (JavaScript library) with truncated details stored in the payment gateway.
 - CVV2/CVC2 passed only during cardholder data capture.
- ACH Payments Processing: Global Payments VIP Preferred.
- Player Wallet: PayPal and Sightline (Play+).



We describe each of these methods in further detail next. Should the Lottery wish to add other PSPs, IGT's flexible solution is able to integrate them.

Payment Card Processing

Worldpay eCommerce Platform

Through integration with Worldpay's U.S. eCommerce platform, our solution supports debit and credit card transaction processing. Integration enables players to register one or multiple payment cards, and then initiate a player account balance top-up by selecting one of the registered cards and entering the amount to be deposited.

ACH Payment Processing

Global Payment VIP Preferred Platform

Players can deposit funds to their accounts using the Global Payments VIP Preferred platform. This service implements deposits by guaranteed e-checks.

Player Wallets

PayPal

PayPal supports U.S. lotteries and gaming operators through a Real Money Gaming (RMG) scheme that allows players to use their PayPal accounts as a Player Wallet to fund wagers over the Internet.

Sightline Play+

Sightline is a prepaid payment card provider that, in partnership with their card-issuing bank, organizes a private wallet scheme, called Play+, for the players of lottery and gaming organizations and their operators.

Players enroll through the merchant site for a Play+ wallet, which is backed by a prepaid card that can be used for payments, not only for gaming but for "customer present" and "customer not present" purchases as well. The Play+ wallet can be funded through a series of payment methods integrated independently by Sightline, effectively creating an alternative/backup option for primary payment providers and improving usability of payment cards for some card issuers.



4.9.2.4

Minimum Banking-Service Capabilities

At a minimum, the System must include:

4.9.2.4.A (a-c) ACH Funding Verification

The bank account and owner verification process for ACH funding, including capability to pre-note for new funding sources. ACH transfer, provided that the Vendor has security measures and controls to prevent ACH fraud pursuant to NACHA guidelines, bank regulations, and/or the following below; or any other means approved by the Director:

- a. A failed ACH deposit attempt will not be considered fraudulent if the player has successfully deposited funds via an ACH transfer on a previous occasion with no outstanding chargebacks. Otherwise, the Vendor should:
- b. Temporarily block the player's account for investigation of fraud after five consecutive failed ACH deposit attempts within a 10 minute time period. If there is no evidence of fraud, the block may be removed; and
- c. Suspend the player's account after five additional consecutive failed ACH deposit attempts within a 10-minute period.

Per Addendum 3, the Lottery has changed this requirement to read as follows: "The bank account and owner verification process for ACH funding, including capability to pre-note for new funding sources. ACH transfer, provided that the Vendor has security measures and controls to prevent ACH fraud pursuant to NACHA guidelines, bank regulations, and/or the following below; or any other means approved by the Director:

- a. A failed ACH deposit attempt will not be considered fraudulent if the player has successfully deposited funds via an ACH transfer on a previous occasion with no outstanding chargebacks. Otherwise, the Vendor should:
- b. Temporarily block the player's account for investigation of fraud after five consecutive failed ACH deposit attempts. If there is no evidence of fraud, the block may be removed; and
- c. Suspend the player's account after five additional consecutive failed ACH deposit attempts for a total of 10 failed attempts."

IGT has read, understands, and will comply with this requirement.

While our solution is not an exact match to the mechanism described above, IGT will still meet the Lottery's stated goals via Guaranteed ACH. To note, the pre-note feature is not required, nor is it an available feature within Guaranteed ACH. With Guaranteed ACH, your players can easily make wagers online, as IGT's technology partner manages the account authentication process and, upon approval, guarantees the transaction for merchants and makes funds available to players in real time.

With this model, IGT can implement the proper velocity checks that can terminate transactions and suspend a player's account. Working with the Lottery, IGT can configure the model that best suits your needs. With this solution, IGT has configurable controls, supports direct bank access, and can enforce ACH limits.



4.9.2.4.B

Single Debit Funding and Purchase

A feature that allows a registered player to purchase any games with a debit card without funding a wallet. The payment card information would not be retained. Please list any limitations of this requirement.

IGT has read, understands, and will comply with this requirement.

Registered players will be able to purchase any Draw Games using their debit card as a direct payment. On successful purchase, players can see all transactions, along with game history, under the "My Account" section of the player profile. To fully enable this functionality, there would need to be a minimum purchase amount set. Then, players can assemble their ticket via the Lottery's website or mobile application and can make the purchase once they have met the required minimum purchase.

4.9.2.4.C

Single Bank-Issued Credit Card Funding and Purchase

A feature that allows a registered player to purchase any games with a bank issued credit card without funding a wallet. The payment card information would not be retained.

IGT has read, understands, and will comply with this requirement. However, IGT recommends a wallet-based transaction, as it is the most flexible solution.

4.9.2.4.D

Minimum Purchase and Deposits

The Lottery desires the lowest possible transaction threshold for completing a purchase or deposit. Vendors must state the minimum transaction amount that allowable to transfer external funds into a Wagering Account. The System must have the capability to adjust minimum purchase and deposit amounts.

IGT has read, understands, and will comply with this requirement.

Minimum funding/deposit amounts are configurable by end users through the administrative section of the payment gateway's back-office User Interface (UI).

IGT recommends that, for deposits, the Lottery sets a minimum of no lower than \$10. While it is technically possible to set a lower minimum deposit, our recommendation is based on our experiences and industry-wide best practices. For withdrawals, IGT recommends a minimum transaction of \$0.01. This gives players the ability to drain an account they would like to close.



4.9.2.4.E Saved Payment Types

A feature that allows the system to save utilized payment types in a manner that is secure and meets any Payment Card Industry (PCI) requirements to fund or purchase. Players must be able to remove a saved payment type from their profile, and the System must retain any historical reporting in such cases.

IGT has read, understands, and will comply with this requirement.

The iLottery System supports saved payment types, including tokenized cardholder details and bank account details. The iLottery System will allow players to remove saved payment types from their profile and retain any historical reporting in such a case.

For payment cards, the payment gateway uses eProtect, which is a sensitive cardholder data outsourcing protocol provided by the Worldpay U.S. eCommerce platform. Use of this protocol makes sure that sensitive cardholder details never reach networks and systems of the merchant.

For ACH details, with the goal to reduce the risk and impact of an unlikely data breach, the iLottery System uses the features of the VIP Preferred platform to minimize the persistence of sensitive Personally Identifiable Information (PII) content via storage of truncated banking details along with the VIP Preferred customer ID. Details and matches with truncated values are retrieved just before the request of a deposit or withdrawal transactions.

Data Privacy

As with cardholder data security, data privacy has been a key design goal of our iLottery System from the start. Serving a series of demanding clients in the EU, Canada, and the U.S., our data privacy solution has continually improved, including a substantial set of enhancements implemented in 2017 in advance of the General Data Protection Regulation (GDPR) rollout in the EU.

4.9.2.4.F Payment Enablement and Disablement

The ability to place a specific payment instrument on hold within a player account while also supporting the ability to re- enable the payment type.

IGT has read, understands, and will comply with this requirement.

The iLottery System supports a series of features related to the control of the use of payment methods, including:

- Payment methods can be disabled or enabled for all players at once.
- Individual payment instructions can be suspended for players, based on their uniqueness criteria.
- For players and all or a subset of them, their previously registered payment instructions containing unique IDs (whether active or logically deleted) can be blacklisted, so that any attempt to register such instructions (the same card, PayPal account, or VIP Preferred platform identity) can be refused—and with the player optionally suspended along the way.



4.9.2.4.G Recurring Payments

The ability for the System to setup a recurring payment schedule for recurring purchases ("Subscriptions"), including handling scenarios for payment cards that have expired, insufficient funds, or game changes that require possible refunds. Describe how the System can support subscription games.

IGT has read, understands, and will comply with this requirement.

IGT's player portal features a subscription module that enables players, during the subscription order, to request that the subscription be renewed automatically. The iLottery System automatically extends a subscription when it has been selected to be auto renewed; no manual intervention is required on the part of the Lottery or the player. To ensure that players truly intend to renew a subscription, the iLottery System can automatically send players renewal notices when their subscriptions are nearing the end date.

Players whose subscriptions are ending and not set to auto-renew are sent a notification prior to expiration. If a subscription has already ended, players can easily choose to replay that subscription. A system-level subscription cancellation capability is provided through the customer service administration interface.

Financing recurring payments can be done by card and ACH methods using stored payment instructions. If a subscription payment process meets a scenario in which a payment method has expired or has insufficient funds, the iLottery System can be configured by the player to utilize funds from another source.

4.9.2.5

Player Wallet Withdrawal Methods

Vendors should describe in detail the methods by which players may conduct withdrawals from a Wagering Account. This should specify workflows to support and preserve the functionality describe in the CRFP related to Cashing Accounts. At a minimum, the System should include:

IGT has read, understands, and will comply with this requirement.

Players can withdraw funds from their wallet and deposit them into the PSP account (e.g., ACH transfer to the player's bank account or PayPal account).

Our iLottery System does not apply any limitations on withdrawals when requested by a player (outside of any regulatory or fraud rules that would be at the request of the Lottery). Depending on the funding source into which the player is requesting to transfer funds, there could be additional withholding rules that are outside the control of the iLottery System and pertinent to payment regulations and compliance. In general, most withdrawals are processed immediately and are credited to the player's external account. The processing time depends on the withdrawal source.



4.9.2.5.A ACH Withdrawal

Ability for a player to direct funds to a specified bank account provided that the Vendor verifies the validity of the account with the financial institution.

IGT has read, understands, and will comply with this requirement.

Based on our current product baseline and the immediate roadmap, we recommend implementing Global Payment VIP Preferred as an ACH processing partner. This will allow players to direct funds to their bank accounts while also verifying the validity of the account with the bank.

4.9.2.5.B Check Payment

Ability for a player to obtain a check payment in the mail.

IGT has read, understands, and will comply with this requirement.

IGT's solution supports the ability for players to obtain physical checks, which we can achieve in two different ways:

- 1. IGT can compile all check requests into a file, which we can then regularly deliver to the Lottery for further processing, or,
- 2. IGT can partner with a bank such as Wells Fargo to facilitate check issuance.

4.9.2.5.C Original Credit Transaction

Ability for a player to direct funds to a specified debit or credit card and to be posted as a transaction. Prior to any withdrawal, if a player used a credit or debit card to fund a wagering account, within the preceding ninety (90) days, any remaining balance in the account up to the amount of the deposit shall be refunded to the player's credit or debit card account used to fund the wagering account provided that a credit or debit card issuer permits the return of a withdrawal from an wagering account funded by the credit or debit card of the issuer.

IGT has read, understands, and will comply with this requirement.



Our solution uses the payment instruction concept to map registered cards, bank accounts, etc. An instruction is allocated for each card the player registers for use. Once the player registers a card, an instruction is created for it, and the player can then fund their account by it. If the card is detected to support OCT at registration (\$0 OCT test transaction along with the \$0 authorization for cardholder data validation), the instruction is marked with one of the payment method codes that supports withdrawals. The player can delete the card instructions at their will, but if they register the same card again, the deleted instruction will be activated for new use, grouping all the transactions from the same card and making it possible to track the history of use for working out withdrawal preferences.

Our current default model for managing withdrawals back to cards is less restrictive than that requested, but IGT will work with the Lottery to determine the optimal player experience in this instance and find the ideal mechanism for players to direct funds to specified debit or credit cards and be posted as a transaction.

4.9.2.6 Player Compliance and Risk Requirements

The Vendor is solely responsible for the accuracy, quality, integrity, and legality of all transactions submitted by each payment method. The Vendor shall be responsible for ensuring compliance with all state, federal, anti-money laundering ("AML"), National Automated Clearing House Association (NACHA) rules. PCI imposed regulations associated with the acceptance of payments and external transfer of funds, and the Federal Trade Commission to the extent applicable. Player financial information such as ABA and account number and debit or credit card numbers shall not be accessible by the Lottery. The Vendor shall be solely liable for all risk, such as chargebacks, related to payment activities. The Lottery is not responsible for financial losses incurred by the Vendor as a result of player wallet transactions. The vendor shall maintain a West Virginia bank account separate from all other operating accounts to ensure the security of funds held in the player wallet accounts. The balance maintained in this account shall be greater than or equal to the sum of the daily ending cashable balance of all player's wallet accounts, funds on game, and pending withdrawals. Vendor shall have unfettered access to all player's wallet account and transaction data to ensure the amount held in its independent account is sufficient. The Vendor or his or her designee shall file a monthly attestation with the Commission that the funds have been safeguarded pursuant to this section. The Vendor shall comply with the West Virginia Uniform Unclaimed Property Act (WVUUP A) regarding any funds left idle in the Player Wallet.

IGT has read, understands, and will comply with this requirement.

Our payment gateway includes a range of features to support operational security processes and fraud-related countermeasures. This includes features such as various limits of player payment options and activity, sophisticated rule-based risk evaluation, referral of transactions for manual review, duplicate players detection and identifiers blacklisting and many others.



4.9.2.7 (A-H) PCI Certification

The Vendor and all Sub-Vendors should meet PCI requirements and obtained timely certifications that are necessary to conduct efficient operations in a manner that does not impede player's ability to easily use the system. Proof of PCI certification should be provided to the Lottery on an ongoing basis. The Vendor should comply with all additional standards the Networks may require. The Lottery, or its designee, should be able to audit the Vendor's PCI/DSS compliance.

The scope of PCI compliance should not implicate the Lottery in any manner, and the Vendor should modify its systems in a manner that absolves the Lottery from any PCI scope.

The Vendor should ensure that all third-parties, including financial institutions and credit card processors, have access to credit/debit card nonpublic cardholder data, adhere to the PCI Data Security requirements and should agree to each of the following:

- A. That they are responsible for security of cardholder data in their possession;
- B. That such nonpublic cardholder data can ONLY be used for assisting the Lottery in completing a transaction, supporting a loyalty program, supporting the State of West Virginia providing fraud control services, or for other uses specifically allowed by law;
- C. That they should provide business continuity in the event of a major disruption, disaster, or failure;
- D. That they should comply with all requirements of an unaffiliated third party;
- E. That in the event of a security intrusion, the PCI representative, or a PCI approved third-party, should be provided with full cooperation and access to conduct a thorough security review and the review should validate compliance with the PCI Data Security Standard for protecting Cardholder data;
- F. That they should properly dispose of nonpublic Cardholder data when no longer needed;
- G. That they should continue to treat nonpublic Cardholder data as confidential upon termination of the iLottery Program; and
- H. That each Sub-Vendor should provide the Lottery with documentation verifying PCI Data Security certification has been achieved and should advise the Lottery of all failures to comply with the PCI Data Security Requirements (such failures should include, but not be limited to system scans and self-assessment questionnaires), and should provide a timeline for corrective action; provided that, if the Sub-Vendors are listed on the Validated Service Provider list, the Lottery receives a copy of such Sub-Vendor Attestation of Compliance and its most recent scan (performed by a qualified scan Vendor), which documents be provided annually with proof of quarterly scans from Sub-Vendors to the Lottery for approval.

IGT has read, understands, and will comply with this requirement.

Designed from the start for PCI DSS compliance, IGT's payment gateway product and its implementations have gone through a series of PCI DSS validations, including validation of our United States cloud-based shared services program. There is an ongoing gap analysis performed by a qualified security accessor to prepare the product for PCI Software Security Framework (PCI SSF) validation in 2022.



Our operations and practices include:

- Maintaining PCI Data Security Standard (PCI DSS) compliance of the entire solution. IGT also
 verifies that all sub-service providers we work with maintain PCI DSS compliance, including data
 disposition controls.
- Adopting state-of-the art business continuity strategies for products and deliveries to be fully prepared for when disaster strikes.
- Annually reviewing attestations of compliance of sub-service organizations. IGT can provide these attestations to the Lottery for approval.

4.9.2.8 Wagering Account

4.9.2.8.1 Software and Services

The Vendor shall provide software and services that allow players to transfer funds to and from a wagering account. The wagering account should expose APIs that can be utilized by third-parties, including game content providers, in order to retrieve balance information and to complete external wagering activities such as purchasing wagers and receiving winnings. Transferring of funds between wagering accounts is not permitted.

IGT has read, understands, and will comply with this requirement.

The iLottery System's integration layer exposes Application Programming Interfaces (APIs) that can be used to integrate with third parties, including game-content providers. Please see Section 4.13.3, Third-Party Interactive Game Integrations, for more details on this integration layer functionality.

4.9.2.8.2 Minimizing & Mitigating Fraud

The Vendor should advise the Lottery regarding any limits that may be necessary to minimize exposure to possible fraud activities. The System should provide other rules and configurable settings that mitigate possible payment fraud activities. Vendor should deposit wagering account funds in an FDIC insured bank account.

IGT has read, understands, and will comply with this requirement.

As part of Payment Operation Services, IGT will consult with and provide recommendations to the Lottery on configuration of the payment gateway, the PAM, and Payment Providers to optimize sales and minimize exposure to possible fraud activities and friction in the player experience.

As stated in Section 4.9.2, Player Banking Services, all wagering account funds will be held in an FDIC-insured bank account held in trust of the West Virginia Lottery.



4.9.2.8.3

Dormant Wagering Accounts

Vendor shall track, report, and transfer any Wagering Account funds that have become dormant and may be subject to the West Virginia Uniform Unclaimed Property Act to the Lottery or designated West Virginia State Agency. A wagering account shall be considered a dormant account if there is no player initiated activity for a period of sixteen (16) months. The Vendor shall comply with W.Va. Code Chapter 36, Article 8 of the Uniform Unclaimed Property Act of West Virginia in the closing and refunding of the account balance.

IGT has read, understands, and will comply with this requirement.

IGT partners with a trusted third-party company to facilitate obligations such as this. IGT will provide reporting based on Lottery-provided criteria for determining dormant accounts that may be subject to the West Virginia Uniform Unclaimed Property Act to the Lottery or designated West Virginia State Agency. IGT will comply with West Virginia laws in the closing and refunding of the account balance.

4.9.2.8.4 Player Closing of Wagering Accounts

The Vendor shall provide a conspicuous and readily accessible method for a player to close his or her account through an account management or similar page. Any balance remaining in a player's wagering account closed by a player shall be refunded pursuant to the Vendor's internal controls.

IGT has read, understands, and will comply with this requirement.

Our account manager solution features an easy-to-access "close account" function.

4.9.2.9 (A-E) Account Statements

The Vendor shall provide an account statement with wagering account details to a player on demand, which shall include detailed account activity for at least the six months preceding 24 hours prior to the request. In addition, the Vendor shall, upon request, be capable of providing a summary statement of all player activity during the past year. Information to be provided on the summary statement shall include, at a minimum, the following:

- A. Deposits to the wagering account;
- B. Withdrawals from the wagering account;
- C. Win or loss statistics;
- D. Beginning and ending account balances; and
- E. Self-imposed responsible gaming limits history, if applicable.

IGT has read, understands, and will comply with this requirement.



4.9.2.10 Reporting Tools

The Vendor should provide the Lottery with web-accessible reporting tools that provide access to data related to banking services activities. This includes, but is not limited to, reporting features that provide player-specific activity logs and aggregate data such as total transfer count and amount by payment type. Vendors should describe their solution to maintain wagering accounts for all players on the System while providing explicit details on the following:

IGT has read, understands, and will comply with this requirement.

Our reporting tools are web-accessible and will provide the data required by the Lottery. The proposed payment gateway is seamlessly integrated into the web-accessible iLottery System back-office portal UI in using inline frames with single sign-on, including the option to pass the context of the current player for high-efficiency player servicing.

Via the back-office portal, the Lottery will have access to reporting tools that contain data related to banking service activities including, but not limited to, reporting features that provide player-specific activity logs and aggregate data such as total transfer count and amount by payment type.

4.9.2.10.A Tools for Administrating Wagering Account Activities

Web-accessible tools and capabilities for the Vendor to research, diagnose, correct, adjust, disable, enable or otherwise administer wagering account functions on behalf of players.

IGT has read, understands, and will comply with this requirement.

Lottery and IGT users of the back-office UI can research, diagnose, correct, adjust, disable, enable or otherwise administer wagering account functions on behalf of players.



4.9.2.10.B Audit Trail Capabilities

Provide specific details on audit trail capabilities that can track the user who made changes, what was done, when it occurred, why it was processed and other event logging details.

IGT has read, understands, and will comply with this requirement.

The back-office UI features an auditing function, which makes it possible to view all actions performed by any back-office user. A detailed footprint of each user is available, which means that every action of all users is available for review (e.g., who made changes, what was done, when it occurred, why it was processed, and other event logging details). An audit report may be generated and exported to Excel, csv, or pdf file formats.

For banking-related activities specifically, the payment gateway uses syslog protocol for online reporting into a centralized audit log facility. Audit events have been tailored to the requirements of Payment Card Industry Security Standards Council (PCI SSC) and Payment Application Data Security Standard (PA-DSS) standards. On top of that, important back-office user actions on players' data trigger creation of an alert type ("back office audit event") that records who has done what and when, helping back office users' collaboration in customer servicing activities.

4.9.3 Player Notifications

Vendor will be required to provide software and services that communicate directly to players systematically (i.e. managed with ease administratively by Lottery and/or Vendor) but delivered as a data-driven and highly personalized communications to each player ("Notifications"). All types of Notifications shall be functional at the time of successful player registration completion (i.e. available in real-time as players register on the System). Web-accessible tracking and analytics regarding Notifications shall be provided to Lottery. Vendor shall provide end-to-end services necessary to deploy fully-functional Notifications which are being proposed.

Vendor should describe their solution for Notifications while providing explicit details on the following:

IGT has read, understands, and will comply with this requirement and its sub-requirements below.

The iLottery System includes extensive built-in notification features (as well as player-segmentation capabilities), enabling you to deliver player personalized communications to each player based on real-time data.

As part of the registration process, players choose their notifications preferences, rendering notifications functional at the time of successful registration completion. Players have full control of the notifications they receive (opt-in/opt-out, communication-channel preferences, black-out timing when they don't wish to receive messages, and more, including promotional email messaging, text messaging, and push notifications).

Lottery users can access tracking and analytics capabilities via the iLottery System's back-office administrative UI.

IGT will provide the end-to-end services necessary to deploy the fully functional notifications solution described in this Proposal. For further details on our player-notifications solution, please see Section 4.19.3, Player Communication Tools.



4.9.3.A

Communication Channels Utilized

Identify which communication channels (e.g. email, SMS, mobile push notifications, etc.) will be utilized.

Subject to players' notification opt-ins and preferences, communications are available via email, SMS/text, portal/app inbox, and mobile push notifications.

4.9.3.B

Loading Content into the System

Identify, by communication channel, how content (e.g. copy, images) can be loaded into the System with flexibility, ease and organization by Lottery and/ or Vendor.

Content for communications is entered using the online template editor in the back-office administrative UI. The editor can operate in two modes: as a simple text editor for channels such as SMS, or as a Rich Text Format editor for the inclusion of graphical content.

4.9.3.C

Dynamically Populating Content

Identify, by communication channel, how content (e.g. copy, images, orientation, etc.) can be dynamically populated within Notifications.

All communications channels use the same editor described in Section 4.9.3.B, Loading Content into the System. Dynamic content, which is populated at the time the message is sent, is indicated using variables in the format \${VARIABLE_NAME} in the body of the notification. These variables can contain information related to the player (such as their name or player ID) or related to the notification (such as the calculated reward amount for a campaign). Global variables can also be used; they could contain text (for content that is often updated such as the amount of money that the Lottery has so far given to charities) or HTML (for the inclusion of images or other dynamic content).

4.9.3.D

Tracking and Performance Measures

Identify, by communication channel, what tracking and performance measures (e.g. deliverables, opens, clicks, etc.) will be available to Lottery.

Our third-party CRM provider will make available tracking and performance measures including deliverables, opens, clicks, and more for each delivery channel.



4.9.3.E Data Security Features

Describe the data security features related to Notifications.

As with other sections of the System, user access to notifications is restricted with a role-based security system.

Each role can be given access to:

- Adding new templates.
- Adding new versions of templates.
- Editing template versions.
- Deleting templates.
- Deleting template versions.

A role can also be given read-only permission for those users who may need to view, but not edit, templates.

4.9.3.F Core Services Provided

Describe the core services (e.g. creative design, copy writing, software engineering, testing, etc.) being provided as part of Notification implementations.

IGT will provide all services to support the Lottery's player-notification implementations. Our dedicated Customer Relations Manager will work with appropriate ongoing staff to manage execution of all campaigns, including creative design, graphics, copy writing, communications, software engineering, testing, and more.

Specifically, the Customer Relations Manager's responsibilities will include:

- Designing player communication strategies and tactics to activate and retain players.
- Converting plans to engaging player communication programs and campaigns.
- Defining technical requirements to execute campaigns on marketing automation platform.
- Defining day-to-day operational processes, tasks and schedules needed to deliver campaigns.
- Segmenting players to audiences, define player queries, develop communication goals and messaging together with player marketing team members.
- Creating A/B and Multivariate testing strategies to ensure performance of subject line, send time optimization, and email content.
- Measuring campaign results and drive for continuous improvement.
- Supporting GDPR/CASL/CAN-SPAN compliance and handling of Personal Identifiable Information (PII).
- Coordinating with marketing technology vendor to manage operations marketing automation software.

For further details on our services in this and other areas, please see Section 4.22, Staffing, Services, and Operations.

4.10

Claims and Payments

4.10.1 Payment Issuance

Vendors should describe in detail the features, capabilities, configurable parameters, and operational support related to providing the Lottery with software to manage a virtual prize claim center. The description should address the following minimum requirements:

IGT has read, understands, and will comply with this requirement and its sub-requirements (A-M). IGT's proposed iLottery System will come with a system of record, i.e., your Aurora™ retail gaming system, which includes the Aurora transaction engine configuration and a Claims and Payment (CAP) back-office application.

Prizes resulting from qualifying and winning iLottery wagers will be processed via autopayment of winnings to the Player Wallet solution. IGT's transaction engine will perform autopay selection on the qualifying iLottery prizes (after draw processing). The Aurora transaction engine will generate two autopay files following draw processing:

- Low-Tier File: This file will contain prizes less than \$600 and be directly transported to the IGT iLottery System for payment to the player's account and transaction history updates.
- Mid- and High-Tier File: This file will contain prizes greater than \$600 and be provided to both the iLottery System and the CAP application.

For balancing purposes, the iLottery System will perform checks on all prizes paid. The System will create a record of player information and hash failure indicators (if applicable) for all high-tier prizes processed via autopay. For the Lottery, this information will then be provided to the CAP application for processing of claims for both individually paid prizes and group-play prizes.

The CAP application will also play an integral role in the Scan and Redeem (mobile cashing) functionality. This – along with other digitalized retail services that we call Connected Play – will be available to the Lottery because, as stated, IGT will fully integrate the iLottery System with your Aurora retail gaming system. This integration, which only IGT can provide, will ensure a single system of record for your entire business, enabling a truly omnichannel ecosystem.

Claims and Payments 4.10 – 1



The Scan and Redeem feature enables players to scan winning physical tickets purchased at retail and claim the winnings to their Player Wallet – i.e., they can cash out their winning tickets via the app without having to return to the retailer or to be paid via the CAP application for high-tier prizes. The Player Wallet funds can then be reused to buy additional lottery tickets or withdrawn to the player's debit card or bank account. For iLottery wagers, winnings can be automatically added to the player's Player Wallet. (Autopay is an app setting that the player can turn on/off at any time.) For further details on Connected Play and its features, please see Section 4.18, Retailer Support.

For additional information on Player Wallets and their management, please refer to Section 4.9.2, Player Banking Services.

4.10.1.A AML Compliance

The System should provide all necessary validations to ensure that AML and any other regulatory validations are properly performed prior to the release of any payments.

IGT will manage the third-party payment processors, player and Lottery funds, and payment risk functions required with any payments program. IGT will retain full visibility of key financial data and all suspicious payment escalations.

AML

The Lottery will benefit from our iLottery System's extensive fraud and security functionality, which supports operational security processes and fraud-related countermeasures including both manual-fraud and money-laundering monitoring activities.

Processes and countermeasures related to this aspect of business operations include:

- Player-restriction models.
- Rule-based risk scoring and general extensibility based on the rules model.
- Referral of transactions to a manual review.
- Mechanisms for detection of duplicate accounts.
- Mechanisms for blacklisting payment identifiers.
- Support for Card Verification Value 2/Card Verification Code 2 (CVV2/CVC2) and Address Verification Services (AVS) validation.
- Real-time monitoring of recent transactions.

4.10.1.B

Immediate Prize Payments

The System should have capabilities to issue immediate prize payment to a player without any manual intervention. The Lottery requires prizes of \$600 or less to be paid instantaneously.



Our iLottery System can issue an immediate prize payment to a player without manual intervention. After a draw, all wagers included in the draw go through the winner selection process and the winning iLottery wagers are identified. Low-tier winnings (less than \$600) are immediately and automatically deposited to the player's Player Wallet based on the player's preferred payment settings.

Additionally, our player Scan and Redeem functionality described above enables an anonymous player to scan a paper Scratch-Off or Draw Game ticket, then register and claim it to their Player Wallet or submit to Claims and Payments via the mobile app.

4.10.1.C Mid-Tier Prize Claim Payments

At launch, the System should have capabilities to move a prize into a pending status that further requires manual processing by the Lottery. This process should include debt set off checks for items such as Child Support arrearages and State back tax set offs. The System should have capabilities to create a tax record for prizes between \$600.01 and \$5,000.00, per single win. A single win is defined as any prize of \$600.01 more, including bonus, won on a single wager.

All iLottery wins of \$600 and greater are automatically sent to the CAP application for processing as a new claim (including debt set-off checks) according to the Lottery's business rules. In compliance with this requirement, the claim will be placed in a pending status until all verifications are completed by Lottery Claims staff, after which one or more payments will be issued (or scheduled for issuance) to the player. Creation of tax records occurs automatically for prizes between \$600.00 and \$5,000.00. Additionally, the player is notified that they've won a prize and should contact the Lottery. For details on our autopay process, please see Section 4.10.1, Payment Issuance.

4.10.1.D High-Tier Prize Claim Payments

At launch, the System should have capabilities to move a prize into a pending status that further requires manual processing by the Lottery. The Lottery requires prizes greater than or equal to \$5,000.01, per single win, to be placed in a pending status. The System should provide ease of use to the Lottery staff for prioritizing, searching, tracking, processing, and closing all steps required in order to issue a prize payment of \$5,000.01 or more, including annuities.

a. The Lottery reserves the right to request after launch, that the System should have the capability to issue immediate prize payment to a player, withhold taxes and create a tax record for prizes won on a single wager over \$5,000.00. This process should include debt set off checks for items such as Child Support arrearages and State debt set offs. The system should have the capability to dynamically update the maximum amount that can be immediately paid. All prizes shall be paid in compliance with applicable state and federal laws.

Claims and Payments 4.10 – 3



Our iLottery System supports management of mid-tier (greater than \$600.00) and high-tier (greater than \$5,000.00) payouts according to state and federal law. This is possible because the system of record (your retail gaming system) includes a CAP back-office application that supports the management of a claim throughout its life, i.e., creation, approval, and payment. Claimant or payee information is stored separately from claim information, allowing an authorized user to search for a claimant's information while processing a claim and viewing previous claims made by that claimant. The user can also add new or modify existing claimants.

The CAP application will make your process for paying winners fast and easy. Low-prize cash prizes can be paid through a check, an EFT transaction, or directly to a player's Player Wallet. For high-prize winnings, the iLottery System will transfer the relevant information (along with the player's necessary PAM data) to CAP, which will handle prize management through your standard claim process, ensuring all rules are checked and that necessary withholdings are performed as required.

CAP processing includes multiple activities performed by authorized Lottery personnel. Typically, all claims move through the following cycle:

- Creation.
- Approval.
- Payment.

The CAP application can create two types of claim payments: cash prizes and merchandise prizes (noncash prize). Cash prizes are paid through a check or EFT transaction to a player's bank account. (Depending on the prize winnings and game rules, CAP can generate one or more payments per claimant. This part of the solution will be configured to your requirements.)

4.10.1.E Debt Set-Off Checks

Debt set off checks should occur at a configurable level. The Lottery will manually check for Child Advocate and State back taxes. The System should deduct the Set Off from the prize payment and reflect the Off Sets to players in portals. The System should provide the ability to separately collect, manage, and track multiple Set offs for a single prize payment claim and made available within reporting to Lottery staff. An export file of all set off payments by player should be made available to the Lottery daily. Vendor should provide a solution to allow the Lottery to print set of checks, including a letter for set off checks, per single win containing any set-off debt The lottery can provide the Vendor an example of what is to be included in the letter.

IGT will meet the Lottery's requirements for managing child support and other debt set-offs. The iLottery System will allow multiple set-offs for a single prize, as required. (Please note that, currently, debt set-off checks apply only to mid- and high-tier prizes.)

Set-offs will be visible to players via the Claim History view in the mobile app. An export file of all set-off payments by players will be made available to the Lottery daily.

During the claim process and in real time, the CAP application will check the West Virginia Lottery debt set-off records and deduct any found set-off amount, along with any related fees. The debt set-offs will be applied to all prizes on each single claim, including merchandise prizes. Our iLottery System will perform this function for all types of prizes and prize payments.

4.10 – 4 Claims and Payments



All claims processed will also be checked against the database of ineligible players, which is updated and maintained by West Virginia Lottery Security.

Our CAP application has a powerful, open-standards-based structure that can interface with third-party back-office systems. For example, it can connect directly to external state agencies that communicate debtor information automatically. This makes state debt collection easier to automate. Debts such as overdue taxes or child support can be set-off against prizes, ensuring the appropriate state agencies are paid before paying the claimant.

4.10.1.F **Message Exchanges**

The System should trigger automated messages to players, as defined by the Lottery, in order to request any documentation necessary to complete a prize claim. The Vendor should receive a notification in the back-office system when a player has sent a correspondence or document upload. The Vendor and the Lottery should be able to view and download the correspondence or document upload and send a customized message to the player from within the back office if necessary. Please provide all messaging to be used. Messaging should be approved by the Lottery prior to its use.

We will configure the iLottery System-CAP application integration so that players are always aware of the status of their claim (via the mobile app or web portal). For example, if additional player data or documentation is required, the claim will be placed in a status that triggers an update back to the player.

The CAP application uses the claim status as a trigger to automatically initiate communication to the player. In scenarios where more information is required from the player, CAP provides an automated message notification that directs the player as to the next steps (e.g., "a document upload is required").

All required back-end messaging will be supported, and the documents will be stored and accessible for view and download via the back-office. Authorized users can also send customized messages to players.

We can configure the iLottery System to include any messaging the Lottery desires. We will work with the you to implement your desired messaging, and all predefined messages to be used will be agreed-upon with you prior to implementation.

4.10.1.G Claim Center Back Office

The System should provide a back-office capability that enables Lottery staff to access a queue of all pending prize claims. The System should propose a solution that includes the ability to access claim payment activity in real time, provides tools and capabilities for approved Vendor and Lottery staff to search, edit, correct or otherwise administer claims and payments functions in the System and captures an electronic completed claim information and other forms. The Vendor and approved Lottery staff should be able to view any processed claims and details including tax withholdings, offsets, and amount paid to Player Wallet.

Claims and Payments 4.10 – 5



IGT's iLottery System includes back-office capability that will enable the Lottery and IGT staff to:

- · Access a queue of all pending prize claims.
- Access claim payment activity in real time.
- Search, edit, correct, or otherwise administer claims and payments functions in the System.
- View any processed claims and details, including tax withholdings, offsets, and amounts paid to the Player Wallet.

The solution will capture electronic completed claim information and other forms. The CAP application will integrate with the Lottery's Claims Information System so that all prize winner records are housed in one location.

CAP Reports

The CAP application provides reporting functionality for processing and viewing claims, payments, claimants, and other functions relating to prize payments. It can produce a report detailing information that Lottery staff can view on their reports screen.

CAP provides several methods of searching for a payment in the event a payment needs to be voided or for other reasons such as tax adjustments. This functionality includes the ability to search by payment, claim, or player. CAP will produce a daily check register, which will be broken down by regional office. The check register will include all checks issued and voided for a given day. CAP also can generate daily extracts of prize validation and payment data in any format the Lottery requires.

4.10.1.H Document Storage

The System should retain any documentation related to claims for each player in a manner that is compliant with any state, federal, PCI, NACHA or other regulations. When a player makes a subsequent claim, the System should not trigger an automated message to players when necessary, documentation is already on file and not required by any Lottery mandated thresholds. In these cases, the System should allow the Lottery to expedite the prize claim process.

The iLottery System will retain claims-related documentation for each player in a manner compliant with any state, federal, PCI, or other regulation.

CAP will accurately record income tax withholding as required by applicable law. In processing a winning claim for payment, CAP will calculate and withhold federal and state taxes and other designated amounts as defined by the Lottery, and it will also capture and print claimant information required for IRS reporting (i.e., W2-Gs). This process will record any appropriate income tax withholding for aggregated claims of Lottery-determined thresholds for the state and federal income tax.

CAP will print an IRS Form W2-G. The Lottery's claims staff will be able to issue a separate W2-G after a claim has been processed. In addition, the software can produce W2-Gs for multiple claimants for a single claim if an IRS Form 5754 is presented. As detailed earlier in this section, player documentation is saved in the back-office. Therefore, the iLottery System will not trigger automated messages to players, and the Lottery can expedite the prize claim process.

4.10 – 6 Claims and Payments



New claims are added to an existing winner's file. For repeat winners, the player does not have to be entered twice. However, a new claim under that Player ID is created as new prizes are processed and paid out. In addition, an authorized user can see all claims under that player.

4.10.1.I Retention of Prize Winners

The System should retain records of prize payments for at least seven years of historical plus current year records, including preserving a mechanism for accessing, summarizing, and researching prize payments. Vendors should specify which portion of data is available online (e.g., a rolling 18 months period) versus available offline. All retained data should be migrated to the next vendor upon contract termination.

Per Addendum No. 3, the Lottery has changed this requirement to read:

The System should retain records of prize payments of \$600 or more for at least seven years of historical plus current year records, including preserving a mechanism for accessing, summarizing, and researching prize payments. Vendors should specify which portion of data is available online (e.g., a rolling 18 months period) versus available offline. All retained data should be migrated to the next vendor upon contract termination.

The CAP application uses normalization techniques for all data, allowing a large amount of data to be stored without wasting space. CAP will be able to retain all data for prize validation and payments, including prize payments of \$600 or more for as long as the Lottery requires the data to be accessed. All retained data will be migrated to the next vendor upon Contract termination.

4.10.1.J Prize Claim Hold

The System should be configured to automatically place prize claims on hold based upon criteria/thresholds as defined by the Lottery. The hold may only be lifted/bypassed by designated Lottery personnel.

The System will be configured as required.

4.10.1.K Completion of Prize Claim

The System should allow the Lottery to mark a claim as approved, while removing any tax withholdings and offsets, and initiate a final credit to the wagering account that is available for immediate withdrawal for qualified claims. The System should support a two-person verification process before the claim is approved.

CAP supports claim approval functionality in the baseline.



Dual Control Processing

We can configure dual processing, in which – to promote the highest possible level of auditability and security – CAP requires that all claims go through an approval process before they can be paid. To achieve this objective, CAP will be configured to require a two-step process for printing prize checks. We call this dual control processing.

Here's how it works:

- To process a claim, an authorized Lottery staff member accesses CAP and executes all the steps
 required to create the claim. Then a different Lottery staff member accesses CAP and approves that
 claim before a payment record is generated.
- Because CAP records user information with each item of data stored on the System, an audit trail detailing who processed the claim and who approved it is automatically created.
- CAP will allow Lottery staff members to be involved in either part of the two-step process, but no single person can perform both steps on a single claim. This same two-step process can be applied to all payment types.

4.10.1.L Exceptions and Overrides

The System should allow for exception claims and overrides that do not meet the defined workflow associated with a prize claim. This includes, but is not limited to, the ability to override default tax withholdings or to mark prizes as paid through external systems. An export file of exception claims should be available to the Lottery.

The System supports processing of payments – via keyboard entry – for prizes not included in the validation system, such as exception claims and overrides that do not meet the defined workflow associated with a prize claim. It also supports the ability to override default tax withholdings or to mark prizes as paid through external systems.

Any data that is captured in the CAP application can be extracted into interface files, including the:

- · Payment type and amount.
- Check number, date, and amount.
- Withholding amount.
- Tax ID information.
- · Player information.

Export files of exception claims are thus available to the Lottery.

Since an exception claim does not validate a ticket, it requires additional information that identifies why the claim is being processed as a such. One of the methods to identify the claim is to assign it a Reason Type. Reason Types include:

- **Expired:** Game closed or ticket is too old.
- Previously Paid: The Lottery is confident the ticket was marked in the system as paid, but the player
 did not receive the funds at that time.



Damaged: Ticket is unreadable.Jackpot: Grand prize validation.

All these parameters can be modified, or new parameters created, to distinctly identify the exception claim.

4.10.1.M Cashing Policy

The System should allow cashing of winning Wagers as determined by the Lottery. Currently prizes should be claimed within one hundred eighty calendar days after the date of drawing for Draw-Based Games or one hundred eighty calendar days after the end of the game for Scratch-Off games. Prizes not claimed within specified time periods ("Unclaimed Prizes") should be marked accordingly on the System. The Lottery can set other policies as appropriate.

Our autopay process (introduced in Section 4.10.1, Payment Issuance) ensures that we can comply with the Lottery's cashing policy requirements. When the autopay process initiates on the draw game engine, players will receive their low-tier winnings, and high-tier wins will be shared to CAP, in near-real time. Wagers won through the iLottery channel will be linked to a player account and paid once the drawing is finalized. With this association, prizes for the iLottery channel will always be cashed and associated with the player. Mid- and high-tier prizes sent to CAP will have this same association, and processing of these claims will be based on the Lottery's business rules.

When a player scans a paper Scratch or Draw Game ticket on their mobile application (using the Mobile Claim feature), the draw game engine will verify the age of the ticket before returning a response. In the case of an expired or ticket-too-old scenario, the player will not be offered the Claim option.

4.10.2 Taxes

4.10.2.1 Tax Withholdings

The System should support IRS and Lottery requirements for withholding from prizes and recording of name, address, and related information necessary for reporting of winners of single wins of \$600.01 or more. The System should issue W-2G or 1042S forms to winners at the time of payment, and support reprints of W-2G and 1042S forms.

Vendors should explain the solution for providing W-2G and 1042S forms to winners and the Lottery. The Vendor should provide an interface file to the Lottery for daily tax reporting to federal and state taxing authorities. The Vendor should provide a solution to submit payments to the IRS and State Tax payments. These payments would need to be made at the end of each day and proof of payment be sent to the Lottery daily.



IGT has read, understands, and will comply with this requirement.

CAP will accurately record the income tax withholding required by applicable law.

In processing a winning ticket for payment of prizes over \$600.00, the CAP application will be able to:

- Print an IRS Form W2-G.
- Calculate and withhold federal and West Virginia state taxes and other designated amounts as defined by the Lottery.
- Capture and print claimant information required for IRS reporting, i.e., W2-G or 1042S forms.
- Issue the W2-G or 1042S forms to winners at the time of payment via electronic communication or in person at a Lottery claim center.
- Record any appropriate income tax withholding for aggregated claims of Lottery-determined thresholds for state and federal income tax.

The Lottery's Claims staff will also be able to issue a separate W2-G form after the claim has been processed. In addition, the CAP application can produce W2-Gs for multiple claimants for a single claim if an IRS Form 5754 is presented.

Payment processing will be faster as the person's player record will already be in the system.

We will provide an interface file to the Lottery for daily tax reporting to federal and state taxing authorities.

Claimant data will be retained in the CAP application to support those instances when a player wins an additional large prize(s) in the future, i.e., it will make payment processing faster because the person's player record will already be in the system.

4.10.2.2 Tax Reporting

The Vendor should provide a solution to merge two system IRS and/or State of West Virginia tax reporting files to create one file for each government entity. A tax file is currently being produced for the retail gaming system payments and would need to be merged with the new iLottery tax file.

IGT has read, understands, and will comply with this requirement.

As stated near the start of this section, we will integrate the iLottery System with your retail gaming system — and thus with your existing CAP back-office application — which will provide the ability to export files in a Lottery-specified format. These files can be combined with retail claim center data to create all required tax reporting for each government entity, providing you with an efficient and integrated tax reporting solution.

The CAP application will also serve as an integrated solution for validating claims, generating payments, writing checks, managing and processing debt setoffs, and any other function associated with claims and payments of *non-merchandise* prizes. CAP will present a single view of players' claims and payment history, including their claims, payments, and annuities, regardless of the prize game type.

4.10 – 10 Claims and Payments



Expired Prizes Reporting

CAP, the interface through which the Lottery will manage the virtual claims center, will contain data related to prizes which can then be exported into a file of expired prizes, as defined by the Lottery. Unclaimed prizes will be transferred directly to the Lottery and will not be subject to IGT's commissions.

Virtual Claims Reporting

Via CAP, the iLottery System will provide detailed daily reporting related to virtual prize center claim activities. During the collaborative requirements gathering phase of the implementation project, we will work with the Lottery to determine the operational needs and requirements of this solution.

IRS Tax Reporting System

IGT understands that we will be required to provide the data files necessary to meet IRS and West Virginia state tax reporting and remittance requirements. CAP will capture all tax reporting information for prize claimants to satisfy IRS W-2G year-end reporting requirements. The information will be compiled into the required data file format and can be transferred either electronically or by physical media such as tape or CD, depending on the Lottery's preference. W-2G forms will also be printed directly on check stubs at the time of initial payment and can be reprinted, as necessary.

Claims and Payments 4.10 – 11

ି 4.11

Wagering Capabilities

Players shall access the System through a Portal and shall then exercise functions available including wager purchase and game play. All wagering and game playing shall be recorded by the System and available in the player account.

IGT has read, understands, and will comply with this requirement.

4.11.A Wager Acceptance

Players shall access the portals to wager and play games, once they have identified themselves to the System (via password and/or other authentication mechanism) and Geo-location services have verified that the player is physically located in West Virginia.

IGT has read, understands, and will comply with this requirement.

4.11.B Wager Logging

The player should be able to determine his or her iLottery Wagers, including active Wagers for upcoming drawings, Wagers not fully played through the game experience (e.g. communication disconnect before full reveal of win / loss outcome), Wagers that did not win, and Wagers already declared winners.

IGT has read, understands, and will comply with this requirement.

Wagering Capabilities 4.11 – 1



4.11.C

Variable Base Wager Capability

The System should accept wagering values in United States currency for all games ("Base Wager"). Further, the System should accept Base Wagers in fractions of dollars and in whole dollar increments (e.g., \$5.00 Wagers, \$0.50 Wagers, penny play, nickel play, etc.) for games.

IGT has read, understands, and will comply with this requirement.

The proposed iLottery System supports fractions that can be purchased via the retailer or digital channels. Our iLottery eInstant games can be configured to be played at any price point (including fractions of dollars), from \$0.01 to \$999.99, accepted in U.S. currency. Single or multiple price points can be used and will cover any denominations in between these wager values. The same holds true for West Virginia Lottery Draw Games (DGs); we will reflect whatever wagering price configurations that are supported in the retail channel. The Lottery can configure the size of the fractions.

4.11.D

Incremental Wager Capability

The System should support product features that are incremental to the cost of the Base Wager. For example, features like a prize multiplier, ingame progressive, or linked progressive.

IGT has read, understands, and will comply with this requirement.

iLottery eInstant games allow players to win prizes based on the Base Wager amount. A game design document specifies how prizes are defined based on formulae created by mathematicians. The Lottery's requirements for specific values can be entered into these formulae to produce new price points and versions of the mechanic data.

Prize multipliers, progressive features including stand-alone and linked Progressive Jackpot games, are available in a variety of current games. For DGs, we will support all multiplier add-on games supported in West Virginia.

IGT supports eInstant game multipliers, progressives, linked progressives, and multi-ticket features. All of these features are live within various games carried by the Kentucky and Georgia lotteries, as well as by a number of our international lottery customers.

4.11 – 2 Wagering Capabilities



The following figure provides an example of a player's add-on screen from the Georgia Lottery.

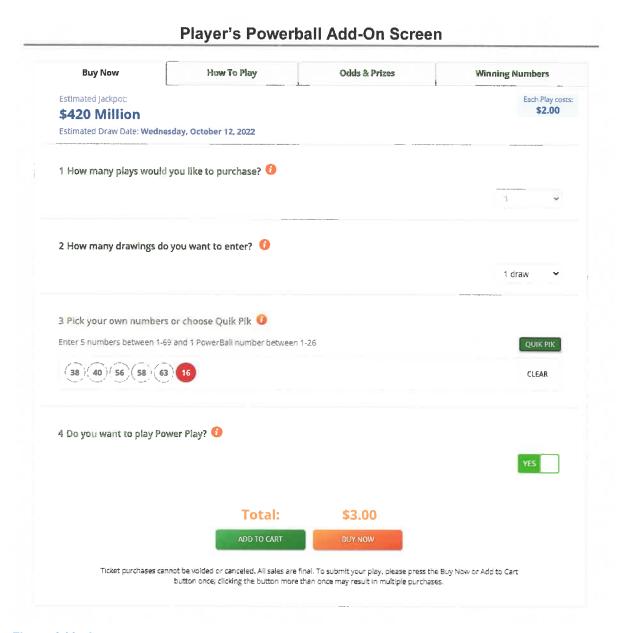


Figure 4.11 -1.

Wagering Capabilities 4.11 – 3



4.11.E

Pari-Mutuel, Progressive Jackpot, Wager Pooling

The System should provide the capability to pool wagers based on a prescribed, and configurable, percentage value designated by the Lottery for any applicable games or wager types ("Wager Pooling"). Wager Pooling should be accessible within the System in real-time to provide data such as current progressive jackpot amounts. A baseline amount, initially funded by the Lottery via the game prize structure or other means, should be supported by the System each time the wager pool is awarded as a prize (plus upon the first deployment of the game). The System should support a method to fund the baseline amount based on future player funding of the wager pool.

IGT has read, understands, and will comply with this requirement.

The proposed System will support the wager configurations currently offered to West Virginia players via the retailer channel. Any pari-mutuel, progressive jackpot, wager pooling support for the retail channel will be applicable to the iLottery channel.

4.11.1

Transaction Integrity

Vendors should demonstrate system features that maintain control over transaction integrity and detect and identify when a transaction has been altered outside of the transaction processing rules.

IGT has read, understands, and will comply with this requirement.

The security measures of your proposed iLottery System's system of record (i.e., your Aurora™ retail gaming system, the transaction engines in particular) will ensure the integrity, completeness, and accuracy of all gaming transactions. Strong encryption of transmitted data ensures that all data transmitted to and from those transaction engines is fully protected. Our overall "defense in depth" security approach ensures that these and other security measures provide multiple layers of security.

For eInstant games, IGT's Remote Game Server (RGS) uses a digital signing process to ensure that the contents of each outcome do not change. Once the random numbers are pulled and the game engine determines the results of the play request, the game engine digitally signs the outcome. The game engine creates a digital signature and then encrypts the digital signature with a private key. This ensures that the signature cannot be tampered with. This signature is stored as part of the outcome. Any time the outcome is loaded from the database, its digital signature is verified against the outcome's contents, thus guaranteeing that the contents have not been modified. If the system detects a modification to the outcome, it rejects it and logs the issue.

4.11 – 4 Wagering Capabilities

4.12

Responsible Gaming Controls

4.12.1 (A-H) Responsible Gaming

The Vendor should provide software and services that promote and ensure the highest level of responsible gaming. The System should provide the ability to set configurable player account funding limits, both minimums and maximums, by payment mechanism. Configurable limits should include daily, weekly, monthly, yearly and lifetime parameters. The Lottery has the sole discretion to designate funding limits. Vendors should describe their solution for responsible gaming controls while providing explicit details on the following capabilities:

- A. The Lottery to establish and modify default deposit limits.
- B. Players to establish and modify personal deposit limits.
- C. Players to self-exclude for durations of time.
- D. The Lottery and/or the Vendor to manage personal wagering limits and/or self-exclusion on the player's behalf.
- E. Identify the amount of time and money a player has spent on the site during the current visit.
- F. Enforce cooling off periods for player-initiated gambling control modifications.
- G. Include responsible gaming messaging including but not limited to during the user experience, pre/post visits.
- H. Provide reports on player demographics, velocity controls, and those utilizing the responsible gambling tools.

IGT has read, understands, and will comply with this requirement.

As the world's leading end-to-end gaming company, IGT is more than aware of the risks associated with gaming activities. As the industry has grown, we have steadily increased our commitment to minimize any risk that may adversely affect players. More specifically, we work closely with our customers to understand and accommodate their need to embed Responsible Gaming (RG) features into their offerings.

IGT is committed to being a forward-thinking company that weaves RG into the fabric of all its products, programs, and policies. This commitment is demonstrated in our adherence to globally recognized programs, such as those of the World Lottery Association (WLA) and the Global Gambling Guidance Group (G4), which strive to protect players and minimize problem gaming risks and other potential harms.



The certifications awarded to IGT by the most respected gaming industry associations worldwide (such as the WLA and G4; see just below) are acknowledged as the highest commitment to RG.

- We were the first lottery gaming vendor in the world to achieve RG accreditation from the G4 for iGaming and digital operations. In 2020, our G4 certification was attained for another three years. We also remain the only vendor among our competitors to hold a G4 certification. To maintain the certification, we were independently assessed to confirm that we go above the industry standards of providing player protection tools and RG information on gaming machines and within our iLottery operations.
- We've also received the WLA Responsible Gaming Standards for Associate Members, Level 4.
 Level 4 the highest level, for continuous improvement certifies that members are implementing specific programs into their day-to-day operations and are continuously improving those programs.
- We also work with a wide variety of stakeholders, including problem-gambling researchers and advocacy groups dedicated to promoting awareness of RG and industry best practices. IGT representatives are actively engaged in working groups that share information and set industry standards for RG.

Designed and continually refined (in line with the needs of our customers worldwide who are operating in some of the most mature digital gaming markets), our iLottery System offers a diverse and progressive mix of highly configurable RG tools. We are ready to work with the West Virginia Lottery in launching RG controls to safeguard the Lottery's iLottery players.

In compliance with the industry's best practices and standards, IGT has identified eight responsible gaming commitments to support our company's goals:

- 1 Work with appropriate stakeholders on RG issues to ensure IGT follows best practices and is aware of current RG research as it relates to our operations.
- 2. Create internal awareness of RG and provide education and training to employees as it relates to their daily activities.
- Incorporate RG tools into products and services to minimize potential risks.
- 4. Ensure IGT's remote gaming platforms offer operators the ability to monitor players' behavior and minimize any potential excessive or illegal gaming activities.
- Ensure all advertising and promotional activities comply with IGT's Responsible Gaming Code of Principles.
- 6. Support customers with RG best practices to promote responsible play.
- Engage with stakeholders to align RG strategies with expectations.
- 8. Report IGT's RG activities to key stakeholders.



Types of Responsible Gaming Limits and Controls

As detailed above, our company-wide commitment to RG infuses all our solutions and service offerings – and underscores our entire approach to serving our lottery customers.

Understanding that providing players with opportunities for digital gaming requires especially diligent attention to RG regulations and principles, our iLottery System adheres to the highest RG standards. To place limits on gaming behavior and monitor playing habits, our System allows RG settings to by established by:

- West Virginia Lottery Users: The Lottery can use the iLottery System's back-office administrative User Interface (UI) to establish minimum, maximum, and default RG settings for player accounts, selecting which combination of limits should be enforced. For each limit selected (i.e., financial, session time, etc.), a default, minimum, and maximum value can be set. The default is the limit for a new player. No player can increase their limit to a value above the maximum.
- Players: A player uses the player portal or mobile app to view and configure their limits. Players will readily see the available player protection measures they can invoke (such as self-imposed limits and self-exclusion) and information on how to invoke them. Players can reduce the value of any of their limits at any time if they wish to restrict their gaming behavior; such a change is effective immediately. If a player wishes to increase the value of a limit, the change is not immediately effective rather, a cooling-off period (i.e., Buffer Period) is enforced. Basically, the period is a configurable number of hours (dependent on legislation and a lottery's choice) between the request being made and coming into force. Again, it will not be possible to increase the value past the maximum limit specified by the Lottery.



Manage My Limits: Mobile App

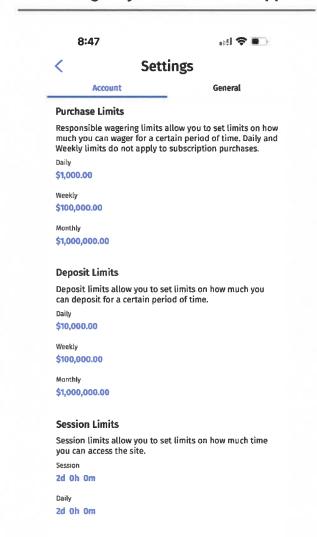


Figure 4.12 – 1. Player-Defined Limits: Players can configure all RG-related limits, including purchase, deposit, and session time.

The types of RG limits and controls that will be available to both players and authorized West Virginia Lottery users include the five described next.



Financial Limits

Financial controls include limits on deposits, losses, spend, and game transactions; each can be configured with a maximum limit per session, day, week, month, or year. We can also accommodate players' ability to self-impose individual wager transaction limits and cumulative (daily, weekly, monthly) wager spend maximums. Financial limits for a player can be set by the players themselves or by customer support agents. The Lottery can select which combination of limits should be enforced. For each limit selected, a default and a maximum value can be set. Players will have a ready view of their current account balance along with the amount relative to a particular RG-established limit.

When a player exceeds the lifetime deposit threshold, the iLottery System (which will be configured to abide by all established regulations) will a) immediately prevent any wagers by that player until he or she makes certain acknowledgements and b) require the player to reaffirm those acknowledgements at scheduled intervals.

Session Time Limits

The iLottery System supports time limits to help players and lotteries track and set limits on the amount of time spent playing. Players are kept apprised of their time and limits (e.g., the portal shows the duration that they've been logged in; individual games show the duration that a game session has been open).

Session time limits can be set in the same way financial limits are set. The System notifies an active game system when a player reaches his or her time limit. Due to the different nature of different games, however, a player might not be immediately stopped from playing (i.e., forcefully logged off from the current session midround) because this behavior is the responsibility of the particular game system. Typically, players are allowed to continue with the current game session. But when they attempt to launch a new game session, they are informed that the session time limit has been reached and are prevented from launching the new game.

Reality Check Message

The Reality Check cautionary message displays to warn players when they've been playing for a self-defined amount of time. The message shows how much play time has elapsed since the player logged in, along with the amount wagered, lost, and won. Reality Check is for advisory purposes and does not enforce a hard stop on gaming activity.

Exclusion Periods

Lotteries often require that certain players be excluded, and players may have the need to cut themselves off from gaming temporarily or permanently, regardless of the status of any limits. Once excluded, a player is unable to login and wager (and perform other functions as determined by the Lottery) until the exclusion expires. On the back-office administrative UI utilized by the operations team, the player will show as excluded, along with the date on which the exclusion will expire. This is where the Lottery can also manage the self-exclusions of players.



Exclusion periods also account for:

- Integration with Self-Exclusion Databases: The iLottery System can integrate with all manner of third-party systems, including exclusion databases. When a player self-excludes, the relevant player details and exclusion-expiry are passed to the database. Likewise, upon player login (and before the player can begin playing), the database is called to verify that the individual is not excluded from gaming.
- Balance Classifications: Balance Classifications eligible for withdrawal can be issued back to the player prior to exclusion lockout. Should a player self-exclude, they can withdraw winnings in advance of the exclusion taking effect (winnings will be the only funds type available for manual withdrawal). Should the player have a need to pay down another balance, they can work with the Customer Service Center.
- **Updates to Communication Systems:** When a player is excluded, they won't receive any communications through the iLottery System's communication channels. With regard to the event messaging system, we can immediately update any third-party Customer Relationship Management (CRM) solution to remove a player from their platform.

Game Bans

As an additional RG safeguard, the West Virginia Lottery and its players can also establish game-specific exclusions. These will prevent a player from playing a certain type of game (e.g., Keno games) or a certain game itself (e.g., Powerball) either permanently or temporarily. If the player or the Lottery selects a temporary ban, the ban will expire at the configured time, after which the player can start playing again. If Lottery decides to remove the ban at the player's request, a cool-off period is applied.

Responsible Gaming Awareness and Information to Players

Our commitment to RG starts with people. Technology may be a powerful tool that operators use to deliver game content to players, but gaming is fundamentally a human activity, which is why we support "positive play" with the belief that a well-informed player – one with access to RG information – will be less likely to engage in risky behaviors that could lead to problem gaming. Consequently, we'll incorporate into your player-facing UIs the display of account information and RG messaging.

Please note that we routinely include a comprehensive RG section in our customers' player UIs, and the section can include items such as:

- Problem gambling telephone number.
- Information to help players understand gambling and the potential risks associated with excessive participation in gaming.
- Direction to further RG education and compulsive gambling support.
- The ability to enable self-exclusion and timeouts.
- Notification that individuals on self-exclusion lists are barred from claiming prizes.
- Educational information about underage gambling myths and misconceptions.
- A gambling risk-assessment test that the West Virginia Lottery can offer players that may be at risk for developing gambling problems.



We'll also work with you to define and implement the display of information on the login and logoff screens, such as date, time, and duration of player's last session, etc.

Tracking and Reporting

IGT's iLottery System tracks all player interactions in granular detail. This enables our highly configurable RG profiles to analyze and monitor player behaviors for characteristics associated with best practices for player protection, including but not limited to:

- · Changes in play.
- Type of games being played.
- How much a player is spending.
- How many wagers a player is placing in a day.
- How many times a player is depositing in a day.
- Limit hits.
- Number of days on the site.
- Age group.
- Use of responsible play tools.

Reports can be found (and exported) in the back-office administrative UI reporting area and details of history. Players using the RG tools will be found in a player's RG history pages. Our goal, like the Lottery's, is to ensure that information is available in real time to allow for efficient player protection via monitoring players and for managing instances of concern.

4.12.2 (A-C) Responsible Gaming Limits

The Vendor shall be capable of allowing a player to establish responsible gaming limits. Any decrease in these limits shall be effective no later than the player's next login. Any increase in these limits shall become effective only after expiration of the time period for the previous limit. The responsible gaming limits shall include:

- A. A deposit limit offered on a daily, weekly, and monthly basis, which specifies the maximum amount of money a player may deposit into his or her wagering account during a particular period of time:
- B. A spend limit offered on a daily, weekly, and monthly basis, which specifies the maximum amount of patron deposits that may be put at risk during a particular period of time; and
- C. A time-based limit offered on a daily basis, which specifies the maximum amount of time, measured hourly from the player's login to log off, that a patron may spend playing on the iLottery system, provided that if the time-based limit is reached, a player shall be permitted to complete any round of play.

IGT has read, understands, and will comply with this requirement.



Players can reduce the value of any of their limits at any time if they wish to restrict their gaming behavior; such a change is effective immediately. If a player wishes to increase the value of a limit, the change is not immediately effective while a cooling off, or "buffer," period is enforced. The period is a configurable number of hours between the request being made and coming into force.

Limits are set via financial and time configurations. The iLottery System tracks how much remains of these limits and prevents the player from exceeding them.

By default, it handles these profile types:

- Self-exclusion.
- Daily spend.
- · Weekly spend.
- Monthly spend.
- Transaction game.
- Daily game.
- Annual game.
- Monthly game.
- Daily game loss.
- Monthly game loss.
- Weekly game loss.
- Yearly game loss.
- Reality check.
- Session time.
- Daily deposit (or funding).
- Weekly deposit.
- Monthly deposit.
- Individual or cumulative deposits per funding source (through IGTs payment gateway solution).

Of course, RG is about more than providing limits and self-exclusion for players. All lotteries are required to prevent underage gambling and to comply with Know Your Customer (KYC) regulations. IGT also supports its customers in achieving these aims by partnering with ID and age verification service providers.



4.12.3

Responsible Gaming Defaults and Limits

Vendor should propose a set of responsible gaming defaults and limits for Lottery's consideration that is based on any best practices from other jurisdictions and innovative methods to proactively engage players with responsible gaming tools and messages

IGT has read, understands, and complies with this requirement.

We will provide you with market benchmarks and work with you to establish RG default settings that align with your business strategy. That said, some of the best practices we've included in our iLottery solution for other jurisdictions include:

- Limiting players to one active funding source.
- Not allowing a player's self-imposed RG limits to override more restrictive RG limits imposed by their lottery, thus, making the more restrictive RG limits the priority.
- Setting a lifetime deposit threshold. When a player exceeds the lifetime deposit threshold specified by their lottery, immediately preventing any wagers until the player makes certain acknowledgements and require the player to reaffirm those acknowledgements at scheduled intervals.

As an international company, IGT is committed to player safety by staying abreast of the industry standards used around the world and meeting or exceeding them. And we are always interested in exploring new ways to keep players safe and in assisting implementing the RG strategies of our customers.

4.13

iLottery Games & Game Integration Services

The Vendor should provide a System that can support a wide portfolio of gaming options including traditional Draw Games ("DGs") along with instant keno, digital instants, and related styles of games ("Interactive Games"). An open System architecture should readily attach and detach third-party game supplier's libraries of games.

The Vendor will implement secure integration services that allow third-parties to readily develop and deploy iLottery Games that are fully integrated with the System. Similarly, the Vendor may utilize the same secure integration services to act as a provider of iLottery Games.

iLottery Games may be divided into two sub-types for clarity throughout this RFP; those whereby the wagers and prize pool is shared across more than one central gaming system ("Decentralized") and those whereby the Vendor manages the entire universe of wagers and prize pool ("Centralized"). These sub-types can be applied to iLottery Games in general (e.g., Decentralized iLottery Games, Centralized iLottery Games).

IGT has read, understands, and will comply with this requirement.

Our iLottery System will support the Lottery's traditional Draw Games (DGs), instant keno, digital instants (eInstants), and related styles of Interactive Games. The System's integration layer enables efficient, secure plug-and-play integration with third-party game content (eInstants as well as other digital content that the Lottery may choose to adopt in the future, regulations permitting).

As an enabling framework, the integration layer permits the construction of a gaming system comprising multiple game engines. As a content-aggregation solution, it plays the role of intermediary between the various game engines, the jurisdiction's regulator, and external Business-to-Consumer (B2C) systems. By aggregating content from multiple game engines, it enables consolidated portfolio management that is integrated with the iLottery System's player account management and player-engagement functionality. IGT will use the same integration services to provide its own iLottery games via its Remote Game Server (RGS).



4.13.1

Draw Games

The Vendor should be able to implement current games and game features and any future changes or games offered by the Lottery including Powerball, Mega Millions, Lotto America, Daily 3, Daily 4, Cash 25, Ca\$h Pop, and Keno Go with Keno Go Bonus products as determined by the Lottery and any other current games. These games should support all functional operations independent of the Lottery's retail gaming system such as collecting wagers, conducting winner selection, processing validations, and reporting results.

Powerball, Mega Millions, and Lotto America should be available for the initial launch and the remainder of games should be delivered no later than one calendar year after startup.

Vendors should provide a plan that describes games available at launch and the strategy behind why these games were chosen, along with a roadmap to deliver the full portfolio of DGs into the market. This should be included in the marketing plan as referenced in Section 4.14.1.

Per Addendum No. 3, the Lottery has changed this requirement to read:

"The Vendor should be able to implement current games and game features and any future changes or games offered by the Lottery. Current games include Powerball with Power Play, Mega Millions with Megaplier and Just The Jackpot, Lotto America, Daily 3, Daily 4, Cash 25, CA\$H POP, and Keno Go with Bonus.

Powerball with Power Play, Mega Millions with Megaplier and Just The Jackpot, Lotto America should be available for the initial launch and the remainder of games should be delivered as quickly as possible but no later than one calendar year after startup.

Vendors should provide a plan that describes games available at launch and the strategy behind why these games were chosen, along with a roadmap to deliver the full portfolio of DGs into the market. This should be included in the marketing plan as referenced in Section 4.14.1."

IGT has read, understands, and will comply with this requirement.

The iLottery System will provide West Virginia players with digital purchase options for the Lottery's Draw, Numbers, and Keno games as determined by the Lottery. The System's design and capabilities reflect our belief that iLottery players should have the same game options that are available to them at retail *and* enjoy additional options to maximize the digital player experience.

Via our full integration of the iLottery System with the Lottery's existing Aurora™ retail gaming system, the Lottery will have a single system of record (configured with Lottery game rules, specified draw processing, claims and payment processing, and connecting with the Lottery's Internal Control System [ICS], etc.) to process, record, and designate all wagers (both iLottery and retail purchases). DGs and Keno game purchases will be logged in real time.

All required games will be available for the initial launch. For details on our proposed launch plan and roadmap, please see Section 4.15.1, Marketing Plan.



4.13.1.1 Drawing Operations & Control Center

Understanding that the DGs take place at a television studio or other approved site at regularly scheduled times, describe anticipated facilities, staffing, software, specific controls, and any other features that will be necessary for delivery of drawing results into the System. The Vendor shall anticipate instances of changes to drawing frequency and time of drawings. Specifically identify your approach for entering draw results into the System.

IGT has read, understands, and will comply with this requirement.

Because we propose to fully integrate the iLottery System with your existing retail gaming system and enable a single system of record for your entire (i.e., digital and retail) business, we do not anticipate that any new facilities, staffing, software, specific controls, or other features will be necessary for delivery of drawing results into the iLottery System. All processes and configurations will remain as they currently are.

Moving forward, we will work with the Lottery to ensure the delivery of draw results into the iLottery System functions in a way best suited to your needs. We can support programmatic solutions for the import of winning-results data for all games through received messaging via an exposed Representational State Transfer (REST) endpoint or the consumption of encrypted eXtreme Markup Language (XML) files.

If no programmatic solution is available, our default approach for entering draw results for most DGs is to enter them into the system of record by using its back-office User Interface (UI). The UI enforces dual human entry of winning numbers, share values, and other game/draw activities as applicable. After the Lottery's operations team performs its manual entry of the draw results – accessed via secure connection to the Primary Data Center's (PDC) back-office UI – our West Virginia iLottery operations staff will perform their part of the dual draw-results entry via secured connection to the same PDC back-office component.

Dual Manual Draw Results Entry (Double Blind)

Dual manual entry of winning numbers protects lotteries. It ensures no one person has control over a draw and can commit fraud, and it protects a lottery from a single incident of operator error that could impact players and that lottery's reputation.

Beyond Double Blind

Please note that IGT is not limited to the double-blind approach. We can fully support your desire to import results from a CLC or third-party system, including importing of Keno results every four minutes, for example. We can support the import of winning-results data for all games by receipt of messaging via an exposed REST endpoint or the consumption of encrypted XML files. Further, our rapid-draw Keno Game supports the real-time computerized receipt of winning numbers via Application Programming Interface (API), as well as the back-office UI, if necessary. We look forward to discussing your needs in this area and will support your preferred approach.



Our system of record enforces dual manual entry by requiring entry of the draw results through two different application screens. To further ensure the integrity of the process, we can configure access to the two screens to require two different users to login (i.e., define permissions to ensure separate users are performing each function). Beyond that, our dual entry process can be from two different locations.

Once a draw attains the appropriate status (e.g., Draw Closed) and before it is set such that all divisions are payable, the following process takes place:

- An authorized user accesses the Enter Winning Numbers screen for the game and enters the winning numbers.
- A different user then enters the winning numbers on the Verify Winning Numbers screen. (This second screen can be accessed only after the winning numbers have been entered on the first screen.)
- Once the numbers entered by each user match (and they must match for the process to continue), the winning numbers can be displayed to the public.
- If the numbers entered on the two screens do not match, the system of record rejects the entire process and both entries need to be repeated. All attempts are logged in the Master Journal File (MJF) of each of the system of record's transaction-processing engines, successful or not. Entry screens of successful attempts can be automatically printed, and a file created and delivered to the Lottery for updating other systems.

These checks provide an added layer of authentication that will ensure the integrity of the Lottery.

We will make the essential back-office UI accessible from the Lottery's office to ensure that the process for dual manual entry of draw results can be performed.

4.13.1.2 Purchase Features

The Vendor should provide all necessary requirements to manage DGs, including wager options, multi-draw selection, number selection, add-ons, and draw break management.

Vendors should describe their capabilities to support purchasing of DGs, including single tickets, subscriptions, or other innovative methods for selling these types of games.

IGT has read, understands, and will comply with this requirement.

The highly configurable iLottery System makes it possible to offer a range of purchase types (single draws or multidraws, manual selection of numbers or Quick Picks, add-ons, single-game or shopping-cart purchase, etc.).

(Please note that the player-facing screens throughout this section are examples only from our product baseline. The implemented solution will align with West Virginia Lottery design guidelines.)



Purchase Example: Draw and Keno Games

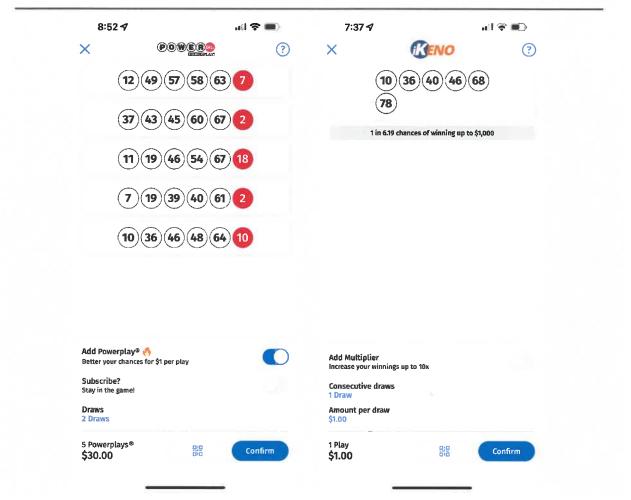


Figure 4.13 – 1.



Purchase Example: Numbers Game

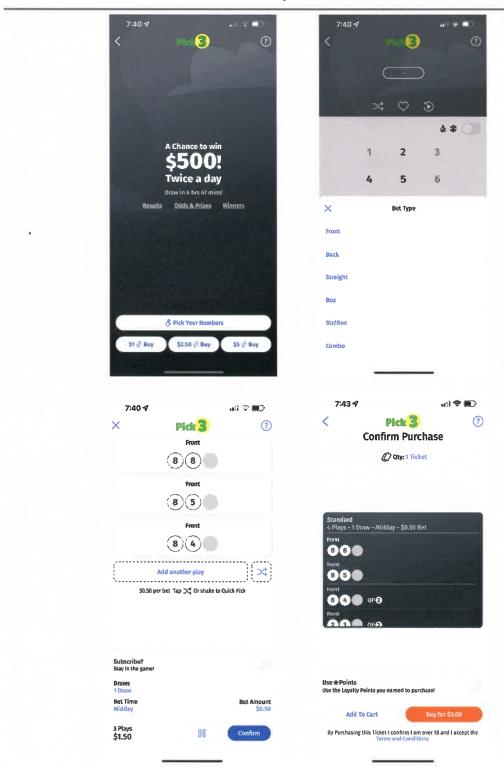


Figure 4.13 - 2.



There are no limitations to the availability of Draw, Numbers, or Keno games, wager options, or other game parameters – even system wagering is available to expand a player's capabilities.

Purchase Examples: Manual Selection or Quick Pick

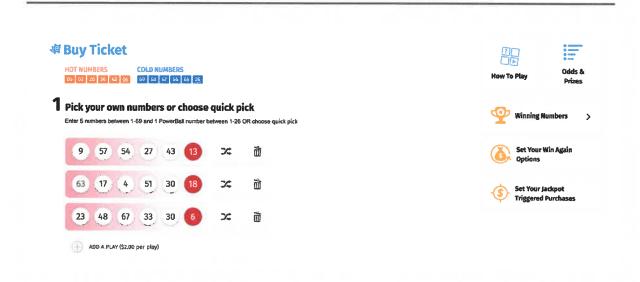


Figure 4.13 - 3.

Wagering via the digital channel is available 24/7/365 with only a few minutes of downtime to switch over to the next processing day; however, during this window players can still configure and set up purchases for when wagering is available again.



Digital Play Slip: Convenient Purchase Option to Support the Retail Channel

Whereas the convenience version of the digital play slip carries only the ticket information itself, light-to-fully registered players can enjoy an enhanced Connected Play digital play slip. (For details on the digitalized retail experience we call Connected Play – which IGT alone can offer the Lottery via full integration of the iLottery System with the Lottery's existing Aurora retail gaming system – please see Section 4.18, Retailer Support.)

Players use the mobile app to select their numbers, store them (possibly as their favorite numbers), and create a digital play slip that is then scanned at the terminal to produce a ticket.

But with Connected Play, the scanned digital play slip carries the player's ID and all player-configured preferences (digital vs. paper ticket, auto-payment of winnings to the Player Wallet, responsible gaming limits, etc.). This convenient option bypasses the need for paper, aligning with players' growing "war on waste" and contributing to the Lottery's sustainability goals.

Moreover, this feature provides retailers with the details to identify the individual player at the point of sale and the Lottery with individualized details on the retail transaction. Players using the enhanced digital play slip can earn points for purchases at retail (if a loyalty program is configured) and transactions will be recorded within the player's account. In addition, if the player's preferences for digital ticket and autopay options are set to Yes, tickets are recorded within the player's account and processed for payment of prizes.

Value-Adding Play Features for the Digital Channel

eSubscriptions: "Never Miss a Draw"

Players can make a subscription of any DG purchase (excluding Keno games) via the mobile app and website. They can select either continuous play for uninterrupted play or a specific number of draws.



Subscriptions User Experience

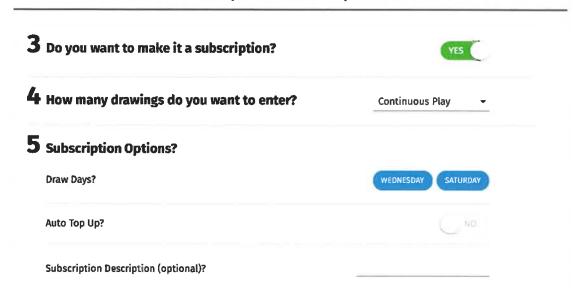


Figure 4.13 - 4.

eSubscription wagers are no different than normal wagers; they're part of the same draw, same prize pool, and same rules and regulations. Prizes are paid the same way, as part of the autopay process described in Section 4.10, Claims & Payments. Responsible gaming configurations and geolocation checks work the same for eSubscriptions as for any other digital play during the time of purchase and as required during a renewal cycle. This ensures a consistent and familiar experience for players regardless of how they decide to play.

The following table highlights key benefits of our eSubscription solution:

eSubscriptions Features	
Feature	Details
"Continuous Play" Auto-Renewal	 During the eSubscription order, players can request that the subscription be renewed automatically
	 The digital platform automatically extends a subscription, when the subscription has been selected to be auto-renewed, if funds are available in the Player Wallet. If they're not, we send a reminder to let the player know they deposit funds into their account from their linked payment source. Players can also select Auto Top Up to automatically replenish funds when their account is low
	 To ensure a player truly intends to renew a subscription, the solution can automatically send the player a renewal notice when the subscription is nearing its end date
eSubscription Ending and Replay	 Players whose subscriptions are ending and are not set to auto-renew are sent a notification prior to expiration
	 If a subscription has already ended, a player can easily choose to replay that subscription
	 A platform-level subscription-cancellation capability is provided through the customer-service administration interface



eSubscriptions Features

Feature	Details
Self-Maintenance	 Subscription users maintain their own accounts
	 Players can easily check the status of their subscription (e.g., How many wagers are left? What is the current end date? Is auto-renew enabled?) via the website or mobile app. Players can log on and see how many plays are remaining and if they have an outstanding prize
	 Players can pause an eSubscription at any time and restart when they're ready
Automatic Prize Payouts	 Subscription wager winnings are automatically paid to the recipient's account for all low-tier winnings (i.e., those that don't require redemption at a lottery claim center). For high-tier winnings, the platform integrates with the Claims And Payment (CAP) application, by which players can be paid:
	 Electronically: With the platform's payment gateway solution, players can enter their bank account information, which will then allow for winnings to be transferred from the Player Wallet to that account via Electronic Fund Transfer (EFT)
	 Via cheque: Cheque payments are processed via CAP
	 This minimizes administrative work and the mailing of small warrants (which can make operating a subscription service more labor-intensive)
	 Additional revenue can be gained from players using their winnings for additional lottery-game purchases
Subscription-Specific Responsible Gaming	 The Lottery and its players can set limits on the amount players can deposit to purchase subscriptions
Subscription Cancellation	 Includes a platform- and player-level subscription-cancellation capability

Figure 4.13 - 5.

The iLottery System will process new subscriptions and updates by players' completing a form (including basic account registration and subscription payment) via the Lottery's web portal and mobile app. Once the player's payment is complete, the digital platform submits the wager to the system of record's transaction engine so the player can begin participating in drawings.

Players who have successfully registered, logged in, and complied with geolocation, age verification, and payment requirements or other jurisdictional requirements will be able to create, view, and update a subscription from the website and mobile app. The digital platform can set up multiple subscription options and duration parameters for players.

Through the entire eSubscription life cycle, players know exactly where their subscription stands. We'll send them renewal reminders, win notifications, and more as their eSubscription journey unfolds.



Lottery Users' Subscription Configuration & Management

Authorised administrators will be able to configure the parameters available for player subscriptions. It is critical to the success of a subscription program that players can purchase subscriptions for the next available draw, as well as for small lengths of time, in a way that is not intimidating to them. We have configurable system parameters that will give the Lottery flexibility for subscription lengths – from a single draw up to a configurable number of entries. Thus, players can set duration parameters for their subscriptions, which can help responsibly maximise sales.

Authorised Lottery users will be able to use the player-engagement platform's administrative UI to manage subscription accounts, including:

- Communications: The Lottery can send electronic messaging via any notification method the player has opted into (email, Short Message Service [SMS], push, and portal). These messages can include subscription-purchase confirmations, renewal notices, account status changes, winning-payment deposits, or other player or marketing information.
- Providing Player Services to Subscribers: You will be able to access all player information, transaction, and behavior data (all stored in the PAM database) and provide personalised player services.

Group Play: "Digital Office Pool"

Our Group Play solution is an exciting way to expand player engagement with a social component. A refreshed, modernized version of the office pool (or wager pooling), it allows players to form their own groups and pool their money. Players increase their odds of winning a share of a jackpot while still paying the same amount per ticket.

Players can join their friends or co-workers and play their favorite DGs on any device, providing everyone with a convenient social-play experience and a chance to win. A player can either create a group (and be the group captain) or join an existing group. Included are tools for the group's captain to follow simple steps to create the group, manage the group, invite friends to play, choose the game, and make the group's purchase.



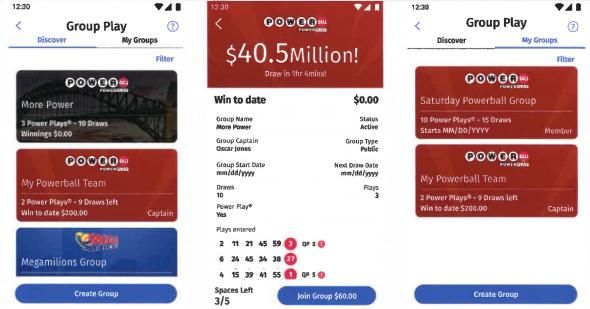


Figure 4.13 - 6.

Incremental Wagering

Our iLottery solution utilizes the same wager parameters available on the retail game engine, allowing players to place bets for different amounts depending on their preferences and the options available.

Play-It-Again: "Convenient Replay"

The player can replay a ticket up to X weeks (configurable; usually just a few weeks) since its last draw. (The board information is stored on the host for a configurable amount of time.)



Play-It-Again User Experience

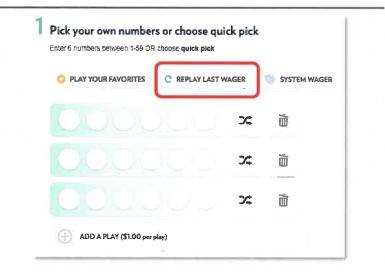


Figure 4.13 – 7.

System Wagering: "Combine Your Favorite Lucky Numbers"

Players can purchase plays of all the combinations of a subset of preselected numbers — a convenient way to purchase every combination of their lucky numbers. In this scenario, the player selects more than the required numbers on a game board.

For example, in a game 6/59, the system calculates all the 6-digit permutations out of all the selected numbers:

- System of 8 selections: 28 simple bets.
- System of 9 selections: 84 simple bets.
- System of 10 selections: 210 simple bets.
- System of 12 selections: 924 simple bets.
- System of 13 selections: 1,716 simple bets.



System Wagering User Experience

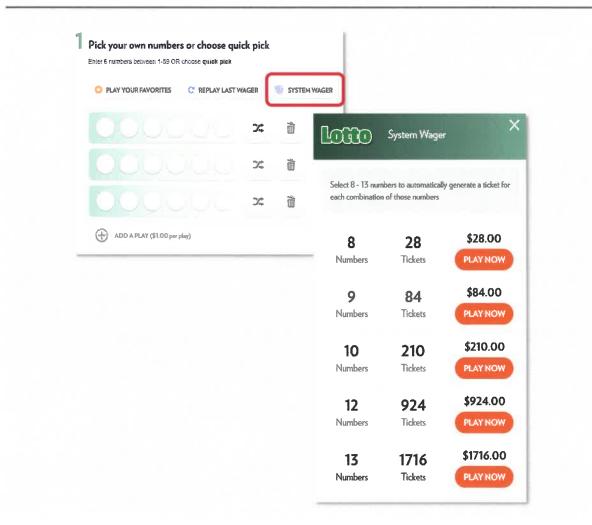


Figure 4.13 - 8.

Package Play: "Buy DG Packages by Price Point"

You can select and configure packages on any specific games (e.g., by price point) at any specific times you want, offering players discounts on those games when purchased as a packaged bundle. This represents an additional promotional tool that allows players to add purchase multiple DGs with one click.

Win Again: "Pocket-Change Reinvestment"

Facilitating "pocket change reinvestment," players can opt to automatically reinvest low-tier winnings to a new game. Players choose a winning-level threshold that triggers purchase of another ticket, and the amount they want to reinvest.



Win Again User Experience

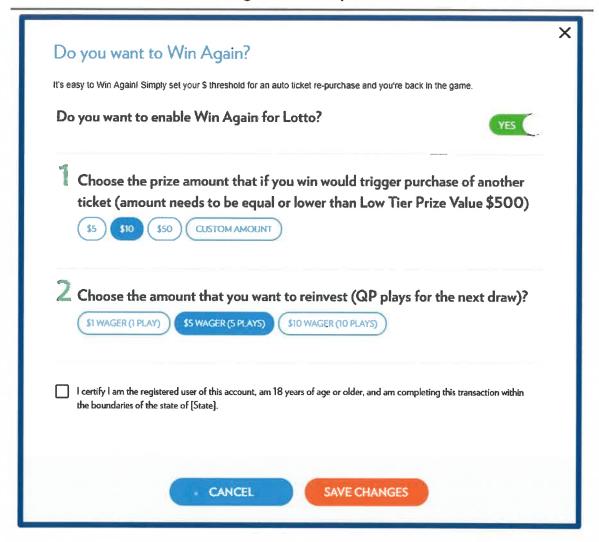


Figure 4.13 - 9.



Jackpot Triggers: "Never Miss When a Jackpot Is Hot"

To provide additional convenience for highly jackpotconscious players, individual wagers can be configured to take effect only when a jackpot exceeds an established threshold. Though not a subscription purchase at that time, this functionality operates like a subscription to purchase a wager at a certain threshold and, as such, purchases only a single wager at that time. Configurable for each DG, this feature offers both manual pick and Quick Pick.

Draw-Break Management

IGT provides a configuration parameter for every game so the Lottery can configure the duration of a draw-break based on its business needs. There are no system limitations as to how quickly we can enable sales for the next draw — that will be completely up to the Lottery.

Enabling payouts for a draw that has just closed depends on the type of game and what manual steps the Lottery mandates. Keno, for example, will autopay winners immediately after the draw closes and receipt of the winning numbers. For games with fixed payouts, prizes will be autopaid within a few minutes of entering and verifying or import of the winning numbers.

Parimutuel-style games that require prize amounts to be calculated based on sales will require import or dual entry of the Lottery's share values, after which the applicable parimutuel wins will be autopaid. The system

Jackpot Triggers User Experience



Figure 4.13 - 10.

of record simply needs to determine the number of winners for each prize division before the externally shared values can be calculated. If needed, a game can be configured to require an individual to manually approve the results before winnings are autopaid. Autopay can execute for MUSL games as soon as the MUSL-confirmed prize amounts have been dual-entered.

We will make the essential draw-management back-office UI accessible from the Lottery's office to ensure that the process for dual manual entry of draw results can be performed if no programmatic method is available (as further discussed above in Section 4.13.1.1, Drawing Operations).



4.13.1.3 Liability Caps

As required by the Lottery, Vendor should interface with the Traditional Lottery Central Gaming System to manage any liability caps associated with DGs. For example, the ability to support a Lottery-specified cap of \$850,000.00 Daily 4 tickets of the same number combination that may be sold in any given drawing pool combined across the retail and iLottery channels.

IGT has read, understands, and will comply with this requirement.

Because we will fully integrate the iLottery System with your existing Aurora retail system, the Lottery will have one pool of wagers for its entire business – i.e., rather than merely interfacing, we'll be able to use the same single pool to cover the sales of both the retail and digital channels.

Tracking liability caps for various number combinations in Numbers games is critical. In our unique solution, when a Numbers wager is placed (or a subscription is created), the corresponding game liability and sales are updated for the respective draws to ensure the pool adheres to the liability restrictions and to track a collective liability limit across the retail and digital channels. The share calculation applies to the single wager pool, and winners are broken across the entire pool regardless of the channel by which the sales originated.

4.13.1.4 Step Down Management

The System should have the ability to step down wagering functions when a game matrix has a planned configuration change. For example, if the Powerball matrix is set to change in four weeks, the ability to automatically throttle down multi-draw wagers in order to prevent the sale of tickets that would be ineligible.

IGT has read, understands, and will comply with this requirement.

Our system of record provides a step-down utility that gradually reduces the number of multiple draws available. On the night of game termination or a game change, the system of record will allow the suspension of sales after the last draw of the day and until the change to the new matrix has taken place. The step-down program is customized for each game but is also part of our baseline set of software tools. Minimal, if any, changes are needed to make this program ready for a step-down. We always recommend a short test to verify the procedures and functionality. But this program can often be ready to run in production in a matter of days.

In addition to stepping down on the system of record, the iLottery System offers additional step-down management on a game-by-game or system-wide basis. This enables the Lottery to cleanly manage:

- Subscriptions and autopay over a game change.
- The iLottery channel separately from retail channel as needed.



4.13.1.5 Third-Party DG Integrations

If applicable, Vendors should describe available methods to integrate with third-party gaming systems that offer DGs including a high-level architecture of system integrations.

A plug-and-play solution, the iLottery System's integration layer exposes a rich set of clean, well-documented REST and Simple Object Access Protocol (SOAP) APIs to simplify the integration process. The third-party game system integrates once with the API (and thus with existing back office) and is spared the incremental effort of implementing multiple adapters for each subsystem. Whenever a new game is added (whether IGT's or that of a third party), it will be available across all your channels (and any player device) instantly.

Effort to Integrate Third-Party Game Suppliers

Integration with third-party remote game servers is enabled via a dedicated layer, called the Game Integration Protocol Layer (GPIL), that exposes APIs through standard web services, including player account services, financial transactions, game session/wager information, and other ancillary services, to provide a full game system integration solution.

We have extensive experience in this area, including cases in which game platforms directly integrated GPIL APIs and we developed an adaptor to integrate third-party gaming systems. (In the latter case, a crucial factor was the quality of the gaming-platform documentation and the descriptions of use cases.)

The following list outlines the effort to connect third-party game content into our System:

- 1. Provide APIs and integration flows or diagrams to the third party, then support the third party through the integration.
- 2. Depending on the type of integration work, also integrate back with the third party.
- 3. Configure the new games. (Games must comply with the jurisdiction's and the regulator's requirements e.g., customisation, payout, Return to Player, responsible gaming, etc.)
- 4. Achieve compliance approval and a certificate.
- 5. Configure financial reports.
- 6. Configure system-level components for the new game provider.
- 7. Thoroughly test the games.
- 8. Receive the lottery operator's approval of the new games.
- 9. Receive any required regulatory compliance approval.
- 10. Transmit Release Notes.

As shown, this process requires commitments from and cooperation between multiple teams before we provide a project plan. While this list provides a general framework for use in any jurisdiction, some jurisdictions have more in-depth compliance requirements or change management processes, which we negotiate accordingly with our customer and the third parties.



4.13.1.6 DG Portal Implementation

Vendors should describe their solution to make the games available and easily purchased through Portals. At a minimum, the Lottery requires that DG games be available for players to browse, customize, and add to a shopping cart prior to, or while logged in.

Our approach is to make it as easy as possible for players to find, learn about, and consider purchasing DG games. Thus, we will design the solution to allow both logged in and non-logged-in players to browse, customize, make their picks, and establish a shopping cart.

Example Flow for Non-Logged In / Non-Registered Player (Mobile Web) JGT. iLottery JGT. iLottery ADD A PLAY (\$2.00 per play) dav's IACKPOT \$1 Billion 2 Do you want to play Powerplay? Last Draw Results 10/01/2022 \$1 Billion YES _33 _44 _47 _51 <u>20</u> POWERPLAY 10x 3 Do you want to make it a subscription? 10/05/2022 10:59 PM Odds & Prizes **Buy Ticket** 4 How many drawings do you want to enter? Package play 1 draw Try a new and easy way to pt 25 29 51 27 31 <u>06</u> 59 58 67 56 65 <u>26</u> 1 Pick your own numbers or choose quick QTY: pick TOTAL: \$3.00 Enter 5 numbers between 1-69 and 1 PowerBall number between 1-26 OR choose quick pick Group play Ticket purchases cannot be canceled or refunded. Pressing the Play Now button more than once may result in multiple purchases. **7**4 ò

Figure 4.13 - 11.

Upon selecting Buy Now, non-logged-in players are prompted to log in – or register, complete with Know Your Customer (KYC) verification – before completing the purchase. After successful completion, they can complete the transaction.



Example Flow for Non-Logged In / Non-Registered Player (Desktop Web)

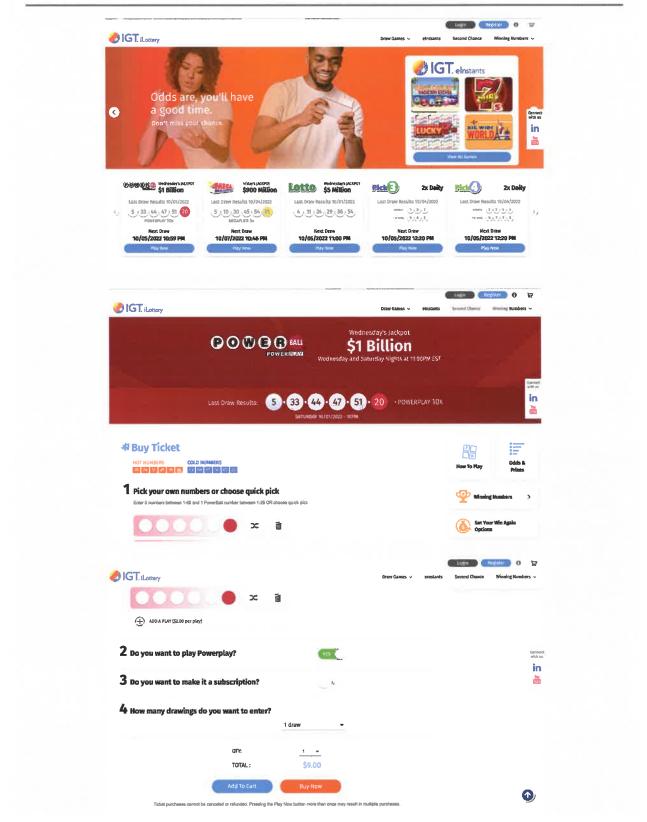


Figure 4.13 - 12.



4.13.2 Interactive Games

The Vendor should provide a full suite of Interactive Games for the initial launch of iLottery. The Vendor should ensure that at least 20% of the Interactive Games are delivered by third-party providers, no more than 6 months after the iLottery launch. Interactive Games and Centralized DGs that utilize Random Number Generator (RNG) technology, as well as the RNG itself shall be tested and certified against GLI-19 at the Vendor's expense by a Lottery approved independent testing laboratory and on an ongoing basis as determined by the Lottery.

IGT has read, understands, and will comply with this requirement.

While the Lottery will have access to our entire eInstants portfolio, our recommended games will feature top-performing mechanics and themes that align with your existing portfolio, as well as high-performing games offered in similar jurisdictions. This diverse portfolio will allow us to analyze all game types to identify which are resonating with West Virginia players. That ongoing analysis will be the cornerstone of game development and selection for future game strategy.

While global data offers us insight into which games perform well, we know that each market has unique nuances. Local player preferences, payouts, and game performance can vary from state to state. Therefore, it's important to perform extensive game analysis and react to the specific local market and player preferences. We have experienced significant growth using a data-driven approach to game selection. Looking at certain Key Performance Indicators (KPIs) allows us to understand which games are attractive to your players and which games offer the best player experience. This knowledge will be an integral component to growing the West Virginia iLottery channel.

IGT's portfolio has accounted for an eInstant sales increase of 298% (\$70 million in Financial Year [FY] 2020 compared to \$310 million in 2022) for the Georgia Lottery during the last three years. A key factor behind this growth was (and is) our continually improving content selection. A key metric for content performance is Average Revenue Per Player Per Game (ARPPU). This metric essentially measures how well a game monetizes its players. The Georgia Lottery's ARPPU metric has improved over the past three years, and is more than 30% annually.

Overview of IGT's Interactive Games

IGT's Interactive Gamess (also referred to as eInstant lottery games) are interactive digital lottery games available for play across multiple devices and orientations. Year-Over-Year (YOY) U.S. eInstant sales grew 6% in FY2022, while IGT's U.S. eInstant YoY gross gaming growth was approximately 45%. This is no surprise, as our company focuses on offering the most diverse game-mechanic library and expert portfolio management services.

With 350+ cumulative years of studio experience, IGT's highly trained, experienced game studio resources focus on both industry best practices and innovation. Our vast studio resources are experienced in delivering omnichannel content and have an extensive licensed portfolio including the most popular brand, Wheel of Fortune®. IGT ensures that its content appeals to the widest range of players to drive acquisition, retention, and revenues for good causes.



The following figure provides an overview of our Interactive Games:



Figure 4.13 - 13.

Our eInstant games are fun, fast-paced, and a perfect fit for players desiring quick mobile transactions. Our games offer innovative designs, advanced animation, and engaging mechanics, to provide an overall entertaining gaming experience. Combined, these factors make our eInstant games perfectly adjustable to fast mobile transactions, and they can be played on other devices such as tablets and computers. With a library of more than 130 HyperText Markup Language version 5 (HTML5) games currently available through our RGS platform – and at least 30 new titles produced annually – we can provide a diverse portfolio of games that engage players, providing both their favorite styles of play and introducing new styles to the game mix. Our eInstants library offers a rich and diverse inventory.

Our iLottery Showcase website, which can be reached at www.IGTiLottery.com, provides playable demos of all games and their corresponding, downloadable asset packs, which include game screens, logos, banners, and more. The Lottery will be able to view screenshots either here or via the IGT Game Studio for any titles approved for inclusion in the Launch Plan.



Diverse elnstants Library



Figure 4.13 – 14.

Game Categories

Diverse Mechanics	Description
Progressive Jackpot	Adding progressive jackpots to an elnstants portfolio is a winning strategy, as these games typically have high sales performance and retention
Modern Play Styles	elnstants innovation ceases to slow down and modern mechanics and play styles continue to be a positive component of North American elnstant portfolios. These modern play styles can include tumblers, expanding reels, linked wins and other complex yet intuitive game play
Traditional Play Styles	Traditional elnstants are similar in terms of play style to physical Scratch-Off lottery games. They attract a lottery's core retail player base while making the transition from retail to digital smooth and seamless
Multi-ticket	Multi-ticket games provide players with a customizable play experience
Casual Play	These offer a longer play duration that appeals to a more casual player. Including these games is a great tool to engage a younger player base
Licensed and Proprietary Brands	Games featuring relevant licensed and proprietary brands like Wheel of Fortune and Cleopatra attract players. They are also excellent long-term sources of revenue as these brands never fall out of favor
Omnichannel	Omnichannel content builds branding and credibility on the digital channel, maximizes marketing potential and promotional activity and provides strong revenues
Seasonal	Games with seasonal themes engage players, allow for increased promotional activity and boost revenue at special times of the year

Figure 4.13 – 15.



Third-Party Integrations

IGT believes in and supports third-party game integrations from many different vendors using our Game Platform Integration API that supports a variety of third-party game engines.

We have integrated, or are in the process of integrating, the top Interactive Game suppliers into our iLottery system and all these integrations can be made available to the Lottery as well as future ones.

The integration API provides game content aggregation services, which allows for a single API to provide a game lobby via portal and mobile solutions with a game-in-progress indicator across integrated game providers to ease the front-end requirements for working with multiple game engines. Game launch parameters are also provided in a clean, efficient manner to facilitate a repeatable approach to launching games, along with a unified game history display via the PAM solution.

This approach has been used in New Zealand, Italy, and Belgium and is currently underway in our U.S. deployments in Kentucky and Georgia. Please refer to Section 4.13.3, Third-Party Interactive Game Integrations, for details.

IGT will ensure that at least 20% of the Interactive Games are delivered by third-party providers, no more than six months after the iLottery launch.

Tested and Certified

IGT, at its own expense and as directed by the Lottery throughout the Contract, will test and certify the Random Number Generator (RNG) for all Interactive Games and Centralized DGs that use the RNG (including third-party Interactive Games) against Gaming Laboratories International (GLI) using an independent testing laboratory.

4.13.2.1

Interactive Games Release Schedule

Vendors should provide a plan for launch and a rolling twelve-month or more release schedule for Interactive Games. The plan should address the game types, game mix, prize structures and rationale. The rationale is defined as examples of research, case studies, and outcomes in other jurisdictions. The provider of each game should be clearly labeled in the Proposal.

Interactive Games should leverage play styles from the Lottery's existing portfolio of games and should also include games that are new, engaging, unique play styles not presently offered, yet are legally permitted by the Lottery. Vendor can view the Lottery's current game examples at www.wvlottery.com. All Interactive Games should be available across the full spectrum of portal types. However, the Lottery recognizes that Apple recently changed guidelines that may inhibit game parity across all portals. As such, Vendors should describe in their plan a matrix of which Interactive games are available within each portal type.

IGT has read, understands, and will comply with this requirement

As discussed in Section 4.15, Marketing and Promotions, we'll provide a Launch Plan and a rolling 12-month or more release schedule for all iLottery games. The Launch Plan, which will include the required game types, game mix, prize structures, and rationale, will be part of the overall Marketing Plan, also described in Section 4.15.



The overview of IGT's Interactive Games, on the previous pages, defines existing play styles, many of which align with your existing portfolio. You will have access to all of our IGT Interactive Games, and we'll make specific recommendations to you based on your current portfolio and objectives for your iLottery program.

Game Types, Game Mix, Prize Structures, and Rationale

IGT recommends an initial Interactive Game portfolio comprising 10-12 games. This portfolio should include a diverse set of mechanics and themes. Diversity in your Go Live game portfolio is important in terms of allowing us to understand the West Virginia player through sales performance and data points for all game types. This insight will allow for a "reaction strategy" on how to approach your game roadmap, tactically and targeted to your players.

The launch portfolio should include high-performing games derived from both the U.S. and global markets. The game portfolio should consist of tumblers, key number matches, casual games, progressive jackpot top prize games, licensed properties, seasonal content, and other varying themes and mechanics. The games should be selected to focus on player acquisition and sales performance.

This will consist of high-performing titles such as the following:

Example of a High-Performing Game



Figure 4.13 - 16.



Sample Screens from Popular, High-Performing Game Titles



Figure 4.13 – 17.

Example of a High-Performing West Virginia Jackpot Game



Figure 4.13 – 18.

IGT proposes that 20% of the Go Live games consist of content from preferred third-party Interactive Game provider IWG, within six months of the initial launch.

Games Available on Each Portal Type

All IGT eInstant games are available on each portal type.



4.13.2.2 Game Format Responsiveness

Vendors should provide screenshots of Interactive Games that depict the change in layout and controls based on device type and screen size. To the extent possible, Vendors should provide access to working demonstration copies of games that are being proposed. Vendors should articulate their strategy to the game development process with specific considerations for usability across portal types.

IGT has read, understands, and will comply with this requirement.

All of IGT's Interactive Games support layout controls based on device type and screen.

Our iLottery game studio follows a robust, thorough, and proven game development methodology. Using consistent, measured milestones during development of a game provides our studio team the opportunity to review the game's design and provide feedback to achieve the ultimate goal – an engaging and optimized gaming experience for players.

Specifically, IGT's game studios follow an Integrated Cross-Channel Framework (IXF) to develop all games. This HTML5-based platform supports a unified game development process that enables games to work seamlessly across and scale to all personal devices – desktop, laptop, tablet, and mobile – for maximum distribution. The framework ensures a responsive design for device-optimized displays, including different screen sizes supporting both portrait and landscape orientations.

The future-proof IXF technology is used by all IGT Game Studios worldwide to:

- Simplify game development.
- Create a smoother, shorter development cycle.
- Speed the delivery of multichannel games to our customers.

IXF provides an API that developers implement to manage communication between the game and the console (game User Interface [UI]). Communication occurs in the context of an event-listening interface that the consoles use to support standard and custom game-play functionality. IXF enables the creation of games with HTML5-optimised asset packs for all channels and the seamless handling of the launch mechanism to load the new IXF game from the RGS back end.

By employing the same development tools across all channels, IXF enables the use of:

- Consistent logic engines.
- Common asset libraries.
- Uniform internal controls, processes, and marketing kit assets.

This yields more reliable build, test, staging, and production environments. Here's how it works:

At both the concept and pre-production stages, the game producer presents the game flow and game screens in both portrait and landscape orientations to the entire game studio. Only if the game is optimized for both orientations will the game be approved for production, as it is essential that a player be able to enjoy a game on whatever device and in whatever orientation they prefer.



Our game quality assurance process puts a game through extensive testing on a wide variety of devices, operating systems, browsers, and orientations. A robust set of test cases ensures maximum possible coverage and support.

IGT eInstant Game Examples in Portrait and Landscape Mode: Dragon's Spawn, Pots O'Plenty, Cleopatra Clusters Jackpot



Figure 4.13 - 19.



Screen Banner for Popular Wheel of Fortune Game

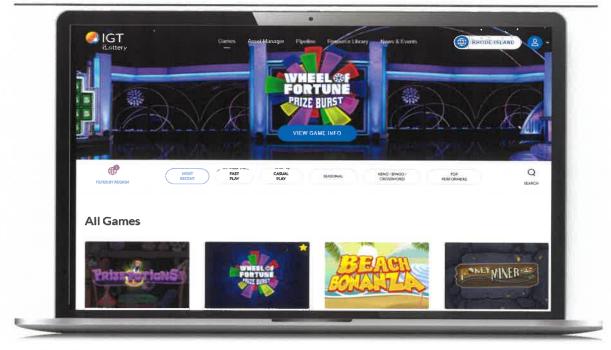


Figure 4.13 - 20.

4.13.2.3 Interactive Game Customization

Interactive Games should be customized to meet the specifications of the Lottery such as price points, prize structures, and graphics changes that do not affect the core mechanics of the game.

If the Vendor proposes Interactive Games that do not meet the Lottery's standards for social responsibility, such as the use of inappropriate imagery, the Lottery, at its sole discretion, may require replacement games at no additional cost.

IGT has read, understands, and will comply with this requirement.



4.13.2.4 Demo Games

All Interactive Games should have a demo version available (i.e., Play for Fun) that players may use for trial and the Lottery may use for testing. Demo games should utilize a payout percentage and pay table equal to approved Interactive Games.

IGT has read, understands, and will comply with this requirement.

IGT will provide demo versions of all Interactive Games for player trial and Lottery testing. The demo games will replicate the payout percentage and pay table for Lottery-approved Interactive Games.

IGT's games include a Try (free play) Mode functionality that allows players to sample the games (in Try Mode) before purchase. The play experience is the same as that of the Buy Mode (including in terms of odds) with one exception – in-game labels and messaging clearly indicate when a game is in the free-play mode and that the player has not won any prize at game's end.

As shown in the next figure, the game displays the word Try in the game's Ticket Cost window and on the Try button (which the player clicks/taps to begin the sample play). In addition, the word "Demo" appears in the Win box; a Move To Money button is available; and the game's closing message reads "You could have won \$X" as opposed to "You have won \$X."



IGT's Emoti eInstant Game in Try Mode



Figure 4.13 – 21.



Currently, we offer these games in Georgia, Kentucky, and Rhode Island in the U.S, as well as in New Zealand, Belgium, Canada, Finland, Italy, Luxembourg, and Norway. We welcome the opportunity to discuss our solutions with you (available from a content perspective all the way to a fully functioning solution) to determine their potential applicability in West Virginia.

4.13.2.5 Price Point Capabilities

The System should support the ability for games to be offered at varying price points starting at \$0.01 in order to maximize consumer choice. Vendors should describe how prize structures relate to price point selections with Interactive Games and any configuration options that are available.

IGT has read, understands, and will comply with this requirement.

IGT can currently offer eInstant games at multiple, configurable price points ranging from \$0.01 to \$999.99. Our price points and prize structures are customizable according to the prize table relationship. Any price point and top prize can be achieved.

4.13.2.6 Prize Pool Configuration

Vendors should describe their capabilities and recommendation, to support Interactive Game prize pools such as depleting or replenishing prize pools. Vendors should specify any differences in methodology among third-party game providers.

IGT has read, understands, and will comply with this requirement.

We support both static and depleting pools with custom triggers to replenish or replace tickets in the pool per customer-specific requirements.

Depleting Pools

Our games provide three depleting pool options (top-tier replenishment, top-tier replacement, or sell-out replacement), offering the Lottery significant flexibility in its Interactive Game distribution strategies. With this range of selections, you will have games that work for you and your players.

Top-Tier Replenishment

Top-tier replenishment is like those instances when a lottery finds that no top prizes remain in a Scratch-Off retail game and then decides it will release a new pool for the game while retaining the remaining tickets.



Dynamic Grid - Sellout Replacement

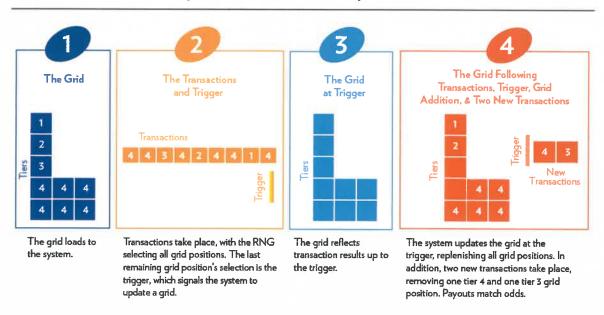


Figure 4.13 - 22.

With Interactive Games, when a game play purchase hits the last top-tier prize, the pool's migration is triggered to a new iteration, where the pool is comprised of the same number of game plays as the original pool combined with the remaining game plays from the original pool.

Top-Tier Replenishment Considerations	
Pros	 The top prize is always available Top-tier replenishment generally reduces liability – winning the top prize may grow more difficult as more pool iterations load
Cons	 The odds change as each game play sells (as with Scratch-Off under this method) The odds of winning a top-tier prize change when a new pool is added (as with Scratch-off games under this method)

Figure 4.13 - 23.

Top-Tier Replacement

Top-tier replacement is similar to top-tier replenishment in that a new pool is added to the system when no top prizes remain. However, with top-tier replacement, the system replaces the remaining game plays instead of retaining them. When a game play purchase hits the last top-tier prize, this triggers the pool's migration to a new iteration with the same number of tickets as the original pool.



Dynamic Grid - Replacement

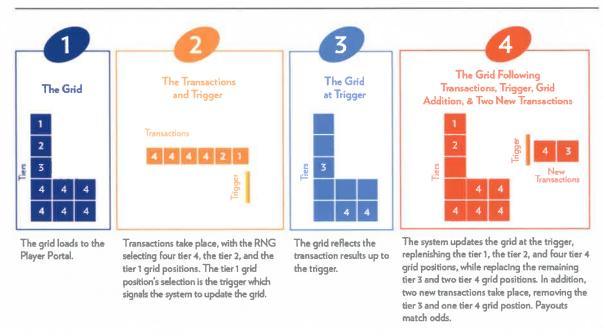


Figure 4.13 - 24.

This process is equivalent to the common Scratch-Offs practice where a lottery removes unsold Scratch-Offs from a pool when no top prizes remain and then adds a new pool to the game.

Top-Tier Replacement Considerations		
Pros	The top prize is always available	
Cons	Careful prize structure construction is required because this option can result in prize-pool underfunding. For example, in a pool of 2 million game plays with one top-tier prize, on average, the top-tier prize game play will sell before or close to the 1 million game play mark. This means that the residual 1 million game plays will never sell and therefore their sales will not contribute to the prize pool	

Figure 4.13 - 25.

Sell-Out Replacement

With sell-out replacement, the last game play's sale triggers the pool's migration to a new iteration. Like top-tier replacement, the new iteration contains the same number of game plays as the original pool.



Dynamic Grid - Sellout Replacement

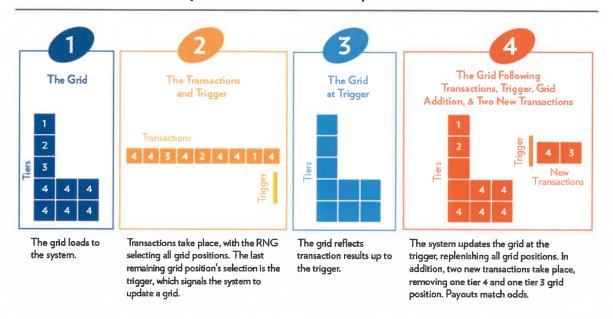


Figure 4.13 - 26.

Sell-Out Replacement Considerations

Pros	The liability per pool is known
	The top prize may not always be available Some prize tiers will not always be available As the grid diminishes, having only non-winning game plays remain is a possibility

Figure 4.13 - 27.

Non-Depleting Pools (Based on Chance, Not Skill)

Interactive Games also work with static pools (grids), giving the Lottery an additional choice for distributing its games. They do not migrate to new iterations (i.e., the grid does not change as each game play sells) – it stays on the same iteration (non-depleting) for the life of the game or until an authorized user changes it. This provides the ability to offer games where every player always has the same chance of winning. Because the grid is static, top-tier prizes are always available, and odds never change.



Static Grid

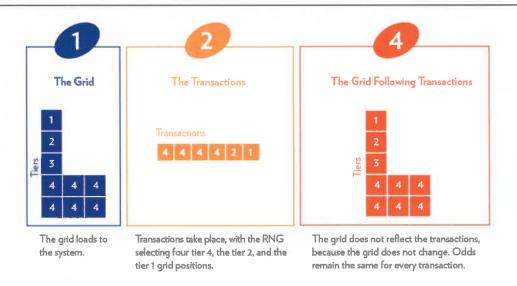


Figure 4.13 - 28.

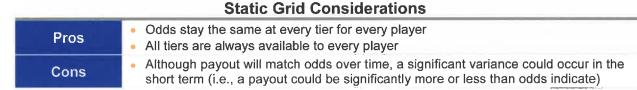


Figure 4.13 - 29.

Fixed Prize Structure Liability

Static grids can provide fixed-prize-structure liability. Though static grids do not give a fixed liability in the short term, they do tend to have the same liability as depleting pools over the long term – they provide fixed *odds* of winning a particular prize.

4.13.2.7

Winner Determination Method

Interactive Games and Centralized DGs shall utilize random winner technology ("RWT") that is certified by a Lottery approved independent testing laboratory on an ongoing basis. Vendors should describe the method of winner determination (e.g., instantly awarded prizes, random drawings, etc.) for each proposed Interactive Game and Centralized DG. For ease of explanation, a Vendor may create categories of Interactive Games and Centralized DGs if the same method is employed broadly across many games.

IGT has read, understands, and will comply with this requirement.



Our proposed iLottery System includes our RNG server, Flexdraw, which is most often relied on for winner determination for games such as your KenoGo and CA\$H POP. This is a traditional random number generator. For eInstant games, we use a Szrek2Solutions winner determination solution that executes the prize pool scenario described in the previous section to determine winners. We will provide an appropriate method in this area for either centralized or decentralized games.

4.13.2.8

Engagement Features

Vendors should describe any mechanisms that can further engage new and existing players leveraging fun, competitive, or cooperative tactics. This may include features such as chat, badges, unlock features, and leaderboards ("Engagement Features").

Describe how these features may, or may not, work cooperatively with any third-party games.

Engagement Features shall be securely exposed to third-party iLottery Game developers and offered as a centralized service across the System. This centralized service may also be exposed to the player loyalty vendor and other vendors. At a minimum, the System shall support the following Engagement Features:

IGT has read, understands, and will comply with this requirement.

Our games can be designed to use persistence, which means we can enhance the player experience by unlocking new levels, allowing players to collect items or upgrades, and award in-game graphical upgrades. None of these impact the predetermined outcomes of the games.

4.13.2.8.A Chat

A feature that allows players to interact with each other while playing the same iLottery Game.

IGT has read, understands, and will comply with this requirement.

IGT has offered a chat solution for players in some of our gaming products over the years, and we'd be happy to work with the Lottery to determine the optimal strategy for implementing and sharing a player-to-player chat solution.

4.13.2.8.B Social Sharing

A feature that allows social network sharing of games and game outcomes such as winnings.

IGT has read, understands, and will comply with this requirement.



Our mobile and portal solutions have provided quick links for players to decide to share details of their wins or other areas they might find of interest on the iLottery solution. IGT will work with the Lottery to determine the optimal placement of these sharing links to enable players to share via their social networks.

4.13.2.8.C Leaderboards

A feature that allows players to post names and scores, and/or other System data, to a public GUI that provides numerical ranking.

IGT has read, understands, and will comply with this requirement.

Leaderboards have been offered as a feature of our IGT Interactive Gaming portfolio. We will work with the Lottery to determine the optimal means to use this feature, as part of the iLottery solution, allowing players to share details of their wins and be ranked against other players.

4.13.2.8.D Individual Winner Awareness

Features that display recent winners, updated in near real time, along with the player name, city, among won and game played.

IGT has read, understands, and will comply with this requirement.

A feature of our standard iLottery solution is a winner awareness area that scrolls as part of the various integrated game solutions. The lists are configurable via the available API, allowing the Lottery to configure the games and prize values to be part of its winner awareness program.

4.13.2.8.E Aggregate Winner Awareness

Features that display total prizes paid, updated in near real time, that are displayed by game or groups of games.

IGT has read, understands, and will comply with this requirement.

IGT's iLottery solution provides multiple sources of winner awareness. The overall draw games winner awareness, for the outcome of a draw, is presented to players once the draw is finalized and results are available. Additionally, there are feeds available on the game pages for recent winning history for both retail and digital draw game purchases. We will work with the Lottery to enhance the winner awareness function to provide the most optimal player experience across your brand.



4.13.3 Third-Party Interactive Game Integrations

The Vendor should have a minimum of one, third-party provider game libraries available within one year of launch. Game library integrations, once completed during an initial project, should provide capabilities for a continuous pipeline of third-party games from that provider without the need for additional integration efforts other than the standard quality assurance cycle. All third-party games and system integrations shall be tested and certified by a Lottery approved independent testing laboratory to comply with Lottery adopted GLI-19 standards. Vendors should describe in detail the high-level integration method, workflow, responsibilities, and capabilities utilized to accomplish third-party game library integrations with the System. The description should specify existing integrations and proposed integrations.

Per Addendum No. 3, the Lottery has changed this requirement to read:

The Vendor should have a minimum of one, third-party game integrations, and at least 20% of game mix originating from third-party providers, within 6 months of iLottery Launch. Game library integrations, once completed during an initial project, should provide capabilities for a continuous pipeline of third-party games from that provider without the need for additional integration efforts other than the standard quality assurance cycle. All third-party games and system integrations shall be tested and certified by a Lottery approved independent testing laboratory to comply with Lottery adopted GLI-19 standards. Vendors should describe in detail the high-level integration method, workflow, responsibilities, and capabilities utilized to accomplish third-party game library integrations with the system. The description should specify existing integrations and proposed integrations.

IGT has read, understands, and will comply with this requirement.

In all, IGT will provide the required 20% of the games from third-party provider Instant Win Gaming (IWG), within six months of the initial launch as indicated in Section 4.13.2, Interactive Games, of our Proposal.

Integration Method, Workflow, Responsibilities, and Capabilities

The iLottery platform of IGT's iLottery System includes a dedicated integration layer. As an enabling framework, the integration layer permits the construction of a System comprising multiple game engines.

As stated previously, integration with third-party remote game servers is enabled via a dedicated layer, called the Game Integration Protocol Layer (GPIL), that exposes APIs through standard web services, including player account services, financial transactions, game session/wager information, and other ancillary services, to provide a full gaming-system integration solution. We have extensive experience in this area, including cases in which game servers directly integrated GPIL APIs, and we developed an adaptor to integrate third-party gaming servers. (In the latter case, an important factor is the quality of the game server documentation and a clear description of all use cases.)

Following is an outline of the effort required to integrate third-party game content into our iLottery System:

- 1. Provide APIs and integration flows or diagrams to the third party, then support the third party through the integration.
- 2. Depending on the type of integration work, also "integrate back" with the third party.



- 3. Configure the new games (games must comply with both the jurisdiction and regulator's requirements e.g., customization, payout, return to player, responsible gaming, etc.).
- 4. Achieve compliance approval and certification.
- 5. Configure financial reports.
- 6. Configure system-level components for the new game provider.
- 7. Thoroughly test the games.
- 8. Receive the lottery customer's approval of the new games.
- 9. Receive any regulatory compliance approval that is required.
- 10. Transmit release notes.

As can be seen, this process requires commitments from and cooperation between multiple teams before we can provide a project plan. While the above outline provides a general framework for use in any jurisdiction, some jurisdictions have more in-depth compliance requirements or change management processes, which we negotiate accordingly with that customer and the third parties.

Existing and Proposed Integrations

IGT game integrations are live in Belgium, Italy, and New Zealand. Proposed integrations are under way in Georgia and Kentucky.

4.13.3.1 Third-Party Game Contracts

The Vendor should be responsible for contracting with all third-party game providers and should impose the same, or greater, standards for game specifications and performance as specified in the Contract. The Vendor may pass the cost of all-third party game provider content at original cost plus integration fees to the Lottery. Integration Fees and costs for third party games should be documented per third party vendor integration and be approved by the Lottery prior to implementation.

IGT has read, understands, and will comply with this requirement.

As indicated in previous sections, we have identified IWG as our primary third-party Interactive Game provider. We know IWG is seen to be a leader in game quality, and it is a company that continues to meet our customers' standards, specifications, and contract requirements. We will impose the same quality standards on any additional third-party providers whose games we intend to integrate, with the West Virginia Lottery's approval, during the Contract.

Third parties like IWG substantially enhance IGT's already deep portfolio of Interactive Games. We are experienced in integrating their games into customer launch plans based on data insights and identified needs. We recommend them for consideration as a third-party provider to the West Virginia Lottery. Their Interactive Games complement our own library and, combined with ours, will further maximize your reach to the widest base of players. And IWG is a great fit in terms of your objective to obtain solutions that provide high standards for player satisfaction and which are designed to meet your evolving business needs.



IWG is a world leader in supplying Interactive Games to NASPL and WLA-member lotteries. IWG has a 20-year history of innovating lottery-style Interactive Games exclusively. No other third-party supplier has focused on this category in the same dedicated way. Today, IWG supplies Interactive Games to 29 NASPL/WLA-member lotteries worldwide. Here in North America, NASPL-member lotteries with IWG Interactive Games include:

Contracts with IWG as Third-Party iLottery Game Supplier

North American Lottery Location	Lottery Jurisdiction
Canada	 Atlantic Lottery Corporation British Columbia Lottery Corporation Manitoba Liquor & Lotteries Loto Québec Ontario Lottery & Gaming Corporation Saskatchewan Gaming Corporation
United States	 District of Columbia Georgia Lottery Corporation Kentucky Lottery Corporation Michigan Lottery New Hampshire Lottery Pennsylvania Lottery Virginia Lottery

Figure 4.13 - 30.

Each year, IWG develops more than 300 new Interactive Games for its global base of lottery customers. Its Interactive Games consistently perform at the highest level, engaging and retaining players while driving superior sales results.

IWG delivers its Interactive Games via its InstantRGS (remote game server). InstantRGS is architected to be central to how IWG develops and delivers its advanced game features. As a result, new product innovations from IWG are 100% contained within their InstantRGS, and do not require any technical support at the iLottery System level to deploy.

IGT regularly partners with IWG. We have previously integrated with IWG here in the U.S. for both the Kentucky and Georgia lotteries. Additionally, we have integrated IWG for the Belgium National Lottery, Norsk Tipping, and Lotto New Zealand.

In our preparation of this CRFP response, we fully reviewed your CRFP with IWG, and they have affirmed to us that they either meet or exceed all your stated requirements for third-party Interactive Game providers.

Further, IGT has reviewed its own project plans with IWG, and should they be selected by the Lottery as your preferred third-party Interactive Game provider, we commit to completing our West Virginia Lottery integration with them so that their games will be available as part of our launch portfolio, exceeding your stated delivery requirement.

IWG values its partnership with IGT and has offered to serve as reference for us in support of this Proposal.



4.13.3.2

Third-Party Game Reporting

The System should provide reporting that is inclusive of third-party games.

IGT has read, understands, and will comply with this requirement.

IGT understands that, in today's digital world, data has become a fundamental corporate asset whose effective use is key to the success of any business. As systems to manage a digital business and maintain a profitable relationship with players proliferate, so does the volume and sources of data. This provides both opportunities and challenges in terms of integrating and managing data to capitalize on the huge potential it offers.

The iLottery System comes equipped with robust operational reporting capabilities. Operational reports leverage data sourced from multiple databases across the iLottery System and provide a view into all digital business operations. They span a wide range of pre-built reports (including automated end-of-day reports) and the tools (drag and drop) to create custom reports based on all the data collected in the transactional database.

Reports regarding third party games will be included in the following baseline reports.

- Wagers: Standard reporting includes total sales/wagers, unique players, and average spend per product. Additional reports include:
- Game: Shows an aggregate of activity across each game over a defined period. This includes the number of players, number of games played, amount wagered, amount won, and gross gaming amount.
- Player Sessions: Shows all player sessions and their associated financial details. This includes player ID, session ID, IP address, game session start and end timestamps, game, wagered amount (real money and bonus cash), winning amount, jackpot amount, and gross gaming amount.

Operational reports (tabular and graphical, pre-defined and user-defined) can be viewed via the back-office administrative UI. Users can access Tableau data visualizations that offer further visibility into your digital business, including breakdowns for all sales channels.

The iLottery System's data warehouse will include data related to daily digital-play activities. It logs all transactional data, including wagers and wins of all games and data on any integrated third-party games.

4.13.4

Games Lobby Portal

Vendors should describe their solution to implement a catalogue of digital games into the portals ("Games Lobby"). If the solution requires third-party implementation support, such as from a website or mobile app provider, the Proposal should clearly state the assumptions, roles, and responsibilities necessary to deliver the Games Lobby.

IGT has read, understands, and complies with this requirement.

Once a game has been integrated, it can be enabled or disabled on any device – whether the player portal or a mobile app – using the IGT Games Admin module.



With our solution, games can be tagged to indicate how they should be displayed to the player. For example, new games could be tagged so they are displayed prominently in a carousel on the player portal or app.

The Games Admin module can also be used to change the display features of a game, such as the icon used and its size. No coding is required.

Games Admin

The Games Admin front-end game-management interface enables you to access and manage game information for both IGT and third-party titles, with the ability to:

- Add/edit detailed game information.
- View and choose configurations.
- Manage digital games.
- Add/edit custom tags.

Featuring advanced search, tagging, grouping, and game-listing capabilities, the interface is used by both lottery personnel and IGT staff through different access control levels.

A unified game registry for all game clients – whether web, mobile, or downloadable – Games Admin enables operators to manage and monitor their games (both IGT and third-party) from one location, saving operational time and money. Games from multiple providers can be managed individually or grouped together in portfolios, with their availability – fine-grained to individual device types – controlled in real time or via schedules.

Games Admin also permits operators to link multimedia promotional material, such as a demonstration video, to games. Operators can use this functionality to attract players to premium content on their iLottery system's portal or app – an easy way to target content to selected players.

On the back end, a database stores all required information based on our game marketing schema for both IGT and third-party games.

Game Attributes

Each game is characterized by a number of attributes and custom tags. The tags are defined by each operator and are customized and available just for them. An operator can then create a group of games based on combinations of the attributes and tags to better manage their games.

Games Admin allows users to see the list of games that are enabled or disabled and to access the full details of each game. Operators filter the game list and can then search for specific games in the list through a quick or advanced search.



Clicking on a game in the list reveals its details, organizing the huge quantity of attributes and information under the following tabs:

- Basic: Shows the simple main attributes, e.g., game name, version, game category, game subcategory, currencies, languages, etc. Based on user permissions, it is possible to edit the values of these attributes; clicking the Edit button makes the values editable via a dropdown list of possible values. Attributes can be edited according to either single or multiple values taken from a set of specific values (like languages, category, currencies, etc.) or via a free text area. Specific attributes include:
 - Game category.
 - Subcategory.
 - Default sorting within game category.
 - Game type.
 - Marketing theme.
 - Device type, operating system.
 - Screen size.
 - Picture URLs.
- Advanced: Reports the complex game attributes such as wagering steps, list of jackpots, bonus
 properties, etc. It is possible to edit the content of this tab with the same mechanism used for the
 Basic tab.
- Clients: Includes game attributes specific to the client using it for various purposes. It is divided into tabs, one for each client (Casino Download, Portal, etc.). It is possible to edit the content of this tab with the same mechanism used for the preceding tabs.
- **Provider**: Lists the information specific to the provider that is publishing the game (e.g., Game Supplier). If the provider is a gaming platform, the user will see the variant ID, variant name, the Game Container name, etc.
- Labels: Displays all the Labels (e.g., New, Popular, and Recommended) defined by the operator domain of the user logged in, indicating as "enabled" those used to tag the game. It is possible to add/remove tags for the game if switching the game view in Edit mode.
- Groups: Displays all the groups defined by the operator domain of the user logged in, indicating as
 "enabled" those to which the game belongs. It is possible to add/remove the game for any of these
 groups if switching the game view in Edit mode.
- **Control**: Shows the global status of the game (if enabled/disabled) and details the status of the game related to the devices. If the game is enabled only for one device, the global status will be enabled. If the game is disabled for all devices, the global status will be disabled.
- Configuration: Shows the game configuration details as defined on its gaming platform.
 The operator can use tags to define custom groups of games such as New, Popular, Recommended, etc.

The above information is exposed through an Application Programming Interface (API) to the portal to be used as metadata for generating games lists or adding more information for Search Engine Optimization (SEO). The portal consumes any data and feeds made available. At that point, any such data can be included when tagging content across the portal to make the data SEO-friendly. The portal allows for all content and banners to be tagged for SEO purposes.



4.13.5 Game Documentation

The Vendor should create and maintain game documentation that adheres to the processes and workflows as established by the Lottery. Documents should be accurate and reflective of final features, subject to the Lottery's approval, at the time of delivery into the Lottery's acceptance testing environment. The game specification documentation should include definitions such as graphics, detailed programming parameters, prize structure, game rules and release schedule.

IGT has read, understands, and will comply with this requirement.

We will create and maintain game documentation that adheres to the processes and workflows as established by the Lottery. IGT will make every effort to ensure that documentation is accurate and reflective of the final game features at the time of delivery to the Lottery's acceptance testing environment. The game specification documentation will include Lottery-requested elements such as graphics, detailed programming parameters, prize structures, and release schedules.

The following figure shows an example of a typical Working Papers table of contents.

Working Papers - Example Table of Contents

Table of Contents 1. Game Overview4

Figure 4.13 – 31.



4.13.5.1

Rules-of-Play Screenshots

The game specification documentations shall include color screenshots of the rules of play as displayed in the game skin/interface of each game, which includes all help screens, pay screens and any game interface artwork.

IGT has read, understands, and will comply with this requirement.

IGT provides Working Papers that include game documentation, format, and data that are agreed-upon with the customer. They contain all the detailed information about the specific game, such as the game mechanic and the game parameters, as shown in the following figure.

Game Documentation Index

1 → Marketing·Text	21
1.1+Preview-Text-Standard	⊋2¶
1.2>Preview·Text·Short	⊋2¶
2 → Legal·Information	. 2¶
2.1+IGT-Legal-Line	
2.2>Brand·Licensing	
2.3>Branded·Legal·Line	
3 → Game-Overview	
3.1+Game-Description	
3.2+Game-Themes	
4 → Game·Mechanic-Details	.
4.1+How·to·Play	
4.2>How-to-Win	
4.3+Game-Parameters	∌5¶
4.4>Winning·Games	⊋7¶
4.5>Non-Winning-Games	→

Figure 4.13 - 32.

We can also provide a screenshot of the rules for playing that is available for screen play, just as in the sample shown in the next figure.



How to Play Screenshot Sample

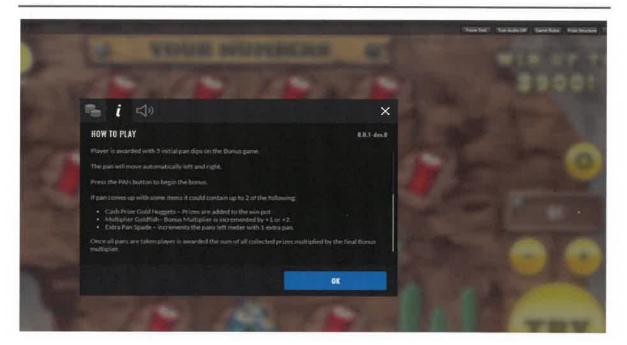


Figure 4.13 - 33.

4.13.5.2 Pay Table Screenshots

The pay table screen shots within the game specification documentation shall be shown at the minimum bet and in cases where pays are non-linear, a screen shot of the pay screen at each non-linear pay change shall be provided to the Lottery Commission.

IGT has read, understands, and will comply with this requirement.

IGT provides a sample screen, shown in the next figure, representing the pay table screen that's directly accessible in the game session. The screen provides information on the single price point, prize layers, prize value, prize remaining, and odds per play.



Prize Structure Sample Screenshot



Figure 4.13 - 34.

4.13.5.3

Game Name, Program ID, and Version

The game specification documentations shall include the game name, program ID and version.

IGT has read, understands, and will comply with this requirement.

4.13.5.4

Progressive Games Feature

For progressive games, a brief description outlining the progressive feature shall be provided either on the game specification documentation or on a separate document to accompany the game rules. This description shall include how many progressive jackpot pool levels exist in the game, base reset value and rate of progression of each level, jackpot pool limits, and any other critical information regarding the progressive feature such as a side bet wager or a qualifying bet that may exist on the game.

IGT has read, understands, and will comply with this requirement.

If the game is a progressive game, documentation will also include all the details about the jackpot mechanic, including how it is accumulated, how it is won, and how the jackpot contributes to the prize structure.



The prize structure with jackpot is also accessible from the game window, as shown next.

BIGH Gold Blast Prize Division Prize Value Approximate Prize Remainin Odds **Ticket Cost** \$900 1234 1:1.00 \$0.10 \$0.20 \$0,50 \$1 2 \$600 1234 1:1.00 \$10 \$2 \$3 \$5 \$300 1234 1:1.00 \$20 \$30 \$50 \$280 1234 1:1.00 Ticket Cost \$1 \$280 1234 1:1.00 \$260 1234 1:1.00 \$260 1234 1:1.00 \$250 8 1234 1:1.00 \$250 1234 1:1.00 10 \$240 1234 1-1.00 \$240 1234 1:1.00

Prize Structure with Jackpot Sample Screenshot

Figure 4.13 - 35.

4.13.6 Game Reporting

The Vendor should log game activities from the production environment and make available the data for System reporting and exportable for third-party reporting systems as directed by the Lottery. This should include all possible reportable elements including but not limited to number of times games are played, price point selections, duration of game play, game play feature usage, and other play statistics. Further, all reportable elements should be logged with consistent data attributes such as time/date stamp and player identifying information.

IGT has read, understands, and will comply with this requirement.

IGT will track and make available a large set of data for each game. Our iLottery System produces multiattribute transactional raw data that can be extracted to a third-party reporting system. The data includes figures such as sales per game, price point selection, number of players, average spend, split by channel, payout, number of transactions by game, and price point.



4.13.7

iLottery Games Procurement and Integration

The Lottery reserves the right to attach to the System or otherwise install games, software, products, or systems other than those required by the RFP. The Vendor shall be required to provide support to the Lottery in conducting future iLottery Game procurements from other source and shall be reimbursed fully for the cost of these procurements. The Vendor shall be required to supply to the Lottery, interface specifications to permit other products to carry out all functions and capabilities desired by the Lottery. In addition, the Vendor shall provide support to the Lottery including providing Facilities and allowing other Vendors to attach or install and test products. Should the Lottery propose to add such games, wager types, software, products, or systems not supplied by the Vendor, there would be no additional cost to the Lottery for this implementation other than the cost associated with the original procurement.

IGT has read, understands, and will comply with this requirement.

4.13.8

Exclusive Use of the Transaction Processing Systems

Use of the Vendor's hardware and software configuration that processes game transactions for the Lottery should be exclusive to the Lottery. Transactions from other sources should not be commingled with the gaming transactions of the Lottery.

IGT has read, understands, and will comply with this requirement.

4.14

iLottery Internal Control System

The Vendor shall provide a qualified third-party ICS application to support iLottery operations and a near real time data feed for all products from the iLottery CGS to the provided ICS solution. The ICS application shall be supplied by an independent, third-party software Sub-Vendor subject to Lottery approval. The iLottery Vendor should identify three (3) such alternative ICS Sub-Vendors from which the Lottery can select. The Lottery reserves the right to obtain documentation verifying the ICS Sub-Vendor's independence from the Vendor and/or any of its affiliates. Credentials of the ICS Sub-Vendor should indicate experience and qualification to provide this type of service and software. The ICS vendor shall be compliant with MUSL Rule 2 Section 2.5 (see Exhibit C), Federal, State, and other regulations.

Per Addendum 4 the Lottery has changed this requirement to read as follows:

The Vendor shall provide a qualified third-party ICS application to support iLottery operations and a near real time data feed for all products from the iLottery CGS to the provided ICS solution. The ICS application shall be supplied by an independent, third-party software Sub-Vendor subject to Lottery approval. The iLottery Vendor should identify two(2) such alternative ICS Sub-Vendors from which the Lottery can select. The Lottery reserves the right to obtain documentation verifying the ICS Sub-Vendor's independence from the Vendor and/or any of its affiliates. Credentials of the ICS Sub-Vendor should indicate experience and qualification to provide this type of service and software. The ICS vendor shall be compliant with MUSL Rule 2 Section 2.5 (see Exhibit C), Federal, State, and other regulations.

IGT has read, understands, and will comply with this requirement.

IGT understands that the independent, third-party software SubVendor supplying the ICS application is subject to Lottery approval.

IGT's proposes Elsym as the qualified third-party ICS application to support iLottery operations. IGT will provide a real-time data feed for all products from the iLottery CGS to the Elsym ICS application as required.

As Elsym's ICS application is already integrated with your Aurora™ retail gaming system and its transaction engines, we recommend its use for your new iLottery System as well. IGT has decades of experience integrating with Elsym's ICS for secure retail and iLottery transaction auditing. Elsym is compliant with MUSL Rule 2, Section 2.5, Federal, and other regulations, including those of the State of West Virginia. Our successful experience with this Sub-Vendor supports our desire to use their auditing services for our proposed iLottery System.

An alternative ICS Sub-Vendor that has also provided support for our lottery systems in other jurisdictions is Spectra. Like Elsym, Spectra offers a record of proven, sustained success.

We understand that the Lottery reserves the right to obtain documentation verifying the ICS Sub-Vendor's independence from IGT and its affiliates. The credentials of our preferred ICS Sub-Vendor will indicate its experience and qualifications to provide this type of service and software.



Overview of Elsym's History and ICS Functionality

Elsym was founded in 1988. It has provided and supported ICS projects since its first contract with the Wisconsin Lottery in 1989. Since then, Elsym has delivered ICS projects to many lotteries. It currently provides ICS support to more than 45 lotteries worldwide. IGT has a long-standing and successful relationship with Elsym, having worked together on lottery implementations all around the world. As noted above, our Aurora system is fully compatible with Elsym's services.

For auditing and balancing iLottery System processes, the ICS will receive and reprocess the iLottery Draw Game (DG) and Keno game transactions, in near-real time, from the transaction log file of your existing Aurora transaction engines. As well, equivalent data from the eInstants games will be passed to the ICS on a daily basis. This approach will permit the ICS to perform draw-sales balancing, immediately, once a draw closes. Draw-results balancing between the transaction engines and the ICS will begin once draw processing has been completed.

The ICS uses a continuous balancing approach, i.e., it will audit and balance the ICS against the Aurora transaction engines at every checkpoint. The balancing is dynamic and will follow the transaction engine checkpoint schedule. The continuous balancing approach means that any out-of-balances will be found immediately, instead of at draw break, and thus can be resolved quickly.

Essentially, to audit the iLottery System, your iLottery DG and Keno wager transactions will be received by the ICS from your existing Aurora retail system's transaction engines. The transactions will then be reprocessed by the ICS and compared to the transaction engines. To ensure it is in balance with the transaction engines, the ICS uses three automated system procedures in the comparison. The procedures are as follows:

- Daily end-of-day ICS reports are automatically compared to the identical DG, Keno, and eInstant iLottery System (i.e., the transaction engines) reports for accuracy.
- Draw-result balancing is automatically performed following winner selection after each draw.
- Weekly financial balancing generates retailer invoice reconciliation and adjustment data to maintain financial accuracy.

The Aurora transaction engine's Master Journal File (MJF), generated by the Aurora system' software, will contain detailed information on all of your iLottery DG and Keno wager transactions, on all of your retail wager transactions, and on every iLottery System and operator-generated command. The ICS will take advantage of this detailed information to scan and identify any command that is out of the ordinary. Any situation that the Lottery deems abnormal can be scanned for. If found, the situation will be reported on, in the System- and Operator-Generated Command Exception Report. This report provides information on the type of exception generated, who generated it, and when it was generated. The report can be supplied to you for follow-up. This process will ensure the integrity of the data captured by the ICS.

The ICS software will reprocess all data for each drawing, verifying sales by game and by drawing, verifying the number of prize winners at each prize level for each game, and confirming validations and outstanding prize liabilities for each game and each drawing. Various reports will also be created to show that the iLottery System is balanced.



4.14.1 ICS Configuration

The Vendor shall provide four (4) separate ICSs to the Lottery, identical in both hardware and software, including all system components and peripheral equipment. Two (2) ICSs installed and configured at the Lottery PDC for production, and one (1) ICS installed and configured at the Lottery's PDC for Customer Acceptance Testing (CAT). The CAT ICS shall be logically and physically segregated from the CGS system and any production networks. Diverse connectivity paths to CGS provided by the Vendor and approved by the Lottery. The ICS Sub-Vendor provider may connect remotely to the ICS for support and service. The ICS platform components shall be designed to be fault tolerant. In the event of a system failure, the ICS software, connectivity, and operations shall continue without interruption and without using the Lottery's network infrastructure at the PDC.

IGT has read, understands, and will comply with this requirement.

4.14.2 ICS Requirements

Costs for all hardware and software elements of the ICS, including maintenance and software upgrades, jumpbox, workstation, printers, and including continuing support from the ICS SubVendor, shall be included in the base price for the term of the Contract. The ICS shall check the iLottery System independently by re-processing all iLottery transactions, allowing auditing of the daily transactions, winner selection/verification (where required), prize payout calculations, sales summaries, and various inquiry and reconciliation activities. The ICS Sub-Vendor shall be compliant with MUSL Rule 2 (see Exhibit C).

IGT has read, understands, and will comply with this requirement.

4.14.2.A Reports

Reports generated by the ICS should be organized and formatted like the related reports of the System for efficient review and balancing. The ICS should provide a daily process for balancing all System transactions. There should be an automated balancing process in order to reconcile game activity, scheduled EFT balances, and to identify any discrepancies. Reconciliation will occur at intervals specified by the Lottery. Audit reports for balancing and reconciliation of iLottery sales should also be provided. Verification of the number of prize winners and amounts won by game/draw should be available.

IGT has read, understands, and will comply with this requirement.



A key feature of Elsym's ICS is its auto-balancing functionality. All pertinent financial information that's recorded and collected on the ICS will be automatically compared to and balanced against the IGT reports that encompass the retail and iLottery wagers information. A process that runs nightly will retrieve the IGT reports via Secure File Transfer Protocol (SFTP) and scrape those reports to obtain the values reported by IGT. The ICS will then create a single auto-balancing report that contains the details from the ICS and IGT reports in an organized, report-by-report, line-by-line format. Any imbalances will be flagged, and electronic notification will be sent out nightly to notify if any imbalances were found or not.

4.14.2.B Interface Files

The ability to export data in various formats such as Excel, PDF, Word, Comma Delimited, etc., along with ad hoc reports and to make reports available through electronic means as Lottery deems necessary. Interface Files, as defined by the Lottery, for the purpose of daily accounting, general ledger and tax reporting should be included in the daily update File to the Lottery's financial application.

IGT has read, understands, and will comply with this requirement.

4.14.2.C Maintenance

The ICS Sub-Vendor shall be responsible for maintaining the ICS application software. This includes but is not limited to updating the application software whenever the Lottery implements a game or makes changes to a game that would affect ICS processing. In addition, the Lottery may require modifications to the application software in order to expedite system balancing. The Vendor or ICS Sub-Vendor shall obtain Lottery approval before making any enhancements or modifications to any software. The ICS Sub-Vendor is responsible for keeping the ICS application patched and running on current and supported hardware and operating system (OS) software. It is the Vendor's obligation to acquire and install an appropriate upgrade with the Lottery's prior approval. If the ICS application requires modification or rewrite due to an upgrade (hardware or software), it is the responsibility of the Vendor to provide the new/modified ICS application. The ICS Sub-Vendor should be available 24 hours per day, 7 days a week, and three hundred sixty-five days a year (remote availability is acceptable) to provide assistance in resolving any issues. The ICS Sub-Vendor should respond in no more than 20 minutes to any issue. Backup/recovery capabilities for current or previous days' transactions should exist to restore and reprocess in the event an error or out-of-balance situation occurs. The ICS Sub-Vendor should provide a detailed recommendation for a backup/recovery system.

IGT has read, understands, and will comply with this requirement.



Support for ICS Software and Modifications

Elsym will provide programming support to maintain ICS compatibility with IGT's iLottery System. The following procedures are recommended when changes to the ICS are necessary:

- A software update document or Software Requirements Specification (SRS) is approved by IGT and the Lottery to document the changes that are to be implemented in the next release of the IGT software.
- The ICS software is then modified by Elsym personnel, unit tested, and transmitted to the ICS site. via Virtual Private Network (VPN) to be tested by Lottery personnel, in conjunction with a third party. Based on the size and scope of the requirements, Elsym personnel may come on site to the ICS location to conduct the acceptance test in conjunction with the Lottery.
- A copy of the ICS software is provided to the Lottery for archival and audit purposes on external media.
- If any changes to the procedures are necessary due to software enhancements, training is provided to ensure the new procedures are understood.
- All documentation is updated to reflect the change in software, including any procedural changes necessary. This includes any software specification and ICS program process rules.

Configuration Management

Elsym will be responsible for all configuration management activities to ensure the operating software, Oracle, and applications are at their current level of support. On a quarterly basis, all configuration updates will be loaded on the test system and a regression test performed. Updates will then be applied to the secondary system and a week later to the primary system.

The ICS will be available during all times the iLottery System is available. It can run in various configurations and in the active/active configuration in near 24-hour active status. The primary ICS is configured to run against the primary transaction engine's data and the secondary ICS is configured to run against secondary transaction engine's data.

Elsym has two methods for processing. The first is the creation of an external media for each day's processing. This media contains an image of everything necessary to reprocess that day including:

- Data at the start of the day.
- All transaction and data files received from IGT.
- All reports, interface files, and logs generated as a result of the day's processing.
- All executable files used to generate the information for the day.
- All interface files provided to other systems.

Due to this method, a single backup can be used to restore and rerun any particular day to ensure all internal and external auditing requests can be met.

The second method is the creation of a Beginning of Day (BOD) directory. The same information stored to external media is stored in a BOD directory with up to 40 days stored on disk. In this way, all reports/logs/data and transactions can be retrieved for viewing and/or reprocessing — without requiring a restore from external media.



Elsym has written a special monitoring program, which runs separately, and continuously, on both the primary and secondary ICS systems. On the primary ICS system, the monitoring program monitors the status of the ICS system. If the ICS system fails or stalls at any point, notification is sent out via email that the system has degraded/failed. At the same time, the secondary ICS system's monitor program monitors the primary ICS system for a complete hardware failure. If the primary ICS system fails, the secondary ICS system notifies Elsym/Lottery via email that the primary ICS system has failed. The reverse scenario is in effect also for monitoring the secondary ICS system. After a review of the system, if it is determined that the primary system cannot be restarted due to hardware or system failure, the secondary system is used to continue processing the day. This makes the system fault tolerant with minimal human intervention.

ICS and Network Failover

There are many data transmission scenarios that the Elsym ICS can handle automatically. Here are the most common scenarios:

- Online Primary System Fails: IGT's transaction engine software supporting the ICS systems
 constantly checks each available transaction engine that's configured for a connection. If a
 connection fails, the ICS will find the correct available transaction engine and make the request to it.
- **Primary ICS Fails During the Day:** If the ICS fails due to a software error, a restore of data from disk is performed. The ICS reprocesses the transactions already received, and then makes a request for the next transactions. (Recovery time after error correction 30 minutes.) If the primary ICS fails due to a hardware error, the secondary ICS has data at the beginning of the day. The real-time process would be started, and the system would catch up. (Approximate time to recovery 30 minutes.) If the secondary ICS is running in full duplex/parallel mode, there would be zero delay in processing activity.
- Communication Error: If a communication problem were to occur during the day, the log file on external media would be used to process the draw. Data collected and applied in real time during the day, up to the failure, would not be lost. (Approximate time to recovery 20 minutes after external media is mounted.)
- **IGT Data Error**: If there is missing IGT data, the missing information would be provided on external media and the ICS would be restored from disk and rerun. (Approximate time to recovery 30 minutes after external media is mounted.)
- ICS Software Error: If there is an imbalance due to an ICS software failure, the problem would be corrected and installed. A disk restore would be performed and the system rerun. (Approximate time to recovery 20 minutes after fix is applied.)



4.14.2.D Documentation

Prior to startup the ICS Sub-Vendor should provide detailed system specifications, flow charts, operating and balancing procedures. The JCS Sub-Vendor should be responsible for updating all documentation if any changes are made which affect the ICS system. The JCS Sub-Vendor should provide detailed documentation for any enhancements or additions for Lottery approval prior to development. A current copy of the application software including source code and documentation should be provided to the Lottery.

IGT has read, understands, and will comply with this requirement.

4.14.2.E Suppliers

The ICS application shall be supplied by an independent, third-party software Sub-Vendor subject to Lottery approval. The iLottery Vendor should identify three (3) such alternative Sub-Vendor from which the Lottery can select. The Lottery reserves the right to obtain documentation verifying the ICS Sub-Vendor's independence from the Vendor and/or any of its affiliates. Credentials of the ICS Sub-Vendor should indicate experience and qualification to provide this type of service and software.

IGT has read, understands, and will comply with this requirement

Please see the information provided at the beginning of this section under the main heading (Section 4.14, iLottery Internal Control System) for details.

4.14.2.F ICS Operations

Depending on the system design as approved by the Lottery, the Lottery may require the Vendor and the selected Sub-Vendor to provide operating instructions and training to the Lottery to run the ICS operations.

IGT has read, understands, and will comply with this requirement.



4.14.2.G

Lockdown Alternative

The Lottery uses a MUSL approved Lockdown Alternative solution for MUSL Powerball, Lotto America and Mega Millions draw games where the Lottery JCS transfers draw transaction data at draw break automatically to a Lottery SFTP server or through manual process, to removable digital media (e.g... USB thumb drive). The ICS shall provide a lockdown alternative solution, subject to Lottery approval, that complies with "MUSL Rule 2.6(b)", and supports both automatic and manual file transfer of draw transaction data to a Lottery SFTP server or removable media at designated preand postdraw times.

IGT has read, understands, and will comply with this requirement.

4.14.2.H Security

Lottery Security will conduct background investigations of the Sub-Vendor personnel maintaining the ICS system. Such background investigations may include fingerprint identification by the Lottery's Security Division, the Federal Bureau of Investigation, and any other appropriate public or private agencies selected by the Lottery. The ICS Vendor should provide requested information on personnel assigned to the Lottery's account. Depending on the system design as approved by the Lottery, the Lottery may manage both logical and physical access to the res environments. The res Vendor should adhere to the Lottery's IT Security Policies as outlined in Appendix E (Lottery IT Security Policies).

Per Addendum 3 the Lottery has changed this requirement to read as follows:

Lottery Security will conduct background investigations of the Sub-Vendor personnel maintaining the ICS system. Such background investigations may include fingerprint identification by the Lottery's Security Division, the Federal Bureau of Investigation, and any other appropriate public or private agencies selected by the Lottery. The ICS Vendor should provide requested information on personnel assigned to the Lottery's account. Depending on the system design as approved by the Lottery, the Lottery may manage both logical and physical access to the res environments. The res Vendor should adhere to the Lottery's IT Security Policies as outlined in Appendix G (Lottery IT Security Policies).

IGT has read, understands, and will comply with this requirement.

4.15

Marketing and Promotions

The Vendor should apply its best efforts to support the Lottery in Channel Mix planning, iLottery Game promotions planning, marketing planning, and other strategic planning activities; thus, assisting the Lottery to achieve its financial and public policy objectives.

IGT has read, understands, and will comply with this requirement.

IGT's Player Marketing Services is a full-service in-house marketing agency focused on the iLottery player. With more than 10 years of iLottery and more than 40 years of lottery expertise, IGT's dedicated team is driving the largest U.S. annual Gross Gaming Revenue (GGR) growth rates. Marketing Services supplements customer resources with iLottery marketing experts that possess a deep understanding of digitally acquiring and retaining players throughout the life cycle of an iLottery program evolved from our U.S. and European B-to-C marketing operations.

IGT Marketing Services covers the entire player marketing scope, from strategic planning to operational execution, throughout the player conversion "funnel" and across the player life cycle, from acquisition to retention. We leverage best practices, IGT's single-player view, advanced analytics, and robust bonus features to support the launch and growth of your iLottery business responsibly.

IGT iLottery customer gross gaming revenue outgrew non-IGT iLottery customer GGR by 45% in FY 2022 in the U.S. IGT pioneered iLottery in the U.S. in 2012, when the Illinois iLottery program was launched. IGT currently provides player marketing services in Georgia, Kentucky, and Rhode Island to support their respective growing iLottery programs. In the U.S., in FY 2022, IGT's iLottery customers grew gross gaming revenues by 45% Year Over Year (YOY), while the non-IGT iLottery market grew by 12%.



Marketing Services Scope



Figure 4.15 – 1.

Digital marketing is continually evolving, with emerging media channels and new marketing technologies. Our seasoned iLottery team helps lotteries navigate the challenges related to new technologies, new marketing processes, and new requirements specific to iLottery programs. Together with our customers, we set up and optimize their marketing technologies, deploy and localize best practice marketing processes, and provide supplementary resources to help run marketing operations.

Our core competency is to help our customers build and develop player relationships across the entire life cycle, from acquisition to retention. Our player acquisition strategy leverages a holistic, multi-channel approach and manages the player conversion funnel from prospect to first-time deposit.

Our conversion-oriented tactical campaigns effectively source new players from both digital and retail channels. In addition to optimizing campaigns on traditional volume and cost metrics, we apply advanced optimization techniques to also measure player post-acquisition value and retention, which results in superior campaign return on investment.



Player Acquisition: Conversion Funnels



Figure 4.15 – 2.

Our player activation and retention strategy captures the player immediately from the acquisition funnel and works to optimize engagement and player lifetime value. Player activation and retention campaigns are based on segmentation built on key elements such as the player's position in the life cycle, product use, financial value, and preferred communications channel. We optimize campaigns, addressing these microsegments to ensure that the right communication and promotion is sent through the right channel at the right time to achieve maximum impact. Using IGT's Player Data Platform (PDP), which enables advanced analytics, business intelligence, reporting, player profiling and personalization, data discovery, and predictive insights, we use advanced analytics to identify trends from big data, consisting of hundreds of thousands of player events and transactions, to provide a deep understanding of player behavior and enable effective decision making.

Our proven Marketing Services team deploys advanced techniques and unique tools to help our customers outperform the market in terms of growth, and is resourced and ready to deliver for the Lottery.



4.15.1 (A-K) Marketing Plan

Vendors should submit a launch plan and an additional 12-Month Marketing Plan, to be evaluated and adjusted at least monthly by the parties, including a launch strategy that represents a Vendor's best efforts at assisting the Lottery meeting or exceeding its objectives. The Vendor should maintain a rolling 12-month or more Marketing Plan throughout the life of the Contract. The Marketing Plan should address, but not be limited to, the following components:

- A. Player acquisition, retention, and optimization strategy;
- B. Digital advertising strategy;
- C. Affiliate marketing strategy;
- D. Promotional strategy;
- E. Player communication plans and strategies;
- F. Product introductions and enhancements;
- G. Deployment of products in new channels;
- H. Payment diversification strategy;
- I. Retailer marketing and cross-promotion plan;
- J. Portal expansion and enhancement strategies; and
- K. Data analytics and player segmentation

The Marketing Plan should include Lottery sales and profitability estimates for the launch year and the following 12-months and should define a Vendor's specific commitments for assisting in the achievement of the sales and profitability estimates. The Marketing Plan should include the specific activities to be taken to generate additional revenue. To the extent possible, the Marketing Plan should detail individual projects with start and, if applicable, end dates. Lottery shall approve Annual Marketing Budget.

IGT has read, understands, and complies with this requirement.

This section provides a description of IGT's Launch Plan and 12-Month Marketing Plan, and is accompanied by a visual representation of the plans in the **West Virginia 12-Month Marketing Plan** insert, which is located at the end of this section.

Please note that we have responded to requirements A through K separately, first for the launch year, under the heading, Launch Plan, and then for the overall 12-Month Marketing Plan.



Overview of the Marketing Plan

As indicated earlier, the core capability of an iLottery marketing program is to initiate and develop player relationships across the player life cycle, from acquisition to retention. The player experience User Interface/User Experience (UI/UX) strategy optimizes player interaction with iLottery products and portals via the web portal and mobile app, aiming to streamline player journeys and extract optimal transaction value from purchases.

IGT adopts a data-first strategy when designing products and uses data to understand player behavior. All versions of the redesigned mobile app feature an optimized experience, making it easier for players to register, deposit money, find winning numbers, save favorite picks, and more. By aggregating the various interactions across multiple player sessions using various data sources (e.g., Google Analytics) and player research feedback, IGT's mobile development team redefined player journeys and flows and addressed any unexpected player behaviors that had been observed.

The role of the Marketing Plan is to enable the Lottery to achieve its business goals, and every marketing plan should start by defining those business goals. IGT Player Marketing Services will work with the Lottery during the pre-launch planning phase to ensure a solid understanding, using U.S. iLottery market performance data to estimate the Lottery's sales potential.

The following estimate, for example, is based on extensive U.S. iLottery performance data and West Virginia market specifics, such as current Lottery performance and expected iGaming market impact. Our projected per capita evolution for a new iLottery program launching in 2023 and offering a full content portfolio can be assumed to reach a weekly Draw Game (DG) (including Keno) GGR per cap of \$0.07 by year five and \$0.23 for eInstants, as shown in our initial projection in the following figure. This would further assume that approximately 12% of total DG sales would be generated by the digital channel while eInstants are forecasted to comprise 40% of total combined digital and retail Scratch-Off sales.

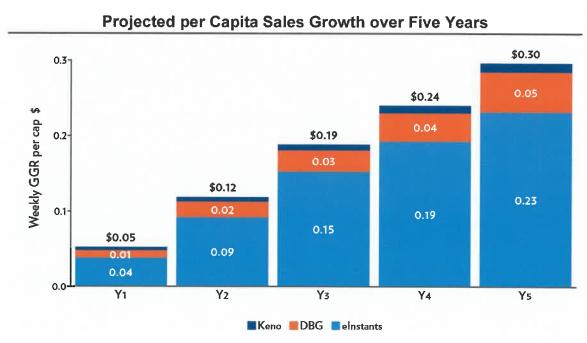


Figure 4.15 - 3.



Financial goal-setting will drive new player acquisition count, monthly player count, and spend per player – all the cornerstones of the Marketing Plan. Benchmark data from other IGT iLottery jurisdictions will support goal-setting that is ambitious, yet realistic. IGT will work with the Lottery to detail financial projections and respective player and spend goals in the pre-launch phase.

iLottery Sales and Profitability Estimates (\$'000)

Sales, Winnings, Revenue, Investment, Profit	Results	Year 1	Year 2	YOY Change (%0)
Gross Ticket Sales	Draw sales	3,034	5,527	82%
	eInstant Sales	23,500	57,000	143%
	Total sales	26,534	62,527	136%
Winnings to Players	Draw winnings	1,707	3,013	77%
	elnstant winnings	20,445	49,590	143%
	Total winnings	22,152	52,603	137%
Gross Gaming Revenue (GGR)	Draw GGR	1,327	2,514	90%
	elnstant GGR	3,055	7,410	143%
	Total GGR	4,382	9,924	126%
Marketing Investment	Player bonusing	500	900	80%
	Media marketing	1,000	1,000	0%
	Total marketing	1,500	1,900	27%
Profit	Profit	2,882	8,024	178%

Figure 4.15 - 4.

Our estimated West Virginia Lottery sales and profitability forecast for the first full two-year period, based on our initial market assessment, projects approximately \$11M in profit. We acknowledge that, over the first two years, marketing investment is over-indexing, but it will be necessary to create the needed player base to support the sales estimate.

Marketing Plan

The Marketing Plan is divided into two sections:

- The Launch Plan section will cover the time period beginning two months prior to launch and ending up to four months after launch.
- The requested 12-Month Marketing Plan section will cover months 5-16 post-launch.

The following pages provide our responses to requirements A through K, first for the Launch Plan and then for the 12-Month Marketing Plan.



Launch Plan

The Launch Plan extends from two months before Go Live to four months after launch.

A. Player Acquisition Strategy

Goal	Key Strategies
 Quickly generate awareness for iLottery program and convert players from most immediate sources Prior to launch, generate anticipation of iLottery on launch date with imagery referencing online play Acquire new players through paid channels from launch date 	 Build awareness through investment in traditional mass media (TV/Radio) advertising Use static & video creatives through organic and paid social advertising channels Use PR to gain earned media visibility for iLottery launch

Figure 4.15 – 5.

Initiatives

Initiative 1

The launch campaign objective is to ensure general awareness of the iLottery program among West Virginia adults. The campaign should use traditional mass media to quickly ramp up the awareness of the iLottery channel.

The launch campaign will include key messaging themes:

- Play lottery anywhere at retail and online.
- Play lottery anywhere at home, on the bus, etc.
- Download the new West Virginia Lottery mobile app.

Media campaign investment should result in high performance in Reach and Frequency metrics. Advertising would begin two weeks after the planned launch to resolve any potential technical challenges. Campaign details (e.g., recommended investment and media selection) will be defined as part of pre-launch preparations.



All applicable lottery product advertising should include a new signature, for example, "Play West Virginia Lottery anywhere, now available online," beginning two weeks post-launch.

Example of New Signature Used in TV Campaign





Figure 4.15 - 6.

Initiative 3

Building the database involves collecting portal visitor email contact information with an "iLottery Coming Soon! Sign Up to Get Your Free Games!" banner, which would contain a link to a promotional and email collection form landing page. The banner would be added to the website three weeks before launch.



At Go Live, Lottery portals (web and mobile app) should become eCommerce sites featuring a prominent "Play Online" call-to-action and provide enhanced visibility for the welcome bonus offer and new eInstant games.

Example of Enhanced Visibility for iLottery Benefits

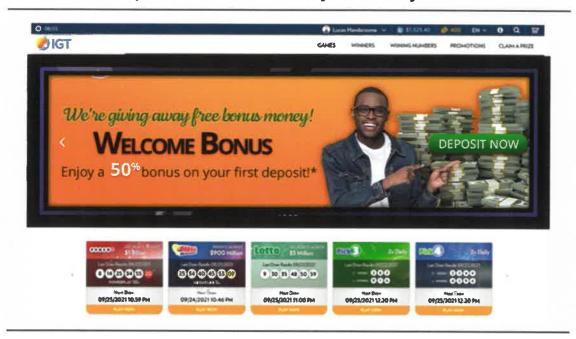


Figure 4.15 – 7.



The Player's Circle database and any other similar database containing player email contact information is an asset for the iLottery launch. The Lottery can further expand its player database by launching a giveaway contest prior Go Live. By providing their name and email address, players can participate in a promotional prize draw for \$10,000. The timing for the promotion launch would be two months prior to Go Live. The Player's Circle database will be messaged with an email marketing campaign after Go Live.

Subscribe to our newsletter to enter the \$10 Valen Subscribe to Our Newsletter and you will be automatically entered in the Valentine's Day Draw First Name Email Address SIGNME UP SIGNME UP

Example of Call to Action for Promotional Draw

Figure 4.15 - 8.

Initiative 6

Player's Circle members will be prompted to complete Know your Customer (KYC) during their next 10 logins after iLottery Go Live before making it mandatory. The Lottery can then use a promotion to incent KYC completion, such as an enter-to-win opportunity or iLottery Promo-Dollars. This removes duplicates from the player prospect database and will improve future marketing campaign conversion rates.



The Lottery can use Public Relations (PR) to gain earned media visibility. The iLottery launch has its initial news value, and visibility in news media will boost the impact of paid media.

B. Digital Advertising Strategy

Support player acquisition using digital media with tactical and conversion- oriented "Play Now" campaigns Campaign success is measured in capacity to generate new depositing players (First Time Depositors [FTD]) Support player acquisition using digital media for tactical conversion campaigns, driving immediate player action. Use traditional media for branding and awareness (see A, Player Acquisition, Initiative 1) Leverage Player's Circle database and portal visitor audiences in campaign targeting for digital advertising

Figure 4.15 - 9.

Initiatives

Initiative 1

The program will focus digital media efforts on high-conversion advertising platforms Meta (Facebook, Instagram) and Google (Ads, YouTube, AdSense). IGT Player Marketing Services can manage target audience settings, tracking set-up, keyword selection, ad content creation, media investment plan, and reporting. Media planning details would be delivered during pre-launch preparations. The campaign would start in parallel with the iLottery System launch and would remain active until the end of launch period.

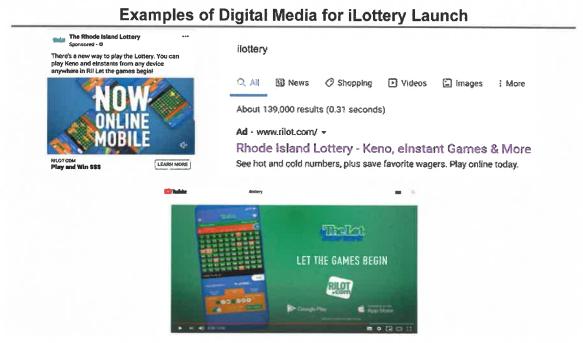


Figure 4.15 - 10.



The Lottery can use selected programmatic advertising platforms to reach additional audiences. IGT Player Marketing Services can recommend applicable platforms, manage target audience settings, tracking set-up, ad content creation, media investment plan, and reporting. Details will be planned during pre-launch preparations.

The campaign would start in parallel with the iLottery System launch and would remain active until the end of launch period.



Figure 4.15 - 11.

Initiative 3

The Lottery can use non-depositor web/app portal visitors as a re-targeting audience in applicable Meta (Facebook, Instagram), Google (Ads, YouTube, AdSense), and selected programmatic platforms. IGT Player Marketing Services can recommend applicable platforms, manage target audience settings, tracking set-up, ad content creation, media investment plans, and reporting. Details will be planned during pre-launch preparations.

The campaign would start in parallel with the iLottery System launch and would remain active until the end of launch period.

Initiative 4

The Lottery can use Player Circle members as custom audiences in applicable Meta (Facebook, Instagram), Google (Ads, YouTube, AdSense), and selected programmatic platforms. IGT Player Marketing Services can recommend applicable platforms, manage target audience settings, tracking set-up, ad content creation, media investment plans, and reporting. Details will be planned during pre-launch preparations.



The campaign would start in parallel with the iLottery System launch and would remain active until the end of launch period.

Example of Campaign Targeting Custom Audience

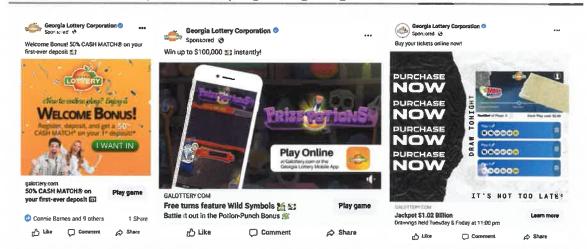


Figure 4.15 - 12.

C. Affiliate Marketing Strategy

Goạl	Key Strategies
Launch affiliate marketing after the initial launch period	 IGT to facilitate partnership with Income Access to plan and implement an affiliate program (affiliate marketing is included in our 12-month plan)

Figure 4.15 – 13.

D. Promotional Strategy

Goal	Key Strategies
Motivate players through the registration process and make their first deposit, initiate player activation and retention campaigns	 Use new player welcome bonus to support player acquisition Use current player activation bonuses to build play frequency Use churn prevention promotions to retain players

Figure 4.15 - 14.



Initiative 1

The Lottery can use an automated welcome bonus leveraging both a deposit-match component and a free eInstant game offer. Our recommendation for an initial welcome bonus offer would be a combination of 50% deposit match and 20 free spins (at a pre-determined price point) on eInstant games (value \$5) to facilitate and encourage player eInstant game trial.

Examples of Advertising Welcome Bonus to Facilitate Game Trial







Figure 4.15 – 15.

Initiative 2

The Lottery can initiate weekly manual player activation promotions to support play frequency. The selected promotion type can be varied weekly to maintain player interest. IGT Player Marketing Services will advise on best practice promotions and support to build a rich promotions calendar for the launch period and provide support in promotion set-up and testing approaches.

Examples of Varied Player Activation Promotions







Figure 4.15 - 16.



The Lottery can initiate automated churn promotions to prevent player lapse. In the early phase, with limited player data available, churn promotions should be based on simple business rules, for example, triggering the campaign if a player has not made a deposit in the past 10 days.

Examples of Automated Churn Promotions

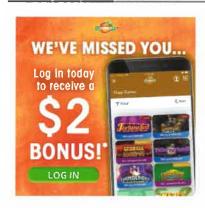






Figure 4.15 – 17.

E. Player Communication Plans and Strategies

Goal	Key Strategies
Convert new first-time depositors from existing player databases	Use automated multi-level conversion campaign to convert first-time depositors from Player's Circle database
	Use manual campaigns to activate whole player base with weekly promotional offers
	Build automated campaign to increase engagement and prevent player lapse

Figure 4.15 - 18.

Initiatives

Initiative 1

The Lottery may use a multi-email conversion campaign to convert first-time depositors from the Player's Circle database. We would send conversion campaigns to all Player's Circle members who have opted-in to marketing communications using Promo-Cash offers.

Initiative 2

The Lottery may target all non-marketing opted-in Player's Circle members using the mobile app with in-app messaging and/or push notifications to provide similar communications and promotions to email-eligible customers.



The Lottery can start a new player-segmented welcome series to educate players on iLottery and convert registered players to depositors. The campaign would start immediately after Go Live.

Initiative 4

Communicate weekly offers based on player segmentation, behavior, and channel preference, to activate and retain all players. The Lottery can target all opted-in players with emails and non-opted-in players with in-app messaging. We can prepare a detailed weekly promotional plan as a part of launch preparations.

Initiative 5

We can support the Lottery in creating and disseminating early churn prevention campaigns based on player data platform analytics that identify players who are showing decreasing engagement. This campaign would start immediately after Go Live.



Figure 4.15 - 19.

F. Product Introduction

Goal	Key Strategies
Offer all Draw Games (DGs) from Go Live to accelerate revenue generation	Launch full DG portfolio at Go Live to maximize new player conversion and revenue generation
and provide enhanced player convenience through one-stop-shopping	Launch elnstant portfolio covering all core play styles and maintain freshness with frequent content additions

Figure 4.15 – 20.

Initiative 1

The initial launch should include full current DG portfolio. Launching a full game portfolio provides the best user experience, as based on player feedback in other U.S. jurisdictions, players will expect the digital channel to have all games available. The full DG portfolio will also provide stronger support for new player acquisition when prospective players can find their favorite games available online.

Multi-state games, (Powerball with Powerplay, Mega Millions with Megaplier) and local lotto games (Lotto America) are important for player acquisition, but their significance is most relevant only during the jackpot periods.

Most traffic to the existing Lottery website on an everyday basis, is driven by the daily game offering, consisting of both the Numbers and Keno categories. Hence, we recommend that the Lottery include all remaining DGs (Daily3, Daily 4, Cash 25, CA\$H POP and Keno GO with Bonus) at Go Live. Daily games support, especially player play frequency, can generate additional opportunities for cross-selling. Typically, across IGT's U.S. iLottery programs, we see 20-30% of sales coming from players who consume all product categories. Often, these multi-product users belong to the most valuable VIP player segment.

Initiative 2

The eInstant launch should include 10-12 eInstant games to offer a robust, diverse starting portfolio.

Initiative 3

A new elnstant game should launch every two weeks to drive player interest and play frequency.

Example of New elnstant Game Announcement



Figure 4.15 - 21.



G. Deployment of Product in New Channels

Our recommendation is to propose deployment of product in new channels after initial launch period based on West Virginia Lottery requirements and roadmap

Figure 4.15 - 22.

H. Payment Diversification Strategy

Goal	Key Strategies
Provide core funding options for players at launch	Focus on the most popular payment channels in the beginning and add more payment options over time
	Communicate how to set up Player Wallet in email welcome series and YouTube instructional videos

Figure 4.15 - 23.

Initiatives

Initiative 1

Offer ACH, online banking, credit card, and debit card options. Make these options are available at Go Live. We can help to create educational materials (e.g., knowledgebase articles, videos, etc.) on how to fund the Player Wallet. For details, please refer to Section 4.9.2, Player Banking Services.

I. Retailer Marketing and Cross-Promotion Plan

Our recommendation is to propose retailer marketing and cross-promotions to start after the initial launch period. Retailer marketing and cross-promotions are included in our 12-Month Marketing Plan.

Figure 4.15 - 24.

J. Portal Expansion and Enhancement Strategies

Our recommendation is to propose portal enhancements after initial launch period. Portal enhancements are included in our 12-Month Marketing Plan.

Figure 4.15 - 25.

K. Data Analytics and Player Segmentation

Goal	Key Strategies
Enable effective, segment-based marketing to identify growth opportunities and improve player communication results	Use standard player segmentation models at the start and end time, and use data and analytics to adapt the model to fit West Virginia player base needs

Figure 4.15 - 26.

Initiative 1

At launch, start with IGT's player segmentation model built on the IGT Player Data Platform, and integrate data feeds to the CRM platform to enable player communication program/campaigns. The player segmentation model will start to collect player data at Go Live.

Initiative 2

Deploy IGT best-practice dashboards and reporting templates to obtain daily performance updates on product level sales, player transactions, and spend. We can initiate daily reporting at Go Live.

12-Month Marketing Plan

This covers the Time Period between 5 Months to 16 months after Go Live.

A. Player Acquisition Strategy

Goal	Key Strategies
initiatives to additional channels to maintain new player acquisition rate.	 Analyze new player conversion in portal/app to identify opportunities to optimize message/offer content and placing
	Continue to include online signature with all applicable product marketing
	Expand use of digital media marketing (see details under B. Digital Advertising Strategy)
	Launch Affiliate marketing program (see details under C. Affiliate Marketing Strategy)
	Expand cross-marketing with retail channel (see details under I., Retailer Marketing and Cross-Promotion Plan)
	 Continue to target Player's Circle non-wagering members with monthly welcome Promo-Cash reminders (see details under E. Player Communication Strategies and Plans)

Figure 4.15 - 27.



Initiative 1

We can refresh promotion creative in Lottery portals (web and mobile app) to avoid content burnout. Rotate promotional creative every month after the initial launch period. Test different promotional bonus value levels and bonus element combinations (e.g., free games, deposit match) every two months.

Examples of Promotional Bonus Element Combinations WE'LL MATCH SOF FEB 8 - FEB 14 First-Time Deposit Match* Leve, The Years to Supplie Zettery SOCOOD SOCOOD

Figure 4.15 - 28.

Initiative 2

All applicable Lottery product advertising should now include the signature "Play West Virginia Lottery anywhere, now available at retail." Add to all campaigns in month 5, when the initial launch period has concluded.

B. Digital Advertising Strategy

Goal	Key Strategies
Expand audience reach, maintain new player volume, and optimize cost per acquisition	Increase investment in core media platforms Expand digital media channel use to gain access to new
	player potential 3. Optimize campaign performance
	4. Leverage player data in ad targeting

Figure 4.15 – 29.



Initiative 1

Increase investment on high-conversion advertising platforms Meta (Facebook, Instagram) and Google (Ads, YouTube, AdSense). Shift from creative used at launch highlighting newness to more evergreen iLottery versions. IGT Player Marketing Services can manage target audience settings, tracking set-up, keyword selection, ad content creation, media investment plan, and reporting. Campaigns are planned on a monthly basis and continually optimized based on performance. Campaigns would start in month 5 after launch.

Initiative

Continue using selected programmatic advertising platform to reach additional audiences. IGT Player Marketing Services can recommend applicable platforms, manage target audience settings, track-up, keyword selection, ad content creation, media investment plan, and reporting.

Initiative 3

Start testing new media platforms outside of core properties. IGT Player Marketing Services can recommend applicable platforms, manage target audience settings, track set-up, keyword selection, ad content creation, media investment plan, and reporting. New media channel testing would start in month 5 after launch. A separate plan will detail the potential new media channels to test during months 5-16.

Initiative 4

Expand and test new keywords for Google Search Engine Marketing (SEM). Use keywords on the periphery of traditional lottery context to reach a better potential iGaming audience. IGT Player Marketing Services is capable of providing support for keyword selection and testing. Keyword expansion would start in month 5.

Initiative 5

Use iLottery player data (at this point, four months' worth of West Virginia iLottery data would be available) to create lookalike audiences based on the most valuable player profiles. IGT Player Marketing Services is capable of providing support for target audience selection and entering media platforms, testing, and reporting results. Creation of look-a-like audience would start in month 5.

C. Affiliate Marketing Strategy

Goal	Key Strategies
Reach new player audiences through retail and digital affiliates	Build earning opportunity for retailers through retailer affiliate option
	2. Reach high-value gaming audience through digital affiliates

Figure 4.15 - 30.



Engage the Lottery's retailer network by giving them the opportunity to operate as affiliates and earn commission. IGT recommends using Income Access as the affiliate technology and services partner. The Income Access platform will support retailer tracking, reporting, and commission payment. IGT marketing services will support the West Virginia Lottery in negotiating a contract with a chosen affiliate vendor, set-up tracking technology, reporting, and coordinate daily operations. We recommend adding retailer affiliates in month 6 after Go Live.

Initiative 2

Engage digital affiliate operators. IGT recommends using Income Access as affiliate technology and services partner, as their digital affiliate network is well established, and tested for the U.S. iLottery market. IGT Player Marketing Services will support the West Virginia Lottery in negotiating a contract with a chosen affiliate vendor, set-up technology, reporting, and coordinate daily operations. Digital affiliates are recommended to be added only when other sources of new players have been well established. Our estimated timing for the digital affiliate launch would be month 12 from Go Live.

D. Promotional Strategy

Goal	Key Strategies
Expand promotional program to	1. Invest 8-10% of GGR back to promotions
cover player acquisition, activation and retention needs	2. Offer relevant bonus for players making their first deposit, drive players to try elnstant games
	3. Leverage existing players as ambassadors by letting them earn bonus money if they refer a new player
	 Launch segmented promotion use based on player life cycle position, value, and product use

Figure 4.15 - 31.

Initiatives

Initiative 1

Invest 8-10% of GGR for player acquisition, activation, and retention. IGT Player Marketing Services will provide a market benchmark, support for budget allocation across various promotional items, and create measurement set-up to enable promotion Return On Investment (ROI) measurement.



Continue using a welcome bonus, leveraging both a deposit match component and a free eInstant game offer. Test different promotion value in months 5-10 to gain data on first deposit value with different promotional levels. IGT Player Marketing Services will advise on promotion set-up and testing approaches. Continue using a welcome bonus in months 5-16.

Example of Welcome Bonus





Figure 4.15 - 32.

Initiative 3

Launch a "Refer a Friend" promotion. Players can earn bonus money by sending invitations to their friends. If a friend registers and deposits as required by the promotion, the referring player earns bonus money. IGT Player Marketing Services will advise on promotion set-up and testing approaches. The Refer a Friend bonus will be more effective when the West Virginia iLottery base has more volume. We recommend launching the Refer a Friend promotion in month 12 from Go Live.

Example of "Refer a Friend" Promotion



Figure 4.15 - 33.



Launch VIP promotions, which are weekly offers whose purpose is to maintain play frequency, reward the player, and proactively prevent churn. VIP player profiles are generated from the IGT Player Data Platform, ensuring that the promotion reaches the intended target audience. IGT Player Marketing Services will advise on promotion set-up and testing approaches. Frequent VIP promotion should be launched in month 5.

Example of VIP Promotion TODAY ONLY! TODAY ON Login Bonus For a traffed time, log in to your InOrth? account to receive a \$10 bonus credit Toward any in header and regal, "y guilly, regall must be in his 2008 Toward any in header and regall," y guilly, regall must be in his 2008 Toward any in header and regall, "y guilly, regall must be in his 2008 Toward to get the second of gridley was on though in this part in the part in the 2008 Toward to get the second of gridley was on though in this part in the part in the 2008 Toward to get the second of gridley was on though in this part in the part in the 2008 Toward to get the second of gridley was on though in this part in the part in the 2008 Toward to get the second of gridley was on though in this part in the part in the 2008 Toward to get the second of gridley was on though in this part in the part in the 2008 Toward to get the second of gridley was on though in this part in the 2008 Toward to get the second of gridley was on though in this part in the 2008 Toward to get the second of gridley was on though in the second of gridley was on though in the part in the 2008 Toward to get the second of gridley was on though in the 2008 Toward to get the second of gridley was on though in the second of gridley was on though in the part in the 2008 Toward to get the second of gridley was on the second of gridley was on though in the 2008 Toward to get the second of gridley was on the

Figure 4.15 - 34.

Initiative 5

Cross-sell promotions are periodic promotions whose purpose is to expand player product category use. Cross-sell audiences are generated from the IGT Player Data Platform ensuring the promotion reaches its intended target audience. The IGT Player Data Platform uses a next-best offer algorithm to identify which new product is the most likely to build engagement. IGT Player Marketing Services will advise on promotion set-up and testing approaches. Cross-sell promotions are more relevant when the product portfolio is more expanded. The initial cross-sell between DGs and eInstants will start in month 5 after Go Live. A more granular cross-sell campaign between individual DGs will be detailed later, based on the game launch schedule.



Figure 4.15 - 35.



Continue to approach the Player's Circle database with monthly deposit offer reminders. IGT Player Marketing Services will advise on promotion set-up and testing approaches. Monthly reminders will launch in month 5 after Go Live.

Example of Deposit Offer Reminders





Figure 4.15 - 36.



Continue running player reactivation campaigns to improve retention rate. Promotion value should be based on player value. Test various promotional offers (login, deposit match, free games, etc.) to verify the best reactivation promotions. IGT Player Marketing Services will advise on best practice promotions, promotion set-up, and testing approaches. Reactivation campaigns are automated campaigns and should run continuously over months 5-16.



Figure 4.15 – 37.



General audience (open for all) play frequency promotions aim to increase players' active days during a month. Promotions are tied to product launches or seasonal events. These promotions create the backbone of the monthly promotions calendar, which is typically planned 6 months in advance, with 3 months in detail. IGT Player Marketing Services will advise on best practice promotions, support to build a rich promotions calendar, and support in promotion set-up and testing approaches. General audience promotions will continue from month 5.

Example of General Audience Play Frequency Promotions



Figure 4.15 - 38.

E. Player Communication Plans and Strategies

Goal	Key Strategies
Build player communication model that covers all key player segments and is aligned with promotions strategy	Use multi-level conversion campaign to convert first-time depositors from Player's Circle database

Figure 4.15 - 39.



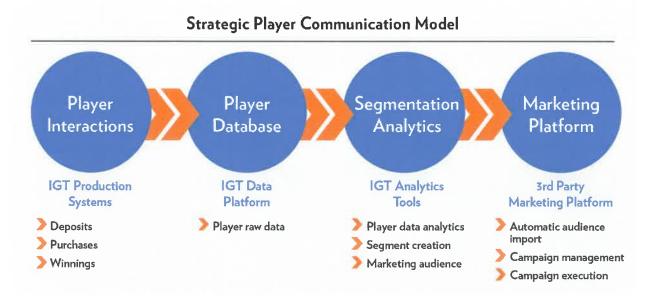


Figure 4.15 – 40.

Run IGT's segmentation model with the player database. Segmentation fine-tuning will be based on actual West Virginia player data. The model includes 25 key segments. The full segmentation model will be deployed starting from month 5.



Design the campaign and create a player journey in the CRM platform for each player segment. IGT's Player Marketing team will support the Lottery in campaign design and player journey set-up. Campaigns that serve the full segmentation model will be deployed in months 5-12.

Sample New Player Journey

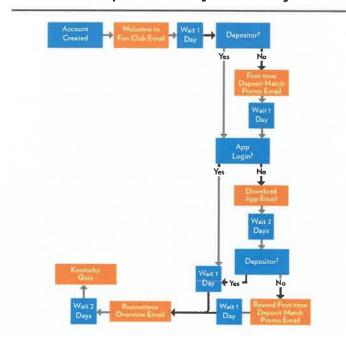


Figure 4.15 - 41

F. Product Introductions

Goal	Key Strategies
Enhance player experience with new features to drive additional revenue	Launch revenue enhancing play features, such as subscription feature, to DGs
	Continue launching new elnstant content every two weeks; consider launching additional games during key holiday seasons

Figure 4.15 - 42.



Initiative 1

Launch subscription feature for Powerball, Mega Millions, Lotto America, and Cash 25 at month 6.

Initiative 2

A new eInstant game should be launched every two weeks to drive play frequency. Separate plan will be detailed containing games to be launched.

Example of New Game Launch



Figure 4.15 - 43.

G. Deployment of Products in New Channels

Goal	Key Strategies
Ensure product availability in emerging new digital channels	Product and marketing teams to scan player behavior, technology trends to identify potential new channels
	Player potential to be verified with market research for any given initiative

Figure 4.15 – 44.

Possible opportunities on the horizon include expansion of digital content distribution to self-service terminals in retail.

H. Payment Diversification Strategy

Goal	Key Strategies
Provide wide range of convenient payment methods to players	Expand payment methods to include deposit at retail to enable non-banking system dependent deposits
	2. Expand digital payment methods

Figure 4.15 – 45.

Initiative 1

Add Deposit at Retail option. Recommended timing for this option is during months 5-6.

Initiative 2

PayPal is recommended to be added in month 12 and Apple Pay will be added during months 14-16.

I. Retailer Marketing and Cross-Promotion Plan

Goal	Key Strategies
Improve retail perception of iLottery channel and leverage lottery retail presence to source new players	 Enable lottery retailers to become affiliates to earn commission from player referral (details in section C. Affiliate Marketing Strategy)
	Enable Lottery retailers to earn commission from account funding and iLottery winnings withdrawals
	 Launch cross-channel promotions to induce cross-channel purchase behavior

Figure 4.15 - 46.

Initiatives

Initiative 1

Add a Deposit at Retail feature. Players can fund their own account or use an online voucher as a gift. Support this new deposit method with a promotional campaign to increase awareness. Recommended timing for the Deposit at Retail feature is during months 5-6.

Example of Deposit at Retail Feature



Figure 4.15 - 47.



Add a Redeem iLottery Winnings at Retail option. Players can identify themselves at retail by scanning a virtual player card at the terminal to open an account session and redeem winnings from their player account.

Example of Virtual Player Card



Figure 4.15 - 48.

Initiative 3

Place promotional messages on the retail DG ticket printouts.

Example of Promotional Message on Draw Game Ticket



Figure 4.15 – 49.



Cross-channel Scratch-Off game launches, leveraging the same game title launched in both channels. A promotional offer can be added to facilitate cross-channel behavior: the retail Scratch-Off game has an online promotion code to be redeemed, and players can earn a promotional coupon at retail by playing an eInstant game.

Example of Cross-Channel Game Launches







Figure 4.15 - 50.

J. Portal Expansion and Enhancement Strategies

Goal	Key Strategies
Improve player conversion rates (%) and conversion value (\$) in portals	 Optimize conversion rates in key player journeys Optimize conversion value in purchase user interfaces

Figure 4.15 – 51.

Initiative 1

Analyze key player-journeys (registration, deposit, purchase) performance on a continuous basis to identify opportunities to improve conversion rates. Implement user interface changes if needed to improve conversion rates. IGT's marketing team will help to analyze performance and make recommendations for improvements.



Analyze conversion value in product purchase User Interfaces (UI) to identify opportunities to improve average purchase value by optimizing UI or by adding new product features such as subscriptions or group play. IGT's marketing team will help analyze performance and make recommendations for improvements.

K. Data Analytics and Player Segmentation

Goal	Key Strategies
nable effective segment-based narketing to identify growth pportunities and improve player ommunication results	 Use data analytics for player segmentation (details in section E. Player Communication Plans and Strategies) Use data analytics to assess promotion effectiveness Use data analytics to identify growth opportunities

Figure 4.15 - 52.

Initiatives

Initiative 1

Deploy IGT promotion performance metrics to evaluate promotion impact on player product use, player value, and play frequency. IGT Player Marketing Services will support with data collection and metrics deployment.

Initiative 2

Deploy IGT best practice dashboards and reporting templates to achieve daily performance updates on product level sales, players, and spend. Daily reporting will be initiated at Go Live and then enhanced based on West Virginia Lottery needs after the launch period.

Initiative 3

Conduct monthly performance reviews. IGT Player Marketing Services will support the West Virginia Lottery to identify actionable growth opportunities from player data.

4.15.1.1

Per Addendum No. 3, the Lottery has added this requirement:

SECTION 4.15.1.1 (added)

All expenses covered under the approved Annual Marketing Budget including (but not limited to) player acquisition costs, digital marketing costs, marketing materials and promotional items, bonuses, promotions, and affiliate partners expenses shall be considered reimbursable expenses. Refer to Section 4.28.

IGT has read, understands, and will comply with this requirement.



4.15.2 Marketing Support

The Lottery desires iLottery Game development and incremental feature modifications over the Term of the Contract. The Vendor should be able to accommodate the Lottery's marketing plans and efforts with corporate marketing support that includes, but is not limited to:

IGT has read, understands, and will comply with this requirement and sub-requirements A through E below.

IGT agrees to engage with the Lottery in providing marketing support for game development and incremental modification features over the Term of the Contract.

4.15.2.A Executive Strategy Meetings

At a minimum, quarterly Executive strategy meetings should be held with the Lottery for (i) formulating the slate of games, game changes, and promotions to be introduced in the future, and (ii) monitoring and analyzing progress.

At a minimum, IGT will have quarterly executive strategy meetings with the Lottery for (i) formulating the slate of games, games changes, and promotions to be introduced in the future, and (ii) monitoring and analyzing progress.

IGT will actively support the Lottery's strategy planning and execution – an ongoing function that does not operate on a specific schedule. On an ongoing basis, and not less than quarterly, we will discuss strategy with you to help formulate ideas and support business cases for product, promotion, sales, and marketing elements that can grow your profits.

Quarterly meetings can be either in-person or via videoconference – whatever can most efficiently ensure participation by the right resources needed to address each meeting's agenda. The meetings will engage our IGT Corporate support team – the precise members of which will be tailored to address your specific needs and focus for the upcoming period.

These meetings can also incorporate the brainstorming and strategic planning sessions with our marketing team and focus on the state of the industry, the Corporation's status and performance within the U.S. market, iLottery evolution, etc. We will take every opportunity to listen to and learn from you so that we can best serve your business.

In addition to these discussions, relevant IGT resources will collaborate with you directly on an ongoing and as-needed basis to understand your priorities and focus on identifying opportunities for spontaneous information-sharing and targeted support from our Corporate, product, and service experts. We welcome regular calls – both scheduled and ad hoc – to review performance and discuss any ideas or concerns you or we may have to share.



4.15.2.B

Marketing Strategy Meetings

At a minimum, monthly strategy meeting should be held with the Lottery for (i) formulating the slate of games, game changes, and introduction schedules, (ii) reviewing player trends and segmentation strategies, (iii) promotional strategies to support games, player segmentation and other opportunities, and (iv) monitoring and analyzing overall progress against goals, (v) and to discuss any operational issues, systems changes, or any additional items that pertain to the system.

At a minimum, IGT will have a monthly strategy meeting with the Lottery for (i) formulating the slate of games, games changes, and introduction schedules, (ii) reviewing player trends and segmentation strategies, (iii) discussing promotional strategies to support games, player segmentation and other opportunities, and (iv) monitoring and analyzing overall progress against goals. As stated above, support for strategy planning and execution is a dynamic function that adheres to no specific schedule.

As part of this support, we can offer:

- Insights from ongoing consultation with you, including weekly check-ins, monthly strategy meetings, working sessions (in person and via phone and video conference), and access to subject matter experts.
- Proof of how we have supported other lotteries and how we have helped them drive growth on an ongoing basis.

We offer structural process improvements to enrich the support that we can provide for your planning process. Our suggestions will be analytical and based in fact to support the goals that are most important to you. We emphasize that this process will enable us to provide timely updates on any new information that may benefit the Lottery, as that information becomes available.

The main benefit behind our team and process is to make the right people available at the right time to help you work on your highest priorities and most time-sensitive projects, and for you to know that you can count on us to follow through.

Continual discussion – particularly between scheduled meetings – will ensure the most collaborative and effective support for the Lottery's marketing and planning initiatives. You can expect each meeting and discussion to be focused on your business and goals, for each participant to have a specific role, and for each discussion to end with clearly designated action items that will produce actual results.

4.15.2.C

State of the Industry Presentation

The Vendor should provide an annual review of the industry, identifying new games, new gaming media, relevant technologies, sales trends, and public policy developments.

We propose to initiate a series of marketing meetings, including monthly check-ins, with you at Contract award, to plan for the games that will be available at conversion. From there, we can collectively establish a comfortable tempo of activity that supports your brand and further excites your sales and marketing teams, retailers, and consumers.



Each year – as part of one of the Executive Strategy meetings – we will provide the Lottery with a comprehensive review of the industry, identifying new games, new gaming media, relevant technologies, sales trends, and public policy developments.

Each of these presentations will serve to inform you about the most successful and prevalent case studies and trends regarding new games, game features, promotions, marketing practices, technology, and innovations from around the industry, peer lotteries, and other IGT customers.

We have learned from experience with and feedback from our customers that the best industry updates generate collaborative discussion, rather than one-way presentation, on the information and variables that impact your business goals, based on the analyses and observations that our collective teams prepare.

No matter where it lies on the calendar, each meeting or discussion will:

- Consolidate observations that may reveal both short- and long-term opportunities for your business.
- Evaluate recent initiatives and identifies opportunities for collaboration for the coming year.
- Share lessons learned from lotteries directly managed by IGT.

We will adjust the scope of the agenda appropriately for requested and ad hoc discussions that take place between scheduled meetings, and always based on the market and your needs at that time. We will work with you to structure the annual Industry Update presentation in the manner that is most conducive for the Lottery to review products, technologies, and trends that can help drive further revenue growth in West Virginia. We will review with you, and offer input into, which of these items you might consider for your Strategic Plan.

The Genesis of Relevant Information

We look to a variety of sources for the news and data that will inform our presentations and discussions with you. These invaluable resources enable us to make you aware of developing future market opportunities as they also give you the widest view of global, national, and local industry news.

- FutureGame™: IGT's game innovation pipeline has brought highly successful DGs such as Cash Pop to market, as both a retail and iLottery game.
- Global Gaming Market Research Exchange: This forum brings together lottery research
 professionals from around the world to share insights, improve research methods, identify common
 and innovative approaches, and brainstorm best practices.
- World Player "For the Win" Study: This IGT research study provided us with relevant information
 to assess playing behaviors within particular jurisdictions.
- Customer Surveys: IGT gives our customers the opportunity to grade our performance across all
 areas of support. We take your feedback and candid opinions into consideration when developing
 solutions for your business and honing our support capabilities.
- Worldwide Conference Leaders: IGT invests significant dollars and effort as a major sponsor/participant in lottery and technology events (EL/WLA, NASPL, PGRI, LaFleur's, etc.) around the world. Our experts present on topics that may apply to your growth strategy and have led critical industry initiatives on a number of topics, including Application Programming Interfaces (APIs), Lottery's Changing Business Intelligence, Mobile as a Medium, Creating Digital Brands, and A Non-Player's Journey to their First Lottery Purchase.



These are examples of the benefit of an IGT partnership – the opportunity to learn from and engage other IGT customers, sharing initiatives to improve sales, expand retailer networks, and revitalize lottery brands based on future roadmaps, innovations, and solutions.

4.15.2.D Gaming Product Planning

Associated with the meetings and presentations cited immediately above, the Vendor should propose product and promotional releases and changes for consideration by the Lottery by using industry best practices and most current data available.

Associated with the meetings and presentations cited immediately above, IGT will propose product and promotional releases and changes for consideration by the Lottery by using industry best practices and most current data available.

As your iLottery portfolio builds and reaches maturity, we can continually work with you to determine which products are the powerhouse performers and which current games might need modification to reinvigorate sluggish sales. We can then leverage this analysis to help you introduce new game ideas, launch promotional opportunities, and identify games that may need to be retired due to declining player interest or low sales volume.

Our collaborative portfolio reviews include:

- Portfolio GAP Analysis: Using game characteristics like overall odds and top prize value, we
 develop a value proposition matrix for your online game portfolio. Coupled with a brand awareness
 assessment and cross-playership estimations, we can make recommendations for new games, game
 changes, or promotions.
- Current Portfolio Value-Add Opportunities: We assess opportunities to add value via add-on games or additional wager types on existing Lottery products.
- **New Game Opportunity Evaluation:** We dedicate a team of marketing professionals to assessing current industry trends and successes and their potential applicability to your market.
- Player Behavior Review: Performance data and player participation data from our ongoing industry research provide insights into game design and mechanics that appeal to players.

IGT's Approach to Product Innovation

The core strategic pillars of planning are to address and adapt market trends, customer requirements, player insights and analytics, market research, and regulatory changes. To maximize potential for our customers over the next five years and beyond – specifically to create innovations tailored to their and their players' needs – we continually collaborate with our lottery and gaming customers and third-party partners on roadmap development, local and global lottery market insights, and player research and analysis.

Indeed, the research we conduct across the industry continually provides us with new insights into what our lottery customers, their players, and their retailers need in both the short and long term. From worldwide player studies to customer-specific research (to the mapping of broad consumer trends, we keep a constant eye on all the factors that influence the markets in which we work and adjust our roadmaps accordingly.



Along with these pillars, our customers are the most important factor in our planning, as they drive the product wish list from their respective markets. We work with our customers to define the roadmap, discussing roadmap items to ensure that customers' needs – along with the latest fast-moving trends – are addressed in our ongoing product development. Our Innovation and Product Development Team – along with our customerfacing teams (account teams, delivery teams, customer service and support teams, etc.) – work with our customers to gather their thoughts and ideas on a regular basis.

This approach ensures that we're not just creating and offering you bells and whistles – rather, we are focusing only on responsible innovation that addresses actual needs and minimizes time to market.

We will work with the Lottery to ensure ongoing alignment for product roadmaps. We understand the importance of building and regularly executing a rigorous and structured process to deliver only the best, most actionable and sustainable ideas. As part of our regularly scheduled planning meetings, we will continually iterate updated product plans with the Lottery while adjusting to the latest intelligence and trends from the lottery industry and beyond, including highlighting recent results of IGT's FutureGame innovation process.

4.15.2.E Player Research

The Vendor should conduct player research for iLottery as specified by the Lottery and performed by the Vendor, with results presented to the Lottery. This should include, but not be limited to, player quantitative tracking studies and qualitative focus group testing on new game concepts.

Per Addendum No. 3, the Lottery has changed this requirement to read:

"The Vendor should conduct player research for iLottery as specified by the Lottery and performed by the Vendor, with results presented to the Lottery. This should include, but not be limited to, player quantitative tracking studies and qualitative focus group testing on new game concepts. The Lottery shall reimburse the Vendor for third party commodities and/or services related to this research at Vendor's net cost, with no additional Vendor markup. The presentation shall be at no additional cost. Research should only be completed at Lottery's request."

IGT will conduct player research for iLottery, as specified by the Lottery, and present results to the Lottery. We understand and acknowledge that this this may include, but not is not limited to, player quantitative tracking studies and qualitative focus group testing on new game concepts.

We continually conduct research throughout our industry – with players and retailers, testing games and retail strategies, and much more. We will bring our extensive market research investment and expertise to bear in support of your iLottery program and growth objectives.

The IGT iLottery Research Team – led by Annalisa Spano and supported by Gerard Caro and Audrey Pate – is part of our Global Lottery Marketing organization. This team will inform our support of game development, enhanced player experience at retail, and other marketing initiatives for the Lottery as it relates to iLottery. The iLottery Research Team is ready to harness actionable consumer and retail insights, using foresight into consumer behavior to accelerate growth in the Lottery's iLottery program.

We regularly work with knowledgeable partners such as Ipsos, KS&R, Reilly Group, Rose Research, Russell Research, TNS, Narrative, YouGov, LBR Insights, FieldGoalsUS, Strategic Research Partners, Leger, People Principles, User Insights, Remesh, and Invoke.



4.15.3

Player Acquisition and Digital Marketing

Vendors should describe in detail a plan on proven iLottery expertise to lead digital paid media and affiliate marketing strategies, which can be performed by the Vendor, which include:

IGT has read, understands, and will comply with this requirement and sub-requirements A through D below.

4.15.3.A Player Acquisition

Player Acquisition

IGT's Player Marketing Services is an in-house marketing agency focused on iLottery player marketing. We have a deep understanding of both lottery player and operator needs, accumulated from our B-to-C marketing operations in the U.S. and Europe. We help lotteries to build responsible digital growth, starting immediately from the launch and helping to sustain it throughout contract terms. IGT services cover the entire player marketing scope from strategic planning to operational execution, throughout the player conversion funnel and across the player life cycle, from acquisition to retention.

IGT's Player Marketing team has extensive experience in building and supporting successful iLottery programs. IGT was a pioneer in supporting iLottery as early as 2012, when the Illinois iLottery program was launched. More recently, IGT has provided player marketing services for Kentucky and Rhode Island lotteries to support their respective iLottery programs.

Digital marketing is a continually evolving landscape, with emerging media channels and new marketing technologies. Our team helps lotteries to navigate through the challenges of digital marketing related to new technologies, new marketing processes, and new competence requirements. We work together with lotteries to set up and optimize their marketing technologies, deploy and localize best practice marketing processes, and provide supplementary resources to run marketing operations.

Our core competency is to build and develop player relationships across the entire player life cycle, from acquisition to retention. Our player acquisition concept leverages a holistic multi-channel sourcing approach and manages the player conversion funnel, from prospect to first time deposit. Our player activation and retention concept captures the player immediately from acquisition funnel and works to optimize engagement and player life cycle value.

Our player acquisition campaigns are conversion-oriented tactical campaigns, sourcing new players effectively from both digital and physical channels. Our performance marketing approach does not limit media spend optimization just to player volume and cost metrics. Our advanced optimization model also includes the player's post-acquisition value and retention rate to further improve the digital media return on investment.



Player acquisition services will be provided by IGT's centralized marketing team responsible for:

- Budget management.
- Media planning and testing.
- Media buying.
- Media invoicing/administration.
- Campaign content/creative idea planning.
- Campaign creative content production.
- Content placement.
- Campaign optimization (gain, cost, output quality).
- Campaign and player tracking deployment and maintenance.
- Campaign performance reporting.
- Media vendor coordination/administration.
- Marketing technology management.

The best-performing player acquisition campaigns are conversion-oriented, tactical campaigns, sourcing new players from both the digital and physical channels. IGT has the experience to support the West Virginia Lottery in all five key player acquisition funnels: organic conversion from portal users, paid media conversions from digital media, conversions from players club, conversions from retail, and affiliate sources.

Player Acquisition: Conversion Funnels

Awareness Portal Visitors Consideration Paid Media Players Club Retail Affiliates

Figure 4.15 - 53.



4.15.3.A.a Media Planning and Buying

Media planning and buying

IGT currently provides full-service paid media operations for the Georgia Lottery, including media planning and buying. Media planning includes budget allocation planning, campaign scheduling, performance projections, and target audience scoping. Media buying includes campaign placement, activation, tracking, reporting, invoicing, administration, and campaign optimization. Service would be provided by IGT's Player Marketing Services team.

Together with the Lottery, IGT will build a West Virginia-specific player acquisition model that will be derived from sales and GGR budgets. It will detail how many new players are needed in a given time period to achieve business results. The model is based on our experience with player spend, retention rate, paid media attribution percentage, and cost per acquisition.

Paid media investment is crucial to attract and engage with potential players outside Lottery-owned channels. Based on our experience, iLottery programs that follow best practices can attribute 30-40% of new players to paid media investments. A multi-channel approach, through paid media channels such as Google, Bing, Facebook, Instagram, direct publishers, and programmatic vendors, allows the Lottery to reach various audiences at different stages of the conversion funnel.

A typical element of iLottery paid media is ongoing investment in tactical new-player acquisition through selected digital media. This advertising always includes a tracking link leading to a landing page with a concrete call-to-action to sign up and play now. These links track a player through to registration and deposit to measure campaign effectiveness and to establish Cost Per Acquisition (CPA) by ad placement.

CPA varies by jurisdiction and depends on product portfolio and gaming market competition. U.S. jurisdictions typically see CPA ranging between \$80-\$140 per acquisition.

Our initial high-level plan for digital media use and buying is referred in the Launch Plan and 12-Month Plan description in B. Digital Advertising Strategy.

4.15.3.A.b Message Strategy

Message Strategy

IGT currently provides full-service paid media operations for the Georgia Lottery, including message strategy. Message strategies are based on IGT's experiences on supporting iLottery launches in Illinois, Georgia, Kentucky, and Rhode Island. The strongest performing messages in launch phase are centered around newness and shift more towards benefits, products and promotions as the program matures.

- Newness (Now that you are online, did you know you can play now online?).
- Benefits (Play lottery anywhere and anytime, play lottery on your mobile, play at retail and online).
- Products (Powerball is now online, Play Keno is online, play Keno now on your mobile device).
- Promotion (Redeem your free games, a Welcome bonus awaits you).



The initial high-level plan for digital media message strategy is referred to in the Launch Plan and 12-Month Plan description under the heading of B. Digital Advertising Strategy. Digital advertising strategy service and support would be provided by IGT's Player Marketing Services team.

4.15.3.A.c Creative Development

Creative Development

IGT currently provides full service paid media operations for the Georgia Lottery, including creative content development. IGT resources design original content campaigns under lottery brand guidelines and adapt existing creative assets as needed for iLottery purposes. IGT creative content development is highly agile and can provide short turnaround time. Service will include creation of all tactical static and video assets needed for iLottery marketing in digital media. Service would be provided by IGT Player Marketing Services team.

Examples of IGT Original Content for Media Campaigns



Figure 4.15 - 54.

4.15.3.A.d Reporting and Optimization

Reporting and Optimization

IGT currently provides full-service paid media operations for the Georgia Lottery, including reporting and optimization. IGT reporting is built on a combination of Command Platform, IGT Player Data Platform and Media reporting. Key variables IGT can derive and report per media and campaign include registration count, first time deposit count, average first-time deposit value, sales per campaign, player value and player retention rate. IGT optimizes campaign targets audience, creative, campaign budget and channel allocation based on these key variables. Service would be provided by IGT Player Marketing Services team.



4.15.3.B

Omni-Channel CRM Platform

Omi-channel CRM platform to segment, automate, and scale market. including brick and motor retailer

IGT currently provides full-service player communication operations for the Georgia Lottery and the Rhode Island Lottery, including segmentation, player journey management, creative concepts, and campaign execution. Segmentation is based on IGT data platforms with integrations to third-party CRM platforms. Player data includes both registered retail and digital players. Please refer to Sections 4.16, Promotion Capabilities, and Section 4.17, Configurable Rules, and Section 4.19, Digital Communication Tools, for more details.

4.15.3.C Flexible Bonus Engine

Flexible bonus engine, with segmentation capabilities, and the Vendor's in-house expertise to optimize player reinvestments

IGT currently provides full-service player marketing operations for the Georgia, Kentucky, and Rhode Island lotteries, including player promotions budgeting, planning, creative concepts, and campaign execution. Promotions are used to support player acquisition, player activation and retention. The Marketing team uses IGT's versatile bonus engine to run promotions.

Please refer to Section 4.16, Promotion Capabilities, for details.

4.15.3.D

Cross-Channel Promotions with Brick and Mortar Retailers

Integrate with brick and motor retailers.

IGT currently provides full-service player marketing operations for the Georgia Lottery, including cross-channel promotions with the retail channel. Retail programs are a way to engage retailers and add digital dimensions to retail-only player relationships. Retail is an important channel and often undervalued as an acquisition source for iLottery. Based on IGT experiences, retail could optimally directly attribute for 5-10% of new players. Recommended strategies include providing opportunities for a retailer to become an affiliate and earn from players they refer to the Lottery's iLottery program. Incent depositing and utilizing online winnings at retail to generate commission for retailers, and leverage cross-channel product marketing campaigns such as promoting iLottery offering in retail on Scratch-Off tickets, ticket printouts and vending machines.



4.15.4 Lottery Budget Approval

The West Virginia Lottery shall approve all budgets for Player Acquisition, Digital Marketing, and bonuses.

IGT has read, understands, and will comply with this requirement.

4.16

Promotion Capabilities

The System should provide the ability for the Vendor or the Lottery to configure rules-based promotions through a web-accessible interface. Promotions may result in the awarding of free wagering funds ("Promo Dollars"), free games, and other incentives (collectively referred to as "Promotion Awards"). Promotions should be fully reportable to the Lottery via Vendor portal for analysis and providing direction for future offers.

IGT has read, understands, and will comply with this requirement.

Via the iLottery System's back-office administrative User Interface (UI), authorized users will have a rich set of highly configurable promotional capabilities, as well as rewards and bonusing functionality, by which to incentivize player engagement. Our iLottery System:

- Has extensive bonusing capabilities, in which bonus rewards can be personalized based on player preferences and more than 90 behavioral parameters.
- Supports a wide array of reward and promotion types, including Buy X, Get Y and lottery-specific promotions.
- Enables cross-promotion via bonus cash (i.e., Promo Dollars), rewards points, free games, etc.
- Includes a user-friendly tool (Campaign Builder, discussed in more detail in Section 4.17,
 Configurable Rules) to quickly configure and deploy digital-channel promotional campaigns.
- Allows for rewards to be targeted to specific player segments that meet qualifying conditions and to be delivered either via automated promotional campaigns (minimizing the implementation effort) or manually.
- Features real-time analytics and reporting capabilities that will allow you to analyze your promotions as they are happening to measure and maximize their effectiveness.

The rewards functionality will be used to create promotional campaigns, configure the Lottery's player loyalty program, and handle interactions with Player Wallets. To expand and enhance the value of player engagement and increase game sales and profits, you can use the functionality to:

- Promote product (and channel) awareness and engagement across your portfolio.
- Promote your traditional retail lottery products via digital channels.
- Acquire new players (sign-up bonus, promo codes, etc.).
- Improve the frequency at which players play (e.g., "receive 10% match to your first deposit today").
- Reactivate passive players with login promotions (e.g., "come back and get \$X or X points").

Promotion Capabilities 4.16 – 1



The table below provides a snapshot of how to leverage the iLottery System's promotional tools to engage and retain players.

Promotions for Engagement and Re-Engagement

Triggers	Rewards	Targeting Examples
 Registration 	Promo Dollars	Player demographics: Gender, date of birth,
• Login	Bonus bags	currency, etc.Date: Action time ranges, day of week, etc.
Deposit	Free play	 Gaming activity: Number or value of wagers,
Game play	Real money	deposits, etc.
Lottery ticket submissionAccount update	 Loyalty points 	 Lottery campaign-specific: Game, number of draws, etc.
		 Deposit campaign-specific: Amount, currency, payment provider, etc.

Figure 4.16 - 1.

Expanded Promotional Opportunities with Capture of Retail-Player Data Points

Since IGT plans to fully integrate the iLottery System with your existing Aurora™ retail gaming system, we'll be able to introduce additional player data points and segments to create a more detailed player view by means of our unique ability to combine reporting data from both the retail and digital channels.

When light and fully registered players use our mobile app's digital play slip and/or Virtual Player Card at retail terminals, their transaction details will be recorded. We can then, for example, determine what and when they play and what retail types they frequent. These additional elements can allow you to use the integrated external Customer Relationship Management (CRM) solution to perform geolocation-based messaging to deliver personalized communications to an individual player based on their retail history.

4.16.1 **Promotion Types**

Vendors should describe the System's current capabilities to provide Promotion Awards to players based on a required action ("Promotion Types"). The Vendor should, at minimum, implement the following Promotion Types:

IGT has read, understands, and complies with this requirement.

Our iLottery System comes equipped to enable a wide array of promotion types, including those outlined below.



4.16.1.A Deposit Bonuses

The configuration of promotions that reward a specified deposit amount and/or threshold with a Promotion Award.

IGT has read, understands, and will comply with this requirement.

The Lottery will be able to set campaigns that reward a deposit with either a fixed amount or a calculated amount based on the value of the deposit. In the case of a calculated amount, the amount can be specified as either a multiple or a percentage of the deposit value, with a maximum reward amount.

Each deposit-reward can be set to trigger:

- Only when the deposit amount is within a specified range, thus enabling you to have a multi-tier deposit reward system.
- Based on the number of deposits a player has made, thus enabling, for example, the ability to have different reward structures for players making their first ever deposit and for players who've already made several deposits.

4.16.1.B Discount Promotions

The Lottery should be able to discount certain game purchases at specified price thresholds (e.g., \$2.00 discount on a \$10.00 iKeno purchase)

IGT has read, understands, and will comply with this requirement.

The Lottery will be able to configure a promotion that discounts game purchases (individual games, specified games, or all games) at specified price thresholds.

4.16.1.C Buy X Get Y Promotions

The Lottery should be able to trigger certain Wagers as a direct reward with the purchase of qualifying Wagers.

IGT has read, understands, and will comply with this requirement.

With Buy X, Get Y, when a qualifying ticket (wager) is purchased, the iLottery System issues a free ticket for a different game. The reward could be issued as a bonus bag (see "Additional Promotion and Reward Types" on the next page) valid for the chosen game or multiple games, or a lottery voucher for \$1 on the chosen game.

We also support Buy X, Get X that is functionally identical to a Buy X, Get Y promotion, but issues a bonus bag or lottery voucher for the same game as the qualifying ticket.

Promotion Capabilities 4.16 – 3



Additional Promotion and Reward Types

The iLottery System supports several additional reward types, including:

- Bonus Cash (i.e., Promo Dollars): Non-withdrawable money credited directly to the Player Wallet that – once awarded (automatically or manually via the back office) – is immediately available to the player for spending on any game that allows play by bonus (the bonus can never be withdrawn).
- Bonus Bag: This is a "container" holding Promo Dollars, to which extra conditions can be attached. It opens opportunities for cross-selling and upselling new games when rewarding players for actions such as registering, logging in, wagering, or depositing. Highly configurable, bonus bags can be set for use with certain game verticals, with select games or game families, to expire on a defined date or after a defined duration since previous use, and much more.
- Bulk Rewards: At any time, you can award an ad hoc reward to each member of a player group. You can use any available reward type and monitor the reward assigned to each player.

4.16.1.D Bonus Payout Promotions

The Lottery should be able to configure a promotion that raises payouts to an elevated level for specific game(s) for a specific time period.

IGT has read, understands, and will comply with this requirement.

The Lottery will be able to configure promotions that raise payouts for a specific game or games for a specific period of time.

4.16.1.E

Loss Payback Promotions

The ability to return a portion of a player's losses for a specified period of time, including within a specific game or set of games only, as a credit back to their wallet.

IGT has read, understands, and will comply with this requirement.

With this promotion, the Lottery can return a portion of a player's losses for a specified time (including within a specific game or set of games) via a credit back to the Player Wallet. This is an example of a manual campaign. You can define a wide variety of campaigns to be generated offline (e.g., via a report that takes into consideration various events such as logins, deposits, wagering, etc.). Simply stated, you would generate the report and then create a bulk reward process to award players with any of the available reward types.



4.16.1.F Play and Win Promotions

The Lottery should be able to configure promotions that randomly select a designated number of winners within specified periods of time. For example, the promotion may pick five random players during a certain hour to win a \$100.00 deposit. The System should support configurable settings that constrain players to winning one time or multiple times during the promotion, allow for the configuration of prize determination to be drawing(s) or instant win(s).

IGT has read, understands, and will comply with this requirement.

Another example of a manual campaign, Play and Win lets you randomly select a designated number of winners within specified periods. The System can be configured to constrain players to winning one or multiple times during the promotion and allow prize determination to be drawing(s) or instant win(s).

4.16.1.G Player's Circle Club

The System should have capabilities to award automatic points and second-chance promotion entries for tickets entered and for iLottery play. The system should have the ability to select and award prizes based upon the second -chance promotion. The system should have the capability to process any single large win with the approved claim processes and provide W2Gs if applicable.

IGT has read, understands, and will comply with this requirement.

The iLottery System's robust loyalty engine affords highly flexible points-allocation and second chance promotion entries for tickets entered and for iLottery play, with the ability to select and award prizes based on the second chance promotion. While low- and mid-tier winnings are autopaid to the Player Wallet, the iLottery System can process any single large win with the approved claim process and provide W2Gs where applicable.

For more details, please see Section 4.10, Claims & Payments.

Player Loyalty Program: Bringing All the Pieces Together

IGT's loyalty solution is natively integrated with the iLottery System. This robust tool for rewarding players for qualifying digital actions has powered, for example, the Tennessee Lottery's 164% new member acquisition growth, with more than 104 million total wager submissions and approximately 589 million point-redemptions since deployment. With this flexible and configurable solution, you can offer players multiple ways to earn and redeem points, reward them with an array of bonuses, and use the single player view to enhance marketing campaigns to increase player engagement.

The lottery marketplace has evolved past the model of marketing and advertising to an anonymous player base toward an approach that increasingly focuses on registered play and personalization. Our solution is designed to maximize this approach, bringing its benefits to key stakeholders.

Promotion Capabilities 4.16 – 5



IGT's Player Loyalty Program Solution – Stakeholder Benefits

Stakeholder	Benefit
Players	 Earn points automatically on all purchases: digital and account-based retail purchases, winning and non-winning, Scratch-Offs and Draw Games) and for completing qualifying actions (triggers) Earn and redeem points Manage rewards conveniently via any device Receive added value on all ticket purchases, as earning points for purchases represents a discount on future purchases
Retailers	 Increase store traffic and customer loyalty Boost sales by attracting emerging demographics to lottery play
Lotteries	 Keep players in the Lottery ecosystem – as opposed to an inefficient points-for-prizes solution that depletes your prize pools, diminishes your profits, and takes players away from your product portfolio Encourage players to try games they haven't tried before, since they can use their points to purchase Increase average player spend enhancing engagement for all purchases Encourage loyalty and positive emotions toward your brand Incentivize emotionally engaged players via relevant retention strategies Reward engagement behaviors while capturing a player's entire journey via well-run CRM Drive a player experience across all channels with incentives targeted at brick-and-mortar retail locations Configure points according to game or price point Deliver customized communication in real time Evolve anonymous players to known players, providing a single view of the player across all channels and allowing you to better understand and drive your players' behavior across all products

Figure 4.16 – 2.

The loyalty engine will provide you the means to flexibly set up a loyalty program that crosses the retail and digital channels, leveraging data accumulated on player-specific behavior at retail.

Building Loyalty with a Winning Player Experience – Examples

Earn Points	Engage with Points	Win Prizes
 Scan applicable non-winning tickets Type in promo code from ad Highlight weekly product with points multiplier Qualify actions defined via time-limited promotions 	 Use points for second chance draws 	 Monthly/weekly draws with money prizes elnstant game prizes: Points Game discount vouchers Second chance draw entries

Figure 4.16 – 3.



The loyalty engine allows for the creation of multiple loyalty pockets for each game vertical (Draw Games, eInstants, etc.) and cross-platform loyalty programs in which points won in any game vertical will be presented as a single loyalty account.

Earning Points

Should you choose to adopt an "earn and burn" points program, the loyalty engine affords highly flexible points allocation. You can configure how points are earned and redeemed, and target specific player groups, games, time periods, price points, or any combination thereof to reward players with:

- Fixed points.
- A multiplier of points based on price.
- A percentage of points based on price.

To make it as easy as possible for players to earn points, we've established two broad categories by which players can do that:

- Purchases: For iLottery purchases (as well as retail purchases for which players scan the mobile app's Virtual Player Card to initiate a player session at the terminal), players will be automatically awarded with points based on the configured campaign and their loyalty level.
- Activities: For activities, award-triggering configurations (some of which may require offline
 processing or bulk import) can include completing registration, inviting a friend, logging in, updating
 account information, and others (we can add triggers in accordance with accumulated data and
 resulting analytics insights as the iLottery program grows).

Loyalty Points and Bonus Points

Players can initiate, maintain, and grow their loyalty account, which comprises:

- Loyalty points (status points), which determine the player's loyalty level.
- Bonus points, which track how many points can be redeemed for bonuses or other reward types as
 configured on the iLottery System. Bonus points are tracked on a separate point-tracking system;
 when players redeem their points in exchange for anything, their bonus-points balance diminishes but
 their loyalty-point balance is unaffected.

This separation of loyalty (status) and bonus points ensures that players are never penalized or downgraded to a lower loyalty level because they redeemed some of their accumulated points.

At all times, you can maintain the "true-value view" of players through their loyalty level. The earning of loyalty points and bonus points happens simultaneously on the iLottery System, triggered by the same campaign using the same player action/event.

Promotion Capabilities 4.16 – 7



Loyalty Tiers

The loyalty engine is used to define the player levels that group and reward players in accordance with their accrued loyalty points. There are no limits to the number of levels that can be created, each with its own rules and calculation methods for determining:

- The minimum number of loyalty points that must be accumulated to reach that level.
- The time during which points must be accumulated (week, month, year).
- The maintenance rules to indicate how long a player will stay at that level.
- The number of redeemable bonus points a player receives for each loyalty point earned.

Players' progress through tiers is based on the number of points they earn. Once members reach a higher level, they are notified of new benefits.

You can configure exactly how points are awarded for each qualifying action. The point/earnings ratio is defined per loyalty level, which allows players in a higher loyalty level to earn more points for the same action than a player in a lower loyalty level. This means they'll be rewarded more for their continued loyalty. The number of bonus points that a player must redeem to receive a reward can also differ between loyalty level. A player's loyalty level can also determine the campaigns for which they qualify – a method of filtering and segmenting players.

Redeeming Points

Point redemption focuses on enhancing products already offered by a lottery. This seizes the opportunity to build awareness, encourage trial, and enhance the entertainment experience while fulfilling a prize of perceived high value to players (but less costly to the Lottery than a traditional merchandise-prize catalogue). This makes it faster and easier to attain rewards and encourages cross-sell and upsell of other lottery products.

Players can redeem points on the mobile app and a microsite integrated with the Lottery website.

We can work with you over time – using Key Performance Indicators (KPIs) from the various player touchpoints and external CRM platform, along with market trends from other industries and lottery experience – to continually optimize your available rewards to maximize player satisfaction and participation.

4.16 – 8 Promotion Capabilities



Convenient Player Interface

The player portal and mobile app put all rewards functionality at players' fingertips. Players are kept apprised of their loyalty status on the website and mobile app and by notifications via their preferred channel and language. Our User Interface (UI) makes it easy for a player to view his or her points balance, status, and current and past loyalty program entries.

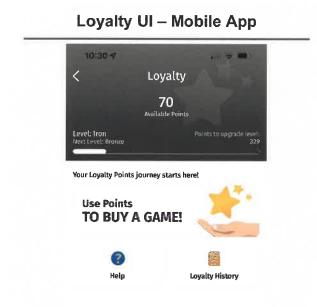


Figure 4.16 - 4.



Loyalty Landing Page and History – Mobile Web

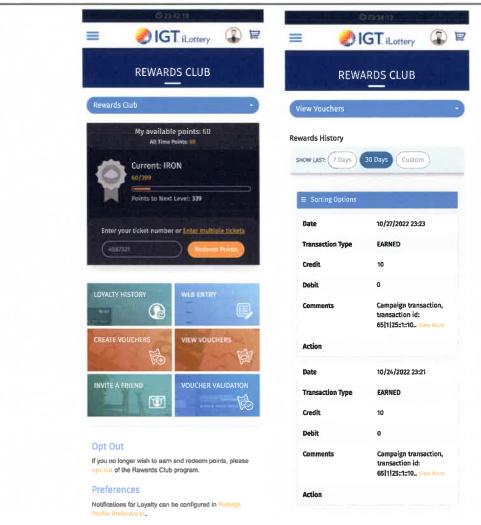


Figure 4.16 - 5.

In addition, the introduction of a daily dashboard – shown upon player login – represents a strategic opportunity to expose players to your most interesting active promotions and to provide them with useful status information and actionable tools. The prominent display of featured promotional activities on the daily dashboard can generate interest around the titles you want to push – for example, building awareness about a new scratch card game launch or around your valuable holiday games.

Maintain Program Relevancy: The Power of Data

Our iLottery System's expansive capture of player data will promote effective business decisions, provide the explicit information to segment players, and drive targeted promotional activities to specific players.

To continually analyze results, our program is based on a set of KPIs that are the true measure of a player loyalty program. Prior to implementation and development of the program, we will consult with you to determine the optimal program metrics to be measured.

4.16 – 10 Promotion Capabilities



Our model's performance indicators will expand brand awareness and:

- Increase revenues and incremental net profit.
- Increase player participation, engagement, and redemption.
- Enhance player satisfaction by driving increased rates of redemptions.
- Increase retention of existing players.
- Enhance retailer collaboration by driving incremental return.

Our solution provides lotteries with a real-time reporting dashboard available 24/7. We will build the dashboard to measure the variables most important to you based on your objectives.

Standard Reports and Ad Hoc Reporting Total Time Economic Redemption Spent on Site Performance Behavior per Member Communication Member Rewards Response Enrollment Behavior Member Responsible Earning Engagement Behavior Gaming

Maintain Program Relevancy

Figure 4.16 - 6.

With this approach, lotteries can maintain a clear view of the program's costs and benefits – and measure results. It's a profit-driven business model that minimizes risk.

Our program is based on actual redemption of points, as opposed to a lump sum associated with prize pools. Prizes are paid upon redemption, instead of pre-paid. In other words, rather than taking a percentage of funds out of the prize pool, the Lottery can choose to print more tickets. *You* decide how much you want to invest in each promotion.

This transparency with respect to rewards costs and performance – coupled with rewards that are more Lottery-focused than those of a typical prize catalogue – can drive more value for the Lottery.

Promotion Capabilities 4.16 – 11



4.16.1.H Second Chance Promotions

The ability for players to enter second chance promotions with varieties of triggers and entries for digital or physical games. Allows players to collect points for entries into a second chance promotion. The Lottery should be able to configure promotions that randomly select a designated number of winners with different levels of tiers within specified periods of time.

The Lottery can use IGT's solution to flexibly offer second chance drawings for all lottery products.

IGT has read, understands, and will comply with this requirement.

Our flexible, configurable second chance solution enables lotteries to offer a player another chance to win. (It powers the California Lottery's second chance program, the largest in the world.) Part of the iLottery System, it uniquely enables a single player view of iLottery, second chance, and known retail transactions (i.e., those associated with a player account), as well as access to IGT's robust bonus capabilities, to create targeted campaigns that attract and engage players and offers benefits to key stakeholders, as described in the next figure.

IGT's Second Chance Solution - Stakeholder Benefits

Stakeholder	Benefit
Players	 Enjoy a range of convenient options for entering second chance drawings, e.g., by scanning their tickets using the mobile app or entering ticket codes in the app or on a device-responsive second chance portal Appreciate the fun and ease of automatically being entered into a second chance drawing by simply scanning their ticket with the mobile app Receive daily updates from the Lottery on the latest loyalty program opportunities
Retailers	 Leverage integrated second chance data to offer incentives that drive players to retail locations (in line with your goal of enhancing your existing retail partnerships) Leverage players' mobile devices to provide a convenient way to generate second chance entries via retail purchases
The Lottery	 Retain and strengthen the relationship with existing players by keeping them invested in West Virginia Lottery products, maximizing player engagement and revenue growth Build your player base (one of your purposes in obtaining an iLottery System per CRFP Section 4.1), including the hard-to-reach 18- to 34-year-old demographic
	 Reach players daily with loyalty program and associated marketing opportunities via their mobile devices (iOS and Android) Gather information about your players and their motivations for playing – the more you
	 know, the more you can do for them Manage underperforming games and create new play experiences on non-winning tickets, thereby creating more value across the game portfolio Promote new games and game families with limited-time promotions

Figure 4.16 – 7.

Our second chance solutions currently process more than a billion second chance entries throughout North America, where they have proven an exceptionally successful way to attract players to retail locations where lotteries can cross-promote new games from their portfolio.



Second Chance Innovation to Drive Ticket Sales

Our solution will provide you with extraordinary flexibility in the creation of your second chance drawings – including the selection of draw types and the robust bonus capabilities available. It also allows for extensive draw configurations, including cascading-draws options, which allow players to win a small prize and enter a draw for a larger one.

The table below illustrates a few of the types of second chance draw capabilities we can support.

New Ways to Boost Games Draw Types Bonusing Capabilities Draw Configuration Pool Purchase date Daily or monthly reoccurrence Promotion Entry window Fixed number of draws Multi-Entry Value One-time draw Value Pool/Promotional Multi-tier draws **Entry Pool/Promotion** Winner management Collect the Set End the Game

We can work with you to pinpoint specific promotional-draw types that meet specific opportunities in the West Virginia market.

4.16.2 **Promotion Triggers**

Vendors should describe the System's current capabilities to require actions that should be met ("Promotion Triggers") in order for a player to receive a Promo Award. The Vendor, at a minimum, should implement the following Promotion Triggers:

IGT has read, understands, and will comply with this requirement.

To target different audiences, campaigns can be set up to trigger in several ways that combine a reward with a particular player action that triggers the reward. For example, a campaign triggered by player registration would target new players, whereas a campaign triggered by logins could be used to encourage current players to play again. Wagering and deposit campaigns can be used for both types of players. You can define and accept a wide variety of promotion codes that players can redeem to trigger an offer.

To simplify the process, existing campaigns can be cloned to create new campaigns or to repeat a campaign. When cloning a campaign, the user has the choice of whether to make a simple copy or to repeat the campaign periodically – e.g., weekly, monthly, or by calendar month – along with the number of copies to create. When creating periodically repeated copies, the start and end dates of the new campaigns are calculated automatically.

Promotion Capabilities 4.16 – 13



Bonus Campaign Targeting

In addition to targeting Player Groups, all bonus campaigns can further target players using the following criteria elements:

Bonus Campaign Targeting Criteria

Data-Based	Gaming Activity-Based	Player Demographic-Based
Action Time Range	Wager Amount/Dates	 Total Number of Logins
Action Day of weekAction Months	 Total Number/Value of Deposits 	GenderCurrency
Loyalty Levels	 Total Number/Value of Withdrawals 	Birth Date
Login DatesDeposit Amounts/Dates	Total Number/Value of WagersTotal Number/Value of Cash	CountryEmail
 Withdrawal Amount/Dates 	Games	Nationality
	Number of DrawsNumber of Game Boards	LanguageRegistration Date and Level

4.16.2.A Promotion Codes

The loading of promotion codes that can be entered by players into Portals in order to obtain Promo Awards. The Vendor should be responsible for generating these codes, and loading them onto the System for redemption, as directed by the Lottery.

IGT has read, understands, and will comply with this requirement.

These special codes, linked to promotional campaigns, can be used to award extra real-money or Promo Dollars or simply to allow players entry into a campaign. At the Lottery's direction, IGT will generate these codes and load them onto the iLottery System for redemption.

4.16.2.B Referrals

The Lottery should be able to offer a bonus to players that complete a mechanism within Portals to refer a new user to the iLottery Program. If the new user signs up successfully and conducts wagering then a bonus may be applied to the referral user, the referred user, or both as configured by the Lottery.

IGT has read, understands, and will comply with this requirement.



This feature rewards both the referrer and the friend referred – a viral marketing campaign to grow the player base. The referral program is Lottery-configurable, to a fine level of detail. Both the referrer and the new player can receive any of the rewards available in your rewards system.

Example Referral Bonus



Figure 4.16 - 8.

4.16.2.C Events

The Lottery should be able to provide Promo Dollars into a player's account for certain events. For example, the Lottery designs a \$5.00 Promo Dollar deposit on a player's birthday.

IGT has read, understands, and will comply with this requirement.

Using a combination player-group and action-rewards promotions, you can flexibly define event-based rewards (such as Promo Dollar deposits on a player's birthday). Players in a group are notified of the active promotion and the actions that they must carry out to claim it.

Promotion Capabilities 4.16 – 15



4.16.2.D

Player Wager Selection(s)

Player wager selection, or combination of selections prompting a coupon, free play, promotional dollar, etc.

IGT has read, understands, and will comply with this requirement.

Campaigns can be established wherein all players or specified Player Groups can receive a triggered promotion (configurable by the Lottery) for a completing a wager selection or combination of selections.

Example Promotion for Player Wager Selection



Figure 4.16 - 9.

4.16.2.E Scanning Qualifying Physical Tickets

Scanning of qualifying physical tickets prompting a coupon, free play, promotional dollar, etc.

IGT has read, understands, and will comply with this requirement.

The Lottery can configure campaigns so that, when players use the mobile app to scan qualified tickets, they are rewarded with a specified promotion (e.g., coupon, Promo Dollar, etc.).

4.16 – 16 Promotion Capabilities



4.16.2.F List Imports

Ability for the System to receive and import a list from and export a list to an external source in order to award, or qualify, players for a certain Promotion Type.

IGT has read, understands, and will comply with this requirement.

Authorized users can use the back-office administrative UI's Player Groups Import functionality, which supports the bulk import of a predefined list of players. Once imported, the Player Groups functionality affords countless opportunities to award or qualify players for one or more of the iLottery System's promotion types. The iLottery System can also export a Player Groups list to an external source.

4.17

Configurable Rules

Vendors should describe the System's current capabilities to establish configurable rules related to Promotion Awards, Promotion Types, and Promotion Triggers. The Vendor should, at a minimum, to implement the following configurable rules that can be established with any Promotion Award, Promotion Type, or Promotion Trigger:

IGT has read, understands, and will comply with this requirement.

Campaign Builder: Efficiently Create and Manage Promotional Campaigns

Campaign Builder is the iLottery System's main tool for creating, managing, and deploying promotional campaigns – easily. This real-time, step-by-step tool can trigger communications (i.e., email, text messages, etc.) and bonuses as soon as a specified event occurs, based on the parameters set for the campaign.

By defining actions that trigger a promotion and configuring numerous reward types, you can quickly deploy timely offerings for any type of promotion. And, with Campaign Builder's automation capabilities, you can eliminate manual effort and potential error from as many tasks as possible.

Campaign Builder is characterized by the features listed just below, which will benefit the Lottery as player behaviors continue to shift, new devices continue to proliferate, and market dynamics to change:

- Ease of Creation and Management: An easy-to-use Campaign Builder User Interface (UI) by which you can create, edit, clone, and reuse promotions.
- Control of Application of Promotion: The functionality to apply a promotion to all players, to Lottery-created player segments, or to players whose details or actions meet those specified in the promotion.
- **Flexible Triggers**: The functionality to describe numerous types of actions that will trigger a promotion, ensuring the efficient and timely offering of any type of promotion (as further described in Section 4.16, Promotion Capabilities).
- **Flexible Awards**: The functionality to describe numerous award types (e.g., points, vouchers, and cash prizes).
- Automation: The capability to automate as many tasks as possible to eliminate manual effort and error.
- At-a-Glance View of All Campaigns: The Campaign Dashboard provides a quick view of all campaigns in the system, with the ability to drill down to the details of any particular campaign.
- **Analytics**: The functionality to analyze the performance of your promotions (real-time analytics) so that you can continually enhance them.

Configurable Rules 4.17 – 1



For third-party content, Campaign Builder will use the marketing assets provided by the content providers.

Additionally, if you wish to send a notification on a particular event, the solution's Communication Campaign wizard includes the ability to create and manage your messaging content strategy through email and other electronic communications with your players.

Creating a Promotional Campaign

To create a promotional campaign, Campaign Builder takes the user through the five main steps:

- 1. **Campaign Detail:** The user gives the campaign a name and description, selects the reward type (e.g., cash bonus, bonus bags) and trigger action (e.g., deposit, login, or wager), gives the campaign a priority, defines whether it can be combined with other campaigns, and selects the activation and expiry date.
- 2. **Parameters:** Depending on the type of campaign selected, different parameters can be added to define the campaign. The parameters will always include any restrictions around eligibility based on the player registration date, registration level, and player level, but can also include parameters related to the trigger action, such as time of day or amount.
- 3. Reward: The user enters the reward details. These include the calculation for the reward value, the games on which the reward can be used, and (for bonus bags) the qualifying and conversion requirements.
- 4. **Target Groups:** In this step, the user defines which player groups are eligible for the promotion and whether players must opt-in or enter a promo code to join the promotion.
- 5. **Communications:** The user defines any notifications to be sent as part of the promotion. This includes any messages to be sent announcing the campaign or reminding players to take part and the message to be sent when a player is rewarded.

The next figure shows how Campaign Builder guides the user through Step 1, Campaign Detail, of creating a promotion. (The five steps can be seen near the top of the screen.)

4.17 – 2 Configurable Rules



Creating a Promotional Campaign

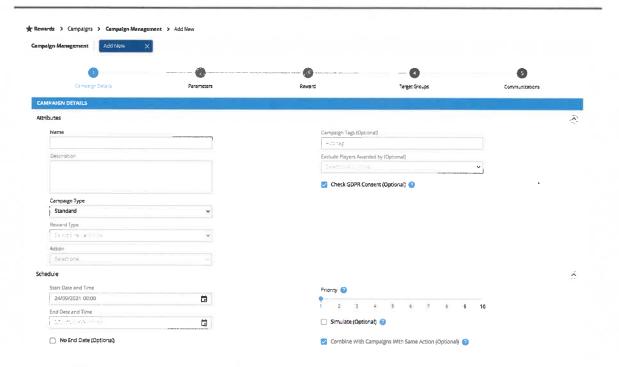


Figure 4.17 - 1. Campaign Builder: This screenshot shows the first of five steps required to create a campaign.

To simplify the process, existing campaigns can be cloned to create new campaigns or to repeat a campaign.

Campaign Tracking & Reporting

Campaign Builder features real-time analytics capabilities that allow you to analyze your promotions as they are happening to measure and maximize their effectiveness. The impact of your promotions on sales is easy to track and to allocate to each participating player. Each campaign can have an overall budget and a budget per player. The insights and control provided will give you the power to maximize the value of your player base while remaining in control of your promotional budgets.

The impact of your promotions on sales is easy to track and allocate to each participating player.

Our solution tracks promotions both by player and by promotion. Each promotion is assigned a unique identifier on the iLottery System, which supports reporting. You can run reports at custom intervals (real time, hourly, daily, weekly, etc.) for any of your promotions based on the specific promotional offers. You can evaluate response rates and the Return On Investment (ROI) for your promotion campaigns. Promotions are exportable in a file feed and can be provided on a scheduled basis to third parties as you direct.

The Campaign Dashboard presents the user with all campaigns in the iLottery System, with key information on each campaign including status, activation and expiry dates, and priority. You can use a search form to quickly find a particular campaign. Clicking on the desired campaign takes the user to a summary screen of the promotion showing the number and value of rewards awarded by the campaign. From there, it is possible to drill down to each player who has been awarded.

Configurable Rules 4.17 – 3



The integrated reporting component includes several standard reports on campaigns and invite-a-friend schemes (referral awards).

4.17.A Award Type

The System should allow the Lottery to specify if a promotion results in the awarding of wagering funds, free games, loyalty points, or an entry into a drawing pool for the chance to win a prize.

IGT has read, understands, and will comply with this requirement.

This functionality is handled in the "Campaign Details" step of creating a promotional campaign, described above and illustrated in the following screenshot.

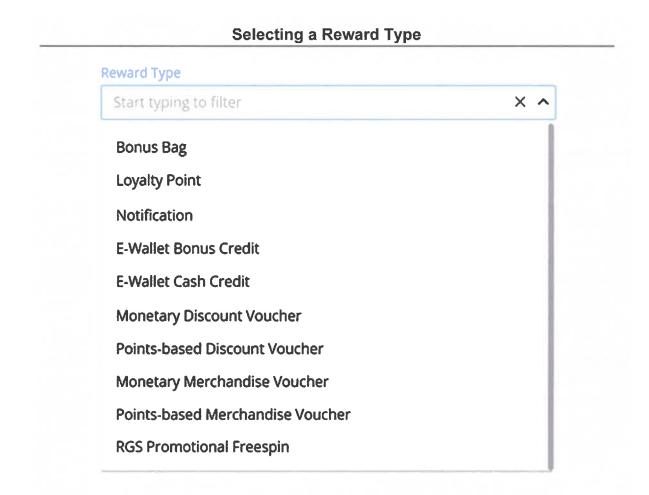


Figure 4.17 - 2.



4.17.B

Audience Segmentation

The Lottery should be able to specify a segment of registered players within the System that are eligible for the promotion.

IGT has read, understands, and will comply with this requirement.

The "Target Groups" step in creating a campaign in Campaign Builder defines which player groups are eligible for the promotion and whether players must opt in or enter a promo code to join the promotion.

As outlined Section 4.9.1, Player Accounts & Player Data, the PAM tracks all player data and interactions in granular detail. Tracking these behaviors makes it easier to personalize players' engagement with your brand.

The Lottery can use the wealth of data at its disposal – including playerspecific data on retail transactions – to segment its customer base in new ways. You'll be able to use the extraordinary wealth of data at your disposal—including player-specific data on retail transactions, because we will be fully integrating the iLottery System with your existing retail gaming system—to segment your customer base in countless new ways. Using the Player Groups feature, you can maximize the relevance of player communications and promotions.

Player Groups can be used as a filter for promotions, notifications, reports, and more. Groups are not mutually exclusive: a player can belong to any number of player groups, and you can create any number of player segments (both automatically and manually). As a result, the possibilities for segmentation and related marketing initiatives are nearly endless.

The following screenshot shows the Player Groups tab.

Player Groups Functionality Player Groups Treate Player Group w/Hide Columns (3/3) PLAYER GROUPS LIST Q 🕹 Export Name 4 Player Group Type Number of Players ‡ Player Convenience 0 Convenience Players Zero Frequency Player 0 Highly Frequent Player Player Very Frequent Player

Figure 4.17 - 3.

Player groups are often used to target promotional campaigns and/or sales-related encouragement so that particular campaigns can be pushed toward players who frequent certain retail locations or do not play as regularly as may be desired. Notifications targeted to specific groups can be triggered by events or sent instantly on demand.

Configurable Rules 4.17 – 5



4.17.C

Promotion Date and Time Settings

Promotions should be configurable with a fixed start and end date. The promotion start date should be capable of being configured at least one (1) year in advance of the actual start date. Additionally, once awarded, any Promotion Awards should also be configurable with a fixed expiration date.

IGT has read, understands, and will comply with this requirement.

In the Campaign Details step, the user defines the promotion's activation and expiry date, which will accommodate your requirement to be configurable for at least one year in advance of the actual start date.

4.17.D Promotion Budget

Promotions should enforce a budget. When the budgeted amount has been disbursed, the promotion should end regardless of other promotional parameters. Promotion budgets shall be approved by the Lottery. Once a patron has met the terms of a promotion offer, the Vendor shall not cap or limit winnings earned while participating in the offer.

IGT has read, understands, and will comply with this requirement.

Using Campaign Builder, you can assign each campaign an overall budget and a budget per player. When the campaign reaches a percentage (specified per campaign) of the overall budget, the rewards engine will send messages to an email address or list, giving the Lottery user the opportunity to decide whether to continue the campaign.

4.17.E Transaction History

Promo Dollars, when awarded, expired, or redeemed by the player should display accordingly in Portal transaction history.

IGT has read, understands, and will comply with this requirement.



Promo Dollars Display in Transaction History

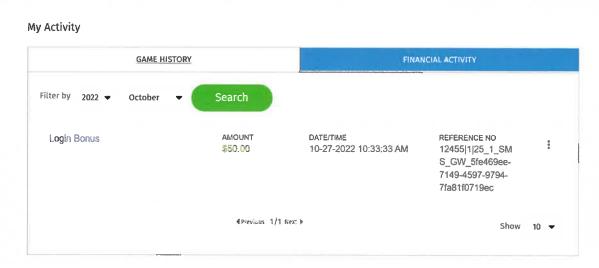


Figure 4.17 - 4.

4.17.F Unique Tracking

Each promotion should have a unique identifier in the System.

IGT has read, understands, and will comply with this requirement.

Each promotion is assigned a unique identifier, which supports reporting.

4.17.G Persistence

Promotions should be able to run automatically and/or persistently (i.e. set it and forget it). For example, the Lottery may set a permanent promotion that provides a \$5.00 Promo Dollar deposit on a player's birthday to occur every year for all players.

IGT has read, understands, and will comply with this requirement.

As part of the Campaign Details step, you can configure a promotion to run persistently without a defined end date.

Configurable Rules 4.17 – 7



4.17.H Portal Visibility

The System should make available promotions visible to eligible players within the portals including unclaimed, active, redeemed, and expired statuses.

IGT has read, understands, and will comply with this requirement.

The following screenshots show an example.

Promotions Display

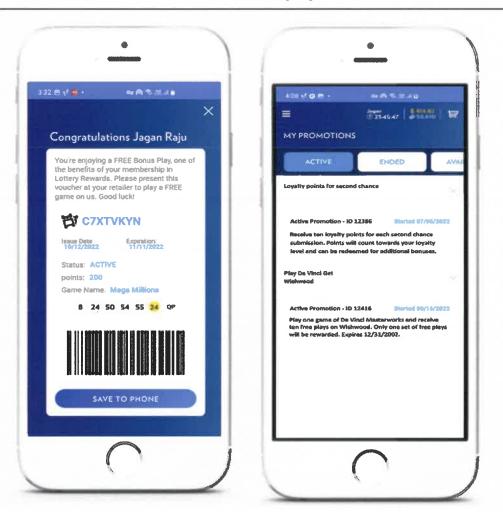


Figure 4.17 - 5.



4.17.I Limitation on Use

Promo Dollars should not be available for external bank transfers until the Promo Dollars have been fully wagered within the System (i.e. prizes resulting from used Promo Dollars may be externally transferred).

IGT has read, understands, and will comply with this requirement.

As described in Section 4.16, Promotion Capabilities, our solution includes a defined reward type called Bonus Cash (i.e., Promo Dollars), which is non-withdrawable money credited to the Player Wallet for spending on a specified game, all configurable via Campaign Builder. Winnings resulting from used Promo Dollars are externally transferable.

4.17.J Game Specificity

Promo Awards should be assignable to specific games including third-party provided games.

IGT has read, understands, and will comply with this requirement.

The Campaign Details step in creating the campaign includes defining the promotion's applicable game(s), which can be any game (IGT's or those of a third party) that is integrated with the iLottery System.

4.17.K Advertising Specificity

Promotions should be able to be associated with specified advertising campaign sources, including Affiliate Online Partners or groups of Affiliate Online Partners, in conjunction with the Affiliate Online Partner Program specified in Section 4.17.2.

IGT has read, understands, and will comply with this requirement.

As described in Section 4.18.2, Affiliate Partner Program, IGT can support your Affiliate Partners. Once established, promotions defined in the iLottery System can also be tagged to become associated with specified advertising campaign sources, including your Affiliate Partners.

Configurable Rules 4.17 – 9



4.17.L Rule Interoperability

Promotion rules, as defined in this section, should be capable of working independently or in combination with each other.

IGT has read, understands, and will comply with this requirement.

When multiple requirements are set for a campaign such as minimum deposit amounts or date of action, a player must meet all the requirements to qualify for that campaign's reward. However, multiple campaigns with differing requirements can operate simultaneously. The priority of the campaigns, as described in Section 4.17.1, Concurrent Promotions Handling, determines which reward the player will receive.

4.17.M (a-h) Promotion Offers

The System should maintain a record of all promotion offers in an electronic file that is readily available to the Lottery. All promotion offers shall be stated in clear and unambiguous terms and shall be readily available to the player after the offer is accepted and prior to completion of participation. Promotion offers terms and the record of all offers shall include at a minimum:

- The date and time presented;
- b. The date and time the award is active and expires;
- c. Patron eligibility, including any limitations on player participation;
- d. Any restriction on withdrawals of funds;
- e. Wagering requirements and limitations by type of game;
- f. The order in which funds are used for wagers;
- g. Eligible games: and
- h. Rules regarding cancellation.

IGT has read, understands, and will comply with this requirement.

We will configure all promotion offer terms and the record of all offers with the minimum specifications and any others the Lottery chooses to add during the Contract Term. This information can be sourced from the reporting solution, described in Section 4.20.6, Data Management and Reporting. We will work with the Lottery to write the terms and conditions for each promotion.

4.17 – 10 Configurable Rules



4.17.N Promotion Cancellation

The System should provide a clear and conspicuous method for a patron to cancel his or her participation in a promotion offer that utilizes restricted gaming credits. If the patron elects to proceed with cancellation, unrestricted funds remaining in a patron's account shall be returned according to the terms and conditions.

IGT has read, understands, and will comply with this requirement.

4.17.1

Concurrent Promotions Handling

Vendors should describe the System's current capabilities for assigning and handling multiple concurrent promotions offered or activated in association with the same player. Provide any supporting rationale for the current architecture including any best practices to ensure player ease of use and understanding.

IGT has read, understands, and will comply with this requirement.

The iLottery System's promotions capabilities can be applied to multiple promotions running concurrently without any limitations. Campaigns can be prioritized in a hierarchical manner. As part of Campaign Builder's "Campaign Details" step, you can assign a priority level to the campaign and indicate whether a player is eligible for one campaign if they have already been rewarded by selected others. This allows for a tiered set of rewards for one action depending on the details of that action, such as having rewards of increasing value or type based on the amount of a player's deposit.

For each campaign, in addition to the ability to send targeted messages and reminders, full terms and conditions are displayed to the player in the player portal and mobile app.

Configurable Rules

4.18

Retailer Support

4.18.1 iCash

Vendors must describe any System capabilities that support the redemption of prepaid instruments that are issued and sold at retailer locations ("iCash"). If applicable, describe the roles and responsibilities required from the Lottery's retail suppliers as compared to those managed by a Vendor.

At a minimum, the Vendor must implement a solution, in cooperation with the Lottery and its third parties, that fully manages the issuance, redemption, and expiry of iCash. Additionally, the System must include reporting related to iCash redemption activity that meets the requirements of the Lottery.

The System must have the capability to accept iCash purchased at retailer locations. For example, redeem \$20.00 iCash purchased at retail, online to fund a wagering account and promotions such as, buy \$20.00 iCash at retail, get \$5.00 of additional for iLottery play.

Vendors must describe options to create and purchase iCash at retail locations while enabling online redemption.

IGT has read, understands, and will comply with this requirement.

IGT will work in cooperation with the Lottery and its third parties to implement a solution that fully manages the issuance, redemption, and expiry of iCash.

The iLottery System supports a number of prepaid instruments as payments. It supports iCash vouchers purchased at retail for loading funds that can then be used for iLottery wagering. This is achieved via the iFunds functionality, wherein a tracking ID number associated with the iCash voucher is entered by the player through the player portal or mobile app, which redeems the value of the voucher from the originating system. The player can then use those funds to make iLottery purchases.

Our portal and mobile app include a User Interface (UI) element to accept merchandised prepaid cards. We will integrate with the third-party's issuance system's APIs to meet your criteria for redemption, effectively treating it in the same manner as a new payment-provider integration.

The iLottery System will report on all prepaid instrument activities, including redemption activity. We will work with the Lottery to define your reporting requirements and configure our solution accordingly.

Retailer Support 4.18 – 1



4.18.2

Affiliate Partner Program

The Lottery intends to authorize retailers and organizations such as businesses that manage online websites, mobile websites, and mobile apps ("Affiliate Partners") to direct traffic to the iLottery program in exchange for a revenue share or bonus payment ("Affiliate Earnings"). Affiliate Partners may also include existing Lottery Retailers that have a digital presence.

When attributable traffic originating from an Affiliate Partner converts into a prescribed outcome (e.g. player wagers, player sign up, etc.) then the Affiliate Partner may be entitled to Affiliate Earnings. The Affiliate Earning may be a flat fee, a recurring percentage of ongoing activity, or a combination of both.

The Vendor should manage the Affiliate Partner program from a sales and marketing perspective. This includes performing functions such as recruiting the Affiliate Partners, negotiating their commission structures with Lottery direction, analyzing and optimizing the Affiliate Partners ongoing business, designing standardized digital advertising assets, seeking approval of the Lottery for each.

Affiliate Partner's portal should house digital assets and providing technical delivery of the System to support the operational needs to manage the Affiliate Partner program. This includes, but is not limited to:

IGT has read, understands, and will comply with this requirement.

The proposed iLottery System can integrate with full-service affiliate marketing platforms and portals to enable advertising-tracking mechanisms such as advertising pixels or affiliate-specific tracking parameters. This would authorize Affiliate Partners to direct traffic to the Lottery's site in exchange for a revenue share or bonus payment (i.e., Affiliate Earnings).

We partner with Income Access to provide affiliate programs for our customers' digital marketing needs. Through the partnership, we can provide an ad-serving system that would allow you to create the required campaigns. Additionally, ads could be serviced by a third-party banner-serving solution. The integrated Affiliate Partners would be able to acquire advertisements through Income Access.

Partnered with more than 300 industry-leading brands in more than 50 markets worldwide, Income Access provides particular value via their experience in the U.S. market. Currently, they support several major iLottery solutions and have the best market knowledge on the U.S. affiliate landscape. Through this experience, Income Access can provide additional consulting services to bring added value. With these advantages, Income Access will provide the Lottery with the greatest value for Affiliate Partner investment.

Via Income Access, IGT will ensure expert services for all aspects of your Affiliate Partner program. This includes managing the program from a sales and marketing program, recruiting Affiliate Partners, negotiating their commission structures under your direction, analyzing and optimizing the Affiliate Partners' ongoing business, designing standardizing digital advertising assets (and seeking Lottery approval for each).

4.18 – 2 Retailer Support



Income Access enables end-to-end Affiliate Partner program solutions by which you can:

- Target your audience with extensive ad serving and campaign management.
- View the full player journey from first impression to conversion.
- Maximize transparency with multi-channel end-to-end tracking.
- Measure the value of acquisition strategies with in-depth reporting.
- Explore actionable data to optimize your allotted marketing budget.
- Satisfy diverse Affiliate Partners' needs with custom commission payouts.
- Leverage Income Access's experience via customized digital marketing services in content marketing, design, media buy, Search Engine Optimization (SEO), social media management, and other areas.

The Income Access portal will house digital assets and provide technical delivery to support the operational needs to manage the Affiliate Partner program.

4.18.2.A Licensing

The System should provide web-accessible software to manage the workflow for the Affiliate Partner licensing process (e.g. accepting applications, holding for review, accepting / rejecting by the Lottery, etc.) along with appropriate logging, tracking and reporting of licensing activities.

IGT has read, understands, and will comply with this requirement.

The Income Access portal includes web-accessible software to manage the entire Affiliate Partner licensing process, along with appropriate logging, tracking, and reporting of licensing activities. With Income Access's expertise in affiliate services stretching back to 2002, it brings expertise in managing the workflows behind all aspects of Affiliate Partner recruitment, negotiations, account management, payment processing, day-to-day administration, and relationship building.

4.18.2.B Asset Management

The System should provide web-accessible software for the Lottery to view and approve program assets and materials that can be downloaded or viewed (e.g. approved banner ads) by Affiliate Partners.

IGT has read, understands, and will comply with this requirement.



4.18.2.C

Commission Management

The System should provide web-accessible software for the Lottery to set commission rates globally and by retailer.

IGT has read, understands, and will comply with this requirement.

The web-accessible Income Access affiliate software includes a dedicated space to set flexible commission structures and rates globally (i.e., via flexible Commission Groups) and by retailer/Affiliate Partner.

4.18.2.D Reporting

The Vendor should provide a web-accessible reporting system for the Lottery to obtain comprehensive reports related to the Affiliate Partner program.

IGT has read, understands, and will comply with this requirement.

Income Access provides a granular, multi-level reporting system that allows lotteries to view campaigns, affiliate performance, and other key metrics in a range of ways – including quick summary points to measure overall program performance, a top-affiliates reporting view, quick stats on individual campaigns (clicks, commissions, etc.), and much more. Data and reports can also be exported. These comprehensive reporting and analytics tools provide a deeper understanding of digital marketing efforts and spend. You'll have detailed insights into where customers are coming from and be able to attribute them in your conversion funnel – a key to ongoing marketing success.

Further, our iLottery System's built-in integration with Google Analytics will provide the tools to track players coming to your site via other media.

4.18 – 4 Retailer Support



4.18.2.E Affiliate Partner Portal

The Vendor should provide a secure website (login with authentication method) for Affiliate Partners to view their metrics, performance activity, financials, and approved assets (e.g. approved banner ads) available for download and immediate use.

The Vendor should be responsible for reconciling payments to all Affiliate Partners except in cases where the Lottery elects to disburse payments directly to Affiliate Partners in which case a payments file should be generated by the System and routinely transferred to the Lottery for processing. Lottery shall approve all Vendor Affiliate Earnings programs prior to implementation. Vendor should include any Affiliate Earnings payments on its regular invoice to the Lottery.

Vendors should describe their proposed solution for an Affiliate Partner program based on the minimum requirements described above. If a third-party company and/or third-party software is utilized to manage the Affiliate Partner program, then Vendors should state the company name and company website address in their response.

IGT has read, understands, and complies with this requirement.

The Income Access (https://incomeaccess.com/) solution portal offers a two-way viewing feature, enabling both the Lottery and Affiliate Partners to have separate logins to view key performance metrics. The Affiliate Partner can easily log in at any point to view their earnings and the latest content available from the Lottery.

The Income Access software facilitates streamlined Affiliate Partner payments by which you can:

- Reward your Affiliate Partners with bespoke compensation models.
- Maintain full control via a fully integrated payment processing tool.
- Apply commission structures to individual campaign tracking IDs.
- Easily set, calculate, and run your Affiliate Partner's invoices all from one tab.

Payments can be fully exported from the system so they can be executed at the Lottery's discretion.

4.18.3 Withdrawal at Retail

The Vendor should describe any ability for the player to be able to withdraw funds for prizes \$600.00 or less at traditional retail locations. Vendors should describe the process to be followed by a player and retailer and the technology solutions that can be leveraged.

IGT has read, understands, and complies with this requirement.

Because IGT will fully integrate the iLottery System with your current AuroraTM retail gaming system, your players will be able to easily withdraw funds by scanning their mobile app's Virtual Player Card (or a completed digital play slip) to initiate a player-identified session at retail. All subsequent transaction activities will then be associated with their player account, allowing the player to withdraw from the withdrawable pockets.

Retailer Support 4.18 – 5



Because we'll fully integrate the iLottery System with your retail system, we can go far beyond this capability to provide a full suite of digitalized services to enhance players' retail experience. Our mobile app is designed to be scannable by appropriately equipped retailer-operated and self-service terminals, such as those used in West Virginia. In addition, we design our retail application software to enable our full suite of digital-in-retail features, which we call "Connected Play."

Following are further details on Connected Play, its player features, and its benefits for the Lottery, its players, and its retailers.

Connected Play: The Full Power of Omnichannel Designed Specifically for Lotteries

We know the Lottery is looking ahead at the rapidly evolving retail environment, prioritizing adaptability to maximize a digitalized retail player experience. We've invested heavily in understanding consumer, retail, and technology trends. This includes leveraging our own research, that of third-party experts such as the global trend-watching agency Foresight Factory, and close examination of retail operations that have successfully implemented a digitally connected retail experience.

Further, the COVID-19 crisis placed a premium on the need for lotteries to provide digitalized services that enable players to define their own frictionless journey for engaging with a lottery ecosystem.

From these efforts and observations, we have identified key consumer needs that drive our approach to retail evolution, as shown in the table that follows:

Retail Lottery Today and Tomorrow: Mapping Consumer Needs to Lottery Solutions via Connected Play

Lottery Retail Today	New Consumer Need	New Consumer Behavior	Connected Play: Lottery's Retail Evolution
Fragmented and disconnected channels	Convenience	Mobile-centric: Expect to use their devices for everything	Digitalized services throughout the player journey
Paper-based play slips and tickets	Paperless	War on waste: Want to access everything digitally	Digital transactions and receipts (i.e., play slips and tickets stored on mobile app)
Cash-based transactions (payments and winnings)	Cashless	Intolerant of friction: Want to minimize steps and impediments to purchase	Immediacy via payment- and redemption-enabled Player Wallets
Manual interaction	Contactless	Safety: Want to ensure hygienic interaction	Player recognition at retail via scanning of mobile player card
Anonymous players and mass marketing	Relevance & Reward	Expect recognition: Will share personal information in exchange for strong value proposition	360-degree player view enables enhanced personalization of marketing campaigns and rewards

Figure 4.18 - 1.

4.18 – 6 Retailer Support



To address these needs, we build all our solutions to address the convergence of the retail and digital channels. This Connected Play approach is designed such that:

- Lotteries benefit from new insight into *known* player behaviors at retail by collecting data on all individual consumer habits (vastly enhancing your understanding of your identified player segments) for analysis and use in individually targeted marketing efforts yielding greater player engagement, retention, and sales.
- Players benefit from the convenient, paperless, cashless, contactless, frictionless, and personally relevant consumer experience they increasingly expect in their engagement with brands with a greater ability to own their own frictionless experience at retail and beyond.
- Retailers benefit from the streamlined and modernized consumer experience available in their stores and from lotteries' ability to fuel the drive to retail via digital tools that incentivize desired consumer behaviors.

By designing everything to work in harmony toward one goal – modernizing the consumer experience – IGT's approach to solution development opens a whole new dimension of engagement and growth with a solution that truly is greater than the sum of its parts.

The Heart of Connected Play

The mobile phone isn't an optional device that people simply carry around – it's an extension of who they are. An increasingly important part of today's shopping journey, people expect to be able to use it in their engagement with brands. Connected Play leverages lottery players' relationship with their mobile devices to converge lottery retail locations with newer, contactless, real-time lottery experiences offered across channels. This creates a persistent and on-demand touchpoint, allowing players to make their lottery selections whenever and wherever is convenient for them

Unified Solution Supporting Connected Play's Three Strategic Pillars

The capture of retail data at the level of the individual player represents a transformational evolution in the lottery industry.

Connected Play fills a massive hole that has long vexed lottery operators: how to capture player-specific data on player behaviors? Traditionally, retail lottery has been entirely anonymous, while digitally-engaged players typically must complete full registration with Know Your Customer (KYC) verification (representing a potential barrier to adoption of available digital services). There's been little or no connection between the retail-based transactions and any digital services, and no way to capture player-level data on retail behaviors. Player communications, accordingly, have remained mass-marketing efforts with little consideration of individual player preferences.



Our refined approach changes all that. From the ground up, our unified solution is developed with the player in mind to facilitate the connected experience consumers increasingly demand. It creates a virtuous circle comprised of three strategic pillars, as illustrated in the following figure:

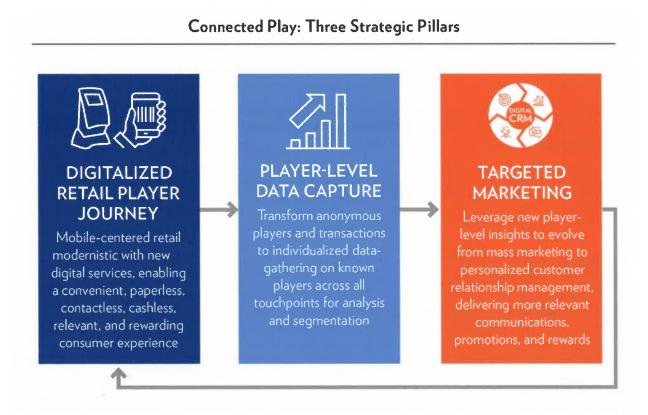


Figure 4.18 - 2.

By designing our retail and digital platforms, touchpoints, and interfaces to work in harmony with a unified data architecture, we've engineered a Connected Play ecosystem that:

- Converges the retail and digital channels.
- Lowers the barrier to player acquisition via light registration, in which players provide only
 minimal personal information (such as email and mobile phone number) to unlock digital-inretail services.
- Builds individual profiles on players to understand their behavior and better serve them.
- Evolves the lottery ecosystem from a product-centric, multi-channel approach to a player-centric, omnichannel approach.

4.18 – 8 Retailer Support



Light Registration: Unlocking New Possibilities

We understand and fully support your goals of integrating player activity across the digital and retail channels and of connecting with players so they think of playing Lottery games wherever they are and can make a purchase at any time.

We design our solutions for precisely this kind of channel convergence and mutual reinforcement. Crucially, our digitalization of retail provides lotteries with new data on retail player behaviors – a transformative breakthrough in the lottery industry. Such data – which has traditionally been unavailable to lotteries – can help you optimize games, services, and promotional efforts and thereby bolster your entire gaming ecosystem.

Digitalization is key to understanding user behavior, even when the player is "anonymous" (i.e., you don't know their personal details, but can identify them as a unique individual in your transactional data sets). Once you understand unique player profiles – what a player enjoys, how and when they want to play, etc. – you can proactively provide personalized, relevant services. Our iLottery System's flexible registration capabilities include a "light registration" feature that can provide you with even greater ability to acquire new players and generate data on a new group of "known" players at retail.

Light Registration: Creating a New Group of Known Players



Light registration is dynamic. You can ask players to provide only the data that's necessary (e.g., email address or mobile phone number) to unlock the digital features. This aligns with best practices for eCommerce and minimizes barriers to player adoption of your digital services. Moreover, once players have light-registered to establish an account, you can use notifications and marketing campaigns as another means to encourage opted-in players to join other Lottery programs (subscriptions, etc.) – promoting their benefits as a strong value proposition to players in exchange for providing additional details about themselves.

For further details on our digital system's flexible-registration capabilities, please see Section 4.9, Player Account Management (PAM) Software & Services.

Retailer Support 4.18 – 9



Connected Play in Action: Some Examples

Connected Play provides *lottery-specific* solutions to address today's consumer behaviors and preferences. Upon registering to establish an account, each player receives a Virtual Player Card attached to their Player Wallet. A digital code in the mobile app represents a convenient, retail-centered player card with which players can open transactional sessions at retail and earn and redeem points, all tied to a single account. This turns the mobile app into a closed loop "virtual debit card" they can use across the retail network. (This is effectively the same type of digital wallet consumers widely use today to buy – and earn loyalty rewards with – their morning coffee.)



Figure 4.18 - 3.

4.18 – 10 Retailer Support



Initiating a player session at retail (i.e., the transaction is associated with the unique player ID) unlocks Connected Play features. The following list highlights some of the features currently available or in our short-term roadmap:

- Enhanced Digital Play Slip: A registered player's digital play slip carries the player ID and all player-configured preferences (digital vs. paper ticket, auto-payment of winnings to the Player Wallet, responsible gaming limits, stored favorite numbers, etc.). In addition, by bypassing the need for paper, it furthers players' growing preference for a "war on waste" and contributes to the Lottery's sustainability goals.
- Player Wallet Cashless Services: Players can make payments using their Player Wallet, receive
 tickets digitally, add funds to their account, and receive automatic prize payments directly to their
 Player Wallet without needing to return to the retail store.
- **Digital Ticket**: Scanning the digital play slip or Virtual Player Card can result in delivery of a digital ticket directly to the player's mobile app, bypassing paper altogether (again, an environmentally friendly benefit). Because it's stored on the central lottery system (and correspondingly, within the player's account accessible via the app), the ticket is secure and cannot be lost.
- Scan-and-Redeem (Mobile Cashing): A powerful tool for acquiring players, scan-and-redeem enables players to scan their low- or medium-tier winning physical ticket at retail and claim the winnings to their account's Player Wallet cashing out winning tickets directly from the app without having to return to retail. These funds can be then reused to buy additional lottery tickets or withdrawn to the player's debit card or bank account. For digital tickets, winnings can be automatically added to the Player Wallet. (Autopay is an app setting that the player can turn on/off at any time.)
- Age Verification: Both fully registered (Know Your Customer-verified) and light-registered players that have completed age verification can avoid repetitive checks at self-service devices.
- Shopping Cart Management: The terminal interface can run in shopping cart mode, allowing
 checkout and cashless payment of all tickets at the end of a player session, whether the tickets are
 printed or digitally delivered to player accounts.
- Cross-Channel Promotions: In-app promotions can be activated at retail.
- Connected Loyalty: Transactions at the terminal can automatically earn loyalty points with the ability to use points to pay for new wagers, further incentivizing retail purchases and providing a seamless player experience (a single loyalty account) with the Lottery.

We will work with the Lottery to determine which features it wishes to adopt during the course of the Contract and collaborate to define and mutually agree on requirements and implementation.

Connected Play affords nearly limitless potential player journeys. It provides players with a modern and convenient experience, eases the path to purchase, and increases the value of each engagement with your players.

Retailer Support 4.18 – 11



Powered by Data to Maximize Personalization

For each use case, lotteries capture player-specific retail behavioral data, compiling ever-richer profiles. No matter where or how a player engages, our solution brings all player data into a central repository, enabling:

- Data analytics to yield key insight into your business and your players.
- Player segmentation and personalized automated marketing communications and campaigns.
- Cross-channel promotions and rewards (as well as exclusive offers for specific channels) for a seamless consumer experience with your brand.
- Responsible gaming profiles and safeguards across all channels.

This approach is designed to facilitate 360-degree marketing, leaving no stone unturned to strengthen the player relationship and drive value from each engagement.

Enabling a Player-Centric Lottery Business Model

Connected Play facilitates a transformation of the lottery business model from product-centric (managing products at retail, mass-marketing campaigns, anonymous transactions) to player-centric, in which turning data into actionable insights takes center stage. Rather than products distributed to touchpoints that players interact with in silos, lotteries can leverage their single view of the player in holistically coordinated ways.

You'll have the means to make a literal and real-time connection between retail-based transactions and individualized digital services while ensuring responsible gaming safeguards across all channels.

4.18 – 12 Retailer Support



One Ecosystem Across All Channels for an Evolving Business Model

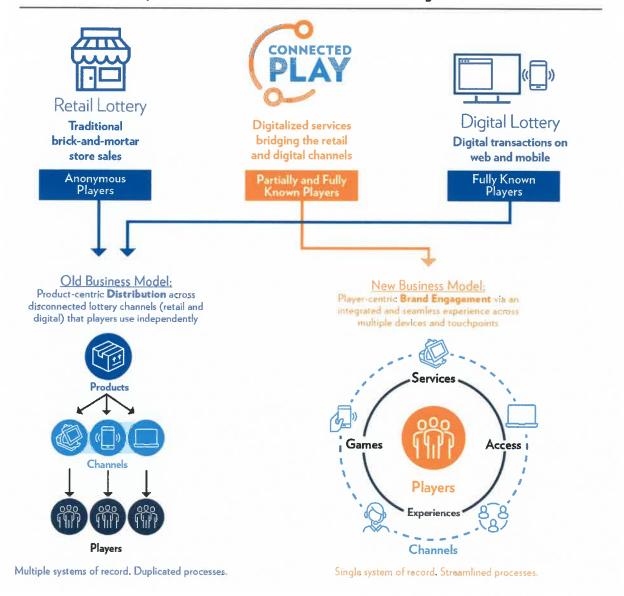


Figure 4.18 - 4.

IGT is focused on building an omnichannel path to purchase by which you can engage West Virginia players anywhere, anytime with a focus on leveraging digital engagement to drive them to retail. Each player will follow their own journey through your ecosystem. As long as the connections between all touchpoints are optimized, you can maximize the potential value at any point in the player's chosen path to purchase and beyond, providing the Lottery with frictionless innovation of Lottery distribution systems.

Retailer Support 4.18 – 13



Continually Evolving the Player Experience

IGT's approach will provide you with the tools to take your relationship with your players to the next level, capitalizing on their use of personal devices within and outside the retail environment and creating a permanent player touchpoint that seamlessly interacts with all Lottery systems and devices.

We are fully committed to Connected Play's ongoing evolution. The features and use cases outlined here are only the beginning. We maintain an ever-evolving Connected Play roadmap for the immediate future and continually examine the marketplace for trends and developments that help us plan further down the road.

Some examples under consideration include those crossing the following key themes:

- Cashless payments: Future cashless possibilities include expanding beyond the Player Wallet, including allowing players to set preferences for payments from and redemptions to credit and debit cards, as well as the integration of third-party wallets (e.g., Apple/Google wallets).
- **Touchless experiences**: We intend to develop new capabilities including evolving from mobile scanning to contactless Near Field Communication (NFC) tap device recognition at retail.
- Player engagement: Some areas of exploration include enhancing player age-verification services to include biometrics checks that can be stored and saved with a light-registered account, as well as the integration of third-party loyalty cards.
- Digital play: Another IGT initiative aimed at providing exciting new retail gaming opportunities and enhancing exposure to digital game content is making elinstants available via IGT's self-service terminal.

Most important, our roadmap evolves based on input from the real-world needs, challenges, and opportunities of our customers – including the West Virginia Lottery. As with all IGT solutions, *you* will play a key role in the ongoing development of Connected Play features and capabilities. In this way, we can bring you the widest array of lottery-specific solutions and will continually help you pinpoint the optimal solutions for the unique West Virginia market.

4.18 – 14 Retailer Support

4.19

Data Analytics and Player Communication Tools

The Vendor should supply a system that offers tracking, analytics, data modeling, data segmentation, personalized direct marketing messages and/or other marketing services that allow the Lottery to monitor and adapt to real-time player performance across all lines of business (e.g., iLottery, retail, loyalty, promotions, etc.). The system may be a custom solution or third-party solution that is provided by the Vendor.

IGT has read, understands, and will comply with this requirement.

IGT's digital marketing capabilities are built on marketing technology ecosystem that will enable marketers to track and capture player behavior (e.g., acquisition source, transactions, portal engagement, and communication preferences), analyze these large datasets (big data capability), and generate actionable insights out of the player data. These insights are presented as Key Performance Indicator (KPI) reports and dashboards (e.g., new players, active players, player value, player churn) to support marketer decision making in real time. Player segmentation is an automated process using multi-variable segmentation criteria and leveraging artificial intelligence optimization in segment generation. Segments are automatically shared with marketing communication platforms – Customer Relationship Management (CRM), front-end – for personalized player-facing campaigns.

We understand that along with the huge opportunity digital transformation offers come huge challenges. For example, the number of touchpoints that have opened up to players has exploded, and players expect their individual needs to be met across all of them. Consequently, lotteries must become experts in listening to their players and responding accordingly.

For the Lottery to truly understand the behavior of its players, data needs to be surfaced, organized, analyzed, and then applied in the proper way. From tools to track key metrics across all channels (whether retail, web, mobile, social, or email) to our next-generation Artificial Intelligence (AI)-enabled Player Data Platform (PDP) (which offers advanced analytics, business intelligence, reporting, player profiling, and personalization) to our advanced customer-engagement platform designed for personalized omnichannel marketing, IGT has created a comprehensive toolset that comprises functionality designed to help the West Virginia Lottery achieve its goals across all lines of its digital business.



4.19.1

Player Marketing Database

Vendors should describe their solution to extract, transfer, and load disparate sources of data from the Lottery's entire line of businesses (e.g., iLottery, retail, loyalty, etc.) into a unified database with a centralized view of each player and supporting tools to interact with and extract data ("Marketing Database"). The Lottery is interested in a solution that should provide the following minimum functionality:

IGT has read, understands, and will comply with this requirement and sub-requirements A through E below.

IGT's next-generation Player Data Platform (PDP) is a proprietary solution that enables advanced analytics, business intelligence, reporting, player profiling and personalization, data discovery, and predictive insights that leverage the benefits of data workloads such as big data analytics, data enrichment, AI and Machine Learning (AIML), and real-time data delivery. The AI algorithms, in turn, help harness the wealth of data collected by the disparate systems operating in a lottery's ecosystem, unearthing key insights to drive decision-making.

We describe the PDP in our iLottery System's functionality in further detail throughout this section.

4.19.1.A Data Integrations

The ability to automatically extract or acquire data from external sources on a defined schedule or incrementing real-time basis. This should entail a complete feedback loop, meaning the data can be connected from an acquisition source, to player registration and all transactional activity, to remarketing campaigns and the resulting trackable actions (e.g., app open, email open, etc.).

As mentioned, we understand the critical importance of data to a modern multichannel operation. Such an operation requires a multitude of disparate systems to serve and market to lottery players. And that carries the risk of data siloes and missed opportunities. The ability to unify all the data is critical to taking advantage of the opportunity that the data presents.

A core function of IGT's PDP is its data management platform. The platform – designed to integrate multiple, disparate data sources – enables a "one source of truth" business value, creating an enhanced understanding of players, products, and the entire operation – leaving nothing to instinct or guesswork. By bringing together data from core systems and marketing technology systems, coupled with the use of AI, a view of a lottery's players – previously unheard-of – is now possible.

Data from gaming systems is ingested in near real time, while data from other systems is acquired at various latencies, depending on the need and the source system capabilities. Our PDP is architected to allow for future integrations in the simplest manner.

The PDP works seamlessly with our Customer Relationship Management (CRM) platform to ensure a truly personalized experience, with a complete picture of the player. Aligned with player interactions from the CRM, all of the game system data can provide crucial insight into what is working, what is not, and potential opportunities to act upon. In short, the PDP ensures the alignment of data across the enterprise and complete data objectivity.



4.19.1.B Player Normalization

The ability to recognize the same player from two or more different data sources and to merge or make the data relational to a single controlling player profile.

IGT's solution works based on each player having a single player ID. Upon registration – either light or full – every interaction is attributed to that player and identified by the assigned ID. This works the same across all the disparate systems required in a modern lottery operation, from retail systems and third-party game systems to the various marketing systems handling our communications.

Even before players are registered, a process of intelligent identity resolution commences that forms a profile of the player prior to acquisition. Using the profile, our toolset makes it possible to establish a relationship with the player, which aids in marketing efforts and reduces the high cost of player acquisition. This works across all lottery touchpoints and devices, forming a single customer view with automatic cleaning and deduplication of data.

IGT's iLottery solution ensures a single player view across the entire lifetime of a player,

4.19.1.C Business Rules

The ability to define and apply business rules, as established by Lottery, to the data sources. For example, the ability to indicate a priority for 'source of truth' for two data sets that contain the same data types.

IGT believes strongly in the necessity of a single source of truth. Complete objectivity in data provides the ability for everyone across the enterprise to see the same data and make coordinated business decisions.

For this reason, our Player Account Management (PAM) system takes all the hard work out of establishing a single player view. Possessing an advanced integration layer where third-party systems communicate, all interactions conducted by the player get recorded in the PAM, completing a 360-degree view of each player. This ensures complete objectivity and confidence in the systems' data and reporting. For day-to-day operations, the single source of truth is already established and maintained.

Whether it is the PAM, the PDP, or CRM, IGT's iLottery system offers the Lottery complete flexibility to define its business rules. IGT will work with the Lottery as it identifies its authoritative data sources to ensure and establish our trusted data source within a data architecture fostered in a secure and accessible environment.



4.19.1.D Data Access

The ability for the Lottery to readily access, query, and export analysis reports or segmented player lists based on the universe of data available.

Across our solution, there are several methods of accessing data in the formats the Lottery requires. Operational and analytical reports ensure smooth day-to-day operations, while an array of curated dashboards supply deep insight into Key Performance Indicators (KPIs) across the whole enterprise. Our solution also provides the opportunity to export underlying data sets.

In addition, our iLottery System provides comprehensive self-service capabilities. But unlike other systems that are rarely used, our iLottery System, as part of its data architecture, provides curated data sets. These data sets are assembled by our data analysts and engineers, and supported by a team of data scientists that make it easy for users to attain the data they need without having to fully understand the underlying data structures, which are often complex and difficult to interpret. Data transformations make it easy to understand and the insight that users desire easily attainable.

Data can be accessed in a variety of formats, from formatted reports and delimited file formats to complex tabular or columnar file formats suitable for import to other systems. Automation capabilities are also present for immediate collaboration, while the power to build complex pipelines is also possible.

4.19.1.E Process Automation

The ability to automate certain recurring processes such as a daily extract file (e.g., a player segment file for a recurring email campaign) that is sent to a third-party.

Our solution provides seamless data integration within its toolset and process-automation throughout.

Data is automatically integrated into the PDP, where advanced algorithms are run to enhance and infer key data about players. AI models further enhance the data to provide insight into core metrics, which the Lottery cares about most, such as engagement levels, churn probability, purchase propensity, conversion rates, and activation rates. With AI used throughout, IGT is moving toward the next step in automation, providing AI-driven systems wherein AI is capable of making intelligent micro-decisions to improve user experiences and enhance personalization.

Near-real-time pipelines work all the way through to our player communications systems where visual journey building is possible. This will allow the Lottery to engage players with personalized content and offers to encourage the completion of goals across multiple channels.

Segmented campaign capabilities are provided, with dynamic segmentation and automation of AI-driven models.

If the use of third-party systems is required, automation of extracts and distribution are all included with both push and pull capabilities provided. The iLottery System can integrate third-party marketing automation systems, adding a dedicated delivery channel. It also allows for daily files to be extracted for use by a third party.



Following is a list of third-party marketing tools and services that are either currently integrated or have been integrated into the iLottery System in the past:

- Planning, Inc. (campaign management software).
- StrongView (full B2C marketing automation system).
- ExactTarget (digital marketing automation and analytics software and services).
- Acoustic (email marketing automation software).
- MBlox (mobile messaging platform, including Short Message Service [SMS] and push notifications).
- Salesforce Marketing Cloud (as part of our solution for the Kentucky and Rhode Island lotteries).
- Iterable (marketing campaigns platform).
- Adobe Campaigns (CRM communication solution)

4.19.2

Portal and Advertising Analytics

Vendor should implement Lottery-specified tracking mechanisms into the System in order to track activities related to portals, advertising, and other areas of useful measurement. Examples include Google Analytics tags, advertising pixels, and direct marketing response tracking.

IGT has read, understands, and will comply with this requirement.

IGT will implement Lottery-specified tracking mechanisms in the iLottery System in order to track activities related to portals, advertising, and other areas of useful measurement.

Web and app analytics tools are key to understanding player journeys across the site. Such tools can show how much time players spend with a page, what kind of choices they make, and whether their journey breaks down at a certain point. In addition to player journeys, each page has conversion elements — elements within a page that intend to get the player to do something, such as fill in and submit a registration form or purchase a wager. Each conversion element can be measured for its effectiveness through the conversion rate it provides and revenue value it generates.

Data analytics is vitally important to marketing, sales, and product management teams who want to make more informed, more targeted customer-centric decisions that lead to improved adoption and player engagement. The following figure depicts, at a high level, IGT's approach to web and mobile analytics.



Mobile & Web Analytics: A 360° Player-Centric Approach

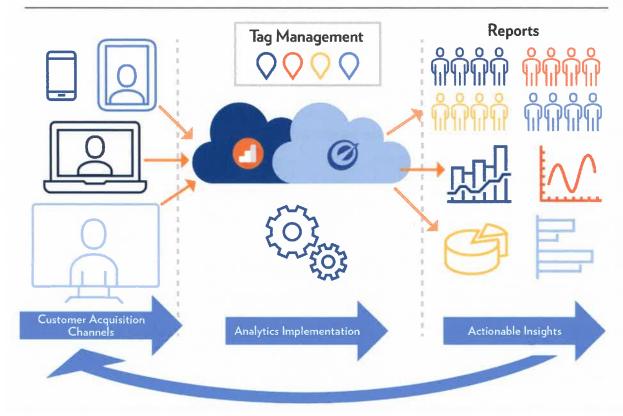


Figure 4.19 - 1.

Our mobile app has built-in integration with Google Universal Analytics. Currently, the app tracks page changes and player interaction on the page. Lotteries can view real-time data through the Google Analytics dashboard. This feature can be used to track a player's use of the app and gain valuable information about players' tendencies and behaviors. It can be used to establish and track funnel visualizations to identify which pages result in conversions and which tend to lose conversion opportunities, along with the capability to pass parameters to relate purchase value back to specific campaigns or site conversion paths. Further, it tracks all site analytics and digital campaigns, from emails to keywords, regardless of the search engine or referral source. Also, leveraging credible published research, test devices will be reviewed annually and the mix of devices changed to reflect any material changes in market penetration.

Further, we integrate with Google Analytics 360, which provides the tools and support to attain actionable insights without any data sampling. In addition to all the standard analytics features and reports, Google Analytics 360 enables access to advanced features like Unsampled Reports, BigQuery Export, and Data Driven Attribution. Its Service Level Agreement (SLA) covers data collection, data freshness, reporting, a higher processing limit, and access to dedicated support specialists from Google.



Website Audit

We provide an extensive audit of the website in terms of player journey, registration conversion, optimized behavior, and content consumption to identify areas for potential improvement. We work case by case and on custom-based needs to provide details of what is working and what is not, providing improvement and technical suggestions. Website auditing also covers benchmarking, predictive analytics, and Return On Investment (ROI) modelling to evaluate the outcome of our suggestions.

Developer Document for Analytics

The developer document is a set of technical instructions with exact code that we pass on to web developers. The instructions include the changes that need to be made to the website and onsite code, what to tag via JavaScript, and where to tag it. The document covers both technical and non-technical information, which includes overall strategy, explanation of tools, code snippets, and screenshots. This provides a complete player journey for custom events. This stage includes a one-to-one session and a live conference or phone support so we can walk clients through the proper procedure.

Google Tag Manager

Google Tag Manager (GTM) is a Tag Management System (TMS) that enables the improvement and management of tags (mark-up snippets such as Google Analytics, Google Ads, online chat, third-party scripts, custom scripts, image, or video). The tags that are required on web properties for an increasingly broad range of digital marketing technologies and vendors range from site analytics and affiliate marketing to multivariate testing and retargeting tools. We deploy GTM to support tag management services, which requires deployment throughout or on specific pages.

Session Play or User Experience Management

Session Play provides unprecedented visibility into the digital player experience. With this solution, we can see the way a website works through the eyes of each individual player. This insight is a strategic enterprise asset, one that affords a proactive approach to dramatically enhance the digital channel. This solution is designed to help players quickly resolve problems that are eroding customer satisfaction and digital-channel revenue. It provides a 360° view of the digital player and their activity. Benefits and results of this tool are exceptional in the digital space, as the typical Return on Investment (ROI) is only from three to six months. This is an optional and premium tool under our services.

Business Intelligence (BI) and Dashboard Solutions

Our iLottery System creates a data-driven culture with BI for all. It enables everyone at every level of the organization to make confident decisions using up-to-the-minute analytics. It helps to reduce the added cost, complexity, and security risks of multiple solutions with an analytics platform that scales from individuals to the organization as a whole.



4.19.3

Player Communication Tools

4.19.3.1 Digital Communication Tools

Vendor should describe its solution to provide a set of digital communication tools that can be leveraged by Vendor/Lottery to automate or create ad-hoc campaigns that are highly-personalized ("Player Communication Tools") to be utilized across all business lines (e.g., iLottery, retail, loyalty, etc.) and used in combination with the data from the Marketing Database. Lottery requires a solution that provides the following methods of communication ("Delivery Channels"):

IGT has read, understands, and will comply with this requirement and sub-requirements A through D below.

With extensive built-in notification features, our iLottery System will provide the Lottery with a fully integrated and controllable "light" Customer Relationship Management (CRM) tool based on real-time data. You can communicate with players via a variety of channels – Short Message Service (SMS), push notifications, email, and portal/app inbox messaging – with personalized messages and marketing campaigns (leveraging data from the Marketing Database) to incentivize their engagement across all business lines (e.g., iLottery, retail, loyalty, etc.).

IGT understands the Lottery's need to market effectively to its players. That's why we designed our iLottery System to maximize player marketing and communications opportunities, including:

- Leveraging retail-behavior data on known players to provide targeted, personalized player communications i.e., delivering messages the player won't miss and that are relevant to them. (This capability is unique to IGT, as we'll fully integrate the iLottery System with your existing retail gaming system, giving you a single system of record for your entire business.)
- Creating a positive, holistic environment for promoting games across your portfolio on all channels, retail or digital.
- Converging the retail and digital channels for example, by:
 - Leveraging digital communications to offer retail-specific promotions.
 - Using retail-location messaging to encourage digital engagement.

Additional User Interface (UI) components, such as in-site dynamic notices, will also be available for customization by the Lottery.



4.19.3.1.A Email

The ability to deliver email marketing messages and proper protocol to ensure that deliverability rates are maximized (e.g., IP warming).

We will work with our third-party CRM provider to ensure that the proper protocols are met for notifications delivery.

Email messages can be triggered by:

- An event in a player's account life cycle, i.e., registering, making a financial transaction, or closing their account.
- A promotional campaign, linked (by a time offset) to the start or end of the campaign or to when the player is rewarded by the campaign.
- By the operator on an ad hoc basis.

In each case, the email content is based on editable templates that can be tailored to the circumstances in which the message is sent. The email could include variables specific to the player (i.e., their name) or to the event (i.e., the deposit amount or, in the case of a campaign, the reward). These variables are replaced with the appropriate values at the time of sending.

To maintain a consistent brand, headers and footers can be defined separately and linked to the email templates.

For each player, the complete history of communications, including emails and their statuses, can be viewed online to establish the success of a campaign's messaging for that player.

4.19.3.1.B SMS

The ability to deliver text messages including the provision of a dedicated short code for Lottery's exclusive use.

SMS messages (texts) can be used in way similar to email messages. Where it's possible to send an email – as part of the player's life cycle, part of a campaign, ad hoc – an SMS message can be used instead. The communication channel used depends on the player's chosen preferences.

Where emails and SMS messages differ is that it is not possible to use graphical and formatting features when configuring the latter – as a text medium, branding and imagery would not be included in the message.

IGT will establish a short code for the iLottery System. We have experience using our own simple integration for short-code generation through our SMS provider, as well as via our third-party CRM integration.



4.19.3.1.C Push

The ability to deliver push notifications in mobile apps and web applications.

IGT built its own messaging platform that:

- Uses geolocation to pinpoint when a player is near a Lottery retailer location.
- Triggers and sends targeted messages and promotions to the player for use at that location.

In our experience, this functionality is best used for short, concise, and targeted messages.

In addition, our mobile app supports both Google and Apple push messaging services.

4.19.3.1.D Inbox

The ability to deliver messages that are sent directly to an inbox, accessible within the portals, that is associated with a player account including the ability for the player to easily identify unread messages and delete messages.

Players have access to view their messages once they've logged into their iLottery player account via the "My Account" section of the portal. The UI presents messages in reverse-chronological order (showing the most recently received messages first) and highlights which ones have been read.



Figure 4.19 - 2.



Players' Marketing-Communications Configuration

All player marketing preferences derive directly from the PAM. Players establish their own preferences for communication channels and the types of notifications they'd like to receive. They have full control of the notifications they receive – opt-in/opt-out, communication-channel preferences, black-out timing (when they don't want to receive messages) and more, including promotional email messaging, text messaging, and push notifications.

Within their accounts via the player portal or mobile app, players can navigate to the My Preferences section to choose which notification types they desire, how frequently they wish to receive them, and how they wish them to be delivered (e.g., SMS, push notifications, portal notification, or email). As new services become available, they will be added to the My Preferences section so that players can continue to control their messaging preferences.

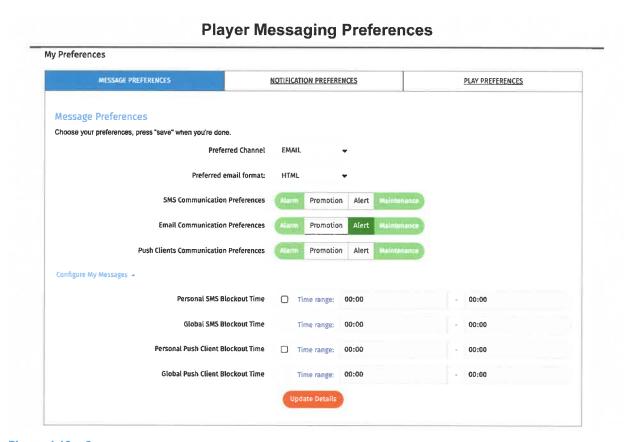


Figure 4.19 – 3.

Players will not receive notifications through any medium until they expressly consent to receiving Lottery communications either through the player portal or mobile app. The iLottery System *does* send out a small number of mandatory alerts. These include functions such as password-reset emails, verification of an opt-out preference, and notification verifications (emails sent to players after they have chosen to opt-in to notifications).

Before alerts are sent to a player's preferred channel, they must verify their email address, phone numbers, or opt into push notifications. In addition, during registration, the iLottery System requires the player to verify their email address to validate that the email is real and that they will receive the notifications.



4.19.3.2

Authoring & Deployment Tools

The Delivery Channels should be supported with authoring and deployment tools used by the Vendor that are easily accessible to the Lottery, while meeting the following minimum requirements:

IGT has read, understands, and will comply with this requirement and sub-requirements A through O below.

4.19.3.2.A Content Authoring

The ability to easily create, edit, and save content such as text, images, and links within a campaign including the utilization of reusable templates.

The editor allows the user to design and maintain the templates, which can each be created with different HTML text, links, and images in alignment with Lottery branding guidelines.

All delivery channels are supported with authoring and deployment tools accessible to Lottery users via the iLottery System's back-office administrative UI.

Each message in the System can be edited for content and formatting. There's no limit to the number of notifications that can be created or channel/language variants – with full support for plain-text emails or engaging HTML content that's authored either in the back-office tool or externally and then imported to manage the template content.

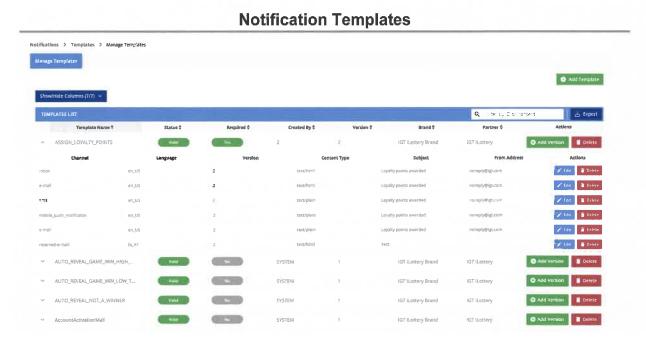


Figure 4.19 - 4. Selection page for notification templates, including language and channel variants



Each variant has an editing panel appropriate to its channel (so that an email will have sender and subject lines) and a Rich Text Format editor for the message content. In contrast, an SMS only has a plain text editor for its content.

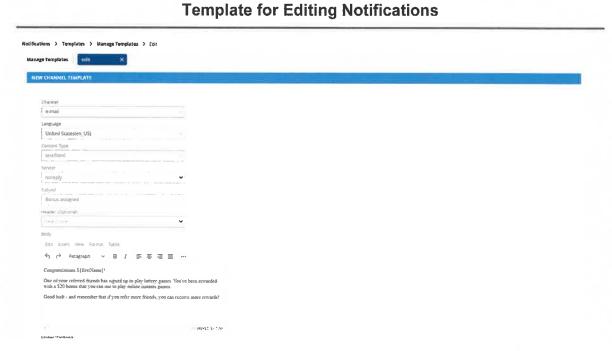


Figure 4.19 - 5. Editing an email notification

4.19.3.2.B Personalization

The ability to generate variable content, such as text and images that are personalized to each recipient of the campaign.

With our iLottery System's modern data infrastructure and advanced analytics capability, you'll be able to use marketing-vertical applications both for conducting campaigns and attribution analysis. The System can harness data collected on player behaviors to instruct integrated CRM applications to deliver increasingly personalized and appropriate messages (including text and images) at the right time. Players can be reminded to renew a subscription, receive an alert that a jackpot has exceeded an amount we know to be of interest to them, receive bulk email campaigns, etc. These messaging capabilities can be increasingly personalized based on player profiles as the System accumulates more data.

With our solution, West Virginia players know the Lottery understands them and has relevant offers for them, thereby increasing their enjoyment of the play experience (while doing so in a controlled manner) and enhancing their relationship with the Lottery.

The messages themselves are automatically sent in the player's preferred language and via their preferred channel and are fully customizable with details specific to the player such as name, loyalty level, financial information, and voucher information.



4.19.3.2.C Multi-Variant Testing

The ability to generate multiple variations within a single campaign for comparative testing. For example, the ability to send a campaign with a random and equal distribution of two different subject lines.

It is possible to create an identical campaign for multiple player groups, each receiving a different combination of notifications. This is not randomized and is under the full control of the operator.

4.19.3.2.D Preview Mode

The ability to preview campaigns, specifically for various email clients, during the authoring process.

Every notification, for any channel, can be previewed to see how it will show in the receiver's inbox. Where a channel allows HTML content, this includes all graphical components.

4.19.3.2.E Scheduling

The ability to schedule campaigns for future delivery at a specified date and time.

IGT has read, understands, and will comply with this requirement.

When a notification is linked to a promotional campaign, notifications can be triggered when a player is rewarded by the campaign or as an offset from the start or end of the campaign lifecycle. This offset can be set in either days or hours. The Lottery can also schedule campaigns for specified dates and times. Messages can be set to repeat on a daily, weekly, monthly, or yearly basis for those players who have not yet been rewarded by the campaign.

4.19.3.2.F Triggered Sends

The ability to establish a real-time delivery sequence that is tied to a specific event. For example, a welcome email triggered upon new registration completion.

Notifications can be triggered by events, or sent instantly on demand, to both individual players and groups of players (via the Player Groups segmentation feature). The event-notification messages to players are based on configurable conditions such as registration, login, deposit, withdrawal, winning numbers, and so on.



The event notification sends notifications to the player when they fulfill configured conditions like login, end game, registration, player birthday, and so on. After an event notification is created, the System handles the notifications automatically without assistance from administrators. The following categories of events are supported by corresponding communications/alerts:

- Account-related events (e.g., registration, change to player details).
- A player funds deposit.
- A player funds withdrawal.
- A game transaction (e.g., a win).
- Player rewards/bonus events.
- Any promotional campaign for which a player qualifies (e.g., welcome bonus, deposit bonus).

Additional Responsible Gaming messaging provides the player with notifications or alerts when any Lotteryor self-established limits are exceeded. Upon reaching the configured threshold, the player can be notified through the aforementioned channels.

Campaigns can be prioritized such that communications to players are targeted specifically to avoid a player receiving excessive communications or campaign messaging.

4.19.3.2.G Asset Hosting

The ability to upload and host assets that are embedded within campaigns.

For Lottery or third-party content, the iLottery System's Campaign Builder tool will use the marketing assets provided by the content providers.

4.19.3.2.H **Tracking**

The ability to track all metadata associated with campaigns (e.g., opens, clicks, multi-variant results, etc.) and to generate reports that summarize campaign performance.

This tracking functionality is handled by our third-party CRM provider, with whom we regularly integrate and for whom these are standard reports. (Alternatively, if the Lottery has an existing preferred CRM provider, we could also integrate with them.)



4.19.3.2.I Unsubscribe

The ability to manage opt-out user flows, tracking, and campaign suppression in accordance with CAN-SPAM requirements.

Players set their communications preferences and can opt out of different marketing campaigns and communications. The iLottery System stores this information and sends it to the external CRM system. The CRM, when pushing messages out to applicable players, suppresses those players who have opted out.

4.19.3.2.J User Permissions

The ability to establish user restrictions by role such as content author versus administrator.

The iLottery System's back-office administrative UI uses role-based permissions to determine the features to which a user has access. These permissions are fine-grained; in the case of notifications, a separate permission exists for adding, deleting, or editing a notification and adding a new language/channel variation. Separate permissions exist for creating header and footer templates so that only certain users can update branding.

4.19.3.2.K Security

Practices and tools in place to protect sensitive information such as player profile details from unauthorized exposure.

Our iLottery System provides for comprehensive data-protection features, including but not limited to:

- Standard settings for obtaining permissions (e.g., default opt-out).
- Supporting data subject requests.
- Permitting different deletion rules or pseudonymization of data (to the extent legally possible in adherence with the Lottery's regulatory framework).
- Setting a retention period for data (e.g., following termination of a player account; the retention period can be configured differently for different termination reasons).
- Providing for data minimization features (i.e., only capture what is needed and retain what is mandated).
- Ensuring encryption and secure storage and transmission of data.

We've designed our solution based on extensive experience with a wide range of stringent regulatory environments and an abiding commitment to the absolute priority of player protections. The iLottery System enables extensive configuration to align these protection measures with your applicable rules and standards now and as they may evolve throughout the Contract Term.



4.19.3.2.L Data Integration

The ability to integrate with the Marketing Database to receive lists for automated and ad-hoc campaign sends.

Via our third-party CRM provider, we can retrieve player lists for both automated and ad hoc campaigns. (Further, we will also have the data from our player data platform, which can achieve the same task.)

4.19.3.2.M Data Extracts

The ability to extract campaign metadata (e.g., opens, clicks, etc.) by user and transfer that data to the Marketing Database.

Our third-party CRM provider will fulfill this functionality. (Looking forward, we are working toward integrating this functionality into our player data platform, as well.)

4.19.3.2.N Retail Coupons

The ability to securely embed a uniquely barcoded coupon that can be redeemed in the Lottery's traditional channel.

Lottery users can configure campaigns that reward players with a uniquely coded coupon specifically for redemption at retail.

Marketing Tactics for Unpredictable Jackpot Runs

No one can predict when the next big jackpot run will occur. But it certainly pays to be ready with approved, proven marketing tactics. With IGT's iLottery System and marketing support, the Lottery will be well positioned for its players to purchase Powerball and Mega Millions online. Our promotional engine will enable you to create offers that drive more digital and retail sales. Jackpot runs are strong generators for acquiring players. We'll collaborate with you to create a strategy to retain these players after the jackpot hits. Because sales are tracked, you'll know which products are purchased digitally. You can then send game-specific offers to players and cross-sell other digital and retail products by using promotional codes and coupons in conjunction with retargeting.



4.19.3.2.0 iLottery Offers

The ability to embed a promotional offer that can be redeemed in the iLottery channel.

As detailed in Section 4.16, Promotion Capabilities, the iLottery System includes a rich set of promotional capabilities and rewards and bonusing functionality by which to incentivize players to engage with your brand, including the ability to embed promotional offers for redemption via the iLottery channel.

4.20

Back Office Systems

The Vendor should provide browser-based back office systems that meet the ongoing needs and obligations of the Lottery and/or the Vendor. Back office systems should provide users with organized, accessible, and real-time information that enables operational success from the perspective of all stakeholders including players, the Lottery, the Vendor and auditors. Key users of back office systems include staff members representing products, marketing, security and accounting.

IGT has read, understands, and will comply with this requirement.

4.20.1 Player Management System (PMS)

The Vendor should provide a back-office system that gives the Lottery and/or the Vendor the ability to research and administer player-related operational needs. The system should be browser based and populated with real-time data. Vendors should describe their PMS, while providing explicit details on the following:

IGT has read, understands, and will comply with this requirement and its sub-requirements A through E below.

Authorized users will be able to manage and monitor the performance of all aspects of your iLottery business via our iLottery System's back-office administrative User Interface (UI), i.e., its Player Management System (PMS). The flexible, easy-to-use, web-based UI will enable efficient iLottery business management, player management, security, and reporting. It will be the single place from which iLottery System features and functions are configured and real-time monitoring and governance of your player base are performed.

The features and functions include but are not limited to:

- General player administration.
- Player Wallet administration.
- Player protection administration.
- Responsible gaming administration.
- Know-Your-Customer (KYC) integration.
- Management reporting functions.

Back Office Systems 4.20 – 1



Highly granular security roles mean that the same back-office administrative UI can be used by everybody, from customer service representatives to executives, and each person will only see the information they need to see. Key Performance Indicator (KPI) dashboards for core modules will be front and center for each user, providing a personalized view relevant to that user's role.

IGT's iLottery System meets all of your CRFP requirements and features an architecture that will enable you to add features and functionality at your own pace in alignment with your business objectives. In the following pages, we outline the System's features and functions across several broad categories including player-management features, game-support services, and player-engagement features.

4.20.1.A Provider of PMS

Specify whether the PMS is software developed by the Vendor, or provided by a third-party company. In the instance of third- party software, indicate the company name and company website address. All player information is property of the WV Lottery and should not be shared or sold without the Lottery's consent.

As a wholly integrated aspect of our iLottery System, the PMS is developed by IGT. IGT understands that all player information is property of the West Virginia Lottery and will not be shared or sold without the Lottery's consent.

4.20.1.B Player Attributes Managed by PMS

Describe the player attributes (e.g. name, address, responsible gaming controls, etc.) that can be managed by the PMS.

Lottery users will be able to use the back-office web-based UI to view all player details in one place — including all Lottery and Player Wallet transactions across all verticals and touchpoints. Your authorized users will also be able to manage all player-related attributes and to contact the player directly via the UI.

A few examples of these attributes are:

- Player details such as name, address, contact details, etc.
- Player account information.
- Player Responsible Gaming and self-exclusion controls.
- Players' financial accounts (for adjustments, etc.)
- Player bonuses (e.g., to award a one-time bonus, etc.).

4.20 – 2 Back Office Systems



4.20.1.C Key PMS Screenshots

Provide key screenshots of the PMS if already developed.

The Lottery will have all the functionality and data needed to manage the player life cycle, including a complete player-activity audit log and the ability to track all manner of metrics including transactions, deposits, purchases, winnings, claims, session times, loyalty activity, and much more. Following are samples of the numerous PMS screenshots available to the Lottery.

Logged-In User Landing Page 🁚 Home Wagers Deposits Ö 387 3 **∌**a 303 more than yesterday Registrations 28 **Today Vs Yesterday Live Performance Average Action Time** Hours Minutes Registrations Update Player Details Registrations Update Player Details Logins Logout Logins Logout Deposits Deposits Withdrawals Canceled Withdrawals Withdrawals • Canceled Withdrawals Wagers Wagers Balance Request 200 300 10 Today Yesterday Today | Yesterday (2)

Figure 4.20 - 1.

Back Office Systems 4.20 – 3



Player Overview

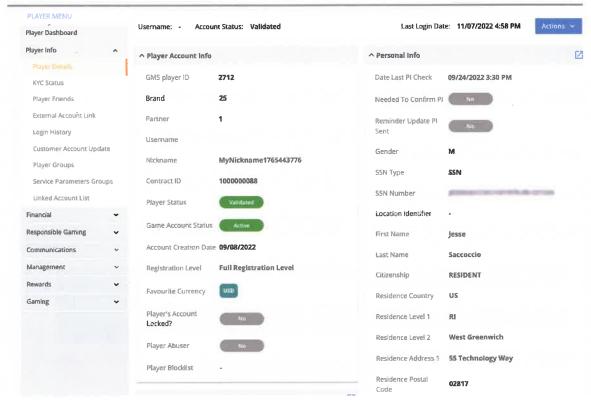


Figure 4.20 - 2.

Responsible Gaming

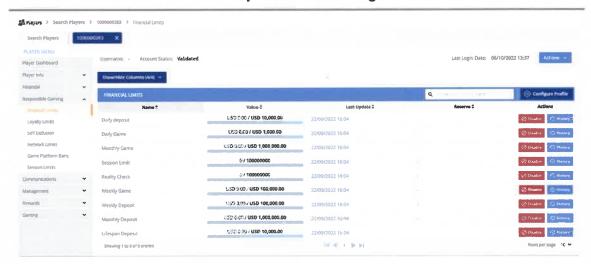


Figure 4.20 – 3.

4.20 – 4 Back Office Systems



Campaign Creation

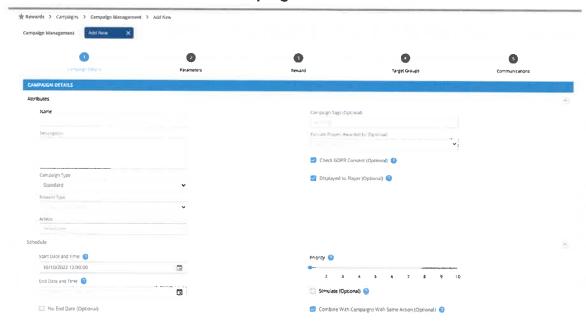


Figure 4.20 - 4.

4.20.1.D User Management

Describe the management of users within the PMS. Be specific if privileges can be administered and the degree of flexibility (e.g. user "X" may only access functions "Y and Z" and objects "A and B").

The iLottery System includes Role-Based Access Control (RBAC), a mechanism for restricting System access to authorized users. RBAC's three common components – role-permissions, user-role relationships, and role-role relationships – make it simple to generate user assignments and will help you manage security among the distributed teams.

The two key categories for controlling user access are:

- Roles: Roles are created for various job functions, with associated permissions to perform certain
 operations. Authorized users can view, edit, add, and delete roles in the System.
- Users: Users include all individuals stored in the System. Administrators can view and manage a user's details, add or delete a user, modify a password, edit user details, assign a profile picture of the user that will appear on-screen when he/she next logs in, and set a user home page.

The Lottery can fully manage permissions. An authorized Lottery administrative user must have the right privileges to access screens and/or actions. Accordingly, that user's activities are properly recorded and stored in an efficient audit engine.

Back Office Systems 4.20 – 5



4.20.1.E

Limits on Number of Unique Users

Identify any limits regarding the number of unique users (i.e. maximum number of users) available within the PMS.

There are no maximum limits regarding the number of unique users (i.e., maximum number of users) available within the PMS.

4.20.2 (A-J) System Interfaces

The System should interface, using real-time and batch methods, with several applications in the Lottery's environment or provided as third- party systems to the Lottery. All data elements logged by the System should be available for export to other third-party systems as directed by the Lottery. The Vendor should provide new interfaces, while supporting existing interfaces, as directed by the Lottery through the Term of the Contract. For the initial implementation, and subject to change, the Vendor should interface with the following third-party systems:

- A. Traditional Central Gaming System
- B. Multi-Jurisdictional Sales Reporting Requirements
- C. Player Rewards Program
- D. Prize Fulfillment Vendors
- E. Data Analytics and Segmentation
- F. Marketing Database System
- G. Customer Relationship Management System
- H. Customer Service Operations Software
- I. Advertising Performance Tracking System
- J. Survey, Scoring and Analytics Programs

The Lottery also requires various forms of data provisioning to feed Lottery administrative and gaming support systems. For some applications, a data file should be supplied in a specified format and frequency.

IGT has read, understands, and will comply with this requirement.

Because IGT – unique among vendors – will fully integrate its iLottery System with your existing retail gaming system, you'll have a single system of record for your entire business, maximizing efficiency and enabling a true omnichannel West Virginia Lottery ecosystem. For your existing retail gaming system, supplied by IGT, we are already providing many of the interfaces itemized in this requirement. Moving forward, we'll be able to extend that existing capability to the iLottery System, maximizing operational efficiency and ensuring a seamless ecosystem for your business.

4.20 – 6 Back Office Systems



Systems integration is a core IGT competency. We've fulfilled this role for our customers since our inception. We're an industry pioneer in the development of clean, well-documented Representational State Transfer (REST) and Simple Object Access Protocol (SOAP) APIs. Our System's APIs are standardized across delivery channels, leveraging a modern API-management platform to enable maximum reusability and faster time to market when adding new channels. With IGT, the Lottery will have a partner with the proven ability to effectively integrate the best systems, services, and content providers available.

4.20.3

Gaming Operating System Security & Control Features & Function

The iLottery System should provide the following features and functions to meet requirements for secure and efficient operation:

IGT has read, understands, and will comply with this requirement and sub-requirements A through T

Our iLottery System will provide the required features and functions, described below, to meet your requirements for secure and efficient operation.

IGT's Corporate-based application of security control standards follows a centralized process like those of other multi-national businesses and includes both Corporate IGT and global IGT certifications, such as International Organization for Standardization (ISO) 27001 and World Lottery Association Security Control Standard (WLA-SCS). We also follow the guidance of the Open Web Application Security Project (OWASP).

We are well prepared to aggressively meet any security challenges to your new IGT iLottery System. Our System is fully integrated, secure, and MUSL-compliant. Data is secured by hardening of our virtual machines as well as strictly limiting access to these and all data.

4.20.3.A Logging

All game processing activities are to be recorded immediately on electronic media on multiple systems. The application should provide display and reporting tools for the Lottery to verify the events recorded in the audit trail.

All game-processing activities and transactions from the retail and digital channels will be securely logged immediately across multiple disks in your Aurora retail system's transaction engines – i.e., in the Master Journal File (MJF), the Backup Journal File (BJF), and each game's Product Transaction Master (PTM) on each transaction engine operating in the Aurora quad-plex system configuration.

Each MJF contains a real-time, time-stamped (to the nearest hundredth of a second) sequence of all system transactions. With the deployment of the new iLottery System, these transactions will now include sales transactions from both the iLottery and retail channels, in addition to rejects, cancels, payouts, validations, validation attempts, other play-related transactions, any other retailer terminal commands, application error conditions, and any commands issued from the game-management application (Aurora Game Manager).

Back Office Systems 4.20 – 7



Audit Trail

Your retail gaming system has built-in security features that allow access to files *only* by authorized users who have signed on (and whose sign-ons are then recorded in an audit log). All attempts to login to its gamemanagement application (Aurora Game Manager), whether successful or not, will be logged. Log entries will include information such as identifiers, i.e., time, date, Internet Protocol (IP) address, and login success status.

Modifications to the iLottery System made from that game-management application (including game control parameters and winning numbers entry) will be logged and protected by verification steps. The iLottery System will provide display and reporting tools to verify the events recorded in the audit trail.

All users will have an explicit set of rights authorized depending upon their role or group, and a user ID will be created before they can successfully login into the iLottery System. Access to the iLottery System's User Interfaces (UIs) can be controlled with the same level of granularity: Each user will belong to a group and inherit access rights and privileges belonging to that group. It is possible to allow/block groups as a whole from executing procedures, viewing parts of the UI, or updating data that the iLottery System has processed.

4.20.3.B Backup

The System shall provide backup, recovery and redundancy features, and using log Files for reprocessing, if necessary. The transaction logging process shall include periodic checkpoints.

Our data-management approach fully meets all iLottery System of record backup, recovery, and redundancy requirements. IGT maintains multiple log files to permit the reconstruction of gaming data for reprocessing, if necessary. Log files of game-processing activities and transactions are logged to the MJF and BJF disks on each transaction engine.

The Lottery's Aurora transaction engines capture data at checkpoints at frequent intervals – about every 10 to 20 minutes on a per-product (per game) basis. Those checkpoints will now include significant totals (counts and amounts) for retail and digital games. The checkpoints will enable the Lottery to restore its memory to the proper point in the MJF and reprocess the transactions in the case of a recoverable failure. (The transaction-logging process is designed so that each log, or record, contains all of the information necessary to ensure full reprocessing.)

4.20 – 8 Back Office Systems



4.20.3.C Auto Balance

Vendors should describe the solution's ability to conduct auto balancing functions and what elements of the system are included in auto balancing activities.

The non-primary Aurora transaction engines process transactions as they are received from the primary transaction engine and balance with the primary transaction engine at every checkpoint. If there is a problem with any non-primary transaction engine, it shows up during processing rather than afterward or when a failover occurs. Consequently, we catch potential issues that could harm the Lottery before they happen, and this will be the case with the iLottery System as well as the retail system.

In addition to ongoing balancing via checkpoints, the transaction engines also perform an automatic end-of-day balancing. This balancing process compares data from different data sources across the primary, secondary, and backup transaction engines. Our System supports a balance and reconciliation process that ensures the two systems are in sync for gaming and financial transactions.

4.20.3.D Auditing

The System shall maintain a log of transactions for 5 years that are subject to auditing for appropriate usage and freedom from error. This shall be entitled an Audit Log of Transactions-this should include the users that made any modifications to the system. (See right to audit in Subsection 4.5.5).

Per Addendum No. 3, the Lottery has changed this requirement to read:

The System shall maintain a log of transactions for 5 years that are subject to auditing for appropriate usage and freedom from error. This shall be entitled an Audit Log of Transactions-this should include the users that made any modifications to the system. (See right to audit in Subsection 4.6.4).

Numerous internal and external audits are performed to validate the integrity of our software, systems, and processes. Authorized Lottery staff can audit and check – from a number of audit and log files maintained on the transaction processing system – all events and transactions in the System, including outages and recovery events, to ensure appropriate use as well as freedom from error. These audit and log files include:

- Operating System (OS) logs.
- Transaction engine logs.
- System-console logs.
- User command logs.
- Internal Control System (ICS) feed of retail and digital transactions.
- Digital transaction databases.



In addition, we perform System checksums and complete user access reviews to maintain the appropriate level of access for users, further ensuring the integrity of all transactions. The Lottery will track and verify the life of any wager transaction or other event in the System. Our System will maintain a relationship between wager, log records, and ICS records. In other words, there is a strict one-to-one relationship between wagers processed, purchased, and registered in the transaction engine's MJF, and wager transactions carried forward to the ICS.

Using these audit/log files, the life of any wager transaction or other event in the transaction engine can be tracked and verified. For example, all transactions representing modifications to Draw Games (DGs) – and such as game-control parameters or winning-number entries – are logged and protected. Tracking and verification can also occur through our software and back-office applications. The site preserves backup tapes for the duration stated in the Contract.

4.20.3.E Transaction Research

Authorized Lottery personnel should be able to research transactions and operations when required. Reports on transaction log entries should allow standard queries and sorts. Data should be immediately accessible real-time and should be available to the Lottery from a browser-based reporting system. Further, at least eighteen months of historical transaction detail, from the later of the date of sale or redemption, should be immediately accessible to Lottery from a web-accessible reporting system.

As the proposed iLottery system will be seamlessly integrated with your AuroraTM retail gaming system, all iLottery transactions will be immediately and securely logged across multiple disks – i.e., on the Master Journal File (MJF) and Backup Journal File (BJF) – on each transaction engine in Aurora's quad-plex transaction engine configuration. As is the case with the retail lottery gaming system, authorized Lottery personnel will be able to access the appropriate MJF, which will contain a real-time, time-stamped sequence of all iLottery System transactions, in order to research transactions and operations as needed throughout the life of the Contract. When creating reports on transaction log entries, authorized personnel will be able to employ queries and sort by wager, board, game, and transaction type.

There are two ways to research transactions:

- 1. By searching a specific serial number, which will bring up a specific transaction such as a wager.
- 2. By scanning the transactional data store and producing a report that can be filtered by various criteria such as dates, times, game, etc.

In addition, a complete player-activity audit log and the ability to track all manner of metrics (including transactions, deposits, purchases, prizes, claims, session times, uploaded documentation, and many more player-associated transactions) will be accessible through the iLottery System's back-office administrative User Interface (UI). Because the System aggregates data from all connected parts, the collected data will cover every transaction a West Virginia Lottery player makes through an integrated touchpoint. The UI will also provide authorized users with access to the System's advanced data-warehouse reporting.

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4.20.3.F Internal Control System Interface

The Lottery requires a near real-time ICS. Refer to Section 4.13.

IGT recommends utilizing Elsym as the ICS application provider for near real-time ICS. By integrating our proposed iLottery System with the ICS application currently in place, only one convenient ICS application will be needed for all the of the West Virginia Lottery's transactions. However, we can also support another ICS vendor. Please see Section 4.14, iLottery Internal Control System.

4.20.3.G Unique Transaction Numbers

All serial number assignment methods used by the Vendor should account for the fact that transactions may reside for extended periods in the System and numerous sources. Transaction serial numbers should be unique over the Term of the Contract.

Two separate serial numbers will be created for each iLottery wager transaction: an Internal Serial Number that's recorded in the transaction engine and an External Serial Number.

The transaction engine assigns a separate, unique external transaction ID number, called the Global Transaction Number, to every iLottery transaction. Each transaction will be logged in the files identified in Section 4.20.3.E (above) in real time, and the information contained within the files will be accessible by authorized back-office personnel.

If a player claims to have not received proper credit for a win, for example, authorized personnel will be able to check the logged transaction using the iLottery System's back-office UI to perform forensics on that player's activity.

4.20.3.H Transactions Protected

The System should ensure that transactions cannot be tampered with, including but not limited to winner Files and transaction log Files.

Descriptions of the encryption and other security measures used to protect iLottery transactions, including winner files and transaction log files, from attempted tampering are included in Section 4.4.4.E, Protection Against Unauthorized Access or Service Disruption.

Back Office Systems 4.20 – 11



4.20.3.I Limiting Controls

Any irregular activity on the System should be detected and handled in a manner that prevents the irregular activity from further occurring. This includes controls that detect irregular winning deposits into a player account to which the System responds automatically by locking out the player and ceasing the irregular activity until the Vendor can intervene for investigation.

IGT has read, understands, and will comply with this requirement.

4.20.3.J

Authentication, Authorization and Access Controls

The Proposal should clearly identify controls related to user authentication, authorization and access controls for applications (including database applications).

The proposed iLottery System will have controls in place related to user authentication, authorization, and access for applications. These controls are described in Section 4.4.4.B, Authentication, Authorization, and Access Controls.

4.20.3.K Address Spoofing

The System should ensure integrity wherein no action, either operational or by tampering, can permit duplicate or unauthorized user or player identities or addresses to be established.

IGT has read, understands, and will comply with this requirement.

4.20.3.L One-Time Cashing

A multi-draw wager should be able to be cashed more than once. In the instance that multi-draw, purchases are available from an iLottery Game then each draw within the range should be treated as a separate Wager by the System.

IGT has read, understands, and will comply with this requirement.

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4.20.3.M Software Checksums

Checksums or standard hash algorithms should verify integrity and authenticity for executable programs on the servers for auditing purposes. This requirement applies also to the test system and ICS system. Checksum information should be provided to the Lottery upon request. The Vendor should maintain control of software distribution such that systems are not able to run inappropriate versions of the software.

IGT has read, understands, and will comply with this requirement.

4.20.3.N Transaction Storage Redundancy

Every wagering related transaction should be received in at least three storage locations. The stored records should permit access by the system handling the transaction, a local backup system capable of recovering for a failure of the system processing the transaction, and a remote backup system.

IGT has read, understands, and will comply with this requirement.

4.20.3.0 Game Monitoring

Real-time monitoring of gaming transaction traffic and system utilization should be provided. The Lottery shall receive immediate notification of abnormal System operations and their causes, such as validation problems, communication difficulties, computer downtime, etc.

IGT has read, understands, and will comply with this requirement.

4.20.3.P Transaction Simulation

Development and test versions the system should be able to interact with transaction simulators to ensure that game provider transactions can be handled correctly and in volume. The System should allow manually entered transactions to mix with the program-generated transactions.

IGT has read, understands, and will comply with this requirement.

Back Office Systems 4.20 – 13



4.20.3.Q

Secure On-Site and Off-Site Storage

The Vendor should provide secure on-site and offsite storage of the System's critical Files, software, and backup data, subject to approval of the Lottery. Stored materials retention should follow a schedule approved by the Lottery. Media stored in archives should be checked and/or exercised periodically to ensure physical integrity and validity. At the Lottery's direction, the Vendor may be directed to restore a backup File to a test system to ensure viability.

IGT has read, understands, and will comply with this requirement.

4.20.3.R

Anomalous Condition Reporting

The System should be capable of displaying and reporting anomalous conditions that may indicate operational problems or attempts at fraud.

IGT has read, understands, and will comply with this requirement.

4.20.3.S

Principle of Least Privilege

All applications and databases should be designed to support only the processes and user accesses required to provide the intended application functions. Application and database users should be granted access only to the application and database functions and data elements needed to perform their job functions.

IGT has read, understands, and will comply with this requirement.

4.20.3.T

Compliance with Security Requirements

If the Lottery deploys any multi-jurisdictional games (e.g. Mega Millions) on the System, then all applications should become compliant with any application security requirements promulgated by any multi-jurisdictional game organizations of which the Lottery may be a member.

IGT has read, understands, and will comply with this requirement.



4.20.4 **Drawing Controls**

Drawings should be coordinated to support certain iLottery Games. The current Lottery game draw schedule is included in Exhibit D. Third-party auditor presence and drawing observation may be required of certain drawings as directed by the Lottery.

IGT has read, understands, and will comply with this requirement and sub-requirements A through D below.

4.20.4.A Game Close

At a specified time before the drawing, the System should communicate to the players the correct status of available games. An appropriate message should be sent to a player attempting to wager at close time. Where applicable, a manual override should be available to close a game.

IGT provides a configuration parameter for every game, which will allow the Lottery to specify each game's draw break duration based on business needs. Enabling payouts for a draw that just closed will depend on the type of game and the manual steps the Lottery mandates. For example, your Keno and CA\$H POP games will autopay winners immediately after the draw's close and the receipt of winning numbers. For games with fixed payouts, prizes will be autopaid within a few minutes of entering and verifying the winning numbers. An appropriate, Lottery approved message will be provided to players attempting to wager at close time.

Autopay will execute for all games as soon as the confirmed prize amounts have been dual entered.

The digital platform of our iLottery System provides the ability to sell wagers during a near 24-hour period, with the exception of the system of record day switch window; additionally, as draws open and close on the system of record, the digital platform will inform players of the draw status as part of the wager purchase.

4.20.4.B **Drawing Numbers Distribution**

As appropriate, the System should provide to players the most recent winning numbers, upon request.

Winning numbers are immediately transmitted for display on the website and mobile app so players can view them upon request. This process will ensure players have access to the most recent winning numbers as soon as they are available.



4.20.4.C Winning Wager Marking

Following game drawings or other prize award events driven by iLottery Games, the System should obtain winner information and mark which Wagers are winners, so that the player can see them upon signing in. Other player winning events may also be presented for the player's review in Portals or notifications sent, depending upon the game played, and player opt-in options

The marking of winning wagers initiates the auto-pay process detailed in Section 4.10.1, Payment Issuance.

4.20.4.D Closing, Drawing, and Cashing Time window

The Lottery considers it mandatory to minimize the time window between close of the games, drawings, and the ability for the player to see and be paid for winning Wagers. Vendor should follow game parameters as required by the lottery.

Our Aurora retail system, integrated with the iLottery System, will comply with the time-window specifications for closing games, conducting game draws, entering winning numbers, and readiness to pay winning wagers. It can address all game types. Once the share values are entered and verified, the enabling of payouts is nearly immediate, which means autopay processing will execute.

Minimizing Time Window

IGT supports fixed-payout validations within seconds in many jurisdictions. For annuity games, prizes become cashable within seconds of draw-processing completion. And you can easily adjust the schedule of these activities, if necessary, through the back-office draw-games management application of the retail system. This applies to all numbers and matrix-type games.

IGT designed the high-speed Aurora transaction engine to be efficient and minimize the processing time for each step of the draw procedure. For example, it ensures instantaneous status changes on a per-game basis for:

- Disallowing wagering.
- Suspending wagering for all draws.
- · Closing the current draw.
- Initiating draw break, if applicable.
- Restarting sales for the next draw.
- Resuming wagering for the next and subsequent draws.

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4.20.4.E (a-h) Drawing Information

At cut-off for any game, the System should record the following information for the game:

- a. Date and Time of day
- b. Net game pool (sales minus cancels)
- c. Hash total of plays (including cancels)
- d. Daily Handle
- e. Close Handle
- f. Future wager reporting
- g. Pool status
- h. Draw Identifier

At cut-off for any game, the System will record the game information (a-h) required.

4.20.4.F Manual Dual Entry

For games requiring that the draw results be entered manually into the iLottery solution, dual entry (Lottery and Vendor) of drawn winning numbers, prize and jackpot amounts should be supported. All attempts, successful or not, should be logged.

Entry screens of the successful attempts should be automatically printed, and a file created and delivered to the Lottery for updating other systems. Unsuccessful attempts should require restarting from the beginning. The Lottery intends to automatically provide drawing results for traditional DGs that exist in the retail channel to be automatically shared between vendors using the traditional gaming system API to gather the winning information entry.

Dual entry of winning numbers is an essential tool for lotteries. In addition to ensuring that entry-control is not given to a single person who could potentially commit fraud, it protects a lottery from being impacted by a single incident of operator error. And with our process, all attempts, successful or not, are irrevocably logged.

Aurora will enforce dual manual entry for the Lottery through two separate application screens (one for entering the winning numbers; the other for verifying them), with access to those screens configured to require two different users to log-in. In addition, our dual entry process can also be performed from different locations.

Once a draw attains the appropriate status (e.g., Draw Closed) and before it is set such that all divisions are payable, the following will happen:

- An authorized user (an IGT employee) accesses the Enter Winning Numbers screen for the game and enters the winning numbers.
- A different user (from the Lottery) then enters the winning numbers on the Verify Winning Numbers screen (which can be accessed only after the winning numbers have been entered on the first screen).
- Once the numbers entered by each user match, the winning numbers can be displayed to the public.



 If the numbers entered on the two screens do not match, the system rejects the entire process and both entries need to be repeated. (All attempts are logged, successful or not. Entry screens of successful attempts can be printed, and a file created and delivered to the Lottery for updating other systems.)

This process is configurable such that the Lottery will be able to designate which party inputs each entry of winning numbers. The checks noted above will provide an additional layer of authentication to ensure the continued integrity of the Lottery.

IGT understands that the Lottery intends to automatically provide drawing results for traditional DGs that exist in the retail channel to be automatically shared between vendors using the traditional gaming system API to gather the winning information entry.

4.20.4.G Multiple Winning Numbers for a Draw

The System should be capable of allowing the entry of multiple winning numbers at the discretion of the Lottery for every DG.

As discussed earlier in this section, IGT's solution will provide unique benefits to the Lottery because the iLottery System will be fully integrated with your existing retail gaming system, giving you a single system of record for your entire business.

Whereas with other Vendors' solutions, the Lottery will effectively need to learn, operate, and manage multiple systems and duplicate numerous processes (with the extra strain on Lottery personnel that such efforts entail), IGT's solution will afford the advantage of a single solution for your entire business, vastly simplifying the Lottery's operations and freeing your personnel to focus on driving the business.

Thus, iLottery wagers will be merged with wagers from the retail channel, greatly simplifying the drawing and winning-numbers processes. The Aurora transaction-engine configuration can allow for the entry of multiple winning numbers at the discretion of the Lottery for every DG, but each winning number need only be managed once – that single instance will cover the entire wager pool from both the digital and retail channels.

4.20.4.H Roll to Next Drawing After a Problematic Drawing

The System should allow future sales for any future open drawing regardless of the status of prior draw results.

The transaction engine's draw-close procedure does permit wagers for players for future sales at the time the previous draw closes without necessarily finalizing and declaring official a problematic drawing if the Lottery so chooses. Your players can keep on playing – they can purchase lottery wagers for future draws while the prior draw is being conducted, the winning numbers are being entered, and the prizes are being verified. Even in the event of a problem with the draw process, wagering for future draws will continue without interruption.

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4.20.4.l Pari-Mutuel Support

The System should support prize tiers that may go pari-mutuel if set prize pool limits are exceeded.

IGT has read, understands, and will comply with this requirement.

4.20.4.J Automated Data Exchange

The System should support automated, electronic data exchange with other systems as required by the Lottery or multi-jurisdictional entities. (Lottery and Vendor).

As your current interaction with MUSL functions are performed today, those procedures and processes will continue with the digital wagers merged with the retail-channel wagers. The addition of the digital wagers will not change the practices currently in place in West Virginia. Any new electronic data exchange introduced for DGs will support the digital and retail wagers concurrently

IGT has implemented a RESTful API that adopts Information Technology (IT) and industry-wide standards for messaging formats, such as Java Script Object Notation (JSON) and standard protocols for simplified third-party integration. This is our assurance to the Lottery that, as new channels become available, we are prepared for any future interface and data exchange requirements.

4.20.4.K Lockdown Alternative

The Lottery uses a MUSL approved Lockdown Alternative solution for MUSL Powerball, Lotto America and Mega Millions draw games where the Vendor CGS transfers draw transaction data at draw break automatically to a Lottery SFTP server or through manual process, to removable digital media (e.g. USB thumb drive). The iLottery Vendor shall provide a lockdown alternative solution, subject to Lottery approval, that complies with "MUSL Rule 2.6(b)", and supports both automatic and manual file transfer of draw transaction data to a Lottery SFTP server or removable media at designated pre- and post- draw times. Please see Exhibit 4 MUSL approved lockdown alternative plan.

IGT has read, understands, and will comply with this requirement.

Back Office Systems



4.20.5

Games Management Application

In addition to Vendor mandated functions, the Vendor should provide Lottery access to a games management application for performing functions, such as configuring settings and controlling operations. Vendors should describe their application, while providing specific details on the following:

IGT has read, understands, and will comply with this requirement and sub-requirements A through C below.

A core principle of our iLottery System design is to enable the Lottery to act, react, and plan according to market changes. It will make it easy for you to perform all major game support functions, including modifying existing games, installing new and additional games, removing existing games, and generating reports associated with those games.

The following outlines the main modules that will drive your game-management capabilities:

- Draw Games: The Game Manager web-based back-office application is used to set up and control DG products and liabilities, monitor and manage system activity related to games (including wagers coming from the retail and digital channels), as well as provide games management, transaction processing and validation, and draw management and processing. Enabling real-time product data (e.g., counts and amounts), it provides a high degree of configurability so users can make changes without intrusive software updates.
- iLottery Games: Our Remote Game Server (RGS) the industry's leading content delivery platform for eInstants includes an intuitive back-office administrative User Interface (UI) designed to facilitate the management and branding of game content. It supports quick configurability of enforceable jurisdiction rules based on the Lottery's regulatory framework. It will enable you to quickly and efficiently complete game-approval steps.

4.20.5.A Lottery Users Access

Access to the game's management application should be permitted from various locations including workstations on the internal LAN s at Lottery Headquarters or remote Lottery offices. In addition, certain functions may be performed by remote staff with Internet access, as permitted by the Lottery.

IGT applies the Principle of Least Privilege to its access control function, whereby users only have access to the resources or information that are essential to perform their jobs. These parameters are configurable and can be set to meet your needs. We will work with the Lottery to define these rules in advance as part of the requirements effort so that they can be thoroughly tested.

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4.20.5.B Game Control

The games management application should support the ability (for an authorized user) to shut off and resume wagering on each game independently.

Your transaction engine solution supports fully configurable game control: It can shut off and resume all wagering or wagering on each game independently. It can vary the number of drawings per game, per day, per week, and/or the days the drawing are conducted. It can determine the number of winners for each prize level for pari-mutuel games within 15 minutes after a drawing.

4.20.5.C Game Monitoring

Authorized games management application users should have the ability to observe real-time statistics on the operation of the System.

We employ sophisticated monitoring tools that were specifically developed for lottery operators. They'll allow your users to observe real-time statistics on the operation of the iLottery System by game, including up-to-date statistics on sales by game.

These tools include:

- Aurora Transaction Engine Progress Monitor: Via a UI, this tool will allows user to check the
 progress of various transaction/System tasks at a glance via colour-coded statuses such as when the
 task started, when it ended, and more.
- **Tivoli Monitoring**: Tivoli components include a VMware Agent that communicates with the Virtual Center appliance to gather events and the health state of the ESX servers and their Virtual Machines (VMs). All collected data can be warehoused for historical purposes, such as trend analysis.
- OperCon: Your retail lottery system has a real-time monitoring tool for the operator to monitor the performance of the system on a UI console. OperCon, a utility application, will enable Operations personnel to monitor and control the active products running on the System, and to bring the transaction engine or a specific component up or down.
- Kibana: Kibana includes an open-source data visualization dashboard, which provides views of performance and transaction graphs and other, crucial health alerts. Kibana is a window into the Elastic Stack and the user interface for the Elastic Search Platform. It allows us to visualize and explore data as well as manage and monitor the entire Elastic Stack. Kibana is monitored 24/7 by the monitoring team and helps in quick identification of capacity, performance, applications, integrated components, and server issues.
- Azure Monitor: This tool provides real-time monitoring of the various metrics of systems or
 components. It delivers a comprehensive solution for collecting, analyzing, and acting on telemetry
 from our cloud environments. This information helps us understand how your applications are
 performing and proactively identify issues that affect them and the resources they depend on.

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Additionally, the Aurora Game Manager application used for managing DGs will also allow for real-time monitoring of game sales data in the overall gaming system. It is accessed through the Aurora Navigator UI. It will provide authorized users an auto-refreshed snapshot of gaming transaction counts and amounts across your active DG portfolio. Game sales data is updated once a minute and is presented to authorized users in tabular form, a choice of two graphical representations, and a hover-over capability for quick insights.

4.20.6

Data Management and Reporting

The Vendor should provide reporting tools that enable scheduled and ad hoc reports and queries to be generated that meet the operational needs of the Lottery. Vendors should describe their reporting solution, while providing specific details on the following:

IGT has read, understands, and complies with this requirement.

4.20.6.A Reporting Platform

Describe and/or illustrate the reporting platform to be accessed by the Lottery. If the reporting interface is a third-party provided solution, Vendors should provide the company name and website address.

IGT has read, understands, and complies with this requirement.

Following is a description of our proposed reporting platform and the kinds of reports it can produce. The solution is proprietary.

Operational Reporting

IGT's iLottery System provides its own data warehouse with direct access to a wide range of tabular and graphical reports (both pre-defined and user-defined). These reports are provided via the System's integrated business intelligence tools.

Digital-Play & Game Reporting

The iLottery System's data warehouse will include data related to daily digital-play activities. The System will log all transactional data, including wagers and wins of all games and data on any integrated third-party games. Authorized users will be able to access data visualizations (tables, charts, and other easy-to-understand graphic forms) that offer better, easier visibility into your digital business, including breakdowns for all sales channels.

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Player Data Platform and Advanced Analytical Reporting

Knowing that data is a key currency of today's business environment, we have built a new, state-of-the-art data subsystem as part of the iLottery System. Using a modern data architecture, this data platform enables advanced analytics, business intelligence, reporting, player profiling and personalization, data discovery, and predictive insights that leverage the benefits of data workloads such as big data analytics, data enrichment, AI and ML, and real-time data delivery.

The iLottery System's data architecture can ingest data from varied and disparate systems through a full range of data-integration techniques. This feature facilitates a single, complete view of players and their behaviors and yields important insights that would otherwise be buried in disparate sources and types of data.

In turn, our AI algorithms – developed, optimized, and backed by years of expertise and data available from our worldwide solutions – help lotteries harness the wealth of data at their fingertips to better understand their players' needs, requirements, and preferences. Such insights support efficient, timely decision making to drive player-engagement and retention strategies, helping increase revenue and reducing expensive acquisition costs.

Leveraging the Power of AI to Keep Pace with Consumer Demands

IGT's player data platform offers lotteries everything they need for enhanced, data-driven decision making. But as the world becomes increasingly digital, players are demanding more and more. They want their lottery to understand them and tailor offerings to them.

This requires lotteries to move from being offer-centric to consumer-centric, meaning it is no longer efficient to rely purely on human decision making. Lotteries need to bring AI into their workflows to process the masses of player-related data needed to take appropriate actions in optimizing each player's journey.

Already employing advanced analytics and Al techniques in the player data platform, IGT is actively working on integrating Al into the player journey. Al can identify vast numbers of segments or groupings down to the individual level, leveraging all information from all available data to help produce consistent, objective decisions. For routine decision making, Al provides the power of a massive workforce to individually analyze each player and respond personally to each interaction they make with their lottery.

AI may just be getting started in the lottery industry, but it's here to stay. It will become the standard way in which lotteries predict and adjust their business models and more.

Back Office Systems 4.20 – 23



Our approach to data reflects our understanding that, to maximize data effectiveness, data must be not only available but accessible and readily useable both by lottery personnel (to gain insight) and consuming systems. Our solution provides access to an array of pre-defined dashboards and data apps, custom-built machine learning models, and self-service capabilities. This gives a lottery everything needed to monitor where the business is going and identify unmet player needs, potential issues, and underlying trends while also using advance AI techniques to identify anomalies and forecast future direction.

Putting the Player Front and Center

Players are at the heart of the lottery business and, for the first-time, digital channels are creating a direct relationship between the lottery and the player. Using the data subsystem, our iLottery System presents lottery users with a single, unified view of players and their behaviors and, ultimately, insights that drive informed decision making. We accomplish this unified view by bringing together data from disparate and heterogeneous sources into a single User Interface (UI) with advanced analytics tools. The resultant analyses help drive a lottery's player engagement and retention strategies.

Knowing your players is key to meeting your core business goals, whether it's optimizing the player experience, creating more engaging content, or increasing sales. Without a full 360° view of players, including their trends and behaviors, decision making that results in efficient, sound strategic and tactical action is difficult and time-consuming. That's why putting the player front and center – alongside a robust Customer Relationship Management (CRM) system – is key to our proposed solution.

Using Artificial Intelligence (AI) to Provide Actionable Insights

To gain a better understanding of players, the iLottery System's data subsystem employees Artificial Intelligence and Machine Learning (AIML) techniques. Custom AIML models are used to paint a picture of each player by gleaning important insights that are buried in disparate sources and types of data. Using these capabilities, lotteries can harness their data to better understand individual player needs and requirements. Armed with those insights, they are better equipped to make decisions and take actions to attract, engage, and retain players.

AI may just be getting started in the lottery industry, but it's here to stay. It will become the standard way lotteries predict and adjust their business models and more.

4.20.6.B Reporting Support

Describe the level of support provided to the Lottery for the customization of reporting needs.

IGT has read, understands, and complies with this requirement.

IGT will provide ongoing support for report development, customization, and distribution to the Lottery. Reports can be scheduled, automated, and distributed to select audiences via the back-office UI. Our player data platform is supported by a team of data professionals, data and machine learning engineers, data scientists and data analysts. Working closely with analysts at the lottery they help supply unparalleled insight into iLottery operations and answer the most complex of questions.

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4.20.6.C Data Universes

Describe the high-level data architecture for reporting and if any limitations exist such as data expiration, data refresh frequencies, and data summarization.

IGT has read, understands, and complies with this requirement.

Reports accessible via the back-office UI are supplemented with iLottery data universes and dashboards, which will allow the Lottery to run custom reports and analyses. You'll be able to access all player information for ad hoc inquiry and reporting activities in addition to routine, scheduled reporting. The proposed data warehouse leverages the latest data-management and performance capabilities to optimize both data storage and retrieval from our data repositories. A central capability of the data warehouse is that it stores pertinent metrics from all business verticals. IGT will provide a stable, redundant, robust application and database, and an overall data management solution.

IGT's Player Data Platform

Included in our data management solution is our player data platform, which presents a unified view of players and their behaviors, and ultimately, insights that guide a lottery in better serving their players. As stated above, we achieve this unified view by bringing together data from disparate and heterogeneous sources, into a single UI with advanced analytics tools. The resulting analyses help drive a lottery's player engagement and retention strategies.

The player data platform utilizes an advanced data lake to ingest data in near real-time from our iLottery Systems. Supplemented with data from other disparate supporting systems in which data can be ingested by streaming or batch mechanisms, data pipelines are used to clean and transform the data and form analytical platform domains. The domains (including player analytics, game analytics and campaign analytics) are then available to data applications for use in ML models, reporting, dashboards, and deep analyses. Flexibility is a core concept built into the iLottery System to allow further analytical domains to be added as needed accelerating time to innovation.

4.20.6.D Data Retention

The Lottery will specify the length of time that data is retained and available for access from the reporting interface provided to the Lottery.

IGT has read, understands, and will comply with this requirement.

The iLottery System's data warehouse is flexible and can be configured to retain and make available data for a period specified by the Lottery.

The player data platform's data lake structure is designed in a manner that allows complete flexibility for retention policies. IGT can work with the lottery to build an appropriate strategy based on its data access and resiliency requirements.

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4.20.6.E Exporting

Describe the ability of reporting to be exportable into common file formats such as Excel, CSV or PDF.

IGT has read, understands, and complies with this requirement.

Within the iLottery System's back-office tool, reports can be easily exported into multiple formats, such as Excel, CSV, PDF, Image files, and more.

The player data platform supports all common formats for export of reports and the ability to be able to automate data delivery mechanisms to allow compliance with destination systems Application Programming Interfaces (APIs).

4.20.6.F Automation

Describe the system's ability to automate reports on a recurring basis.

IGT has read, understands, and complies with this requirement.

Our iLottery System offers a wide range of pre-built reports, many of which can be automated, including automated end-of-day reports among others, as well as the ability to create custom reports via drag and drop tools, based on all the data collected in the transactional database. The list of pre-built reports includes:

- Game Reports: Show an aggregate of activity across each game. This includes the number of players, number of games played, amount wagered, amount won, and gross gaming amount.
- Autopay Reports: Provide details of players who've won jackpots of \$599 or less. Details include
 player ID, game name, jackpot amount, and winning amount. Reporting for jackpots over \$599 will
 come via the Claims and Payment (CAP) back-office application of your Aurora™ retail gaming
 system, which will be integrated with the iLottery System.
- Player Sessions Reports: Show all player sessions and their associated financial details including player ID, session ID, Internet Protocol (IP) address, game session start and end timestamps, game, wagered amount (real money and bonus cash), winning amount, jackpot amount, and gross gaming amount.

We are happy to further discuss which reports can be automated for you.

The player data platform supports automated generation and delivery of reports and dashboards. Reports can be scheduled at specified times and delivered to the required Lottery personnel.

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4.20.6.G Access Controls

Describe the capabilities within reporting for the Lottery to administer user-level access and controls. Be specific to the level of management available such as access to features or elements (e.g., user X has access to feature Y but not object Z within reporting).

IGT has read, understands, and complies with this requirement.

Our iLottery System provides a high degree of configurability, especially when it comes to administering user-level access and controls. We describe how these controls work, next.

Access Controls

- All privileges and permissions are based on the Principle of Least Privilege.
- User account passwords are hashed and stored in a relational database.
- For operating-system-layer accounts, password management is managed via Red Hat IDM (Identity Manager).
- Authorization is role-based. The user's role type and permissions determine which menu choices and features are visible to that user when logging into the back-office interface.
- Access to systems is structured to ensure that principles of "segregation of duties" and "need to know" are enforced with logical separation based upon roles and rules. Each user is given privileges that are based upon their role within the organization. There is no access outside of log-in security controls. (The Role-Based Access Controls [RBAC] are managed via the iLottery System's backoffice administrative UI.)
- Quarterly reviews of logical access privileges ensure that user access is appropriate or removed if no longer required.

Creating and Managing Admin Accounts

RBAC is a mechanism for restricting system access to authorized users. RBAC's three common components – role permissions, user-role relationships, and role-role relationships – make it simple for administrators to perform user assignments, and can help lotteries manage the administration of security across teams. Two important functions of RBAC are:

- Creating roles for various job functions, with associated permissions to perform certain operations. Administrators will be able to view, edit, add, and delete roles in the iLottery System.
- Including all individuals stored in the system as users. Administrators can thus view, edit, and manage an individual user's details, add or delete a user, modify a password, assign a profile picture of a user that will appear on-screen when the user next logs in, and set a user home page.

Application security is enhanced by the most recent technologies, as well as by our strict process of dynamic and static testing. The Lottery can fully manage permissions, i.e., the user must have the right privileges to access screens or actions. Accordingly, user activities are properly recorded and stored in an efficient audit engine and, if needed, limited by a budget monitoring system.

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4.20.6.H Report Portfolio

As part of their Proposal, Vendors should describe the types of reports that are to be made available by functional subject area and provide samples of such reports.

IGT has read, understands, and complies with this requirement.

Following, we describe reports we can make available to the Lottery, by functional subject area.

Operational Reporting

- End of Day Reporting: Includes reports for Gross Gaming Revenue (GGR), deposits, wins, rewards and changes in player status
- **Financial Reports:** Full transaction details by player or by time, adjustments, liabilities, dormant accounts, autopay statuses, and high-tier payments. Also included is the ability to create a full export of Player Wallet contents as an input to an external financial system.
- Operational Reports: Closed player accounts, inactive accounts, bans and self-exclusions, changes
 to responsible gaming limits, Know-Your Customer (KYC) verification failures, changes in player
 consents, loyalty point balances.
- Analytics: Logged-in players, campaign rewards, notification deliveries, game transactions and unfinished games, and player "top-tens" for wagering and depositing activity.
- Second Chance Reporting: Entries by player, rejected entries, draw information, VIP rewards draws.

Our back-office UI gives users access to a comprehensive list of pre-defined reports, comprising roughly 80 of the most commonly used and that cover players, gaming, tracking, finance, statistics, and end-of-day reporting, including:

- **New Registrations**: New player acquisition reporting includes demographics and player channel preferences, which is selected during registration.
- **Returning Players**: Reporting on returning players include a player activity report (which shows the frequency and recency of play) and player-life-cycle reporting (which gives a view into player retention and churn).
- Deposits: The System collects all financial data, which is also viewable within the UI. In this
 way, the Lottery will have access to the entire transactional database for all reporting needs,
 including reporting on deposits. Standard reports regarding deposits include a Player Sessions
 report, which shows all financial activity, including deposits. The Lottery will have ready access
 to views of funds on deposit, including:
 - End of Day (EoD) Deposit: Players who made their deposit the previous day. This can be filtered by tracking campaign.
 - **Top-Ten Deposit Player:** Shows 10 players per brand that have deposited the most during a configured period of time.

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- Wagers: Standard reporting includes total sales/wagers, unique players, and average spend per
 product. In addition, the Game report shows an aggregate of activity across each game and
 includes the amount wagered, among other data points. The Player Sessions report shows a
 breakdown of wagers per player.
- Prizes Paid: Our solution includes an Autopay report that shows all details of players who've won
 jackpots and all the associated data: player ID, game name, jackpot amount, and prize amount.

Game-Play Reporting

The full iLottery technology stack also offers a number of pre-built game-play reports, as noted under Section 4.20.6.F, Automation, above, including:

- Game Reports: Show an aggregate of activity across each game over a defined period. This
 includes the number of players, number of games played, amount wagered, amount won, and
 gross gaming amount.
- Autopay Reports: Provide details of players who've won jackpots of \$599 or less. Details
 includes player ID, game name, jackpot amount, and winning amount. (Reporting for jackpots
 over \$599 will come via the CAP application.)
- Player Sessions Reports: Show all player sessions and their associated financial details, including player ID, session ID, IP address, game session start and end timestamps, game, wagered amount (real money and bonus cash), winning amount, jackpot amount, and gross gaming amount.

Analytical Reporting

IGT's field-tested solution for analytical reporting (live in the market since 2017) processes vast amounts of data in minutes and will relay easy-to-understand reports that enable deeper insights into your business.

Reconciliation Reporting

IGT's iLottery System captures all data related to reconciliation reporting with all financial conditions applied.

Balancing Reports

Balancing extracts and processes are built into the iLottery System and the data is available for reporting purposes. The reports are available via the back-office UI. IGT will also provide a daily, end-of-day, electronic balancing report to the Lottery's Internal Control System (ICS) vendor.

Daily Program Play Reporting

The iLottery System's data warehouse will include data from the PAM component related to daily play activities over the program. Through the back-office UI, users can access Tableau data visualizations, which will give the Lottery further visibility into its digital business, including breakdowns for all sales channels.

Back Office Systems 4.20 – 29



Operational reporting and dashboards are provided to inform and give insight into key performance indicators including registrations, returning players, deposits, wagers, prizes paid and pending (via the CAP application), and an array of sales reporting. Dashboards provide further insight including period-over-period and moving-average comparisons.

Tax Reporting

The iLottery System will be fully integrated with your current retail system's CAP application, as stated above, which will provide the ability to export files in a Lottery-specified format. These files can be combined with retail claim center data to create all required tax reporting.

Expired Prize Reporting

CAP can provide reports on expired prizes to the Lottery so that the funds can be properly allocated. As all expired prizes from the iLottery solution will be associated with a player, the Lottery will have the option of mailing a check to the player.

Prepaid Instrument Reporting

The iLottery System reports on all prepaid instrument activities, such as number of redemptions.

Geolocation Reporting

IGT works with GeoComply, the industry-leading location services aggregator for support of geo-location services.

Reports are available via GeoComply's client portal and provide detailed insights into the performance of geolocation services. This includes a trend-analysis dashboard that shows the number of pass/fails by device type and operating system platform across a date/time spectrum.

GeoComply's client portal provides authorized users with access to transaction data and associated reporting. Sample screenshots follow.

Identity Verification Reporting

The iLottery System's KYC solution features a module that captures all data associated with identity verification, on a player-specific basis.

Virtual Claims Reporting

Via integration with the system of record's CAP application, IGT's solution will provide detailed daily reporting related to virtual prize center claim activities.

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Back-Office User Reporting

Via the back-office UI, you will have a comprehensive view of all active and disabled users of the back-office system, along with assigned permissions.

The user-management section contains a list of users in the System and allows administrators to manage each user's permissions and to view their current status and other details.

4.20.6.I Distribution

Describe methods for automated report distribution.

IGT has read, understands, and complies with this requirement.

Reports can be shared by downloading the report into a common file format (.PDF, xml, Excel, etc.). Users can also share directly from the back-office UI by clicking the "Share" button, which gives the user both embeddable code and a direct URL which can then be shared with selected recipients.

The PDP allows a number of ways to distribute reports. These can be shared to a user's area so they are available to them while enabling collaboration, they can be emailed and distributed by other automated methods as needs require.

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4.21

Drawing Operations and Control Center

4.21.1 Control Room

Vendors should describe any anticipated facilities, such as a control room, and staffing related to the operations of DGs.

IGT has read, understands, and complies with this requirement.

Our iLottery solution will integrate with the Lottery's existing AuroraTM retail gaming system, specifically the transaction engines and operations procedures. No additional staff or facilities related to the Aurora transaction engine control rooms (located at the current PDC and BDC in the state) will be necessary.

4.21.2 **Drawing Application**

Vendors should describe the software related to the support of draw games and any specific controls that are in place to ensure the continuity and integrity of scheduled drawings.

IGT has read, understands, and complies with this requirement.

Our iLottery System will integrate with your current Aurora Game Manager back-office application, which provides management of draw games and drawings. The continuity and integrity of scheduled drawings will remain unaltered from that which you experience today as no specific controls related to our proposed iLottery System are required. The current procedures for processing the drawings of draw games for the retail channel will be applied to our proposed iLottery channel, as described further in Section 4.2.A, Overview.



4.21.3

Control Room and Application Security

Vendors should describe any security features of the drawing applications, or any physical and procedural controls that ensure the security of the control room. The control room, software, and operations should meet any compliance standards imposed by multi- state game associations.

The transaction engine portion of our iLottery System will include the Lottery's current Aurora transaction engines, as stated above, which are part of your existing Aurora retail lottery system. We do not anticipate introducing any new physical or procedural controls related to the control room.

The transaction engine portion of the iLottery System will work within any multi-state game associations' compliance standards regarding control room, software, and operations that are followed by the West Virginia Lottery currently.

4.22

Staffing, Services, and Operations

Vendors must document the staffing with which iLottery operations will be implemented and operated, from a Vendor and Sub-Vendor perspective, whether directly to Lottery, or shared with other U.S. iLottery operations, as set forth in the below staffing sections. The Proposal must make clear which staff proposed for the contract are Vendor employees and which are SubVendors or consultants.

IGT has read, understands, and complies with this requirement.

4.22.1(A-F) Implementation Team

Vendors must provide an organizational chart showing all positions who will be active in the implementation of the System and including the following:

- A. Must identify how the implementation team will be staffed.
- B. If implementation teams are separate and/or unique for certain aspects of time periods of the System development such as Portal responsibilities.
- C. Must identify and quantify staff by title, and state what qualifications they can be expected to have for staff not yet identified.
- D. Physical location of staff and how many staff members are required on site.
- E. There must be a dedicated project manager assigned to the implementation who must be onsite at the Lottery, or a Lottery-approved location, during implementation.
- F. If the Vendor is awarded or currently holds a current Lottery contract, the Vendor shall not share staff or services between the awarded or currently existing contract and this RFP/contract.

IGT has read, understands, and complies with this requirement.

IGT Global Solutions Corporation (IGT) has more than 40 years of experience delivering successful projects in a constantly evolving global lottery marketplace. We have more implementation and conversion experience than any other Vendor, which better prepares us to build an Implementation Plan that ensures a smooth, efficient iLottery System and services delivery for the West Virginia Lottery.

IGT understands that transparency is integral to successful implementations. Consequently, we will keep you updated to ensure all deliverables meet your expectations and establish a schedule of meetings that will not only keep your own project team updated but will also provide them with the opportunity to voice any concerns surrounding the project and to hold IGT accountable to agreed-upon milestones. The frequency of these meetings will be jointly approved by both the Lottery and IGT during the project planning phase following Contract award.



IGT's Implementation Team

IGT recognizes, respects, and understands the need to utilize staff that are completely dedicated to their portion of the iLottery Contract. We will not share staff or services between the awarded iLottery Contract and the current contract. All teams involved in the West Virginia iLottery project, from implementation to daily operational support, will report to Derek Levesque, the Digital Account Manager. He will be the primary point of contact for the Contract, no matter the issue.

The Implementation Team will be led by Angela Patrick, the dedicated Project Manager (PM) who will be working on-site in west Virginia at the Lottery, or a Lottery-approved location, during the implementation. As the PM, Angela will oversee the delivery of the iLottery System implementation and serve as the primary point of contact for the Lottery concerning the project. Angela will work with the Lottery to establish an overview of how the project will be carried out in alignment with the Implementation Plan. A communication plan for the duration of the implementation will also be decided upon, and roles and responsibilities will be discussed and confirmed.



Derek Levesque
Digital Account Manager

Derek is the Director of U.S. Business Development and Account Management. He will work as the Digital Account Manager for the Lottery. Derek has been a dedicated member of IGT's iLottery team for eight years. As the Director of Business Development, he oversees all aspects of account management and operations for Lottery customers throughout North America. Derek has taken his background in strategic analytics to help his lottery partners grow their business and optimize product and operational strategies.



Angela Patrick
Project Manager

Angela has been with IGT since the summer of 2020. With 15 years' experience in global project management leading diverse teams both globally and domestically, Angela leverages collaboration and influence to drive innovative business success. As Project Manager for the Lottery's implementation, Angela offers a seasoned history of success driving the life cycle of multifaceted projects all the way from initiating to monitoring and closing.

IGT has included an insert entitled Resumes for individuals listed, found at the end of this section.

The Lottery's Implementation Team Members

For the Lottery's Implementation Team, IGT proposes the following dedicated individuals. The organization chart that follows shows all positions that will be active in the iLottery System's implementation.



West Virginia Implementation Team

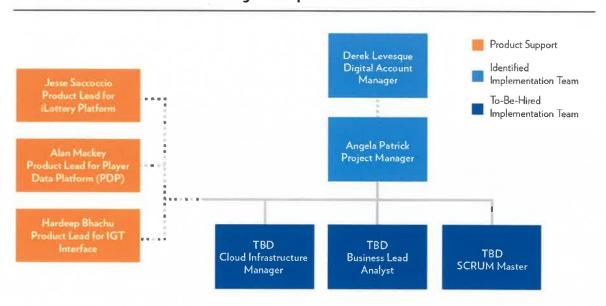


Figure 4.22 - 1. IGT's Proposed Implementation Staff for West Virginia.

For staff not yet identified, we have provided job descriptions that indicate the experience, education, and other qualifications required of candidates. Please refer to the insert entitled **Job Descriptions**, located at the end of this section.

The Implementation Team will be composed of experienced professionals representing business analysis, infrastructure, communications network, software development, product development, training, and operations support. IGT believes in a product-led delivery approach where each product to be delivered has its own designated subgroup within the Implementation Team. These subgroups will be responsible for developing a roadmap in unison with the Lottery to ensure that you receive the latest and greatest product version with increased visibility into that product's roadmap.

With our Implementation Team, the Lottery will receive unwavering service from a diverse and talented group of professionals who will assist the Lottery in achieving its long-term financial and operational objectives.

Key positions include:

- A Product Lead for the iLottery Platform: IGT's product lead for the iLottery platform will
 provide insight on IGT's proposed iLottery Platform solutions and serve as the subject matter expert
 for the Lottery.
- A Product Lead for IGT Interface: Our front-end solutions product lead will serve as the subject
 matter expert for the Lottery and provide insight into IGT's proposed interface solutions.
- A Product Lead for the Player Data Platform (PDP): IGT's product lead for the PDP will provide insight into IGT's proposed analytic solutions and will serve as the subject matter expert for the Lottery.
- Cloud Infrastructure Manager: IGT's Cloud Ops Lead will oversee Cloud integration efforts across the project and be responsible for development and deployment of IGT's cloud operations for the Lottery, while maintaining customer expectations and collaborating with the various disciplines within the Implementation Team for the delivery to ensure its cloud interfaces operate efficiently.



- Business Analyst Lead: The Business Analyst Lead will provide guidance to the Business Analyst
 (BA) team throughout the project in the design, development, implementation, operation, and
 maintenance of the software via the requirements management process.
- **SCRUM Master:** The SCRUM Master will serve as a delivery manager on the iLottery development team and facilitate team events, report Key Performance Indicators (KPI), and help resolve impediments. The Scrum Master will be responsible for ensuring that all team deliverables meet Definition of Done.

IGT certifies that none of the above individuals will be shared with the existing contract. Our Implementation Team will be unified in providing the Lottery with a seamless and successful delivery system. Team members will be able to leverage multi-departmental skills and best practices across lottery delivery verticals. IGT's Implementation Team will be 100% dedicated to their portion of the Contract.

West Virginia's Hybrid Approach

IGT's recommended implementation approach for West Virginia will include a mix of both in-state and remote support. This will allow IGT to leverage our existing facilities within the state, where key members of the Implementation Team will work. All additional staff will operate remotely unless project requirements necessitate them being on site. All remote staff will always be available for any issues.

Per CRFP requirements, Angela Patrick will be working on site with the Lottery; Derek Levesque and Jesse Saccoccio will work remotely from Rhode Island; Hardeep Bhachu and Alan Mackey will work remotely from the United Kingdom; and staff who have not yet been identified are expected to work off-site as well. To maintain continuity of services and ensure the Lottery receives a seamless support experience, core members of IGT's Implementation Team will remain on the project for upwards of one month following Go Live to provide the Lottery with support.

A History of Remote Implementation

The COVID-19 global pandemic affected businesses and economic activities to varying extents. The evolution of the pandemic, coupled with correlated governmental restrictions, had a significant impact on the lottery industry as a whole. IGT responded quickly, focusing on the safety and well-being of our people, our customers, and communities all over the world.

Over the past two years, IGT has performed several implementations 100% remotely. These jurisdictions include Mauritius and Israel internationally, as well as Kentucky, Nebraska, and New Jersey in North America. A 100% remote model was made possible by placing emphasis on flexibility and increased collaboration. Our response to the COVID-19 outbreak allowed us to emerge as a stronger, leaner, and more competitive organization.

IGT proposes a partially remote implementation for the Lottery. This will allow for essential personnel to work on-site, while other key members dedicate themselves remotely. Remote personnel will utilize on-line collaboration tools in order to replicate face to face collaboration as much as possible. Tools and systems access should be discussed up front as part of joint risk mitigation planning.

We value the importance of regularly communicating with our customers. Efficient implementation requires a strategic focus on pre-planning as well as a dedicated attention to escalation plans. This methodology has proven remarkably successful for implementations that have teams operating remotely as well as on site.



4.22.2 (A-F) Staff Profile

Vendors must provide profiles of all management, supervisory and key technical personnel planned to be involved in the installation and implementation of the program and must provide for each such person:

- A. Full name;
- B. Most recent five (5)-year employment history;
- C. If applicable, a specific description of experience that the person has in connection within a lottery, gaming, or online wagering industry;
- D. Specific indication of the role the individual has in this project; and
- E. Any additional helpful information to indicate the individual's ability to successfully perform the work involved in the Contract.
- F. If the Vendor is awarded or currently holds a current Lottery contract, the Vendor shall not share staff or services between the awarded or currently existing contract and this RFP/contract.

IGT has read, understands, and complies with this requirement.

Our proposed Implementation Team, identified in Section 4.22.1, will provide industry expertise while respecting the needs and expectations of your management, staff, and players. Detailed resumes of all named persons can be found at the end of this section under the insert entitled **Resumes**.

4.22.3 Ongoing Staffing

The Lottery anticipates extensive needs for account management, project management, operations, testing, marketing and business analysis in order to maintain a successful iLottery product portfolio. Vendors must provide an organizational chart that describes proposed staffing levels, the key positions required at launch and key personnel who are expected to be active in the ongoing operation of the system for the iLottery program. For staff not yet identified, the Vendor shall identify and quantify them by title, and provide qualifications required for each position. Vendors must provide a minimum of two proposed locations for the operations and ongoing support staff. One of these locations must be located within thirty minutes of Lottery Headquarters. The final location for operations and ongoing support staff will be selected and approved by the Lottery before the contract is final.

Per Addendum No. 3, the Lottery has changed this requirement to read:

"The Lottery anticipates extensive needs for account management, project management, operations, testing, marketing and business analysis in order to maintain a successful iLottery product portfolio. Vendors must provide an organizational chart that describes proposed staffing levels, the key positions required at launch and key personnel who are expected to be active in the ongoing operation of the system for the iLottery program. For staff not yet identified, the Vendor shall identify and quantify them by title, and provide qualifications required for each position."

IGT has read, understands, and complies with this requirement.



The Lottery requires a knowledgeable, proficient team to oversee its day-to-day operations and to assist in ensuring its continued success. If awarded the Contract, IGT will hire exceptional support staff that will assist the Lottery in reaching and exceeding its business goals. As the Lottery embarks on a new business segment, it is imperative for you to have a partner that is leading the iLottery gaming space. Our local team, supported by our comprehensive corporate resource infrastructure, will collaborate with you to build a robust foundation for your iLottery Program that modernizes the playing experience and drives results.

To comply with the in-state requirement, we will look both internally and throughout the local area to build a team of highly qualified and dedicated people to service the Lottery as you strive to bring your players a new, advanced lottery experience. Our recruitment will focus on hiring talent that is knowledgeable about the area, the market, and the members of the community. IGT personnel are expected to support Lottery's business, vision, and values.

As candidates are selected, they will partake in IGT's training programs, which are customized to prepare them to support the Lottery throughout the duration of the Contract.

Corporate Support

The Lottery will have the support of IGT's corporate resources. Our iLottery corporate support team, along with our proposed Implementation Team and support services members, will have the necessary foundation to execute the Lottery's implementation successfully. The corporate support team members are industry leaders with both global and local experience. The Digital Account Manager will navigate all corporate resources listed below on behalf of the Lottery. This direct line of communication ensures the Lottery receives streamlined and seamless support for all facets of the new solution throughout the duration of the Contract. This will minimize the effort necessary on the Lottery's part to reap the rewards of a partnership with IGT.

Executive Leadership



Joseph (Jay) S. Gendron Chief Operating Officer – Global Lottery

Jay ensures each customer's business objectives are fully understood and supported. Jay will provide the Lottery with a visible IGT senior staff presence, as he will regularly engage with local IGT leadership and staff. He brings more than 25 years of experience to our customers. Jay began his career at IGT in 1995 and rose through the ranks. In 2014, he became Senior Vice President of North America. Having demonstrated trust, integrity, responsibility, and an unyielding commitment to customer service, he was promoted to his current role, Chief Operating Officer – Global Lottery, in 2018.





Srini Nedunuri
Vice President iLottery

Srini joined IGT in 2009 and has more than 22 years of experience in the digital gaming industry across various disciplines. As the Vice President of iLottery, Srini oversees IGT's entire iLottery team, product management, and the execution of strategic growth plans for IGT's digital footprint.



Sri Jawaharlal
Senior Vice President & Chief Technology Officer, Lottery

Sri has more than 20 years of lottery experience with a focus on software development and digital solutions. He began his lottery career with HCL Technologies where he served as the technical lead helping to develop the first internet lottery application for European customers. Sri joined IGT in 2001 as an architect. He quickly rose through the ranks and took on increasing responsibility.

During Sri's early years with IGT, Sri helped to create our first software development kit and API development strategy as a Senior Technology Director. In his most recent roles with IGT, Sri has led technology teams (software engineers, architects, business analysts and project managers) from around the world. His team was responsible for delivering technology solutions and services across three continents with more than 150 simultaneous projects and an annual operating income of \$350 million. He oversaw IGT's IT cloud migrations and consolidation to achieve a 30% annual spend reduction.

Corporate Support Staff



Karri Paavilainen
Senior Director iLottery Player Marketing Services

Karri has more than 15 years of experience in the lottery industry, seven of them with IGT. For the past six years, Karri has worked in our iLottery group servicing interactive customers across the globe. His experience within mobile and internet channels includes strategy development, customer analytics, product development, marketing, and sales channel development.

In his current position, Karri is responsible for the development of content and platform feature strategy as well as digital lottery same store sales practices and operations. Karri is integral to IGT's content optimization, game deployment, and site marketing operations.





Jesse Saccoccio
Director, iLottery Product Platform

Jesse is focused on the evolution of our IGT iLottery and digital platform roadmap and ensures its alignment with the entire IGT iLottery solution and third-party integrations, which include our loyalty and second chance solutions. Jesse started with IGT in 1999 as a software engineer with the Player Services Group and has steadily risen through the ranks in roles of increasing responsibility. He was also a member of the team to deliver one of the first interactive draw game wagers in the U.S.



Tom Napolitano

Sr. Director, iLottery Business Development and Operations

As an expert in lottery marketing and gaming product management, Tom works with our U.S. World Lottery Association (WLA) customers, assisting them in understanding IGT's iLottery products and the benefits they bring.

With IGT since 1993, Tom has more than 29 years of lottery industry experience. His career highlights include helping to establish IGT's Printed Products and Interactive business divisions, as well as authoring four innovative patent applications — all while collaborating with lotteries around the world in optimizing their product portfolios. In his role as head of iLottery Business Development for Americas, Tom will help bring global ideas and work with the Lottery on an iLottery roadmap and future product enhancements for continued growth in the digital space.



Hardeep Bhachu
Director Front-End Solutions

Hardeep has been with IGT for nearly 19 years and is responsible for IGT's iLottery System interface solutions of Web Portals and Mobile Apps. Hardeep oversees the global front-end product strategy and customer deployments. He manages the planning and execution of the interface product life cycle. This includes gathering and prioritizing product and customer requirements, defining the product vision, and working closely with commercial teams to ensure customer satisfaction. He has helped deliver mobile and portal deployments to the lotteries in Georgia, Indiana, Kentucky, New Jersey, Rhode Island, Missouri, Tennessee, Texas, and Virginia. Hardeep will oversee the team that will help design and develop the Lottery's mobile app.





Stephen Pasyanos

Vice President iLottery Technology

Stephen is a senior technology leader with more than 27 years of global gaming, lottery and interactive delivery and support experience. His experience includes leading and executing upon complex systems deliveries for lottery and gaming customers. His focus has been on the technology components, including architecting, deploying, and supporting custom solutions for the industry across the globe.

Stephen has had many roles, and this has enabled him to be a leader of change. He has been instrumental in enacting efficiencies through creating standard processes, automation, and change management. This has enabled the team to not only be more efficient in delivery but also be more effective in supporting our customers. Brought into the company as an engineer installing lottery and gaming systems, then eventually leading the organization responsible for the same activities globally, has enabled him to have a forward-thinking open approach to ensuring successful deliveries. Stephen ensures the technology and the methods for delivery are always being looked at and updated.





Alan Mackey
Senior Director Data and Analytics

Alan has been with IGT for more than 25 years. He began as a Regional Technology Manager servicing customers throughout Northern Europe. He was responsible for the development of a region-wide software support hub. Alan began working on digital solutions in 2001 as a Solutions Architect and led the development of a multichannel interactive lottery startup for the UK National Lottery as well as a new internet gaming and sports betting solution for Veikkaus Oy in Finland.

Alan took on roles of increasing responsibility where he played key roles in IGT's acquisitions of a plethora of digital gaming companies, including Finsoft and Boss Media as well as deploying iLottery products on web and mobile channels across the globe.

In his current role as Senior Director of Data and Analytics, Alan oversees IGT's efforts to modernize our data use for reporting and analytics giving insight to players, operations, and lotteries. He identifies opportunities for process automations while utilizing the latest in advanced analytics and artificial intelligence techniques.

IGT has included an insert entitled **Resumes** with all requested information for all individuals listed as corporate support, found at the end of this section.

The organization chart in the next figure shows all positions who will be in support of the West Virginia Lottery during launch and in an ongoing capacity.



West Virginia iLottery Ongoing Support Team

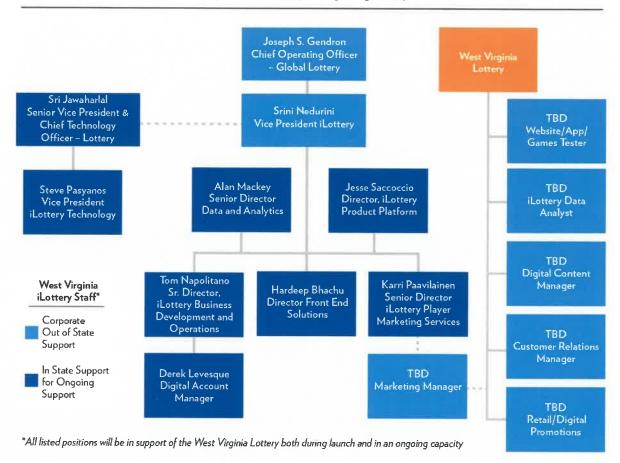


Figure 4.22 - 2. West Virginia iLottery Ongoing Support Team

For staff not yet identified, please refer to the insert entitled **Job Descriptions**, located at the end of this section.

IGT proposes our current facility in Charleston, located at the following address, for all staff expected to work in-state:

International Game Technology 1700 MacCorkle Avenue SE Charleston, WV 25314

For our second location, we would like to propose our secondary building in West Virginia, which is currently co-located with the Lottery's BDC:

International Game Technology 64 Sterling Drive Bridgeport, WV 26330

Please note that although IGT intends to leverage our building in West Virginia, we guarantee that staff and services will not be shared with those utilized for the current Lottery contract. Our existing building has the benefit of being located within thirty minutes of the Lottery headquarters in Charleston.



4.22.3.1 (A-E) In-State & Other Staffing

The Vendor shall provide in-state staffing and other staff as required to fulfill contractor requirements. The following in-state staffing will report directly to the Lottery and work at Lottery Headquarters:

- A. Customer Relations Manager (CRM) Manages a program of retention-based targeted marketing campaigns via a variety of communication channels (applications, email, onsite, social media, SMS, push notifications, etc.). Manages execution of all campaigns including graphics, communications, and analysis. Manages setup of player offers and loyalty program. Establishes customer economics around retention, LTV, engagement, and player prevention abuse.
- B. **Digital Content Manager** responsible for the execution and design of the lottery's einstants. Creates, manages, and implements a 1-year rolling schedule of launches.
- C. iLottery Data Analyst analyzing user behavior(s), industry trends and activity
- D. **Retailer/Digital Promotions** marketing, campaign strategies, consumer advertising, retailer advertising, retailer and player promotions analyzing what worked or didn't work, tracking ROI.
- E. Website/App/Games Tester Test, tracks changes and updates on player portals. Test games to check graphics, play and game content meets requirements, maintains defect and correction logs. Monitors player portal engagement.

IGT has read, understands, and will comply with this requirement.

Should the Contract be awarded to IGT, we will build a diverse team of qualified people to service the Lottery as outlined in this requirement. For more information on position qualifications for staff not yet hired, please see the insert at the end of this section that's entitled **Job Descriptions**.

4.22.3.2 Additional Staffing

The Lottery reserves the right to require additional staffing at any point throughout the Term of the Contract, based on performance issues, changes in business requirements, program growth, or for any other reason it deems necessary. The Lottery reserves the right to request the removal of staff based on performance. The Lottery reserves the right to review and if necessary, disapprove any employee of the Vendor who is assigned to the Lottery contract, either at contract inception or during the term or any extension thereof.

IGT has read and understands this requirement.

Upon Contract award and throughout the duration of the Contract, we will work extensively with the Lottery to ensure our support service is meeting the Lottery's expectations. IGT looks forward to continual communication and collaboration geared toward the perpetual enhancement of your business – and our service thereof – across all functional areas.



4.22.3.3 Shared Staffing

If the Vendor is awarded an additional Lottery contract or holds a current Lottery Contract, the Vendor shall not share staff or services between the awarded or currently existing contract and this RFP/contract.

IGT has read, understands, and will comply with this requirement.

As previously stated, IGT certifies that we will not share staff or services between the awarded iLottery Contract and the existing contract.

4.22.3.4 Replacement Personnel

The Vendor shall not remove personnel (as listed in the RFP Documents of the Project) from this project at any time without replacing said personnel with a person with same or similar experience than the removed personnel. The Vendor must have qualified replacement people available to replace any person listed in the RFP Documents by name or identified as a Key Team Member on the Project. When the removal of a listed person or a Key Team Member is permitted under this Section, or if a person becomes unavailable, the Vendor must submit two resumes, along with such other information as the Lottery may reasonably request, within five business days after the decision to remove a person is made. The Lottery must approve any proposed replacement of a listed person or Key Team Member.

IGT has read, understands, and will comply with this requirement.

We understand that communication and transparency are integral in any lasting partnership. As such, IGT ensures that any changes to key personnel on either the Implementation or Ongoing Support teams will be communicated with the Lottery so that a qualified replacement can be approved by the Lottery.

4.22.4 Operation Services

The Vendor should provide operations services for the System supported by sound operations policies and procedures, including the Principle of Least Privilege.

IGT has read, understands, and will comply with this requirement.

IGT applies the Principle of Least Privilege to its access control function, whereby users only have access to the resources or information that are essential to perform their jobs – but as with the rest of our iLottery System, these parameters are configurable and can be set to meet your needs. We will work with the Lottery to define these rules in advance as part of the requirements effort so that they can be thoroughly tested.



4.22.4.1 **Duties**

Duties should include System start-up and shutdown tasks, report generation, file backups, and various operational procedures to enable the correct operation of the System. Recovery from System failures should engage the operations staff. Operations should produce reports and files documenting operations activities.

IGT has read, understands, and will comply with this requirement.

4.22.4.2

Monitoring Systems and Networks

Monitoring Systems and Networks. The Vendor's staff should continuously monitor the systems and networks and should be trained in the System's monitoring tools for this purpose. Any System faults should be detected, diagnosed and corrected. Any incident/failures require an immediate notification to the Lottery, with a full report to follow within 24 hours.

IGT has read, understands, and will comply with this requirement.

4.22.5 iLottery Customer Support Center (CSC)

4.22.5.1 Modern Customer Support Center (CSC) and Staff

The Vendor should provide staff and operate a Customer Support Center (CSC) for handling player support services that utilizes modern support technologies through interactive channels in order to maximize player convenience and satisfaction. The CSC service channels should include, but need not be limited to a call center, email support, live chat support and a web-accessible self-service (for players) knowledge database.

IGT has read, understands, and complies with this requirement.

IGT considers player support to be a main pillar of a digital program – driving customer satisfaction, ensuring a healthy development of business, and guaranteeing the enforcement of Responsible Gaming principles.



Any successful digital system must be complemented by services that provide players with readily available support for every type of player inquiry (i.e., account registration, validation, products, promotions, winner information, technical issues, responsible gambling, payments, etc.). IGT's CSC provides players with the option to obtain such support through several channels, including phone, email, live chat, and a web-accessible self-service database. When customers reach out to a customer support agent, they will be speaking with someone who specializes in the unique nuances of the digital gaming space.

Players can obtain support through several channels including:

- Call Center: One toll-free number routes callers into a fully customized Integrated Voice Response (IVR) system in which they can navigate selections to reach the player support representative best suited to assist them. That representative will have a window into the caller's registration and account information where required, enabling a faster resolution time.
- Email Support: Users can email questions directly to a player network mailbox assigned to their lottery. Our team uses a pre-defined knowledge base to respond to each written inquiry with accuracy and adhere to procedures agreed upon with the Lottery.
- Live Chat Support: The CSC also employs a Live Chat support tool. Chat requests are queued in the
 order in which they are received, and players receive custom messaging informing them of their
 expected wait time and position in the queue. Players then enter an interactive chat session to resolve
 their questions and concerns.

The following figure outlines the functionality and benefits of each channel:

Player Service Channels

Phone Functionality

- Interactive Voice Response (IVR) Treatment
 - Operator Assisted

Benefits

- Key Metrics
- Call Data



Functionality

- Auto-Replies
- Operator Responses

Benefits

- Response Templates
- Internal Knowledge Base
 - Integration
 - Consistent Messaging
 - Reporting



Functionality

Operator Responses

Benefits

- Response Templates
- Integration Capabilities
 - Host on Any Site
- Consistent Messaging
 - Customizable
 - Reporting

Figure 4.22 – 3. Player Assistance: Players who need help or have questions can contact our CSC player support services through any of these three channels.



In addition to these three channels, we provide a web-accessible self-service knowledge database that players can access to troubleshoot issues and find information at their leisure. Furthermore, we continue to evolve the portfolio of player-centric support information using our collective experience from all iLottery clients. Our CSC staff leverages their experience providing support for internet-wagering players in Kentucky, Rhode Island, and Georgia, as well as traditional and player loyalty support in Indiana, New Jersey, Michigan, Missouri, Tennessee, and Texas to solve a mix of player inquiries and requests specific to online play, traditional lottery, and loyalty programs.

4.22.5.2

Advanced Customer Support Channels

It is desired that the CSC system include additional advanced customer support channel solutions such as automated intercept (e.g. when a player attempts to submit an inquiry the system should recognize key words and offer a self-service solution from the knowledge database rather than sending an email) and virtual agents (virtual agents are software services that engage in automated conversations with customers). The CSC should provide services and manage a system, database and reporting system that fulfills the following Criteria:

IGT has read and understands this requirement.

In the digital arena, technology is only part of the equation. The true driver of success is how the technical assets are leveraged. IGT provides a vast array of digital services to players, including hotline, email, and live chat support.

Our player hotline, staffed and operated by IGT employees, comprises a powerhouse solution that provides contact logging and documentation, ticketing capabilities, contact escalation, reporting (operational, quantitative, qualitative – e.g., contact reasons) and promotions management. Most important, our solution is omnichannel in that it is fully integrated with our chat, email, CSAT survey, CRM, and Player Account Management (PAM) solutions, allowing an efficient flow of information and enhancing the player experience. Our CSC systems will benefit both the Lottery and its players, as our integrated systems ensure smooth and seamless support. When a player contacts the hotline through any of our available channels, the CSC agent will have immediate access to all previous player inquiries, allowing for faster, more accurate service.

The iLottery space is extremely complex. Navigating this dynamic environment requires a vendor who can keep their CSC solutions fresh and relevant for customers. IGT expects to launch a virtual agent program as part of our roadmap in 2023. We are currently in development for both phone and chat bots; each will exist to assist players with simpler inquiries, thus allowing customers the ease of automated assistance 24 hours a day. These virtual bots will allow us to improve the player experience while also reducing player wait time.



22.5.2.A Location Requirement

The CSC should be located in the Continental United States to meet the requirement Vendors should include proposed locations in the response. The Vendor and/or all Sub-Vendors involved in the performance of providing customer support services to the Lottery should disclose the location of its operational staff. Any change in location of customer support centers should be presented in writing to the Lottery ninety calendar days in advance of the change and it subject to Lottery approval.

IGT agrees to notify the West Virginia Lottery, in writing, if there are any changes to our CSC location. Our quality-driven, multi-jurisdictional player hotline operates virtually throughout the state of Rhode Island.

While most of our CSC staff is located within the U.S. (Management, Supervisors, and all Phone Support agents), we currently utilize staff abroad that are fully trained, very experienced, and licensed. These IGT offices have proven beneficial for our email and chat services.

4.22.5.2.B West Virginia Training Requirement

Staff handling calls from the West Virginia players should be trained in West Virginia Lottery Systems, games, procedures and policies. Vendors shall describe the CSC staff training and include the ongoing training that is provided to ensure professional, high productivity and accurate servicing of Lottery players.

IGT will develop and provide the Lottery with customized training for all required staff and third-party vendors on the operation, use, and customer service aspects of our iLottery System. Using our global experience, our trainers will identify the skills and knowledge of the Lottery's employees and build a targeted training plan that takes advantage of their strengths while providing them with the necessary skills to excel in the use of the new solution. The training courses for the Lottery's staff will consist of demonstrations and workshops with an overview of the relevant areas of the new solution prior to the integration phase.

Our many years of experience in the iLottery industry has allowed us to build a comprehensive training program that addresses all inquiries a customer support representative may encounter. Employees are thoroughly trained on all job-related aspects through a variety of methods, including instructor-led, virtual classroom training for technical, soft-skills, and leadership training, as well as coaching and mentoring sessions. We provide our agents with the knowledge and tools needed to offer outstanding support. Our player-centric philosophy is engrained in our culture and is instilled in individuals from the initial interview stages and continuing throughout an employee's tenure with IGT. We reinforce player-centric practices through training, mentoring, and job-shadowing.



IGT is committed to continued improvement; we constantly review player data and trends to maintain updated, relevant training material.

We recognize that information changes fast and understand how important it is to relay the correct information to our customers. For this reason, our CSC team is equipped with an IGT-owned and customizable knowledgebase – Gaming, News, Information, and Expertise (GNIE). GNIE allows our leadership team the flexibility to proactively update procedures and gives our agents immediate access to these updates. Upon Contract award, we will work with the Lottery to build all procedures and escalation paths so as to create a training model that properly educates CSC staff on the West Virginia systems, games, procedures, and policies.

4.22.5.2.C Scope of Services

The CSC staff should be trained and capable of providing support services to players concerning all aspects of the iLottery player experience, the Lottery's loyalty program and how it interacts with the System. The CSC Staff should also be trained to provide support to Affiliate Online Partners described in Section 4.18.2 and/or any other Retailers involved with iLottery as distribution evolves. Additionally, the CSC staff should be trained to provide support to various functions and features delivered with the iLottery solution. The web-accessible self-service knowledge database and any other self-service option implemented should provide comprehensive support for all of the above aspects as well.

In addition to properly training CSC agents on the systems, games, procedures, and policies, our customized training program will familiarize CSC staff to all aspects of the player experience, as it exists in the state of West Virginia. This includes the Lottery's loyalty program, as well as the web-accessible self-service knowledge database. Generally, CSC agents will handle all contacts from the West Virginia players. Support services for Affiliate Online Partners and/or any other retailers or organizations will be directed to a separate CSC line for contacts from retailer agents.

4.22.5.2.D Operate During Gaming Hours

The CSC should be fully operational 24 hours per day, 7 days a week, and 365 days a year.

IGT understands and acknowledges the Lottery's goal for a fully operational CSC that is fully staffed and operational 24 hours a day, 7 days a week, and 365 days a year. IGT looks forward to the opportunity to act as a strategic partner in support of the Lottery's success. Our CSC is capable of supporting players 24 hours a day, 7 days a week, and 365 days a year, in English and Spanish, and across multiple channels. However, we have found the ideal iLottery customer support model includes live support only 17 hours a day, from 7:00 a.m. to 12:00 a.m. (EST) – 7 days a week, 365 days a year. Of course, our support services have full capabilities to work any desired support hours.



Based on our experience providing third shift support for other iLottery vendors, it is our recommendation that live agents be scheduled exclusively for peak support times due to minimal call volumes observed during third shift support.

To accommodate the desire for live staff during third shift hours (12:00 a.m.-7:00 a.m.), IGT would like to propose three recommendations:

- Chat and email support abroad if live agents are required.
- Utilize "virtual agents" via phone and chat bots; expected deployment 2023.
- Open a ticket for live support to handle the issue the following morning.

Our proposed solution optimizes our current CSC resources while providing the Lottery with a fully trained and staffed player hotline available 24 hours a day, 7 days a week, 365 days a year.

4.22.5.2.E CSC Data Retention

Any information which is gathered or utilized by the CSC should be maintained for a minimum of eighteen months and be accessible to the Lottery for review, analysis, and audit using a web-based platform.

Our CRM tool can be customized to retain data for any length of time, after which data can be deleted from the database. We look forward to working with the West Virginia Lottery, in respect to local legislation, to determine a preferred data-retention period.

4.22.5.2.F Staffing

Vendors should describe how the CSC will be staffed and managed to ensure timely, professional and accurate response to player inquiries. The CSC staff should provide all levels of support in a timely manner that adheres to industry standards for each support channel. The Vendor should employ at least one CSC management level individual whose role is to exclusively handle the Lottery's CSC while serving as the single point of contact to the Lottery.

Our player hotline is staffed and scheduled according to an accurate forecasting process (supported by an ad hoc Workforce Management System) of expected volume, as well as each lottery customer's requirements regarding service levels, hours of operations, and support channels. Quantitative performances are defined and measured based on a Key Performance Indicator (KPI) system that can be tailored for the Lottery.

When players have questions about account creation, account management, website navigation, winning information, or any other issue that might arise from using the Lottery's services, they will have access to a CSC agent through either the call center, email support, or live chat support. Our agents are trained to provide excellent customer service quickly, while adhering to industry standards for each support channel.



IGT's CSC Leadership Team

IGT dedicates Paul Cabral, current Call Center Manager, to act exclusively as the point of contact for the West Virginia Lottery for all matters related to the CSC. Along with his Global Consumer Services Team, Paul ensures that daily operations run smoothly so that the iLottery contact center can perform to Lottery standards. His team is staffed with two supervisors and two team leads, all of whom work together to support the iLottery CSC.



Paul Cabral
Customer Support Center Manager

Paul began his employment with IGT 8 years ago, starting out in the call center where he took phone calls from players. During this time with IGT, he has worked his way to Call Center Manager. Over the years, Paul has continually proven that he was both capable of juggling many tasks and dedicated to the strict level of customer service that IGT has become known for.



John DeRosa
Customer Support Center Supervisor

With more than 15 years' experience fulfilling leadership roles, John brings an experienced eye to the iLottery CSC team. As a supervisor, he oversees the onboarding, training, and coaching for more than 40 agents. John ensures that agents are performing and growing in their roles, while also enforcing the highest possible standards of service.



Justin McCormick
Customer Support Center Supervisor

Justin is a lifelong Rhode Islander with experience in many areas of call center life, including customer service, operations, and workforce management. As the newest member to IGT's CSC leadership team, Justin advocates for the professional development of his agents, inspiring them to pursue their careers. He believes that a positive attitude can make a lasting impact on businesses and colleagues.



Stephanie Doyon
Customer Support Center Team Lead

Stephanie is a responsible Team Lead with a passion for excellent customer service. Her ability to remain calm and focused during stressful situations makes her an asset to the CSC team. Stephanie strengthens and motivates her team to outperform their metrics and grow with the call center.





Arthur Lettieri
Customer Support Center Team Lead

Arthur has a strong background in technology and communications. As a Team Lead for the CSC, Arthur is driven to becoming a leader who can coach and mentor associates throughout their employment with IGT. He leans towards proactive solutions for the call center, all while managing multiple responsibilities for the iLottery support services team.

Detailed resumes of all named persons can be found at the end of this section under Resumes.

4.22.5.2.G Call Management System

Telephone call management equipment should be capable of handling all incoming calls. If all available operators are busy, a pre-recorded message should be played, and the calls should be queued for the next available staff member. If a call is queued, the system should provide call status information to the caller at intervals including estimates of hold time, and the system should support custom pre-recorded messages as directed by the Lottery. It is desired that the system also provides the functionality for the caller to be called back when an operator becomes available.

IGT's fully customized Integrated Voice Response (IVR) system can handle all inbound and outbound calls. This call management system will allow players to navigate IVR selections and reach the appropriate department or support representative best suited to their needs. When a call is in the queue, the IVR informs the customer how many calls are in the queue ahead of them.

Our IVR system offers many customizable options, such as queue for call waiting, call status estimation, and the ability to integrate pre-recorded messages that can be customized to Lottery preference and made live as directed.

Between July 2021 and June 2022, IGT's player support hotline received more than 320,000 contacts while exceeding service levels requirements and providing high level support to players. In our experience, IVR callback does not follow best practices, as our support staff can properly assist all incoming player inquiries across all available channels.

4.22.5.2.H Player Access and Self-Service

In addition to a telephone call number, the System should provide a player with access to all support channels and support related information on each Lottery portal channel implemented by the Vendor (this may be in the form of a webpage, in app support section, etc.). The content should include but need not be limited to delivery of a self-service knowledge database, reference documents on how to play, support options, and contact information.



IGT's support service options (phone, chat, and email) can all be built into the portal or application and are typically found beneath a "Contact Us" page. IGT also has the resources to establish dedicated Terms and Condition (T&C) and Frequently Asked Question (FAQ) pages for the Lottery's player portal. For examples of current IGT Help and Contact Us pages, please see the insert **CSC Program Graphics** included at the end of this section.

Upon Contract award, IGT looks forward to building and discussing these support channels with the Lottery.

4.22.5.2.I System Software and Lottery Access

The Vendor should provide system software that provides the Lottery and/or the Vendor with web-based access to call recording, quality management tools, reporting, monitoring, tracking, and analysis of all player interaction with the CSC. Vendors should describe their software system, while providing explicit details on the following:

IGT has read, understands, and complies with this requirement and all sub-requirements a - j.

We record all conversations with customers across all channels and can happily provide the Lottery with access to these systems. IGT understands the importance of ensuring the quality of service provided by IGT staff meets Lottery expectations.

IGT routinely checks in with our customers through Quarterly Customer Scorecards to be sure we are meeting and exceeding their expectations. Not only does this offer IGT one more way to measure and influence the performance of our employees, but it also provides our customers with a tangible method through which to comment on the service provided by IGT. Quality checks can also be used to provide feedback to all interested stakeholders, should the need emerge from the careful examination of contracts.

Synergistic Programs

Our CSC currently utilizes a dual-combo system software that allows access to the tracking and quality control analysis of all player interactions across all support channels. Our Customer Relationship Management (CRM) tool is an industry-leading, web-based application that houses all reporting and documentation for phone calls, chats, and emails. This CRM also allows CSC agents to log case notes, escalate player issues, and track open issue tickets across all player channels.



Coupled with our CRM, IGT also uses Genesys, an advanced recording solution, to record all call interactions and the screen recordings related to those communications. Genesys supports advance query options which provide the ability to quickly locate a call by phone number, operator, date, time, etc. In addition to call recordings, this solution offers real-time monitoring and QA capabilities to ensure the quality of our contacts. The Genesys Cloud houses all reporting data for phone calls, which minimally includes call volume, service levels, average answer speed, and abandoned calls.

Customized to Lottery Preference

Both our CRM and Genesys tools allow for vast customization options which benefit how data is reported. Where Genesys allows for customization that is specific to call recording, the CRM allows for report customization, which IGT has found to be extremely popular amongst various iLottery sites.

With our player-support and trouble-ticketing solution, the Lottery can choose which data is displayed on the application dashboard after login. For example, the dashboard can be customized to show the number of opened tickets by product, as well as the name of the group opening these cases. The CRM tool can also be used to build queues and category codes for custom reporting and trend analysis.

4.22.5.2.l.a Call Recording

A recording device should be provided to record all telephone conversations transacted on the Call Center circuits. Recording of telephone conversations should adhere to all applicable Federal, Lottery and State laws. The Vendor should provide the recording equipment and maintain recorded conversations for at least sixty calendar days. The system should have the capability to record all calls including calls from particular groups and calls to certain CSC teams. The system should support advanced query options and metadata tagging so that the Vendor and/or Lottery personnel has the ability to retrieve recordings quickly and easily among logged calls.

IGT ensures that all recorded telephone conversations, inbound, outbound, internal, and external, adhere to applicable Federal, Lottery, and local laws. The majority of our current iLottery customers elect to have a call retention time of 12 months; however, the length of retention can be determined by the West Virginia Lottery for any duration of time.



4.22.5.2.l.b

Lottery Monitoring of Player/Agent Interactions

The system should provide the Lottery the ability to monitor all the player/agent interactions received by the CSC including calls, live chats, email exchanges and any additional support channel that is implemented. The CSC should provide daily and weekly statistical summary reports for Lottery and Vendor review.

Our service module tracks all communication histories for all channels, both inbound and outbound, as well as promotional. In particular, operators can link an "activity" or "service request" to a player wherein the call recording, chat transcript, or email correspondence is attached for subsequent consultation by either the contact center or CRM professionals. All necessary data is stored with call recordings and can be made available to the Lottery. Case history notes and live calls can be transferred between the CSC and the Lottery as well.

IGT will provide the Lottery with direct access to our CSC program components in a manner that meets all requirements. IGT can provide regular reporting for the Lottery's convenience. For example, daily and weekly summary reports can be customized and generated for the West Virginia Lottery as needed.

4.22.5.2.I.c Quality Management

The system should provide the ability for the Lottery to review and assess the quality of support from individual agents and/or teams through an interface that provides advance search options that retrieve player/agent interactions for calls, live chats, email exchanges and any additional support channel that is implemented. The system should have the ability to generate quality management reports that assess agent/team performance scores, comparisons and trends. Vendors should provide sample reports.

IGT's customer support Quality Assurance (QA) team uses both Genesys and the CRM to perform monthly quality checks of player interactions with the CSC. Genesys is used to measure performance specific to call recordings, whereas the CRM allows advanced reporting and quality checks on all email and chat communications.

These software solutions allow us to provide real-time feedback to our customer support representatives. With the advanced search options available in the CSC's player-support tools, our QA team can pull conversations from any individual agent or team.

Both our CRM and recording solutions will also allow approved users to access management level reporting to assess agent/team performance.



The CRM's Customizable Service Queues SALES IN REPORT COLLABORATION CONFIGURATION Refresh New Request - Actions -E-mail View : Standard View • Create New View Site PNG V REQUESTS LIST REQUESTS All S To Queue (161) Tier 1 - Supervisors (5) Tier 1 - Support (156) My Requests (1) - T & % & ≫ ≡ Player Support II. SEARCHES . m & 8 % J = PNG00000003 Tier 1 - Support To Queue Tier Inquiry Supervised To Queue (150) Tier 1 - Support (156) D 🗖 🗞 PNG00000004 Tier 1 - Support To Queue Tiez Inquiry 8 & J = a 🛅 🦓 PNG00000005 Tier 1 - Support To Queue Tier Inquiry (TESTING) Hi, I 0 🔳 🗷 531 4 to 2 = PNG00000007 Tetr 1 - Support 8 & 2 E _ **6** Sa 3 & ≥ = - D & % & J = PNG00000012 Tier 1 - Support Player Support 8 - H & @ m & 6 Jo / = PNG00000014 Tier 1 - Support To Queue Tier Inquiry test check **a a** Player Support E **(3) 528** % 20 2 ≡ PNG00000021 Tier 1 - Support 4 & 2 = **1** Si 14 cd Page : 017 so si 25 V 🙇 💠 🕁 Export 🕫 Group By View 1 - 25 of 156

Figure 4.22 – 4. Example of Service Queues, left, which can be customized based on Lottery preference. This screen allows users to monitor open cases.

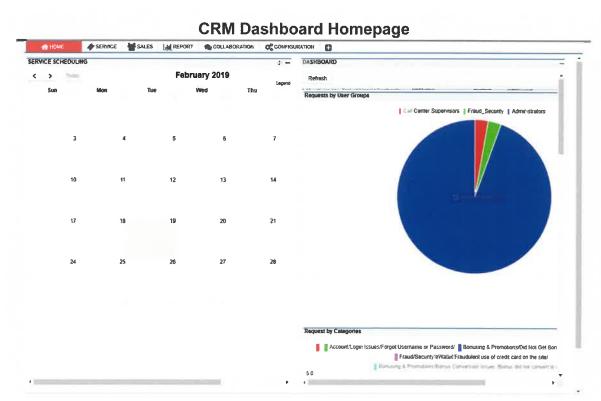


Figure 4.22 - 5. The CRM dashboard is displayed on the Home page after login.



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Live Monitoring with Genesys

Figure 4.22 – 6. Genesys displays real-time statistics for all queues.

4.22.5.2.I.d Analytics and Tracking

The system should provide comprehensive analytics and tracking tools. The analytics tool should include but need not be limited to surveys and capturing of key metrics related to calls, live chats, emails (e.g. call time, average time an issue is open, etc.) and any additional support channel that is implemented. The system should provide the ability for tracking and customized searches of keywords and phrases to recognize issues and trends. The system should provide customized reports of analytics, tracking and player reported problems for each interactive support channel whether or not actual problem(s) are found. The system should have ability to assign a problem type and resolution code and provide useful reports for review. It is desired that the system also provides reporting that ranks the most prevalent problems, solutions, how players rank responses to common complaints, etc.

IGT captures comprehensive data, which can be provided to the Lottery. The provided data will be searchable and include the ability to view a complete record of historical correspondence as well as aggregate CSC reporting. We offer the following main reporting types:

- Contact Reports: This report lists contacts related to players by channel.
- **Trouble Tickets**: This report lists tickets related to calls made by players concerning products/groups/users/players/lead.
- Operator Activity: This report audits operator activity.

Our player-support and trouble-ticketing solution has both analytics reporting and trend tracking available for all incoming calls, emails, and chats. We document all contacts within our CRM under a player's profile, which is integrated with the PAM. This allows for case history to be readily available on future contacts and ensures a smooth experience for both the player and the CSC agent.



When an agent logs notes under a player's profile, the case is "categorized" by product and problem. This allows us to report on case types and any trends we may be experiencing, and it can further guide system improvements and issue resolutions.

As previously mentioned, the full report customization of our CRM will allow trend analysis by product/problem, but it will also allow for keyword searches for more granular reporting. CSC leadership will have the ability to run metric reporting related to all contacts and any additional support channel that is implemented.

4.22.5.2.I.e Player Support History Retrieval

The system should have functionality that easily allows an agent on a call or live chatting with a player to access all previous support related emails sent to the CSC by that particular player during a support session. It is desired that the CSC system have functionality to allow similar access to historical live chats during a support session.

When an agent receives an incoming chat or email, our CRM solution saves the complete transcript within the original case created. These transcripts can be found during future support sessions with any CSC agent.

4.22.5.2.I.f Integration with PAM

The CSC software should have the ability to integrate with PAM as directed by the Lottery. Vendors should describe how the CSC system software would integrate with PAM to provide a single-view of the player's interaction at all touch points and be able to escalate to security.

IGT's solution is omnichannel in that it is fully integrated with our chat, email, and PAM solutions, allowing an efficient flow of information, and enhancing the player's experience.

All registered accounts in the PAM will have a coinciding profile in IGT's CRM. This integration ensures all contacts from a registered player are documented and tracked on an individual player profile. All previous communications between players and CSC agents are readily available for staff in the CRM tool, allowing for a smooth call center interaction.



4.22.5.2.l.g Interface

Vendors should provide key screenshots of the customer support system if already developed.

When a CSC agent moves into the Collaboration tab of our CRM tool, they will be live and ready for incoming chats. When a player reaches out via this channel, a dialogue box will appear, which the agent accepts. Once the chat is accepted by our live agent, players will begin communicating with our representative. See image below.

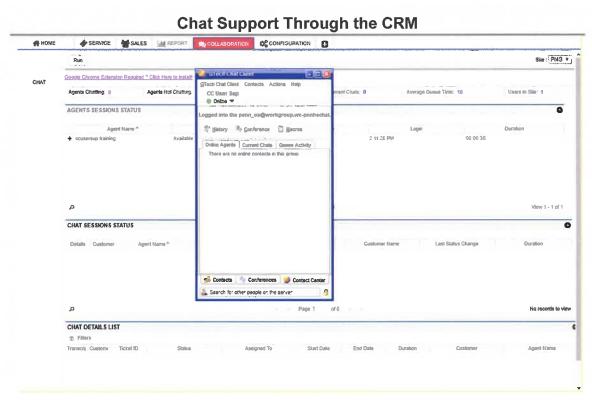


Figure 4.22 - 7. Agent's view of the chat support screen.

If it is determined that a player's issue requires further investigation by the CSC, our agent will open a detailed case documenting the issue. Our CRM will also allow players to submit documentation for the CSC team to assist with their issue.

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Figure 4.22 – 8. This screen shot shows the player document management screen.



CRM: Example Document



Figure 4.22 – 9. This screen shot shows an example document uploaded into the CRM tool.



Figure 4.22 – 10. Example Genesys profile visible to CSC agents. From here, call takers can set their availability status for incoming calls.



4.22.5.2.I.h User Management

Describe the management of all types of users within the CSC. An individual or entity, employed with or contracted by an iLottery contractor, to perform certain activities for the operation of an iLottery system having assigned duties as a customer service representative with access to and ability to modify confidential player account information shall be subject to background check by the Lottery prior to accessing player PII.

All individuals working in the CSC are employed by IGT. Agents report to Team Leads and Supervisors. All leadership staff within the CSC report directly to Paul Cabral, the Customer Support Center Manager.

4.22.5.2.I.i System Delivery

whether the customer support system is software developed by the Vendor, or provided by a Sub-Vendor. In the instance of third-party software, indicate the company name and company website address.

Our CRM software was built completely in-house by IGT engineers.

We utilize Genesys' call recording services to record and house all incoming calls. Their company website address is as follows:

https://www.genesys.com/resources/four-reasons-to-consider-genesys-interaction-recording

4.22.5.2.I.j Failover and Disaster Recovery

The CSC should be equipped with staffing and technology redundancy in a manner that mitigates risk (e.g., backup CSC on different electric grid) and ensures continuous operations. A disaster recovery plan should be provided and approved by the Lottery prior to the startup date and on an annual basis.

IGT will provide the Lottery with a disaster recovery plan prior to the startup date and will continue to provide this information annually throughout the Contract.

Ensuring continuous support for the Lottery's iLottery players is of utmost importance to IGT. We have developed our CSC to provide players with a hotline that is available 17 hours a day, 7 days a week, 365 days a year. Our staffing and management practices are designed to avoid busy signals and shortages of available operators. These processes, in addition to our fully remote staff, allow for strong recovery and issue avoidance – essentially preventing inoperability due to a failover or disaster.

During the COVID-19 pandemic, demand for interactive products increased. Despite this increase, our CSC agents continued to provide support to our customers without interruption.



4.22.5.2.J (a-k) CSC Service Level Support Requirements

The Vendor should maintain reliable communications services for players to reach the CSC. Support response times should be reasonable while keeping Service Levels in parity across support channels. CSC Service Level requirements for support are:

- a. 95% of inbound calls to be answered within forty-five seconds
- b. Respond to 95% of all email inquiries within 24 hours
- c. Respond to 95% of live chat inquires within three minutes
- d. 99% of all calls without a busy signal
- e. Abandoned call rate not to exceed 2%
- f. Average call hold time not to exceed two minutes
- g. 99% of all chats should be answered
- h. Average live chat wait time not to exceed one minute
- i. Abandoned live chat rate not to exceed 5%
- j. 99% of all email inquiries to be answered
- k. Average email inquiry wait time not to exceed 24 hours

IGT has read, understands, and will comply with this requirement.

We will work our best to meet and exceed your standards for support. We look forward to working with the Lottery to outline the Service Level Agreements (SLAs) required to satisfy the Lottery and its players.

Our current recommended support model outlines:

- **Phone**: 85% of all calls answered within 120 seconds.
- **Email**: 90% of all emails resolved within 3 business days.
- **Chat**: 90% of all initial chat responses not to exceed 60 seconds.

Our support model for phone, email, and chat relate directly to abandon rates and average wait times. Since IGT's IVR system does not use a busy tone, we can confirm that 100% of player phone calls will not experience a busy signal; when a call is in queue, the IVR informs the customer of their call status estimation and the number of calls ahead of them in queue.

The above recommended SLAs are overall averages and reflect a support model centered around providing excellent customer service to our players. While this requirement affects staffing, the final decision on SLAs and channels will be determined by the Lottery.



4.22.5.3

Description of Proposed CSC Solution

Vendors should describe their proposed solution for a CSC based on the criteria described above. Description should include experience with CSC, specific measurements and analytics, including call reporting, time to answer, time to resolution, etc. If a Sub-Vendor is utilized to manage the CSC, then Vendors should state the company name, company website address and their capability and experience to perform the work in its response.

IGT has read, understands, and complies with this requirement.

IGT's Customer Support Center is completely managed by IGT employed personnel. Paul Cabral and his team work diligently to ensure call center operations function without interruption. CSC agents are continually coached and guided to iLottery best practices; procedural updates are implemented and communicated immediately for accurate service; and various business analytics are reported on, responded to, and shared with lottery customers.

Powered by our help module, players can have access to a 24/7/365 turnkey solution offering players a CSC specialized in digital gaming. Our vast experience in the lottery space, coupled with our dedication to providing the Lottery with a dedicated iLottery team, ensures that all IGT staff are working to provide the best customer service experience for our players. Our CSC team has experience in all aspects of traditional lottery, iLottery, Cashless support, second chance, and more.

Our proposed SLAs are listed in the previous Section 4.22.5.2.J (a-k). These measurements allow IGT to focus on a support model that prioritizes player needs while meeting service level requirements. For context, our CSC received over 320,000 contacts from July 2021 to June 2022 and handled them with a combined service level over 90%. IGT will be happy to provide more detailed performance indicators, upon Lottery request.

Our player services staff brings road-tested best practices and experience from both U.S. and global markets. We leverage data and intelligence to maximize player acquisition and retention. From account registration, technical issues, and responsible gambling to geolocation and payments, IGT's CSC is ready to assist Lottery players with any inquiry they may have.

4.22.6

System Engineering Support Services

4.22.6.1

All Personnel Necessary to Fulfill Lottery Change Requests

Timely and committed fulfillment of Lottery requests for System support and changes is a requirement. The Vendor should provide all necessary personnel essential end-to-end system changes, testing, and implementation.

IGT has read, understands, and will comply with this requirement.



Our proposed iLottery Ongoing Support Team will be staffed with industry experts who have experience implementing system changes, as needed. These individuals will be more than capable of providing end-to-end system support and Lottery requests throughout the Contract.

For more information, please refer to our response to Section 4.22.3.

4.22.6.2 (A-B) Expense & Hours Regarding Lottery Change Requests

The Vendor should respond with a report of estimated effort to implement any Lottery change request within ten business days from Lottery submission of the change request. Providing estimated hours does not represent an authorization or commitment to implement a change request. Any expense and/or hours associated with correcting System defects, integrating new subcontracted Vendors, or implementing System enhancements are solely and exclusively the responsibility of the Vendor.

The minimum requirements for frequency of software releases to handle change requests are as follows:

- A. System Software Releases. The Vendor should support a mutually agreed upon schedule of releases of software batches, based on change requests specified by the Lottery, as a minimum to support updates to the System through the duration of the Contract.
- B. Portal Software Releases. Portal Software Releases may be adjoined with System Software Releases, upon Lottery approval, but otherwise should be deployed Independently of System Software Releases when any inclusive changes impact only Portal components. The Vendor should be able to support Portal Software Releases as frequently as each month upon the Lottery's request. In such event of monthly releases, the Vendor will work with the Lottery to determine an appropriate scope of change requests that can be effectively developed, tested and deployed within the time constraints of the portal software release. This is intended to support changes that cannot be administered via the CMS.

IGT has read, understands, and will comply with this requirement.

Our disciplined approach to software development for the Lottery will ensure quality software is delivered in the shortest possible time frame. IGT is committed to providing the Lottery with the best software technology to drive your business; our multi-faceted approach to software development allows us to use a variety of processes and practices to ensure successful development, testing, and support of both planned and ad hoc releases.

The modular and scalable architecture of the iLottery System enables the addition of new modules, features, and functionality to deliver and support new sales channels and gaming opportunities. Over time, the software within the iLottery System must be upgraded or changed to meet the evolving needs of the industry as a whole – and of our customers individually – in order to drive the performance expected from the iLottery System.



4.22.6.3

Proposed Release Schedule

Vendors should provide a proposed release schedule for both system and portal software releases for the launch of the program and the next twelve months.

IGT has read, understands, and will comply with this requirement.

Our release schedules are considered proprietary and confidential. However, typically, IGT provides our baseline system and portal software releases, followed by quarterly enhancement updates. Upon Contract award, we will be happy to discuss the solution in greater detail with the West Virginia Lottery.

The following graphic is a sample proposed release schedule for both system and portal software. This three-month plan would continue to cycle through three additional times during the first 12 months.

Examples of Typical Software Changes and Related Time Frames

Change Type	Description
Emergency fixes	These software modifications need to be made immediately to correct any aspect of the system deemed mission critical. The duration of these types of changes is typically measured in terms of hours rather than days
Enhancements to games and back-office applications	These software modifications impact single modules of the software, such as a report or screen change that is cosmetic in nature. The duration for this type of release varies, but our approach is to combine enhancements like these into a development sprint and deliver shippable software in approximately one to two weeks (shorten sprint cycle)
Small-scale software service project	These software modifications may impact multiple modules of the system software, such as end-to-end business processes. The duration for this type of release varies, but generally takes approximately two to four weeks (typical development sprint cycle)
Medium-scale software service project	These software modifications are considered "medium" in nature. They include changes that individually affect multiple modules of software, yet together, may affect a major portion of the system. This would include matrix changes for existing games and the addition of new features or business processes to an existing piece of functionality. The duration for this type of release varies but generally takes approximately eight weeks (two development sprint cycles)
Large-scale software service project	A large software services project, such as adding a new complex functionality or adding a new multi-state game, would have the highest impact on the system and be of the greatest complexity. The duration for this type of release varies but, at the most, will take approximately eight to 12 weeks (two to three development sprint cycles) after requirements are agreed upon

Figure 4.22 – 11.



The use of our existing, mature development methodologies with the additional improvements for requirement optimization and test automation will make this shortened software development time frame possible without risking quality. Our approach provides better agility, communication, and collaboration and a less rigid and more flexible process.

4.22.6.4 Methodology

To the extent that a superior methodology is available, Vendors are encouraged to describe their approach to delivering functionality that exceeds the benchmarks described above. The Vendor should provide an in-state quality assurance capability and support for the Lottery's acceptance testing. In fulfillment of joint responsibilities between the Vendor and the Lottery to make System changes in a timely and correct manner, the Vendor should provide shared access to change requests and change tracking for the Lottery project.

IGT has read and understands this requirement.

Effective and open communication between a lottery and their contractor is a must. IGT will work with the Lottery to establish Quality Assurance (QA) and acceptance testing for software development, testing, and support. We welcome your approval of all requirements and decisions and will regularly meet with the Lottery to monitor the project and ensure it is on track. Such open communication drives essential safeguards (like risk mitigation and business continuity) and allows for problem resolution and/or escalation to occur.

As your iLottery contractor, we would ensure that the Lottery has access to all change requests and tracking for said changes related to this project. Our strict QA and testing processes ensure our solutions are ready to be deployed in critical production environments as scheduled. Our software-development methods are designed from the perspective of the end user to ensure the final product meets both customer and user expectations.

Our Commitment to Agile Software Development Principles

Agile development is a term that encompasses various practices for developing systems and software, all unified by three essential traits:

- Evolving systems in short development iterations.
- Leveraging human strengths.
- Communicating efficiently.

The past few decades have seen these traits implemented within a number of methodologies, such as Scrum, Extreme Programming (XP), and Lean. Because Agile is a mainstream, mature, and proven approach, IGT is committed to its principles.

The disciplined Agile approach offers the following overall benefits:

- Improved Time to Market: Compared to other approaches, Agile is the quicker, more efficient solution.
- **Certified for Success:** Agile's flexible, highly adaptive design allows it to be seamlessly molded into Capability Maturity Model Integration (CMMI) and compliant with other certifications.



- Collaboration: Agile uses a team-oriented methodology working toward a shared goal.
- **Distributed Teams:** IGT centers of excellence numerous and global provide efficient and effective support team resources for system design, development, and maintenance.

Developing software quickly while maintaining quality is an IGT imperative. Our disciplined Agile approach reduces the linearity from the development process and enables the delivery of quality software more quickly. It means we will execute selected Agile principles and practices for more rapid software delivery, but in a disciplined manner that leverages CMMI best practices to meet the high-quality standards of the lottery industry.

Using this approach, IGT will deliver quality software for new games, game changes, emergency fixes (including defects), and/or ongoing enhancements within shorter time-durations than the Lottery has today. It should be noted that some Vendors may promise extremely fast turnarounds for software development but such speed without the discipline afforded from principles grounded in recognized quality practice standards can adversely affect software quality.

Our iLottery System does more than keep pace with industry requirements. It provides the pathway to the future while maximizing uptime and maintaining data security and integrity. Our development methodologies allow us to apply learned feedback to a project as it moves forward, which will ensures we are constantly assessing the quality and status of your iLottery System (and any future enhancements) from the business user's perspective.

Overview of Agile Principles and Practices

We will control and manage software changes and enhancements by using selected Agile principles in a disciplined manner and adhering to best practices and proven procedures. We will use established acceptance testing methodologies and QA best practices for software requirements definition and development processes.

We have successfully used a variety of Agile principles to support our customers' software development needs, including customers in Georgia, Texas, Illinois, California, Michigan, Missouri, Finland, and the U.K. and Antilles.

Agile principles will provide the Lottery with a high level of software productivity, customer focus, transparency, and risk management. Because Agile is so customer focused, it will bring the Lottery the benefit of more involvement and updates throughout the process. Additional benefits to the Lottery include maintaining the iLottery System and software's quality and data integrity at all times.



4.22.7

Incident and Problem Management

The Lottery has adopted Information Technology Infrastructure Library (ITIL) Service Management principles for the purpose of providing and managing internal provided services as well as major vendor provided services. At a minimum, the Vendor should have practices for incident, problem, configuration and release management.

The Lottery administers Incident Management and Problem Management as separate and distinct processes. Incident Management focuses on the restoration of service; Problem Management focuses on the proactive identification and analysis of the root causes of incidents and managing problems to closure. Vendors should describe the Incident Management and Problem Management processes to be utilized in operating and supporting the solution. At a minimum, the descriptions should discuss the following items:

IGT has read, understands, and complies with this requirement.

Like the Lottery, IGT has adopted the principles and best practices of the ITIL and also administers Incident Management and Problem Management as separate and distinct processes.

4.22.7.1 (1-6) Incident Management Process

- 4.22.7.1.1 Incident recording, priority assignment, and classification
- 4.22.7.1.2 First line resolution or referral
- 4.22.7.1.3 Incident tracking and lifecycle management
- 4.22.7.1.4 Incident verification and closure
- 4.22.7.1.5 Escalation
- 4.22.7.1.6 Customer communication

IGT has read, understands, and complies with this requirement,

IGT manages the life cycle of all disruptions of services ("incidents") and ensures that normal service operation is restored as quickly as possible, meeting all requirements the Lottery has outlined. IGT has the corporate infrastructure to support 24/7/365 monitoring of incident management and will oversee incident support for the Lottery as part of a well-defined incident management process. Our process reduces the impact on business by decreasing the time to detect an incident, reducing the notification and response time for key personnel, and decreasing the time required for business to return to normal. In fact, IGT's mean time to repair high-severity incidents has decreased year over year.

To ensure our incident management and notification plan protects the integrity of our customers' systems, IGT has adopted best practices from the ITIL and the ISO/International Electrotechnical Commission (IEC), specifically ISO/IEC 27001:2013. Our plan's use of these best practices, combined with the strength of our people, will ensure your new System will be governed by incident management principles.



The process is as follows:

- 1. Incident detection and recording.
- 2. Classification and initial support.
- 3. Investigation and initial support.
- 4. Resolution and recovery.
- Incident closure.

IGT's Incident Management process is proprietary. However, we can say that it involves a dedicated, highly trained, and experienced Incident Management team; a set of levels for prioritizing the severity of an incident and assigning the required service; the use of incident service tickets and a database and tools for logging, recording, tracking, communicating, and reporting of incidents; an escalation process; and a closure process. As part of our overall Incident Management process, we will communicate the full details of incidents to the Lottery in whatever way it prefers (email, phone, face-to-face, etc.) and also deliver an incident report to the Lottery at an agreed-upon time after the incident has been resolved and closed.

4.22.7.2 (1-7) Problem Management Process

- 4.22.7.2.1 Initiating problem management
- 4.22.7.2.2 Root cause identification
- 4.22.7.2.3 Communicating and documenting workarounds, permanent fixes, or progress of problems
- 4.22.7.2.4 Tracking and escalation
- 4.22.7.2.5 Problem record closure
- 4.22.7.2.6 Customer communication (with the Lottery)
- 4.22.7.2.7 Problem Prevention

IGT has read, understands, and complies with this requirement.

Our Problem Management process resolves the root cause of an incident and minimizes adverse impact on the customer. A "problem" is a condition often identified when multiple incidents exhibit common symptoms. But a problem can also be due to a single significant incident, indicative of a single error, for which the cause is unknown but the impact significant.

The central purpose of our Problem Management process is to find and resolve the root cause of a problem and prevent it from recurring. The process focuses on:

- Improved quality of service to users.
- Improved user satisfaction.
- Reduction in the number and severity of business incidents and problems.
- Improved ability to manage changes and enhancements to the IT infrastructure.
- Provision of reports to our business units and management teams for process-improvement purposes.



Our process can remove a problem from the environment by identifying its root cause. To do so, our Problem Management team works with resources and management to implement a resolution or workaround. Our Problem and Incident Management teams are in constant communication to ensure appropriate attention is given to our customers' critical needs.

IGT's Problem Management process is also proprietary. It involves a highly trained and experienced Problem Management team as well as appropriate experts; a system for determining a problem based on post-incident reviews, tracking and monitoring of incidents, and monthly review meetings; problem-management tickets and a process for priority-rating of tickets and for tracking and updating tickets; a root-cause identification and analysis process; appropriate change management processes; and a closure process once a permanent fix has been implemented and verified. As part of the overall process, IGT will notify and communicate with the Lottery about the severity, risk, and impact of any problem.

4.22.7.3 Notifying Lottery of a Security Incident

In each case of a security incident that may have compromised any aspect of the Security Program, the Vendor shall notify the Lottery verbally and in writing of the incident immediately and fully cooperate with the Lottery to mitigate the consequences.

This includes any use or disclosure of Data that is inconsistent with the terms of the contract. The Lottery and the Vendor may decide to establish incident reporting timeframes based on varying levels of urgency.

IGT has read, understands, and will comply with this requirement.

4.22.7.4

Assisting Lottery in Its Notifications & Incident Documentation

The Vendor shall immediately give the Lottery full access to the details of each incident and assist the Lottery in making any notifications to potentially affected people and organizations that the Lottery deems are necessary or appropriate. The Vendor shall document all such incidents and any appropriate updates, including its response, and provide that documentation to the Lottery within timeframes defined in contract.

IGT has read, understands, and will comply with this requirement.

Through our JIRA Incident Management program, the Lottery will have full details to all incidents. JIRA allows users to document any incident updates in real time.



4.22.8

System Change Control and Configuration Management

4.22.8.1

Change Control & Configuration Practices – Defined & Lottery Approved

The Vendor should operate under defined change control and configuration management procedure practices, which shall be approved by the Lottery.

IGT has read, understands, and will comply with this requirement.

4.22.8.2

Change Control Processes & Evaluation Procedures

Change Control processes detail evaluation procedures for identifying the criticality of updates and determining the updates that shall be submitted to a Lottery approved independent testing laboratory for review and certification. These processes shall be developed in accordance with, the latest version of the GLI-CMP Change Management Program Guide.

IGT has read, understands, and will comply with this requirement.

As stated under Section 4.22.7.1, Incident Management Process, above, IGT has adopted best practices from the ITIL and the ISO/IEC, specifically ISO/IEC 27001:2013. This large body of reference will ensure your new iLottery System will be governed by disciplined change and configuration management principles.

IGT will fully test all changes to systems, network devices, and applications in a test environment following standard QA best practices. When we have satisfactorily completed testing, the Lottery will have an opportunity to test on its dedicated testing system. We will require your acceptance and approval prior to implementation into any production environment. Once deployed, all systems, production, backup, QA, etc. will receive the upgrades necessary to ensure consistency and compatibility.

For those processes outside of those we perform as part of the ITIL management principles, including those from the Gaming Laboratories International Change Management Program Guide, we would be happy to discuss with the Lottery any specific items that would need to be added to that platform.



4.22.8.3

Configuration Management Practices Apply to Components

Configuration Management practices, as described below, should apply to all of the following components, but not limited to: documentation, procedures, specifications, program application source and object code, operating systems, database platforms, other third-party applications, systems and network hardware major hardware components, and any other major System components.

IGT has read, understands, and will comply with this requirement.

As stated previously, we will follow the principles of the ITIL and the ISO/IEC (specifically ISO 27001: 2013, having updated from our 27001:2005 certification) for configuration and change management of any change (documentation, procedures, specifications, program application source and object code, operating systems, database platforms, other third-party applications, systems and network hardware major hardware components, and any other major iLottery System components) to the production environment.

4.22.8.4 (A-H) Configuration Management Guidelines

Strict performance according to principles of configuration management should be required as follows:

- A. **Approved Changes Only.** The Vendor should ensure through procedural and System controls that only Lottery-approved changes, on an approved schedule, can be made. Reports and/or displays should be available to the Lottery to review all related change and configuration management activities.
- B. **Change Introduction.** All changes to servers, network devices, or applications should first be completed on the related testing systems. All changes approved and completed for production systems should also be completed on the associated backup systems.
- C. **Software Checksums**. Checksums are required for software at the time it is released for Lottery testing and should be available at any time for testing applications and for the production systems.
- D. **Component Identification**. System components should be documented with version and release numbers, patch versions, or model and serial numbers.
- E. **Traceability of Components.** System components should be traceable, identifying the history, use, and location of a component.
- F. Change Tracking. The Vendor should track all changes made to System components, provide reports showing when and by whom a change was made and for what purpose, and should avoid update conflicts. Change logs should reference associated planning documents and approvals.
- G. **Configuration Status and Inventory.** The Vendor should have the ability to produce a configuration status report identifying the current configuration of any System component as well as an inventory report including all System components.



H. **Documentation.** The Vendor should provide and maintain comprehensive System documentation. All documentation relating to software and application development, including procedures to ensure that technical and user documentation is updated as a result of a change, should be available for Lottery inspection and retained for the duration of its lifecycle and for seven (7) years thereafter.

IGT has read, understands, and will comply with this requirement.

We will ensure all System Change Control and Configuration Management requirements are properly met and followed.

We will provide release notes for all software changes that characterize the planned changes. The software changes will be incorporated into a completely defined release package. Release notes shall include, but not be limited to, version number, files affected, change request identifiers, and change descriptions.

Tasks assigned Request for change initiated PRIORITIZATION & ANALYSIS Change Manager prioritizes request according to Service Level Agreement Change Manager schedules tasks Change Manager schedules tasks

Figure 4.22 - 12.

Managing Changes to the Lottery's Production Environment

Our Production Change Management approach is designed to identify, evaluate, and negate the risks inherent in moving a very technical environment forward to meet business needs. With our approach, all changes to production system software are initiated by formal request. Specifically, the request includes release notes and our Request for Change (RFC) for Lottery approval of any change to production whether hardware or software.



Once approved, the RFC will be posted to our internal Forward Schedule of Change (FSC) utility. Posting to the FSC allows us to avoid resource conflict and sequencing problems. Upon completion of the production install, all changes are subject to a post implementation review to expose areas of improvement.

The Production Change Management process is owned and managed by IGT's Operations Manager.

Change Management activities commence during Release Planning and proceed in parallel with the Release Management activity, including our disciplined Agile development sprints, with the final validation and authorization for production installation occurring at the sprint(s)' completion and upon successful completion of the Lottery's software QA testing. This ensures that timely production installs will meet the Lottery's business objectives.

A Change Manager will be assigned to coordinate changes through the RFC life cycle to ensure through procedural and system controls that only approved changes can be implemented. This role may be filled by various individuals from our operations or technology teams depending on the scope and type of release. IGT will provide reports to the Lottery to review change management activities.

All changes are recorded in the change management system. For example:

- The scope of service and infrastructure changes is defined and documented.
- All RFCs are recorded and classified (e.g., urgent, emergency, major, minor, etc.).
- RFCs are assessed for their risk, impact, and business benefit.
- Changes are accompanied by an approach for reversing unsuccessful changes.
- Changes are approved, checked, and implemented in a controlled manner.
- All implemented changes are monitored and reviewed for success and post-implementation actions.
- The authorization and implementation of emergency changes are controlled consistent with the change management policy.
- Existing, previously established implementation dates are used as the basis for change and release scheduling.
- A schedule that contains details of all the changes approved for implementation and their proposed implementation dates is maintained and communicated to relevant parties.
- Change records are regularly analyzed to detect increasing levels of changes, frequently recurring change types, and emerging trends.
- The results and conclusions drawn from analyzing change records are recorded.

Throughout the change management process, Continual Improvement actions will be identified, recorded, and put into a plan for improving the service.



4.22.9

Operations Security Plan

The Lottery expects its System and operations to be of the highest security and integrity. This requires both the Lottery and its Vendor to maintain a confidential, high-level comprehensive approach to information security controls.

IGT has read, understands, and will comply with this requirement.

IGT treats an Operations Security Plan as a living document to be continually evaluated, tested, and updated to ensure the integrity and security of the customer's data.

The IGT Information Security Group will create and review the plan for the Lottery. Once the plan is completed, it will be delivered in the required timeframe for the Lottery's final review and approval. Thereafter, the plan will be reviewed annually or at a frequency determined by the Lottery.

Furthermore, our security staff – based on their analysis of changed circumstances – will recommend any changes that should be made to your Operations Security Plan to ensure consistency with actual operations. IGT managers will implement any changed circumstances (such as hardware or software changes, contract changes, user requirements, etc.) as they are approved.

All of this will ensure continual synchronization between the Operations Security Plan and the policies and procedures of the Lottery.

Further details of our comprehensive approach to information security controls are provided in Section 4.4, System Security.

Plan Maintenance

IGT has developed security measures based on the mature processes and best practices prevalent in both the lottery and technology industries. Our approach to maintaining, managing, and continually evolving our security plan is to:

- Closely monitor and participate in the activities of the WLA Security and Risk Management Forum, MUSL, and NASPL.
- Be actively engaged in defining the certifications, regulations, processes, and tools that are related to security (such as those mentioned above), as these are the cornerstone of our industry.
- Attend various security seminars conducted by information security professional organizations.
- Follow the guidelines of the ISO/IEC 27001 and WLA-Security Control Standard (SCS) for information security.
- Follow the Statement on Standards of Attestation for Engagements (SSAE) 18 for our control objectives and activities and Payment Card Industry Data Security Standards (PCI-DSS) standards for computer security.



4.22.9.1 Plan Approval, Outline, Audits, Meetings

The Vendor should present an Operations Security Plan ready for approval by the Lottery. Approval of this plan is an entry criterion for acceptance testing. The Lottery and the Vendor will work to mutually agree on an outline for this plan. There will be periodic audits for compliance with the security plan; and periodic meetings with Lottery staff to review security controls.

IGT has read, understands, and will comply with this requirement.

4.22.9.2 Sample Plan

Vendors should include a sample or outline of an Operations Security Plan that they have produced and used in other operations that are comparable to specifications in this RFP.

IGT has read, understands, and will comply with this requirement.

IGT has included an outline of an Operations Security Plan, used in other operations that are comparable to the specifications in this RFP.

The security plan will include the following sections:

- Business Impact Analysis.
- Risks, Threat, and Vulnerability Analysis.
- Security Strategy.
- Personnel Security Practices.
- Physical Security.
- Data Security.
- Telecommunications Operational and Physical Security.
- Telecommunications Access Security.
- Protection of Software and Other Copyrighted Material.
- Plan Evaluation.
- Security Awareness/Training.
- Plan Maintenance.

The Operations Security Plan is part of our greater Security Program, a more detailed outline of which is provided in Section, 4.4.1, Security Program



4.22.10 Material Supplies

4.22.10.1 Supplies Needed to Operate iLottery System

The Vendor should supply all material supplies needed to operate the iLottery System.

IGT has read, understands, and will comply with this requirement.

4.22.10.2 Related Promotional Merchandise and Print Materials

The Vendor should acquire, on behalf of the Lottery, iLottery related promotional merchandise and print materials as requested by the Lottery and invoice the Lottery at actual cost.

IGT has read, understands, and will comply with this requirement.

4.22.11 iLottery System User Training



4.22.11.1 Training of Lottery Staff Before Launch (A-D)

The Vendor should provide training, before launch of iLottery, for Lottery staff, at the Lottery offices, or appropriate venues as approved by the Lottery, on all aspects of the System, as follows:

- A. Training Plan. The Vendor should provide a plan to train Lottery staff and any third-party vendors utilizing the iLottery System. Please estimate the number of hours needed for training.
- B. Customized Training. Training should be customized to meet the unique needs of Lottery employees performing specific primary and support activities. At times during the Contract, additional training may be needed as System features evolve and/or staffing changes.
- C. Training Documentation and Tools. The Vendor should provide workbooks, documentation, software, or other to support the training.
- D. Additional Items. Training shall also include reviewing Data available in the System, showing how it is assembled for reporting, and demonstrating how to create standard and custom reports with this Data. If any shared responsibilities are agreed to by Lottery for handling CSC, training for player account management and problem resolution shall be included.

IGT has read, understands, and will comply with this requirement.

IGT will develop and provide the Lottery with a training plan, as well as customized training, for all required staff and third-party vendors on the operation, use, and customer service aspects of our iLottery System.

IGT has more lottery training experience than any other Vendor, and we'll bring our global experience to the training we provide to the Lottery's staff and third-party staff. Our training plan will take advantage of the skills and knowledge of the Lottery's employees. Utilizing their current skills and knowledge will ensure a targeted training plan that takes advantage of their strengths while providing them with the necessary skills to excel in the use of the iLottery System. The training courses will provide an overview of the relevant areas of the iLottery System and include workshops and demonstrations. Training will take place prior to the integration phase of the implementation project. All courses will be conducted by our product management and integration teams.

Customized Training

In collaboration with the Lottery, IGT will develop and deliver a customized training plan. At the beginning of the implementation project, our team will work with the Lottery to gain a clearer understanding of your requirements and related processes, as well as insight into your business processes and how they will be best supported by the offered iLottery technology and services. Our team will also consider, as stated above, the current capabilities, duties, and skills of your staff. We will work collaboratively with each of your department managers to suggest ways to maximize efficiency related to their current or future workflows, if needed.

Because the training plan is developed in accordance with the Lottery's pre-existing structures and systems, as well as any new ones related to the iLottery System, IGT will ensure your staff gains the necessary skills to understand and efficiently use the iLottery System, solutions, and services to increase their productivity. The training plan will be adapted to the needs and the deadlines convenient to Lottery staff members.



Training Materials & Documentation

IGT will customize all training materials, manuals, and guides for the Lottery. We will package the information to meet your users' needs (e.g., digital forms or traditional hard copy). The Lottery will be provided with quick reference cards, operating manuals, software guides and other materials deemed necessary through collaboration between the Lottery and IGT. We will update documentation accordingly when required throughout the Contract. IGT will also provide recordings of all training sessions in case the customer needs to revisit the material.

Trainers & Methodology

Lottery staff training will be conducted by the IGT Product Team. The Product Team is involved in both the development and implementation of IGT's digital solutions. The Lottery will benefit from having experienced subject matter experts overseeing the training program and working directly with your staff.

This team will provide a mix of instructor-led presentations and discussions, as well as interactive (hands-on) computer-based activities and workshops. Additionally, we will provide the Lottery and its staff access to our back-end systems prior to the training sessions to ensure the Lottery's students get familiar with the tools available. This allows them to gather questions prior to the training sessions.

Additional Training

At times during the Contract, additional training may be necessary as system features evolve or as new employees are hired. In these cases, IGT will develop and provide an appropriate training course for the relevant Lottery staff to ensure they remain fully aware of the functionality and features of your iLottery system.

4.22.12 Data Center Configuration Maintenance

The Vendor shall be responsible for maintaining iLottery System data center components, including but not limited to servers, LAN s, telecommunications equipment, and infrastructure items (such as power and HVAC). Documentation of maintenance events should be maintained by the Vendor for Lottery review. The Vendor is obligated to obtain replacement parts and maintenance services that are approved, recommended, or recognized by the original equipment supplier as effective.

IGT has read, understands, and will comply with this requirement. IGT will maintain the iLottery System data center components as required.

Resumes

Resumes

Hardeep Bhachu

CONTRACT TITLE: Director, Front-End Solutions

CONTRACT ROLE

Hardeep will oversee the team that will help design and develop the Lottery's iLottery program. He will help with product planning and execution throughout the product life cycle including, but not limited to, gathering and prioritizing product and customer requirements, defining the product vision, and working closely with the Implementation Team to ensure customer satisfaction.

PROFESSIONAL EXPERIENCE

Hardeep has nearly 19 years of lottery and interactive gaming experience with IGT. During this time, he developed digital strategies and implemented complex, enterprise-level digital projects in global Business-to-Business (B2B) environments. He is responsible for working with both internal executive stakeholders and our customers on digital strategy development, governance, and operations. This includes digital marketing, social media, digital development (website platform and mobile applications), content strategy, and User Interface/User Experience (UI/UX) design and usability.

As the Director of Front-End Solutions, Hardeep is responsible for IGT's global portal and mobile app product strategy and customer deployments and has direct oversight of a team of nine. He is responsible for product planning and execution throughout the product lifecycle, including gathering and prioritizing product and customer requirements, defining the product vision, and working closely with IGT's delivery teams to ensure revenue and customer satisfaction are met.

Prior to this role, Hardeep was Head of Interactive Web Portals and was responsible for defining, managing, and leading the implementation of online portal projects from inception to production launch and post-launch assessment based on business requirements as defined by customer stakeholders. He also served as our Account Development Manager (ADM) in several European jurisdictions including Denmark.

EDUCATION AND TRAINING

Hardeep holds a bachelor's degree (with Honors) in business management and information technology (IT) from De Montfort University.

EMPLOYMENT HISTORY

IGT:
Director Front End Solutions
Head of Interactive Web Portals
Portal Product Manager
Account Development Manager (ADM)
Client Services Manager
Client Services Advisor

2004 - Present

Paul Cabral

CONTRACT TITLE: Customer Support Center Manager

CONTRACT ROLE

Paul will be the point of contact for the Lottery for all matters related to the Customer Support Center (CSC). As Manager of the CSC, Paul is responsible for overseeing all call center operations for remote employees located both abroad and within the U.S. Throughout this Contract, Paul will be working to strengthen IGT's relationship with the Lottery and their players by ensuring needs and requests are handled in a timely manner.

PROFESSIONAL EXPERIENCE

During his time with IGT, Paul has won two awards of recognition for outstanding performance. He continually oversees the recruiting, training, and staffing of new employees; he oversees the strategic implementation of technology enhancements in the call center (including a transition to cloud-based CSC solutions); and he has worked multiple projects from beginning stages to Go Live. 7These include setting up the Interactive Voice Response (IVR); granting access/permission for all required programs for the entire team; creating articles outlining our procedures for Gaming, News, Information, and Expertise (GNIE) - IGT's knowledge-management system used in training; and establishing our Customer Relationship Management (CRM) tools with categorization codes. Paul was also selected to instruct a three-week training both on-site and remotely, for new hires at a call center in Toronto, Canada.

EDUCATION AND TRAINING

Paul graduated from the Community College of Rhode Island with an associate's degree in business.

EMPLOYMENT HISTORY

2014 - Present

Call Center Manager Call Center Senior Supervisor Call Center Supervisor Call Center Team Lead Priority Response Associate Call Center Associate

2014 - 2015John W. Kennedy Company: Service Technician

2013 - 2014Newport Creamery: Cook

2006 - 2010Davenport's Restaurant:

Expeditor

IGT:

John DeRosa

CONTRACT TITLE: Customer Support Center Supervisor

CONTRACT ROLE

John will supervise the Customer Support Center as staff members provide players with the option to obtain customer support through several channels, including phone, email, live chat, and a web-accessible self-service database.

PROFESSIONAL EXPERIENCE

John is an experienced manager with a diverse skill set gleaned from more than 15 years in direct-to-consumer and business-to-business sales and account management, customer service, and project management.

EDUCATION AND TRAINING

John graduated from Drew University of Madison, New Jersey with a bachelor's degree in English literature.

EMPLOYMENT HISTORY

IGT: Customer Support Center Supervisor Customer Support Center Team Lead	2019 – Present
Ocean State Job Lot: Customer Service Manager	2018 – 2019
FMC Ice Sports: Customer Care Manager	2017 – 2018
Amazon: Trainer and Team Leader	2016 – 2017
Sterngold Dental, LLC: Customer Service Manager	2015 – 2016
Gatehouse Media: Customer Support Manager	2014 – 2015
InsureMyTrip.com: Product Manager Plan Implementation Program Manager Customer Care Manager	2005 – 2014

Stephanie Doyon

CONTRACT TITLE: Customer Support Center Team Lead

CONTRACT

Stefanie will lead a team in providing players with the option to obtain customer support through several channels, including phone, email, live chat, and a web-accessible self-service database.

PROFESSIONAL EXPERIENCE

Working for 26 years in a local bakery taught Stephanie the value of nurturing customer relations and of working with a successful team who can reinforce that principle. When Stephanie started with IGT, she brought those ideals with her, helping to build up team morale while prioritizing the customer satisfaction.

EDUCATION AND TRAINING

Stephanie received an associate's degree in criminal justice from The New England Institute of Technology.

EMPLOYMENT HISTORY

IGT: 2017 – Present

Customer Support Center Team Lead Customer Support Center Representative

DeFusco's Bakery: 1994 – 2021

Customer Relations Supervisor

Joseph S. Gendron

CONTRACT TITLE: Chief Operating Officer - Global Lottery

CONTRACT ROLE

Jay is responsible for all IGT lottery customers, excluding Italy. He will have executive oversight of IGT's solution delivery to the Lottery. He will work with the West Virginia Account Team to ensure your business objectives are fully understood and supported.

PROFESSIONAL EXPERIENCE

Jay began his career at IGT (then GTECH) in 1995 as an Assistant Account Director. He was later promoted to Regional Account Director, followed by Account General Manager. He previously worked as Director of Video Operations before becoming Vice President of Global Sales, Gaming Solutions. In 2007, Jay was promoted to Regional Vice President, Eastern Region Operations, where he oversaw the company's largest region for seven years. In 2014, he became Senior Vice President, North America, where he utilized his extensive background of expertise to influence the lottery industry. Having demonstrated trust, integrity, responsibility, and an unyielding commitment to customer service, he was promoted to his current role, Chief Operating Officer—Lottery, in 2018. As COO, Global Lottery, Jay ensures that IGT's resources, products, services, and retail innovation support our customers' diverse and unique business models.

EDUCATION AND TRAINING

Jay received a BA in political science from Saint Anselm College in Manchester, New Hampshire.

EMPLOYMENT HIS-TORY

IGT:

1995 - Present

Chief Operating Officer—Global Lottery
Senior Vice President, WLA North America
Senior Vice President, United States
Regional Vice President (RVP), Eastern Region
Vice President of Global Sales, Gaming Solutions
Director of Video Operations
Account General Manager
Regional Account Director
Assistant Account Executive

State of Rhode Island:

1992 - 1995

Family Court, Court Appointed Special Advocate (CASA) Program

Program Coordinator

Sri Jawaharlal

CONTRACT TITLE: Senior Vice President & Chief Technology Officer, Lottery

CONTRACT ROLE

Sri will provide executive leadership for the Lottery's iLottery System project.

PROFESSIONAL EXPERIENCE

Sri has more than 20 years of lottery experience with a focus on software development and digital solutions. He began his lottery career with HCL Technologies where he served as the technical lead helping to develop the first internet lottery application for European customers. Sri joined IGT in 2001 as an architect. He quickly rose through the ranks and took on increasing responsibility.

During Sri's early years with IGT, Sri helped to create our first software development kit and API development strategy as a Senior Technology Director. In his most recent roles with IGT, Sri has led technology teams of more than 1500 software engineers, architects, business analysts and project managers from around the world. His team was responsible for delivering technology solutions and services across three continents with more than 150 simultaneous projects. He oversaw IGT's IT cloud migrations and consolidation to achieve a 30% annual spend reduction.

EDUCATION AND TRAINING

Sri has a bachelor's degree in physics and a master's degree in computer science, both from the University of Madras. Sri is also certified in Lean Six Sigma Primer program, Data Science Specialization, and Information Technology Infrastructure Library (ITIL).

EMPLOYMENT HISTORY

IGT:

2001 - Present

Senior Vice President & Chief Technology Officer Lottery Senior Vice President & Chief Technology Officer PlayDigital Global Chief Information Officer

Vice President Technology

- · Global Lottery Delivery & Services
- · Chief Architect Lottery
- International Lottery Delivery & Services
- International Client Services

Senior Technology Director/ Chief Architect Senior Technology Director, Engineering Senior Technology Director, Enterprise Architecture Architect

HCL Technologies:

1999 - 2001

Technical Lead

L-Cube Innovative Solutions:

1997 – 1999

Technical Lead

Arthur Lettieri

CONTRACT TITLE: Customer Support Center Team Lead

CONTRACT ROLE

Arthur will lead a team in providing players with the option to obtain customer support through several channels, including phone, email, live chat, and a web-accessible self-service database.

PROFESSIONAL EXPERIENCE

Arthur started with IGT assisting players via our call, email, and chat support channels. He is responsible for communicating critical information to representatives in order to aid them with advanced player and customer service concerns. Arthur also regularly performs quality assurance evaluations on incoming conversations with players.

EDUCATION AND TRAINING

Arthur graduated from the Community College of Rhode Island with an associate's degree in general studies. He continued his education at Rhode Island College, graduating with a bachelor's degree in computer information systems.

EMPLOYMENT HISTORY

IGT: 2016 – Present
Customer Support Center Team Lead
Call Center Associate II

Burger King: Shift Supervisor

Call Center Associate I

2012 - 2016

Derek Levesque

CONTRACT TITLE: Director, U.S. Business Development and Account Management

CONTRACT ROLE

Derek will oversee all account management aspects of the iLottery operations. This will include, but not be limited to, updates on market best practices, elnstant roadmap guidance, game performance, best practice updates and overall strategic initiatives.

PROFESSIONAL EXPERIENCE

Derek and his reporting account manager will be the primary points of contact for the Lottery as it relates to operations, strategy, and performance. He has approximately 8 years of experience at IGT, all of which have been focused on iLottery. Derek has spent the last 5 years focused on growing his North American customers.

EDUCATION AND TRAINING

Derek graduated the University of Rhode Island with a bachelor's degree in finance and economics. He also graduated Bryant University with an MBA.

EMPLOYMENT HISTORY

IGT:
Director, Business Development & Account Management
Director, eInstant Product Strategy
Sr. Manager, Global Business Development
eInstant Product Manager
Market Analytics Manager

2015 - Present

Alan Mackey

CONTRACT TITLE: Senior Director Data and Analytics

CONTRACT

Alan is responsible for the development and execution of IGT's data strategy for our iLottery segment and will support for this project.

PROFESSIONAL EXPERIENCE

Alan has been with IGT for more than 25 years. He began as a Regional Technology Manager servicing customers throughout Northern Europe. He was responsible for the development of a region-wide software support hub. Alan began working on digital solutions in 2001 as a Solutions Architect and led the development of a multichannel interactive lottery startup for the UK National Lottery as well as a new internet gaming and sports betting solution for Veikkaus Oy in Finland.

Alan took on roles of increasing responsibility where he played key roles in IGT's acquisitions of a plethora of digital gaming companies, including Finsoft and Boss Media, as well as deploying iLottery products on web and mobile channels across the globe.

In his current role as Senior Director of Data and Analytics, Alan oversees IGT's efforts to modernize our data use for reporting and analytics giving insight on players, operations, and lotteries. He identifies opportunities for process automations while utilizing the latest in advanced analytics and artificial intelligence techniques.

EDUCATION AND TRAINING

Alan has a BSc in applied computing from Waterford Institute of Technology and a MSc in big data analytics from Atlantic Technological University. Additionally, he has a Scaled Agile Framework Agilist Certification and a Certificate in Project Management (PMI) from Bryant University.

EMPLOYMENT HISTORY

IGT:
Senior Director Data and Analytics
Director Data and Analytics
Account Director/Director of Operations, OLG
Head of Lottery Solutions
Director Sales Engineering
Solution Architect

Regional Technology Manager

1995 - Present

Justin J. McCormick

CONTRACT TITLE: Customer Support Center Supervisor

CONTRACT ROLE

Justin will supervise the Customer Support Center as staff members provide players with the option to obtain customer support through several channels, including phone, email, live chat, and a web-accessible self-service database.

PROFESSIONAL EXPERIENCE

Justin has seven years' experience working in collaborative environments. As the newest member to IGT's iLottery leadership team, he brings a history of supervising and coaching new employees, analyzing performance, and working to meet business goals. He aims to be a role model, leading by example and continually adapting to change.

EDUCATION AND TRAINING

Justin graduated from The University of Rhode Island with a bachelor's degree in history.

EMPLOYMENT HISTORY

IGT: 2022 – Present Customer Support Center Supervisor

CVS Call Center: 2020 – 2022 Customer Relations Supervisor

Santander Bank: 2015 – 2019

Workforce Management Analyst Onboarding Assistant Manager

10

Tom Napolitano

CONTRACT TITLE: Sr. Director, iLottery Business Development and Operations

CONTRACT ROLE

Tom will be responsible for oversight of the Digital Account Team directly supporting the Lottery's day-to-day operations of its digital channel.

PROFESSIONAL EXPERIENCE

As an expert in lottery marketing and gaming product management, Tom works with our U.S. World Lottery Association (WLA) customers, assisting them in understanding IGT's iLottery products and the benefits they bring.

With IGT since 1993, Tom has more than 29 years of lottery industry experience. His career highlights include helping to establish IGT's Printed Products and Interactive business divisions, as well as authoring four innovative patent applications – all while collaborating with lotteries around the world in optimizing their product portfolios. In his role as head of America's iLottery Business Development and Operations, Tom will ensure the Digital Account Team directly supporting the Lottery's day-to-day operations of their digital channel will have all the support they need form the global organization.

EDUCATION AND TRAINING

Tom has a bachelor's degree in business administration from Hofstra University.

EMPLOYMENT HISTORY

IGT:

1993 - Present

Sr. Director, iLottery Business Development and Operations
Director Product Management
Senior Manager, New Product Development, and Innovation
Senior Manager, Retail Game Design/ Content Technology Manager
Advanced Technology Architect
Director of Software Development
Software Developer/Project Manager

Srini Nedunuri

CONTRACT TITLE: Vice President iLottery

IOT.

CONTRACT ROLE

Srini oversees IGT's entire iLottery team, product management, and the execution of strategic growth plans for IGT's digital footprint.

PROFESSIONAL EXPERIENCE

Srini joined IGT in 2009 and has been in the digital gaming industry across various disciplines for more than 22 years. As the Vice President of iLottery, Srini oversees IGT's iLottery business segment with the responsibility of executing strategic growth plans for IGT's iLottery footprint globally.

Prior to IGT, Srini worked for the largest Business to Consumer (B2C) organization and successfully established Interactive gaming startups for media group companies as well as financial sector companies within the Casino, Poker, Bingo and Live TV roulette space.

2000 Procent

EDUCATION AND TRAINING

Srini has a Bachelor of Commerce from Osmania University, India.

EMPLOYMENT HISTORY

Vice President iLottery Senior Director: Play Digital Platform & Products Head of Poker & Bingo	2009 – Present
Blue Group: E-Commerce and Marketing Consultant	2008 – 2009
Smart TV Broadcasting: Marketing Director	2007 – 2008
Cantor Gaming: Marketing Manager	2006 – 2007
Essel Group: Consultant	2005 – 2006
IVY Comptech (as part of Entain plc): Director of Operations	1999 – 2004

Karri Paavilainen

CONTRACT TITLE: Senior Director iLottery Player Marketing Services

CONTRACT ROLE

Karri will be responsible for player marketing services.

PROFESSIONAL EXPERIENCE

Karri has more than 15 years of experience in the lottery industry, half of that on the lottery operator side and half with IGT. For the past seven years, Karri has worked in our iLottery System group servicing interactive customers across the globe. His experience within mobile and internet channels includes strategy development, player analytics, product development, marketing, and sales channel development.

In his current position, Karri is responsible for leading global player marketing services supporting our iLottery customers in player acquisition, player retention and player experience optimization.

EDUCATION AND TRAINING

Karri graduated from the Helsinki School of Economics in Finland with a master's degree in economics and business administration.

Karri has post-graduate marketing management studies in the Harvard University Extension School with focus on digital marketing.

EMPLOYMENT HISTORY

IGT: 2014 – Present

Senior Director, iLottery Player Marketing Services Senior Director PlayLottery Operations, Content & Connected Play

Senior Director, Daily Games, Product Marketing

Veikkaus Oy: 2005 – 2014

Finnish National Lottery Gaming and Sports Betting Company:

Vice President, Daily Games Business Division Vice President, Strategy and Development

Stephen Pasyanos

CONTRACT TITLE: Vice President iLottery Technology

CONTRACT ROLE

Stephen will be responsible for leading the iLottery technology architecture, delivery, and support.

PROFESSIONAL EXPERIENCE

Stephen is a senior technology leader with more than 27 years of global gaming, lottery and interactive delivery and support experience. His experience includes leading and executing complex systems deliveries for lottery and gaming customers. His focus has been on the technology components, including architecting, engineering, deploying, and supporting solutions for the industry across the globe. These solutions include cloud and on-premises datacenter deployments.

Stephen has had many roles, and this has enabled him to be a leader of change. He has been instrumental in enacting efficiencies through the creation of standard process, automation, and change management. These items have enabled a team to not only be more efficient in delivery but also be more effective in supporting our customers. Stephen was brought into the company as an engineer installing lottery and gaming systems, then he eventually lead the organization responsible for the same activities globally. This has enabled him to have a forward-thinking open approach to ensuring successful deliveries. Stephen ensures the technology and the methods for delivery are always being looked at and updated.

1995 - Present

EDUCATION AND TRAINING

Stephen has a BS in information systems science from Salve Regina University.

EMPLOYMENT HISTORY

IGT:
Vice President iLottery Technology
Senior Director of Technology, Systems Delivery and Services
Director of Technology, Systems Deliveries and Services
Technology Manager II
Technology Manager I
Technology Manager
Principal Systems Support Engineer
Senior Systems Support Engineer
Systems Support Engineer II
Systems Support Engineer

Angela Patrick

CONTRACT TITLE: Project Manager

CONTRACT ROLE

As the Project Manager, Angela will oversee the delivery of the online implementation and serve as the primary point of contact for the Lottery concerning the project. Angela will also work with the Lottery to establish an overview of how the project will be carried out in alignment with the general project plan. A communication plan for the duration of the implementation will also be decided upon, and roles and responsibilities will be discussed and confirmed.

PROFESSIONAL EXPERIENCE

Angela has experience managing geographically diverse (both global and domestic) resources with Program support teams and has collaborated with external vendors and internal leaders to create an environment centered around partnerships, trust and ensuring customer satisfaction. She has led initiatives in IoT and IoT security, led teams of more than 10 members across multiple disciplines, and has developed process documentation to standardize workflows and increase productivity.

Prior to IGT, Angela managed IT operations to support Enterprise hardware deployment, inventory tracking, site decommission, and systems maintenance for global manufacturing Original Equipment Manufacturers (OEMs) with a customer base of 10 million. Her responsibilities spanned multiple organizational towers, requiring purposeful communication strategies to maintain effective levels of support and positive team energy.

Angela possesses Safe Agile 5.0, Certified Scrum Master (CSM), Product Owner (CPO), and ITIL certifications. She has more than five years in IoT/Cyber Security and 2.5 years with online gaming systems.

EDUCATION AND TRAINING

Angela received a BS in business information systems from the University of Phoenix.

EMPLOYMENT HISTORY

IGT: Project Manager	2020 - Present
AT&T: Sr. Program Manager	2013 – 2020
Life Cycle Management LCM: Professional Client Services Project Manager	2008 – 2013
IT Application Support: Process Development Engineer	2008 – 2008

Jesse Saccoccio

CONTRACT TITLE: Director, iLottery Product Platform

CONTRACT ROLE

Jesse will be the Product Directory representative who liaises with the delivery teams to ensure the iLottery platform solution is being utilized to its fullest potential to deliver an outstanding solution to the Lottery.

PROFESSIONAL EXPERIENCE

For the entirety of his tenure with IGT, Jesse has been involved in the development and deployment of player and interactive solutions. He has delivered both traditional draw-based game subscription systems as well as a number of the first new lottery platforms and iLottery solutions, including the first iLottery delivery in the U.S. with the Illinois Lottery.

Jesse served as the Player Account Management (PAM) Technical Lead for the California second-chance project where the lottery converted its legacy system to our lasted PAM and second-chance solutions. This project consisted of a conversion of more than three million players and hundreds of millions of second-chance entries. Prior to this, Jesse was a member of the team that helped launch the Illinois system which produced the first internet wager in the U.S.. Jesse served in various software engineering roles prior to his role as Technology Manager.

In his most recent role as Director, iLottery Product Platform, Jesse is responsible for the direction of iLottery platform solutions, which include responsible gaming, third party gaming integration, draw based game offerings through iLottery channels, player, and lifecycle management. Additionally, he is responsible for the Business Analysts for our iLottery solutions.

EDUCATION AND TRAINING

Jesse received a bachelor's degree in computer science from the University of Rhode Island.

EMPLOYMENT HISTORY

IGT:

1999 - Present Director, iLottery Product Platform

PlayLottery Director Product Management PlayLottery Director, PlayCommand iLottery Director, PlaySpot and New Media Player Direct Technology Manager Consulting Software Engineer Principal Software Engineer Senior Software Engineer Software Engineer II Software Engineer I

Job Descriptions

Implementation Team

Cloud Operations Manager

Duties and Responsibilities:

- Manage a small team to execute the business plan objectives for IGT's Cloud initiative.
- Become a recognized leader within IGT and in the marketplace for the transformation of our Systems business using the Cloud-based deployment alternative.
- Be responsible for product management and business success for IGT's Cloud initiative.
- Evaluate capital requirements, drive cost of goods, and ensure optimum use of invested cash and personnel resources, increasing profitability.
- Ensure that the transformation of our Systems business toward the Cloud/Software as a Service (SaaS) model creates leadership in the market.
- As an Agent of Change; define and execute the strategic business plan for the Cloud initiative;
 making sure that the business plan dovetails well into the long-term company market focus.
- Help to focus the creative process.
- Lead appropriate market research.
- Secure alliances or partnerships with vendors and other companies to strengthen the company's competitive position in the Cloud area.
- Continue to build demand for the company's products in their markets; identify new market opportunities.
- Drive the sales process while supporting the global sales team for this new, innovative set
 of offerings.
- Integrate and leverage the Cloud approach into the product management process for IGT's Systems Products.

Experience and Requirements:

- A minimum of 10 years in management positions of increasing responsibility.
- Successful career in marketing, product management, product marketing and product development.
- Proven success within a geographically disparate operation with a high growth rate.
- Experience in creating, building, growing, and managing a scalable efficient organization.
- Recognized leader/change agent with the ability to gain credibility internally and lead.
- Experience within Enterprise Resource Planning (ERP)- based software companies and/or cloud based or server-based products.
- An undergraduate degree in business, computer science or engineering is expected. An MBA is highly desirable.
- Experience within the casino industry is preferred.



Business Analyst

Duties and Responsibilities:

- Evaluate business processes, anticipate requirements, uncover areas for improvement, and develop and implement solutions.
- Lead internal and external groups in analyzing, designing, and implementing business requirements.
- Generate change requests and new requirements based on customer discussions.
- Create detailed technical requirements of software requirement, user stories/epics, and use cases.
- Experience in writing business requirements and functional specifications associated with formalized Software Development Life Cycle (SDLC).

Experience and Requirements:

- Strong multi-tasking skills to manage multiple deliverables.
- Familiarity with high performance multi-tenant transaction processing systems is desired.
- Work with business and technology team members to ensure seamless integration of business functionality and requirements throughout the SDLC process.
- Conduct meetings and produce presentations to share ideas and findings, effectively communicating your insights and plans to cross-functional team members and management.
- Gather critical information from meetings with various stakeholders and produce the necessary reports.
- Performing and assisting in user acceptance testing.

SCRUM Master

Duties and Responsibilities:

- Maintain and ensure the continuous integration and release processes are followed.
- Provide processes that improve team performance and document all the agreements that the team defines as part of their self-organization.
- Responsible for coaching the Agile team, focusing on team dynamics and performance. Help the team manage interpersonal conflicts, challenges, and opportunities for growth.
- · Responsible for actively removing impediments, fostering an environment of high productivity
- Support and reinforce team rules. Responsible for the teams' performance in terms of metrics and deliverables.
- Shield the team from outside distractions and interferences.
- Facilitate team meetings daily stand-ups, iteration planning, iteration review, retrospectives.
- Create and maintain JIRA processes.
- Support the Product Owner in their efforts to manage backlog and guide the team with respect to priorities and scope.



- Teach problem solving techniques and help the team become better problem-solvers for themselves. Escalate where necessary but only after the teams have exhausted all possible options of resolving the issue themselves.
- Coordination with other teams to continuously improve communications and relationships with other teams. Help the team remain aware of opportunities to engage and improve iLottery System program effectiveness.
- Responsible for supporting Scale Agile Framework (SAFe) adoption by coaching stakeholders and non-Agile teams.
- Facilitate Program Increment (PI) planning events, system demos, and focus the team on continuously improving from prior learning.
- Act as the project manager at the Agile team level and work towards building and maintaining efficient teams that deliver on time, with high quality and within budget.

Experience and Requirements:

- System thinking (in addition to strategic thinking).
- Lean Agile leadership experience across multiple large and complex projects, across distributed teams, across multiple locations.
- Be a strong leader with experience in measuring Agile project against Lean portfolio metrics
- Have strong backlog management and facilitation techniques.
- JIRA configuration and management.
- Must be familiar with software development lifecycle and understand customer centricity.
- Have strong stakeholder management skills, both internal and external, in an Agile delivery environment.
- Strong communication skills with all the key stakeholders to ensure Project scope is understood and implemented correctly.
- Be an advocate of continuous improvement and industry recognized best practices in Agile.
- Strong knowledge of Gaming and Lottery, including Player Platforms, Customer Relationship Management (CRM) features, remote gaming server integrations and Data Protection is a plus.
- Excellent knowledge of risk management, risk identification, and risked-based planning
- Proactive, strong-minded, quick thinker and assertive.
- Able to motivate a team, recognize good talent and bring the best out of everyone.
- Excellent communication, influencing skills, and negotiation skills to get management buy-in on ideas and concepts.



Ongoing Support Team

Customer Relations Manager

Duties and Responsibilities:

- Design player communication strategies and tactics to activate and retain players.
- Convert plans to engaging player communication programs and campaigns.
- Define technical requirements to execute campaigns on marketing automation platform.
- Define day-to-day operational processes, tasks and schedules needed to deliver campaigns.
- Segment players to audiences, define player queries, develop communication goals and messaging together with player marketing team members.
- Create A/B and Multivariate testing strategies to ensure performance of subject line, send time optimization, and email content.
- Measure campaign results and drive for continuous improvement.
- Support General Data Protection Regulation (GDPR) Canadian Anti-Spam Law (CASL) / Controlling
 the Assault of Non-Solicited Pornography and Marketing (CAN-SPAM) compliance and handling of
 Personal Identifiable Information (PII).
- Coordinate with marketing technology vendor to manage operations marketing automation software.

Experience and Requirements:

- 3+ years' experience using email campaign automation platforms like Pardot, IBM Watson Campaign Automation (Acoustic), or any other marketing automation solution.
- Ability to Understand and manipulate HTML and Cascading Style Sheets (CSS) changes inside graphical editor.
- Experience with Google Analytics platform and Google Analytics Campaign URL Builder.
- Previous experience sending Short Message Service (SMS), push notifications at an enterprise level.
- Bachelor's degree.
- Proven expertise in digital marketing with a focus on customer acquisition and retention.
- Experience in Customer Relationship Management (CRM) and/or loyalty programs.



Digital Content Manager

Duties and Responsibilities:

- Work with content vendor product teams to identify games for release roadmap.
- Propose games for release roadmap.
- Maintain and update release roadmap.
- Prepare working papers.
- Follow-up and ensure timely game provisioning from studio to production.
- Coordinate launch schedules across technology teams.
- Launch games to production environment.
- Analyze content performance to gain insight for future game choices.
- Escalate production errors to appropriate technology and content development teams, follow-up trouble shooting.

Experience and Requirements:

- Bachelor's degree in computer science, information systems, business, or related field.
- Proven experience with project coordination/management.
- Certificate in project management (Project Management Professional [PMP], Project Management Institute [PMI], or equivalent) preferable.
- Computer skills in Microsoft Office (Word, Excel, Outlook, and PowerPoint) required.
- Organization skills to take initiative and manage multiple tasks and work independently in a demanding, dynamic environment.
- Communication, collaboration, and relationship management skills to effectively engage with stakeholders and deal with a diverse set of problems.

iLottery Data Analyst

Duties and Responsibilities:

- Define requirements for data extraction from various source systems to enable needed analytics.
- Analyze data to provide reports and insight for marketing processes (campaigns, promotions).
- Support product owners in product development by collecting data on product performance.
- Create and develop recurring sales and player report templates.
- Create and develop Key Performance Indicator (KPI) dashboards.
- Monitor reporting to identify errors and service breakdowns.
- Create and develop frameworks and tools for player analytics (lifecycle, value, retention).
- Create and develop analytics frameworks and tools to measure marketing and promotion effectiveness.
- Organize data, build reports, extract insights, present results and make recommendations.



Experience and Requirements:

- Bachelor's degree in mathematics, economics, computer science, information management, statistics, or other applicable areas.
- 2+ years' experience with data analyst and data mining.
- Technical expertise regarding data models, database design development, data mining and segmentation techniques.
- Strong knowledge of and experience with reporting packages (Business Objects etc.), databases (SQL etc.), programming (eXtensible Markup Language [XML]), JavaScript, or (Extract, Transform and Load [ETL]) frameworks) and Google Analytics.
- Knowledge of statistics and experience using statistical packages for analyzing datasets (Excel, Statistical Package for the Social Sciences [SPSS], Statistical Analysis System [SAS] etc.).
- Strong analytical skills with the ability to collect, organize, analyze, and disseminate significant amounts of information with attention to detail and accuracy.

Marketing Manager – iLottery

Duties and Responsibilities:

- Formulate and maintain strategic growth plan for digital lottery program and develop marketing initiatives to deliver the growth.
- Define strategies and tactics for player acquisition and retention, convert these plans into action with team of marketing professionals.
- Identify opportunities to improve player experience and develop initiatives accordingly to optimize product features, user interface elements and player journey flow.
- Work together with technical organizations to convert identified business needs to product requirements.
- Maintain oversight of all site activity and metrics, looking for ways to improve digital channel
 performance by improving the user experience and increasing the efficiency and effectiveness of
 business processes.
- Work closely with team members to make recommendations on the best functional solutions for improving customer experience and optimizing revenue, while balancing business value, technical complexity, and operational costs.
- Report on key e-commerce, operational and customer support metrics to highlight successes, challenges, and trends.

Experience and Requirements:

- 3+ years proven expertise in digital marketing.
- Bachelor's degree; MBA a plus.
- Proven expertise in digital marketing with a focus on customer acquisition and retention.
- Experience measuring, analyzing, and developing user experience reporting.
- Strong analytical, reporting, and problem-solving skills.
- Capable of simultaneously managing strategic initiatives, projects, and production issues.
- Strong follow-through skills.
- Ownership mindset regarding products and performance.



Retailer/Digital Promotions

Duties and Responsibilities:

- Define strategies and tactics to activate and retain players through marketing campaigns and promotional offers.
- Develop and facilitate campaign ideas for retail and/or digital channels.
- Maintain iLottery marketing calendar, detailing timing, and campaign ideas.
- Coordinate campaign preparation (creatives, media selection).
- Define associated promotional/player bonus offers.
- Coordinate campaign execution across channels per campaign plan.
- Set-up promotions in promotions tool.
- Place promotional content on owned media through the Content Management System (CMS) tool.
- Collect, analyze, and report campaign performance and player bonus spend.
- Suggest improvements for future campaigns based on performance insights.

Experience and Requirements:

- Bachelor's degree in communications, marketing, business, or related field.
- 2+ years' experience in digital marketing and advertising.
- Knowledge of relevant digital marketing platforms (Facebook, Google, Programmatic).
- Experience in campaign analytics using relevant tools, for example Google Analytics and Tag Manager.
- Interest in data and analyzing the performance of their campaigns.

Website/App/Games Tester

Duties and Responsibilities:

- Analyze test requirements, and design and execute tests.
- Accountable for test scripts generation both functional and automation.
- Able to take ownership of the system incremental quality and capable of delivering demos for any release.
- Acts as a Subject Matter Expert (SME) with critical knowledge of the Agile Definition of Done (DoD).
- Expertise in various test methodologies that include functional testing, system testing, Integration Testing, user acceptance testing.
- Good experience to perform API-related automated tests using SOAPI-UI and/or JMETER or any other similar tool.
- Ability to read and interpret server logs.
- Oversee all aspects of quality assurance including, applying industry best practices, and developing new tools and processes to ensure quality goals are met.
- Develop, update, and maintain testing standards and procedures.
- Record problems and issues in accordance with the project's problem and issue management plans.
- Liaise with product owners, scrum masters, business analysts, developers and quality assurance during product development and testing phases through to production and maintenance.



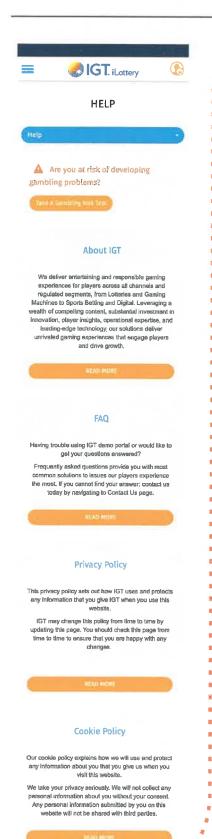
Experience and Requirements:

- Analyze test requirements, and design and execute tests.
- Accountable for test scripts generation both functional and automation.
- Able to take ownership of the system incremental quality and capable of delivering demos for any release.
- Acts as a SME with critical knowledge of the Agile Definition of Done (DoD).
- Expertise in various test methodologies that include functional testing, system testing, Integration Testing, user acceptance testing.
- Valuable experience performing API related automated tests using SOAPI-UI and/or JMETER or any other similar tool.
- Ability to read and interpret server logs.
- Oversee all aspects of quality assurance including, applying industry best practices, and developing new tools and processes to ensure quality goals are met.
- Develop, update, and maintain testing standards and procedures.
- Record problems and issues in accordance with the project's problem and issue management plans.
- Liaise with product owners, scrum masters, business analysts, developers and quality assurance during product development and testing phases through to production and maintenance.

CSC Program Graphics

CSC Program Graphics

Example Mobile Help Screen









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The USA PATRIOT Act is a Federal law that requires all financial institutions to obtain, verify, and record information that identifies each person who opens an account. You will be asked to provide your name, address, date of birth, and other information that will allow us to identify you. You may also be asked to provide documentaiton as proof of identification. "100% Approval" and "No one is Turned Down" is contingent upon successfully passing this mandatory identification confirmation

This iLotlery demo system is only intended for demo and test purposes only and real money game play is not available.

No real money can be deposited or withdrawn and all funds are for testing only. Please note that some system services and functionality may not be fully functional on this portal.

> Contact Us About IGT

Accessibility Terms & Conditions











Example Mobile Contact Us Screen





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IGT

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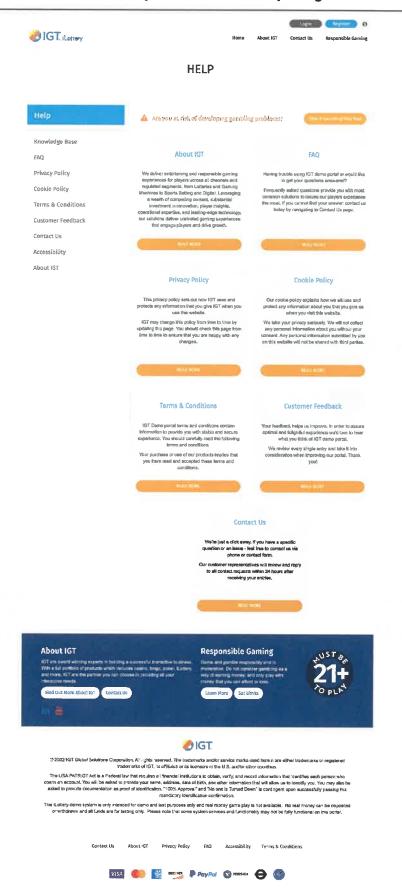








Example Website Help Page



Example Portal Help Page



Home

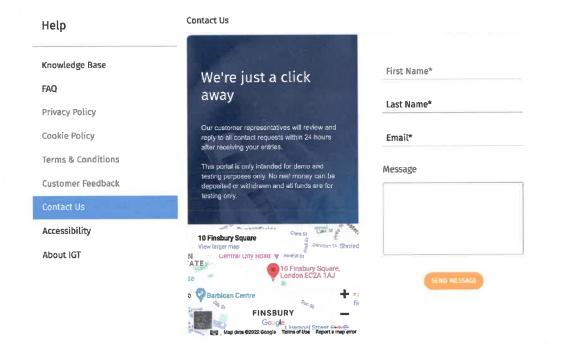
About IGT



Register **()**

Responsible Gaming

HELP







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The USA PATRICT Act is a Federal law that requires all financial Institutions to obtain, verify and record information that identifies each person who opens an account. You will be asked to provide your name, address, date of birth, and other information that will allow us to identify you. You may also be asked to provide documentation as proof of identification. "100% Approval" and "No one is Turned Down" is contingent upon successfully passing this mandatory identification confirmation.

This illustery demo system is only intended for demo and test purposes only and real money game play is not available. No real money can be deposited or withdrawn and all funds are for testing only. Please note that some system services and functionality may not be fully functional on this portal.

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4.23

System Implementation

The implementation process requires that all of the new software, hardware, and service elements of the System be delivered, installed, tested, and put into production. The System must integrate seamlessly with other systems and legacy systems as noted in this RFP.

IGT has read, understands, and will comply with this requirement.

IGT will meet all implantation requirements and provide a seamless integration with all systems. Our strategy and timelines are described throughout this section.

4.23.1 Implementation Strategy

A Vendor should propose strategies that would best support the Lottery's implementation. A Vendor describe the pros and cons of the approach proposed, making sure to (i) avoid start-up deficiencies (such as coming up late, having Downtime, missing features, causing disruption to existing systems), and (ii) maintain good player, Retailer and Lottery relations.

IGT has read, understands, and complies with this requirement.

To ensure a successful iLottery program and the continuity and integrity of its business, the Lottery requires a Contractor with the experience necessary to develop and deliver an iLottery System that meets your unique needs. With more than 40 years of experience implementing lottery systems of all kinds, no Vendor is more prepared to take on this project than IGT. We will work with you as a strategic partner to ensure the smooth delivery of a fully functional System that can adapt to your future requirements and the evolution of the industry.

Having performed hundreds of system implementations through which we have continually improved and refined our project management processes, IGT's experience is unmatched, and includes nearly 20 years of deployments in the digital space.

More recently, we have delivered full iLottery systems in several U.S. and international jurisdictions. We have performed 10 of these implementations since 2012, including deliveries in Georgia, Kentucky, Rhode Island in the U.S., as well as in Belgium, Italy, and Poland. We have learned and documented a tremendous amount from starting up and maintaining iLottery systems in these "greenfield" jurisdictions, and this experience has prepared us to provide a reliable iLottery program for the Lottery.

System Implementation 4.23 – 1



These deliveries have not only resulted in a proven, refined implementation approach to start from – they've also enabled us with the flexibility to successfully adapt that approach to the needs of our customers in real time. We will adapt our implementation strategy to best suit your needs, including a customized schedule based on your input and priorities. Please see Section 4.23.5 (A-F), Project Management, farther along in this section, for information on our Integrated Delivery Model (IDM) and use of the Agile approach to solution development and delivery, which are central to our overall delivery strategy.

Please note that our implementation process has been refined to ensure quality, measurable progress reporting, and delivery of an iLottery System that will meet your objectives. Throughout the project, we'll work to build trust and establish a relationship with you that will facilitate communication, transparency, and productivity not only throughout the implementation but the Contract period as well. We'll also apply our experience, best practices, and proven delivery strategy to expedite project delivery and start-up, ensure the Implementation Team's productivity, and eliminate waste and rework.

Our draft Implementation Plan is presented as an insert at the end of this section entitled **Standard High Level Schedule**. It identifies detailed tasks, activities, and project milestones, and makes clear those items that are on a critical path for a timely and successful implementation. After Contract award, IGT will work with the Lottery to develop and present a finalized formal Implementation Plan.

We will then proceed to:

- Engage our core Implementation Team members and the Lottery for the Project Kickoff.
- Align the Implementation Team.
- Finalize the baseline Implementation Plan.
- Refine staffing requirements for the project and assign staff members.

We will document the project scope to ensure that all parties are aligned, grouping and defining project deliverables. Project management will also provide separate plans for risk management, communications, and change control management.

This Implementation Plan, which, when finalized, the Lottery will have final approval on, identifies the tasks and major milestones on the critical path, and covers:

- Requirements definition:
 - Drafting.
 - Documenting.
 - Review.
 - Approval process.
- Software development:
 - Design.
 - Implementation.
 - Testing.
 - Problem tracking and resolution.
 - Change control management.
 - Release management.
 - Installation.
 - Configuration management.



- Facilities availability and need.
- Central hardware/infrastructure deployment.
- Integration with Lottery back-office systems and other existing systems.
- Testing any communications network elements.
- Training and support for Lottery staff.
- Acceptance testing and live-test phase:
 - Test process.
 - Plan development.
 - Documentation of results.

4.23.2

Formal Implementation Plan with Timeline

Vendors must provide a proposal that contains a detailed implementation plan and timeline identifying the major milestones to be accomplished for the business requirements definition, construction, equipment delivery, software programming, installation, testing, and File Conversion. The plan must make clear which items are on the critical path for timely implementation. Responsibilities of the Vendor's implementation team, of the Lottery's implementation team, and of any of the Lottery's other providers must be identified. The final implementation plan of the Vendor is subject to Lottery approval. The system must be available for acceptance testing no later than nine (9) months from date of contract execution.

IGT has read, understands, and will comply with this requirement.

Please see our **Standard High Level Schedule** insert, at the end of this section, for our detailed Implementation Plan and timeline.

4.23.3

Interim Facilities and Processes

If the implementation involves interim configurations, facilities, staffing, or business procedures, the Vendor should explicitly describe them and note their development and use within the schedule. Costs associated with interim facilities are strictly the Vendor's responsibility.

IGT has read, understands, and complies with this requirement.

IGT will leverage its existing facilities, and does not believe any interim configurations, facilities, staffing, or business procedures will be necessary to complete the implementation project.

For details about the team that will manage the Implementation project, please refer to Section 4.22.1, Implementation Team.



4.23.4

Lottery Acceptance Testing

A Lottery approved independent testing laboratory (ITL) shall be utilized to conduct on site acceptance testing at Lottery Headquarters. All acceptance testing costs related to the ITL is the responsibility of the Vendor. Primary acceptance testing shall be conducted using the Vendor's production environment with full support from the Vendor. Errors found during testing shall be corrected by the Vendor and the testing process repeated until approval is granted by the Lottery.

IGT has read, understands, and will comply with this requirement.

We understand that the Lottery will conduct a series of acceptance tests – i.e., what we call Customer Acceptance Testing (CAT) – using a Lottery-approved ITL, which we will fully support. We will equip the testing facility at Lottery Headquarters, where Lottery acceptance testing will be conducted.

For details about our testing environments, including our Mobile Device Testing Lab, please refer to Section 4.3.5, Lottery Tests Environments.

4.23.4.A

Schedule for Lottery Acceptance Testing

A. Schedule for Lottery Acceptance Testing. To support acceptance testing, the Vendor should have the data center facilities, systems, and network equipment configured and operational ninety calendar days prior to the scheduled start-up day. The Operations Security Plan must be delivered at this time.

IGT has read, understands, and will comply with this requirement.

To support CAT, IGT will have the data center facilities, systems, and network equipment configured and operational ninety (90) calendar days prior to the scheduled start-up day. We will deliver the Operations Security Plan at this time.

4.23.4.B

Documentation and Support

B. Documentation and Support. Training and procedure manuals specific to the Lottery should be delivered upon availability of the System for Lottery acceptance testing. During the testing period, the Vendor should provide technical staff on- site as a resource to collaborate and support the Lottery's acceptance testing.

IGT has read, understands, and will comply with this requirement.



IGT will provide training and procedure manuals specific to the Lottery when the iLottery System becomes available for Lottery CAT. We will provide technical staff on-site as a resource to collaborate and support the Lottery's CAT during the testing period.

IGT will be ready to assist as necessary, including providing the Lottery a copy of our own test scripts and all test results, both interim and final. Our personnel will be prepared to train the Lottery's team ahead of CAT and assist you in efficiently conducting testing to ensure the iLottery System we deliver meets the needs of your players and business users. Where appropriate, we suggest engaging your business users during CAT, to exercise and use the software just as they would during normal business days. This goes beyond even hands-on training. West Virginia already has first-hand experience with IGT's on-site Quality Assurance (QA) and can expect that same level of support and attention for its iLottery system. For more information about our staffing and services solution, please refer to Section 4.22, Staffing Services and Operations.

4.23.4.C Random Winner Technology Testing

C. Random Winner Technology Testing. Samples from the Vendor's RWT should be submitted for quality testing to the Lottery. The RWT samples and certification are due on or before the start of the Lottery testing period. The Vendor shall be responsible for the cost of third-party testing and certification of the RWT by a Lottery-selected laboratory.

IGT has read, understands, and will comply with this requirement.

We will submit samples certification from our Random Winner Technology (RWT) on or before the start of the Lottery's testing period. We will bear the cost of third-party testing and certification of the RWT by a Lottery-selected laboratory.

4.23.4.D Release Notes

D. Release Notes. Each release of the software for testing by the Lottery should be accompanied by release notes that identify net changes being introduced. The release notes should evidence good configuration management practices, namely each release should be identified by a version number and the changes must be succinctly defined.

IGT has read, understands, and will comply with this requirement.

During the project and throughout the Contract, IGT will provide release notes for all software releases provided for testing, using configuration management best practices of identifying version numbers, with succinct change definitions.

System Implementation 4.23 – 5



4.23.4.E

Entry and Exit Criteria

E. Entry and Exit Criteria. The Lottery will consider the System ready for acceptance testing once all hardware and software items are installed and configured in accordance with the Lottery's standards. The Lottery will have successfully completed testing when all components of the System have been tested and all significant issues identified during testing are resolved by the Vendor and validated by the Lottery. The Vendor and the Lottery will develop and agree upon detailed criteria that should be met prior to the System being put into production. The Lottery testing efforts will comply with guidance provided by MUSL minimum requirements, NASPAL QA Acceptance Testing, and West Virginia Lottery rules and regulations.

IGT has read, understands, and will comply with this requirement.

We understand that the Lottery will consider the iLottery System ready for CAT once all hardware and software items are installed and configured in accordance with the Lottery's standards. We further understand that the Lottery will have successfully completed testing when all components of the System have been tested and all significant issues identified during testing are resolved by IGT and validated by the Lottery. IGT and the Lottery will develop and agree upon detailed criteria that must be met prior to the System being put into production. Also, we understand that Lottery's testing efforts will comply with guidance provided by MUSL minimum requirements, NASPAL QA Acceptance Testing, and West Virginia Lottery rules and regulations.

The following information demonstrates IGT's adherence to NASPL best practices for QA acceptance testing.

Adherence to North American Association of State and Provincial Lotteries (NASPL)

An important part of our overall test process is adherence to the lottery industry's best practices as described in the NASPL Standards Initiative (NSI) Best Practice for Quality Assurance (QA) of Product Development – specifically, the NSI Acceptance Testing Best Practice. This best practice provides a set of processes and procedures that address QA requirements throughout the hardware and software production cycle, from requirements specification through design, implementation, and testing to acceptance and deployment.

NSI has defined the scope of this best practice in a general manner for many software and hardware production environments while addressing several QA aspects that are specific to the lottery industry. It consists of:

- Requirements Definition: The requirements for the system or system components must be defined, documented, agreed upon, and approved by both the service providers and the customer. IGT will work with the Lottery to follow this process in order to specify the correct information and reach all necessary agreements.
- **Development Process:** IGT uses a development process that covers design, implementation, testing, problem tracking and resolution, change control management, and release and installation. The process incorporates documentation and approval phases.
- Acceptance Testing: IGT follows a defined acceptance testing process and plan that is typically
 agreed upon during requirements definition and carried out in a controlled environment during
 acceptance testing.

4.23 – 6 System Implementation



NSI's suggested method for creating an acceptance test plan includes:

- Analyzing the product to be tested (in this case the system conversion), including performing a risk analysis.
- Determining a testing strategy.
- Identifying entry, suspension, resumption, and acceptance criteria.

Recently, IGT successfully re-certified under the NSI Quality Assurance Best Practices for Requirements Definition and Development Process.

4.23.5 (A-F) Project Management

The Vendor should provide centralized project management services for all implementation projects, taking the lead role in organizing all parties involved through a defined process. Vendor should describe its end-to-end process for project management specific to implementations, while providing explicit details on the following:

- A. Types of documentation that are utilized to manage the implementation process. Be specific as to which documents are used for client review and/or approval versus internal Vendor use only.
- B. Order, or sequence of events, of the typical implementation. If applicable, be specific by Channel Mix regarding how the process may differ (e.g. web vs. Mobile App).
- C. What tools, if any, are utilized to collaborate effectively with Lottery and/or third- party stakeholders involved in the development process.
- D. Samples of project management documentation used for implementation projects.
- E. Risk Management
- F. State what type of project management

The Vendor should provide suitable access to project records to enable Lottery staff to monitor project management tasks, schedules, and issues. This requirement begins with implementation and continues throughout the Contract.

IGT has read, understands, and will comply with this requirement.

IGT's iLottery Implementation Team will follows the Agile methodology's process of development. This will enable us to deliver using an iterative and incremental build, test, and release plan.



Our Agile approach to solution development and delivery reflects our understanding of iLottery and digital-channel market dynamics. Supporting our customers' ability to continually adapt to rapidly changing market situations, the Agile approach ensures:

- **Speed to Market**: Agile methodology reduces the linearity from the development process and enables faster delivery of software.
- **Collaboration**: Agile's team-oriented approach facilitates significant customer involvement throughout the development process.
- **Software Quality**: Frequent testing allows the development team to catch and remedy any quality issues quickly and efficiently.
- Certified for Success: Agile's flexible, highly adaptive design allows it to be seamlessly molded
 into the Capability Maturity Model Integration (CMMI) maturity model for software development
 and process improvement and other best practices and standards.

This approach doesn't stop at product delivery. Throughout the West Virginia iLottery System implementation project, during Go Live, and throughout the Contract period, we'll be by your side, proactively addressing your needs with agility and quality so you can focus on driving your business. To keep your iLottery program fresh and aligned with the latest iterations of IGT's solutions and ever-changing market dynamics, we'll maintain a software-update schedule of every three months.

Once we have a mutual understanding of your requirements and needs, our highly experienced Implementation Team will execute the implementation. The Implementation Team will adhere to IGT's Integrated Delivery Model (IDM), a standardized system of procedures and a mature, reliable framework that we have developed, evolve, and continue to use to ensure repeatable success. The Implementation Team will be led by Project Manager (PM) Angela Patrick, who will oversee the project and serve as the primary point of contact for the Lottery, working closely with you to ensure a low-risk launch. Angela possesses Safe Agile 5.0, Certified Scrum Master (CSM), Product Owner (CPO), and Information Technology Infrastructure Library (ITIL) certifications.

For added accountability purposes, the Implementation Team will be overseen by our Global Program Management Office (GPMO). The GPMO:

- Is staffed with highly competent and skilled product, product delivery, and service personnel who, combined, have hundreds of years of experience overseeing, managing, and executing complex deliveries around the world.
- Will provide complete corporate oversight of your project, ensuring that it receives a high level of
 experienced leadership that can enable the delivery of a well-planned, well-managed, and successful
 project for you.

IGT uses a best-in-class Project Portfolio Management tool, Clarity PPM, to factor in resources for all committed projects and to forecast resources for potential project opportunities. With Clarity, we know the overall resource demand per month, by team role or skill type, across all projects in each portfolio and can thus adapt quickly as needed.

IGT will provide access to project records, enabling the Lottery to monitor project management tasks, schedules, and issues, beginning with implementation and continuing throughout the Contract.

4.23 – 8 System Implementation



Types of Documentation

We will work closely with the Lottery to manage documentation throughout the project. This will begin with collaboration to enable us to understand the precise needs of the Lottery's business users. A full, functional understanding of the configurations necessary to meet your requirements will accelerate the overall delivery process.

Throughout the Contract, IGT will use the Partner-JIRA project-tracking tool to enter and track Lottery software requests. The tool will allow us to efficiently assess, plan, and deliver to your expectations. We'll also use JIRA to manage and track any problems identified during CAT. Additionally, Adobe XD will be used to provide wireframes and/or mockups to collaborate with end-users to ensure that the User Interface and User Experience (UI/UX) are acceptable.

The specific types of documentation used also includes:

- Allocation Plan: To ensure resources are available and to keep track of spend.
- Solution Design: A high-level design of the overall solution to guide the implementation.
- Requirements Documentation: To document and track the requirements in scope for the solution.
- **High-Level Designs/Low-Level Designs** (as needed): Will be created to document the design of individual components or features.

Sequence of Events

Please refer to the **Standard High Level Schedule**, located at the end of this section, for a high-level project schedule that clearly identifies the major milestones, approvals, and key activities to be completed for development and installation of the iLottery program.

Prior to the Project Kickoff, the supervising staff of the Implementation Team will work with the Lottery to establish a general overview of how the project will be carried out, create a communication plan, and confirm roles and responsibilities.

System Implementation 4.23 – 9



Tools for Collaboration and Development

IGT's project teams use many tools to plan, schedule, and manage a project's activities. With these tools, as well as the Key Performance Indicators (KPIs) derived from them, our teams can quickly evaluate the quality of the deliverables and use that information to adjust the plan and the schedule and/or quality outputs where required.

Among the tools our West Virginia Implementation Team will use are:

- Clarity PPM: As noted above, near the beginning of the Project Management section, this is
 the tool we use for resource planning and all project management-based functions, including
 team planning and management, schedule planning, and time tracking management; allocation
 forecasting; change control; risk, issue, and action item management; status reporting; and
 document management with version control.
- Microsoft Outlook: Our project managers use Outlook to communicate with global resource pools and stakeholders. Outlook is also used to set up meeting schedules and send and track invitations to participants.
- Microsoft Teams: Teams is used to communicate via instant messaging for immediate feedback
 and quick exchange of information, and to facilitate conference calls with remote users and
 collaborate virtually with team members using the incorporated desktop-sharing and videoconferencing capabilities.
- GPMO Website and Mailbox: Part of IGT's Intranet, the GPMO Website offers information on Clarity PPM and Project Management Affinity and is a source for processes, templates, forms, guidelines, best practices, and other policies. The GPMO Mailbox provides daily support to the project manager community regarding processes and guidelines, templates, tools, historical references, and policies.
- IDM Website: This website houses the IDM. Resources click through the phases, steps, and actions containing our detailed processes, templates, and tool and delivery references via this web interface.
- SharePoint: A collaborative document-management system and the basis for the IDM website.

 Data is maintained and controlled via SharePoint, creating a seamless experience for users of the web interfaces. SharePoint is also used to store and control IGT departmental and organizational data libraries and to provide personal storage space per user for backing up or offloading data files.
- Partner-JIRA: A highly configurable project-tracking tool that uses custom workflows to track
 software development projects and software issues. It can be used to enter and track requests and
 provides status updates on the progress of those requests within the delivery workflow. PartnerJIRA will allow us to collaborate with you to ensure we deliver software that aligns with your
 business priorities.

4.23 – 10 System Implementation



Project Management Documentation

We will document the project scope, grouping and defining project deliverables, to ensure all parties are aligned. The core Implementation Team will also provide separate plans for risk management, communications, and change control management. This phase will include planning and documentation of requirements for all software disciplines required for the new iLottery System. We will facilitate a series of reviews and "walkthroughs" with Lottery stakeholders on the requirements documents, culminating with approval and signoff. A standard format for all documentation will be agreed upon during Project Kickoff.

Examples of documentation include:

- Best practice documentation via IGT's Project Management Body of Knowledge (PMBOK).
- Project specifications and change requests.
- Software versioning and revision control.
- Start-up checklist.
- Executive readiness actions.
- Operations requirements.
- Requirements definitions.
- Project scope.
- Specifications documents for all software disciplines.
- Training materials.

Risk Management

The Risk Management process at IGT enables project teams to continually identify, categorize, evaluate, analyze, prioritize, and subsequently monitor any potential risk to a delivery. These six steps are critical in preventing significant disruption to a project or, at a minimum, providing the team adequate time to prepare and plan for an unavoidable disruption.

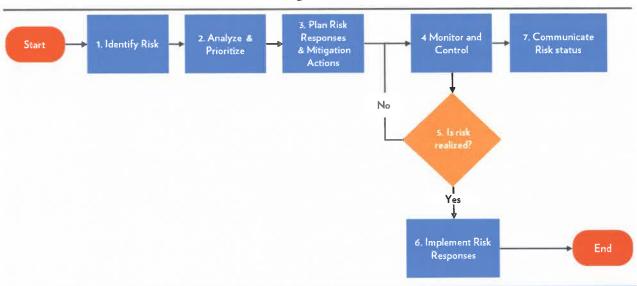
Project Manager Angela Patrick will assume overall responsibility for ensuring the iLottery Implementation Team, local Account Team, and the iLottery Team receive timely and detailed communication regarding all documented project risks and associated plans. Risk communication is a key factor in managing risks, allowing as much available data as possible to be gathered in order to combat a risk and understand how the probability and impact of that risk may change over time.

Risks and risk management plans are tracked and regularly reported on and reviewed throughout a project via our well-defined risk management process, illustrated in the figure below.

System Implementation 4.23 – 11



Risk Management Process



Role		Process Steps	
1. Identity	Implementation Team	1. Identify Risk Project ID Customer Review past risk from risk database Unique risk id	 Short Risk Tittle Risk description Person who identified the risk (risk logger) Status: Open, Work in Progress, Never Occurred, Resolved, Closed
2. Analyze & Prioritize	Risk Owner Project Manager	Analyze and Prioritize Risk Identify impact areas: Schedule, Scope, Team, Budget, Quality Agree on the probability Overall risk rating (Red/Yellow/Green)	 Select risk strategies Set risk Priority in the backlog Identify risk owner Select strategies to address risk: mitigate, avoid, accept, transfer
3. Plan Risk Response / Mitigation Actions	Risk Owner	3. Plan Risk Responses Plan risk responses List mitigation actions List actions after risk realization	
4. Monitor & Control	Implementation Team	4. Monitor and Control Use project events to monitor and control risks Implement the mitigation actions as per priority listed in the risk responses	
5. Risk Realized?	Implementation Team Project Manager Risk Owner Other Stakeholder	5. Is Risk Realized? Validate if risk is realized Update Risk status	
6. Implement Risk Responses	Risk Owner	Implement Risk Response Plan Implement the actions listed in the risk response plan (after risk realization)	
7. Communicate Risk Status	 Project Manager 	7. Communicate Risk Status Update Risk Status: Open, Work in Progress, Never Occurred, Resolved, Closed Update risk register	Identify risk-related "lesson learned"Update project dashboardUpdate risk database

Figure 4.23 – 1.



A Probability-Impact Scale assessment, shown below, is performed to evaluate and prioritize risks and mitigation actions:

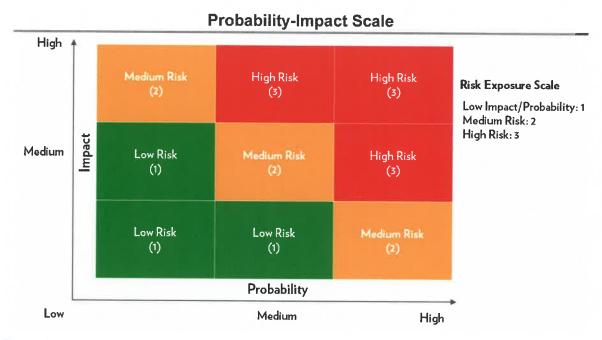


Figure 4.23 - 2.

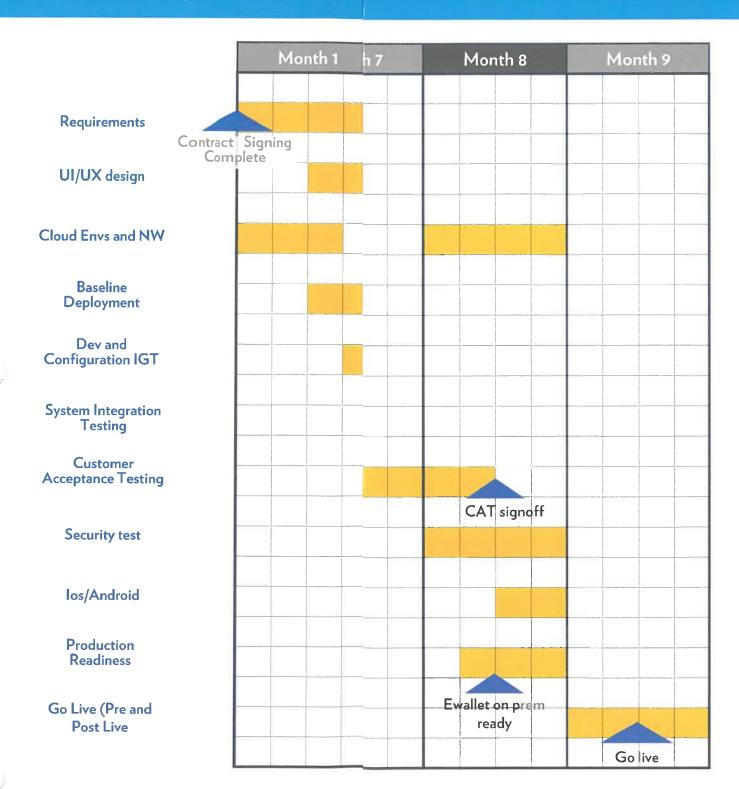
Type of Project Management

IGT's project management methodology is based on sound project management practices and decades of experience performing system implementations around the globe. All IGT technology deliveries are managed under the Project Management Institute's (PMI's) Project Management Body of Knowledge (PMBOK) model, as part of our overall IDM strategy. The project manager assigned to the project, Angela Patrick, will be committed to providing this service according to PMBOK standards to ensure all requirements are met and the solution is delivered on time.

As mentioned above, our iLottery team also follows an Agile approach to implementation.

System Implementation 4.23 – 13

Standard High Level Schee



4.24

Liquidated Damages

All monetary values referenced are in U.S. dollars. Liquidated Damages may be assessed by the Lottery after the grace periods set forth below.

Except as otherwise provided herein, nether the Contractor nor the Lottery will be liable to the other party for any delay in or failure of performance of any covenant contained herein, nor will any such delay or failure of performance constitute default hereunder, to the extent that such delay or failure is caused by force majeure. As used herein "force majeure" is strictly limited to an event which is outside the control of the party and cannot be reasonably avoided or deterred by such party, to include fire, explosion, action of the elements, terrorism, rationing, war, civil disturbance, epidemics, or pandemics. The existence of such causes of delay or failure will extend the period for performance to such extent as may be necessary to enable complete performance in the exercise of reasonable diligence after the causes of delay or failure have been removed.

Anything in the foregoing notwithstanding, the Lottery, in its sole discretion, may elect to terminate the Agreement upon occurrence of any force majeure if continuation of the Agreement is materially threatened or hindered by reason of extended delay or failure of performance.

During a period of non-performance due to Force Majeure, payments from the Lottery to the Contractor will be suspended.

4.24.1 Installation

Paragraph No. 4.23.2 of this RFP requires the Vendor provide a detailed implementation proposal that sets forth timelines for the completion of critical components of iLottery. Such plan must be approved by the Lottery according to the requirement. The plan must identify those deadlines that are considered critical and must include (1) the date on which the system is ready for Lottery Acceptance Testing; (2) the date on which the system is approved by Lottery Acceptance Testing; (3) the contract-agreed upon production start-up date; (4) the date on which the system is ready and able to go live with the Lottery's approval. Such plan may include additional deadlines for completion and may be amended during the project subject to Lottery approval. If the Vendor does not meet the dates/deadlines for completion for critical project components as set forth on the implementation plan required by 4.23.2, the Lottery may impose liquidated damages of \$1,000 per day. If the Vendor does not meet the date/deadline for "go live" with the approval of the Lottery, the Lottery may impose liquidated damages of \$5,000 per day the "go live" date is delayed.

IGT has read, understands, and will comply with this requirement.

Liquidated Damages 4.24 – 1



The Successful Vendor shall not be required to pay Liquidated Damages for deployment delays due solely to time delays that the Lottery caused or specifically and previously approved in writing.

4.24.2 Software Release Schedule Adherence

Adherence The Vendor shall ensure that modification batches to the System and Portals meet the frequency as agreed upon, based on Section 4.22.6 -System Engineering Support Services. If the Vendor fails to meet the: frequency, then the Lottery may impose Liquidated Damages of \$5,000.00 per incident.

IGT has read, understands, and will comply with this requirement.

4.24.3 iLottery System Down

The Vendor shall ensure that the System is not "Down" for more than three minutes during the operational hours on any day. The System is "Down" when it is unable to accept any connections and/or process any requests during a period of time when any applicable third-party network being used to access the System for such connections and/or requests, such as the Internet, is operational. The Lottery may impose Liquidated Damages in an amount of \$1,000.00 for each one minute of System Downtime, or fraction thereof, which is greater than three minutes in duration during the operational hours for iLottery sales on any day. The total time during which the System is Down during the day will be calculated as the sum of all time during such daily operational sales period when System is Down. For example, three, ten-minute long instances of Down time in one day constitute thirty minutes of daily down time. To address chronic problems, in the event that two Downtime events of any length have already occurred in a Business Week, the grace period of three minutes must be rescinded, and Liquidated Damages must begin immediately with any subsequent outage in that Business Week.



4.24.4 iLottery System Degraded Performance

The Vendor shall ensure that the System does not evidence degraded performance for more than fifteen minutes during the operational hours on any day. The System will be considered degraded if any of the following conditions are true:

- A. Any prescribed performance criteria not being upheld.
- B. Player access on average exceeds the response time requirements, or the System is incapable of meeting the throughput specifications set forth in the Contract.
- C. The System processes transactions, but not for all gaming products and player-related activities.
- D. Transactions do not log at the data center to at least two local systems, one remote system, and to the Lottery's ICS.
- E. Critical functions of System management and administration cannot be conducted by the management workstations.

The transaction response time for response of the server to display the confirmation page back to the end user on Portals will be targeted for less than three seconds with a maximum threshold often seconds. The Vendor should put monitoring in place that checks for transaction response time in intervals not to exceed fifteen minutes. The Vendor should provide the appropriate network bandwidth to connect the Portals and/or CGS to consumer accessible networks (e.g. mobile network, internet, etc.). On a regular basis, the Vendor should monitor the bandwidth for capacity utilization. The Vendor should take corrective action to accommodate the additional traffic to meet all performance commitments required in this RFP. If any of the Vendor's server processes including but not limited to routers, CPU, disk space, Random Access Memory or the network interface card continually reach 90% capacity for more than ten minutes, then the Vendor should take immediate corrective action with respect to those processes and equipment under the Vendor's control. For equipment and software outside of the Vendor's control, the Vendor should contact the Lottery within thirty minutes to take the necessary corrective action. For the purposes herein, "control" means the ability to direct or influence the related operations, directly or indirectly, by virtue of contract, ownership of voting shares, or otherwise. The Lottery may impose Liquidated Damages in the amount of \$1,000.00 for each fifteen minutes of degraded time, or fraction thereof, which is greater than fifteen minutes in duration during the operational period on any day. The total time during which the System is degraded during the day will be calculated as the sum of all time during the daily operational sales period when the Systems are operating at a "degraded performance level." To address chronic problems, in the event that two degraded performance events of more than thirty minutes in length have already occurred in a Business Week, the grace period of thirty minutes should be rescinded, and Liquidated Damages should begin immediately with any subsequent degraded performance event in that Business Week.



iLottery System Timely and Accurate Reports

The Vendor should produce and deliver timely and accurate management reports within the time frames specified by the Lottery as set forth in the Contract (reports will be categorized into critical and non-critical groups according to importance). The Lottery may impose Liquidated Damages of \$1,000.00 per day, or fraction thereof, for each late, insufficient, or inaccurate management report in the critical group (once any approved grace period set forth in the Contract has passed), until such report is provided, made sufficient or corrected (as the case may be). The Lottery may impose Liquidated Damages of \$100.00 per day, or fraction thereof, for each late, insufficient, or inaccurate management report in non-critical group (once any approved grace period set forth in the Contract has passed), until such report is provided, made sufficient or corrected (as the case may be).

IGT has read, understands, and will comply with this requirement.

4.24.6 iLottery System Timely and Accurate Files

The Vendor should produce and deliver timely and accurate files within the time frames specified by the Lottery as set forth in the Contract (files will be categorized into critical and non-critical groups according to importance). The Lottery may impose Liquidated Damages of \$2,000.00 per hour, or fraction thereof, for each late, insufficient, or inaccurate file in the critical group (once any approved grace period as may be set forth in the Contract has passed), until such file is provided, made sufficient, or corrected. The Lottery may impose Liquidated Damages of \$500.00 per our, or fraction thereof, for each late, insufficient, or inaccurate File in the non-critical group (once any approved grace period as may be set forth in the Contract has passed), until such file is provided, made sufficient, or corrected.

IGT has read, understands, and will comply with this requirement.

4.24.7

Failure to Meet Third-Party Game Quotas

The Vendor should have a minimum of two, third-party game integrations, and at least 20% of game mix originating from third-party providers, in production at all times. The Lottery may impose Liquidated Damages of \$1,000.00 for each day that Vendor fails to meet one or more of these requirements.

Per Addendum No. 3, the Lottery has changed this requirement to read as follows:

The Vendor should have a minimum of one, third-party game integration, and at least 20% of game mix originating from third-party providers, in production at all times. The Lottery may impose Liquidated Damages of \$1,000.00 for each day that Vendor fails to meet one or more of these requirements.

IGT has read, understands, and will comply with this requirement.

4.24 – 4 Liquidated Damages



Failure to Produce a System Upgrade or Change

The Vendor should modify or add software to the System to produce reports, screen displays, inquiries, or other applications as may be specified in the Contract with written approval by the Lottery of a set of change specifications (unless an extension is authorized in writing by the Lottery or a schedule is otherwise established following written request of the Lottery for changes). Unless otherwise agreed upon by both parties, the Vendor should deploy any such modified or additional software within a one hundred twenty (120) calendar day time period. The Lottery may impose Liquidated Damages of \$500.00 per day, or fraction thereof, that the modified or additional software is not installed.

IGT has read, understands, and will comply with this requirement.

4.24.9

Unauthorized Software/Hardware Modifications

The Vendor should not modify any software or hardware without the prior written consent of the Lottery and the Vendor should design Configuration Management practices to obviate this possible problem. "Modification" does not include replacement of a System component with an essentially similar working component in the event of necessary maintenance. If the Vendor modifies any software or hardware without the prior written approval of the Lottery, the Lottery may issue a written order that the modification be removed, and the System restored to its previous operating state at the Vendor's expense. Further, the Lottery may impose Liquidated Damages of\$5,000.00 per violation in addition to any other damages that may occur as a result of such unauthorized modification.

IGT has read, understands, and will comply with this requirement.

4.24.10 Unauthorized Access or Compromise

The Vendor should preclude personnel not authorized by the Lottery from accessing, modifying, or otherwise interfering with System data or software. The Lottery may impose Liquidated Damages of\$5,000.00 per Person per Incident in addition to any other damages that may occur as a result of such unauthorized access or compromise. An "Incident" is each act of access, modification, or interference System data or software by an unauthorized Person.



iLottery System Failure to Report Incidents

The Vendor should immediately report all significant incidents related to the operation of the System, either personally or by telephone, followed by a notice addressed to the Lottery's contact person (and any designees) within 24 hours of the incident. The Vendor should send all written reports and notifications by email. At a minimum, the Vendor should provide a written report for each of the following types of events:

- A. System takeovers
- B. Major communications failures
- C. Significant operator errors
- D. Out of balance conditions
- E. Emergency software or hardware changes
- F. Security violations
- G. Other conditions as defined by a memorandum of understanding
- H. Any situation which may cause the general public to become alarmed and/or which may damage the integrity or public image of the Lottery.

If the Vendor fails to report any incidents as required, the Lottery may impose Liquidated Damages of \$1,000.00 per day or fraction thereof, until an incident is correctly reported.

IGT has read, understands, and will comply with this requirement.

4.24.12 Failure to Comply

The Vendor should comply with all commitments contained in the RFP, the Proposal, and the Contract, and all clarifications and amendments to these documents. The Vendor should provide all products, services, data, and documents as obligated under the RFP, the Proposal, and the Contract. To the extent not specified elsewhere in this Exhibit, if the Vendor fails to provide an obligated product, service, data, or document, where not otherwise addressed by other Liquidated Damage provisions in this Exhibit, the Lottery may impose Liquidated Damages of \$500.00 per day or per incident (at the Lottery's discretion) until the condition is rectified.



4.24.13 **Multi-Jurisdictional Standards**

The Vendor should comply with all required Lottery and/or multi-jurisdictional standards. If the Vendor fails to comply with any required Lottery or multi-jurisdictional association standard within sixty calendar days following notification by the Lottery to the Vendor of any changes to such standards, the Lottery may impose Liquidated Damages of \$5,000.00 for each instance of non-compliance. In addition, the Lottery may impose an additional \$1,000.00 for each subsequent 7-day period, or portion thereof, for each instance for which compliance has not been achieved.

IGT has read, understands, and will comply with this requirement.

4.24.14

iLottery System CSC Outages, Hold Times, Response Times and Service Levels

The Vendor should maintain Service Levels identified in the RFP. If not, the Lottery may impose Liquidated Damages of \$1,000.00 per Service Level violation incident not to exceed \$5,000.00 in any one month.

IGT has read, understands, and will comply with this requirement.

4.24.15 iLottery Security Breach

In connection with the iLottery Program, the Vendor should comply with all applicable state, US territory and Federal laws with respect to an exposure of non-public personally identifiable information ("PII"). In the event that there is a data security breach of non-public PII, the Vendor should pay all costs associated with the disclosure of PII.



Shared Staffing and Replacement Personnel

Shared Staffing. If the Vendor violates Section 4.22.1 (F), 4.22.2(F) or 4.22.3 .3 of this RFP with regard to shared staffing between a currently existing or awarded Lottery contract and this RFP/contract, the Lottery may impose liquidated damages in the amount of \$1,000 for every day between the date the Vendor began to share resources until the date the Vendor remediates the issue.

Replacement Personnel. The process for replacing personnel listed in the RFP Documents, or other Key Team Members, is set forth in section 4.22.3.4. If the Vendor violates such provision with respect to Replacement Personnel, the Lottery may impose liquidated damages in the amount of \$1,000.00 for every day beginning on the date on which the person was removed until the date that person is successfully replaced with Lottery approval.

4.25

Mandatory Qualification/Experience Requirements

The following mandatory qualification/experience requirements must be met by the Vendor as a part of its submitted proposal. Vendor must describe how it meets the mandatory requirements and include any areas where it exceeds the mandatory requirements. Failure to comply with mandatory requirements will lead to disqualification, but areas where the mandatory requirements are exceeded will be included in technical scores where appropriate. The mandatory qualifications/experience requirements are listed below.

4.25.1 Vendor Profile and Staff Requirement

4.25.1.1 Profile Summary

Vendor should include a profile summary. The response should include a description of the Vendor's capability, capacity, and experience in support of the requirements of this RFP.

IGT has read, understands, and complies with this requirement.

IGT's History

As the world's leading supplier of lottery technology, IGT has the expertise and vision to serve as the Lottery's exclusive partner. We will rely on our more than four decades of experience and our history of financial stability to help the Lottery operate a reliable, adaptable, and efficient lottery enterprise.

IGT, formerly known as GTECH Corporation, began as a start-up in Rhode Island on December 23, 1980, with a focus on lottery technology. Although IGT began in America's smallest state, over the past 40+ years, IGT has grown to become the global leader in gaming, operating in more than 100 countries. IGT's holding company headquarters is in the United Kingdom, with operating headquarters in Rome, Italy; Las Vegas, Nevada; and Providence, Rhode Island.



IGT's iLottery Experience

IGT's iLottery dedicated business unit delivers world-leading solutions to lotteries on their journey to digital gaming. IGT's award-winning and Global Gaming Guidance Group (G4)-certified turnkey offering comprises flexible products and diverse content, including omnichannel titles, backed by dedicated iLottery expert services. Powering the fastest-growing U.S. iLotteries and 25 other lotteries worldwide, our natively integrated solution uses one system of record across the retail and digital channels, thus enabling a single player view. With our optimized and modernized player experience and our breadth of iLottery services, we help our customers drive the results that matter – growing their revenues for good causes.

By "breadth of experience" we mean that the Lottery will have, in IGT, a strategic partner that brings a deep understanding of the full scope of the business, marketing, technical, and regulatory considerations that are integral to the development of an iLottery program. Not only did we deliver the very first iLottery program in the U.S., 10 years ago, but we've stayed current with how the lottery marketplace and regulations have evolved in the decade since. And with our diverse worldwide customer base, we've worked in the most mature iLottery and iGaming markets, continually adapting our systems and products to cater to customer needs. We have built and are continuing to develop our proven and trusted iLottery System and service offerings to account for how the younger U.S. iLottery market will evolve in the future.

More broadly, our presence in the lottery industry – providing the lottery system to eight of the top 10 U.S. lotteries in terms of total sales (including the top six) and to eight of the top 10 worldwide (the remaining two use proprietary systems), while also acting as a lottery operator ourselves – means that we are able to combine our expertise in the iLottery space with an across-the-board understanding of the needs of a lottery enterprise.

We also bring unparalleled experience in project delivery to this opportunity. We dedicate an expert team of resources to every implementation project – large or small – that provides a consistent, focused, and communicative approach and best practices to meeting the objectives of the customer, from the initial planning and software-requirements stages through to post–Go-Live execution. Our West Virginia Lottery project team will work closely with the Lottery's project staff to establish a relationship that will facilitate mutual communication, transparency, productivity, and ultimately a successful outcome.

Our proposed iLottery System and services offering is the result of our ongoing and long-standing investment in forward-looking platforms and services that can help any lottery in any jurisdiction offer a more seamless play experience to their current consumers while engaging new player demographics. More than 1,000 IGT employees worldwide are devoted to the digital space, working across business units to meet the diverse needs of our global customer base, along with lotteries' increasing demand for agility and flexibility.

After more than 40 years of innovation and growth, we have the people, expertise, experience, products, and financial resources to support the Lottery in its ongoing efforts to generate revenue for West Virginia's schools, senior citizen programs, and tourism and state parks – in full alignment with the Lottery's commitment to the highest standards of good public policy and social responsibility. We're committed to working with you every day to seize opportunities and overcome challenges.



4.25.1.2 Proposed Project Manager

Vendor should propose a project manager. The project manager must hold a current Project Management Professional (PMP) certification and have a minimum of five years experience. A minimum of two years experience is required with online gaming system projects.

IGT has read, understands, and complies with this requirement.

For the West Virginia iLottery System project, IGT Consultant, Angela Patrick, will be the Project Manager (PM). Angela has more than 15 years of global project management experience and possesses a current Project Management Professional (PMP) certification from the Project Management Institute (PMI). In addition, she holds Safe Agile 5.0, Certified Scrum Master (CSM), Certified Product Owner (CPO), and Information Technology Infrastructure Library (ITIL) certifications. Angela also has more than 5 years of experience in Internet of Things (IoT)/Cyber Security and 2.5 years with online gaming systems. To learn more about Angela Patrick and what makes her qualified to be the PM for this project, please see Section 4.22, Staffing Services and Operations, as well as the resumes in that section.

4.25.1.3 Certified Network Engineers

All Network staff must be Certified Network Engineers and have a minimum of five years experience, and a minimum of two years of experience with online gaming is required.

IGT has read, understands, and will comply with this requirement.

4.25.1.4 Experience

All other staff must have a minimum of five years of prior experience in the functional role for which they are proposed. A minimum of two years experience in the proposed role in support of online gaming is also required. Examples include but are not limited to: database administrator, business analyst, process engineer, and training specialist.



4.25.1.5 Staff Not Already Engaged or Shared

If the Vendor is a current Lottery Vendor, it must provide staff that is not already engaged in delivering services, including, but not limited to, development and testing, to the Lottery. If the Vendor is awarded an additional Lottery contract, the Vendor must not share staff or services between contracts. It is within the Lottery's sole discretion to require the removal and replacement of any staff in violation of this or any other requirement of the Contract as it sees fit.

IGT has read, understands, and will comply with this requirement.

IGT employees working with the West Virginia Lottery and with the iLottery System will exclusively work within their assigned their West Virginia Lottery retail lottery gaming system or iLottery gaming system contract.

IGT will not share staff or services working on other contracts with the West Virginia Lottery.

To fulfil these requirements, IGT may have to hire new employees who will be solely dedicated to the Lottery. IGT will carefully source, vet, and train the staff that will provide the services to the Lottery throughout the iLottery contract. During the transition period, their training will be ongoing, and support will be provided by management to ensure they are able to smoothly transition into their daily duties at the Go Live.

4.25.2 Prior Project Experience

Vendor should include a Vendor Prior Project Summary. The Response should include previous experience and expertise in igaming and/or internet gaming and wagering, and provide a minimum of two previous projects similar in size (or larger), scope, and complexity in the previous five years. Details of similarities should be included. Preference will be given to experience in North America. The Vendor must release from liability any such previous clients based on recommendation of work completed.

IGT has read, understands, and complies with this requirement.

The Lottery can rely on IGT to guide it through all stages of its expansion into iLottery. We bring the experience of having installed 10 iLottery solutions worldwide, many of them in mature European markets.

For the required references, provided below, we have selected two U.S. jurisdictions where, as with West Virginia, IGT is the chosen retail lottery system provider and, most important, the Vendor that best understands the retail-iLottery convergence and the challenges of dealing with evolving iLottery regulations.

Reference # 1

Name: Georgia Lottery Corporation

Description of Products and Services Provided: The Georgia Lottery has been an IGT customer since 1993. IGT provides both their retail and digital lottery systems, thus enabling a digitally connected retail experience for players.



IGT converted the Georgia Lottery's retail system from Enterprise Series (ES) to Aurora™ in 2018. The Aurora system has proven capable of operating at very high volumes – in fact, Aurora powered the Georgia Lottery through a billion-dollar jackpot in 2021 without issue, even at 25,000 transactions per minute during the busiest sale hour.

IGT's role in bringing digital lottery to Georgia was equally historic. With IGT's assistance, the Georgia Lottery became only the second jurisdiction in the U.S. to launch a digital lottery system. It started selling digital draw games in 2012 and introduced iKeno in 2013, followed by instant win games in 2014. We worked together to introduce a mobile app for wagering in 2015, along with several games that could be played on cell phones and other mobile devices. In addition, Georgia's Remote Gaming System (RGS), which is an IGT system, has been successfully moved to the cloud.

IGT provides extended services and marketing support to the Georgia Lottery, contributing to its overall success. The Georgia Lottery leads the U.S. market in per capita draw game sales (including Keno), according to LaFleurs 2021 Internet Report Database.

When the COVID-19 pandemic hit, IGT worked closely with the Georgia Lottery on planning and executing strategies and analytics for their iLottery channel. Consequently, they experienced 250% Year-Over-Year (YOY) iLottery sales growth during those turbulent months. Messaging used for traditional marketing was quickly and seamlessly pivoted from driving foot traffic into retailers to encouraging iLottery play within the safety of one's home. Technical enhancements put in place before the onset of COVID helped ensure the infrastructure was ready to support the influx of new players – and in the second half of 2020, new player growth jumped 75% YOY.

IGT's iLottery contract with the Georgia Lottery has just been extended to 2032.

Reference # 2

Name: Rhode Island Lottery

Description of Products and Services Provided: Since 1978, IGT has worked hard to ensure that the lottery in its home state of Rhode Island has always benefited from the industry's leading technology across all sales channels.

IGT launched an iLottery program for the Rhode Island Lottery in May 2020, giving players the opportunity to play iKeno and eInstants from anywhere in Rhode Island by registering for a free VIP+ Purchase Power account at RILOT.com or on the Rhode Island Lottery's new mobile app.

As part of the Rhode Island Lottery's Play Responsibly Program, maximum deposit limits are in place and players can set session time limits. Players must be 18 or older and pass a Know Your Customer (KYC) verification process to open a VIP+ Purchase Power account. Players must be physically located in the state of Rhode Island to access their Player Wallets and/or place wagers.

IGT recently finalized a 20-year contract extension with the Rhode Island Lottery to remain the exclusive supplier of retail lottery, digital lottery, video lottery, and scratch card solutions and services through 2043.

4.26

Disentanglement Plan

As soon as reasonably practicable following notice of partial or complete termination of this Contract with the intent of the Parties not to continue the contractual relationship stipulated for herein, Vendor and Lottery agree to confer and negotiate a Disentanglement Plan in good faith so as to promote an efficient winding up of business between the Parties and an effective transition of the iLottery operations from Vendor to Vendor.

IGT has read, understands, and will comply with this requirement.

Disentanglement Plan 4.26 – 1