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

State of West Virginia
Master Agreement

Order Date: 09-21-2022

CORRECT ORDER NUMBER MUST APPEAR ON ALL PACKAGES, INVOICES, AND SHIPPING PAPERS. QUESTIONS CONCERNING THIS ORDER SHOULD BE DIRECTED TO THE DEPARTMENT CONTACT.

Order Number:	CMA 0210 0210 ISC2300000001 1	**Procurement Folder:**	1102749
Document Name:	Emergency Contract for Mainframe as a Service (OT23015)	**Reason for Modification:**	
Document Description:	Emergency Contract for Mainframe as a Service (OT23015)		
Procurement Type:	Central Master Agreement		
Buyer Name:			
Telephone:			
Email:			
Shipping Method:	Best Way	**Effective Start Date:**	2022-08-24
Free on Board:	FOB Dest, Freight Prepaid	**Effective End Date:**	2026-09-15

VENDOR	DEPARTMENT CONTACT
Vendor Customer Code: VS0000039622	**Requestor Name:** Andrew C Lore
Ensono, Inc.	**Requestor Phone:** 304-352-4944
3333 Finley Road	**Requestor Email:** andrew.c.lore@wv.gov
Downers Grove IL 60515	
US	
Vendor Contact Phone: 6367515656 **Extension:**	

Discount Details:

	Discount Allowed	Discount Percentage	Discount Days
#1	No	0.0000	0
#2	No		
#3	No		
#4	No		

23

FILE LOCATION _____

INVOICE TO	SHIP TO
DEPARTMENT OF ADMINISTRATION	WV OFFICE OF TECHNOLOGY
OFFICE OF TECHNOLOGY	BLDG 5, 10TH FLOOR
1900 KANAWHA BLVD E, BLDG 5 10TH FLOOR	1900 KANAWHA BLVD E
CHARLESTON WV 25305	CHARLESTON WV 25305
US	US

Total Order Amount:	Open End

Purchasing Division's File Copy

ENTERED

10/03/2022

JLH 9/30/2022

PURCHASING DIVISION AUTHORIZATION	ATTORNEY GENERAL APPROVAL AS TO FORM	ENCUMBRANCE CERTIFICATION
DATE: 9/30/22	DATE:	DATE: Beverly Tolen 10-12-2022
ELECTRONIC SIGNATURE ON FILE	ELECTRONIC SIGNATURE ON FILE	ELECTRONIC SIGNATURE ON FILE

10/11/2022

Extended Description:

Emergency Mainframe Contract

Emergency Purchase between the Vendor, Ensono, and the State of West Virginia, for the purchase of Mainframe as a Service per the Vendor's attached proposal and terms and conditions incorporated herein and made apart thereof.

Effective Dates: 08/24/2022 - 09/15/2026

Line	Commodity Code	Manufacturer	Model No	Unit	Unit Price
1	81111802			EA	0.000000
	Service From	Service To			

Commodity Line Description: Mainframe as a Service - See attached proposal

Extended Description:

NASPO ValuePoint
PARTICIPATING ADDENDUM

Cloud solutions 2016-2026
Led by the State of Utah

NASPO
ValuePoint

Master Agreement #: AR3099

Contractor: **Ensono, LLC**

Participating Entity: **State of West Virginia**

The following products or services are included in this contract portfolio:

- *Infrastructure as a Service* as described in the attached Statement of Work.

Master Agreement Terms and Conditions:

1. <u>Scope</u>: This addendum covers **Cloud Solutions** led by the State of *Utah* for use by state agencies and other entities located in the Participating State authorized by that State's statutes to utilize State contracts with the prior approval of the State's Chief Procurement Official.

2. <u>Participation</u>: This NASPO ValuePoint Master Agreement may be used by all state agencies, institutions of higher education, political subdivisions and other entities authorized to use statewide contracts in the State of West Virginia. Issues of interpretation and eligibility for participation are solely within the authority of the State Chief Procurement Official.

3. <u>Access to Cloud Solutions Services Requires State CIO Approval</u>: Unless otherwise stipulated in this Participating Addendum, specific services accessed through the NASPO ValuePoint cooperative Master Agreements for Cloud Solutions by state executive branch agencies are subject to the authority and prior approval of the State Chief Information Officer's Office. The State Chief Information Officer means the individual designated by the state Governor within the Executive Branch with enterprise-wide responsibilities for leadership and management of information technology resources of a state.

4. <u>Primary Contacts</u>: The primary contact individuals for this Participating Addendum are as follows (or their named successors):

Contractor

Name:	Corky Allen
Address:	3333 Finley Road, Downers Grove, IL 60515
Telephone:	636.751.5656
Fax:	N/A
Email:	Corky.Allen@ensono.com

Participating Entity

Name:	Joshua D. Spence, CIO, West Virginia Office of Technology
Address:	State Capitol Complex Building 5, 10th Floor, Charleston, WV 25305
Telephone:	304.558.8100
Fax:	N/A
Email:	joshua.d.spence@wv.gov

NASPO ValuePoint
PARTICIPATING ADDENDUM

Cloud solutions 2016-2026
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ValuePoint

5. Participating Entity Modifications Or Additions To The Master Agreement

These modifications or additions apply only to actions and relationships within the Participating Entity.
Participating Entity must check one of the boxes below.

[___] No changes to the terms and conditions of the Master Agreement are required.

[X] The following changes are modifying or supplementing the Master Agreement terms and conditions.

   a. Additional Contract Terms. The following additional terms are added to the Contract.

   i.   PAYMENT - Payments for goods/services will be made in accordance with Vendor invoice in arrears only upon receipt of a proper invoice, detailing the goods/services provided or receipt of the goods/services, whichever is later. Notwithstanding the foregoing, payments for software licenses, subscriptions, or maintenance may be paid annually in advance.

   ii.   VOID CONTRACT CLAUSES – This Contract is subject to the provisions of West Virginia Code § 5A-3-62, which automatically voids certain contract clauses that violate State law.

   iii.   BACKGROUND CHECK: In accordance with W. Va. Code § 15-2D-3, the State reserves the right to prohibit a service provider's employees from accessing sensitive or critical information or to be present at the Capitol complex based upon results addressed from a criminal background check. Service providers should contact the West Virginia Division of Protective Services by phone at (304) 558-9911 for more information.

   iv.   ANTITRUST: In submitting a bid to, signing a contract with, or accepting a Award Document from any agency of the State of West Virginia, the Vendor agrees to convey, sell, assign, or transfer to the State of West Virginia all rights, title, and interest in and to all causes of action it may now or hereafter acquire under the antitrust laws of the United States and the State of West Virginia for price fixing and/or unreasonable restraints of trade relating to the particular commodities or services purchased or acquired by the State of West Virginia. Such assignment shall be made and become effective at the time the purchasing agency tenders the initial payment to Vendor.

   v.   PRIVACY, SECURITY, AND CONFIDENTIALITY: The Vendor agrees that it will not disclose to anyone, directly or indirectly, any such personally identifiable information or other confidential information gained from the Agency, unless the individual who is the subject of the information consents to the disclosure in writing or the disclosure is made pursuant to the Agency's policies, procedures, and rules. Vendor further agrees to comply with the Confidentiality Policies and Information Security Accountability Requirements, set forth in http://www.state.wv.us/admin/purchase/privacy/default.html

NASPO ValuePoint
PARTICIPATING ADDENDUM

Cloud solutions 2016-2026
Led by the State of Utah

NASPO
ValuePoint

vi.   ISRAEL BOYCOTT: Vendor understands and agrees that pursuant to W. Va. Code § 5A-3-63, it is prohibited from engaging in a boycott of Israel during the term of this contract.

vii.   NO DEBT CERTIFICATION: In accordance with West Virginia Code §§ 5A-3-10a and 5-22-1(i), the State is prohibited from awarding a contract to any bidder that owes a debt to the State or a political subdivision of the State. By submitting a bid, or entering into a contract with the State, Vendor is affirming that (1) for construction contracts, the Vendor is not in default on any monetary obligation owed to the state or a political subdivision of the state, and (2) for all other contracts, neither the Vendor nor any related party owe a debt as defined above, and neither the Vendor nor any related party are in employer default as defined in the statute cited above unless the debt or employer default is permitted under the statute.

6. Subcontractors: All contactors, dealers, and resellers authorized in the State of West Virginia, as shown on the dedicated Contractor (cooperative contract) website, are approved to provide sales and service support to participants in the NASPO ValuePoint Master Agreement. The contractor's dealer participation will be in accordance with the terms and conditions set forth in the aforementioned Master Agreement.

7. Order of Priority: The Contract created by this Participating Addendum is comprised of the documents described below, and will be interpreted in the following order:

    a. This Participating Addendum – First Priority
    b. Statement of Work – Second Priority
    c. NASPO Master Agreement #AR3099: – Third Priority
    d. WV Business Associate Addendum - Fourth Priority
    e. IRS 1075 Addendum - Fifth Priority

8. Orders: Any order placed by a Participating Entity or Purchasing Entity for a product and/or service available from this Master Agreement shall be deemed to be a sale under (and governed by the prices and other terms and conditions) of the Master Agreement unless the parties to the order agree in writing that another contract or agreement applies to such order.

NASPO ValuePoint
PARTICIPATING ADDENDUM

Cloud solutions 2016-2026
Led by the State of Utah

NASPO ValuePoint

IN WITNESS WHEREOF, the parties have executed this Addendum as of the date of execution by both parties below.

Participating Entity: WV Office of Technology	Contractor: Ensono, LLC
Signature: *Joshua D. Spence* DocuSigned by: 51D03A1365264DB...	Signature: *Chris Garcia* DocuSigned by: A8CFACA4CAB7451...
Name: Joshua D. Spence	Name: Chris Garcia
Title: Chief Information Officer	Title: VP, Deputy General Counsel
Date: 8/30/2022	Date: 8/24/2022

For questions on executing a participating addendum, please contact:

NASPO ValuePoint

Cooperative Development Coordinator:	Shannon Berry
Telephone:	775-720-3404
Email:	sberry@naspovaluepoint.org

*Please email fully executed PDF copy of this document to
PA@naspovaluepoint.org
to support documentation of participation and posting in appropriate data bases.*

WV STATE GOVERNMENT

HIPAA BUSINESS ASSOCIATE ADDENDUM

This Health Insurance Portability and Accountability Act of 1996 (hereafter, HIPAA) Business Associate Addendum ("Addendum") is made a part of the Agreement ("Agreement") by and between the State of West Virginia ("Agency"), and Business Associate ("Associate"), and is effective as of the date of execution of the Addendum.

The Associate performs certain services on behalf of or for the Agency pursuant to the underlying Agreement that requires the exchange of information including protected health information protected by the Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as amended by the American Recovery and Reinvestment Act of 2009 (Pub. L. No. 111-5) (the "HITECH Act"), any associated regulations and the federal regulations published at 45 CFR parts 160 and 164 (sometimes collectively referred to as "HIPAA"). The Agency is a "Covered Entity" as that term is defined in HIPAA, and the parties to the underlying Agreement are entering into this Addendum to establish the responsibilities of both parties regarding HIPAA-covered information and to bring the underlying Agreement into compliance with HIPAA.

Whereas it is desirable, in order to further the continued efficient operations of Agency to disclose to its Associate certain information which may contain confidential individually identifiable health information (hereafter, Protected Health Information or PHI); and

Whereas, it is the desire of both parties that the confidentiality of the PHI disclosed hereunder be maintained and treated in accordance with all applicable laws relating to confidentiality, including the Privacy and Security Rules, the HITECH Act and its associated regulations, and the parties do agree to at all times treat the PHI and interpret this Addendum consistent with that desire.

NOW THEREFORE: the parties agree that in consideration of the mutual promises herein, in the Agreement, and of the exchange of PHI hereunder that:

1. **Definitions.** Terms used, but not otherwise defined, in this Addendum shall have the same meaning as those terms in the Privacy, Security, Breach Notification, and Enforcement Rules at 45 CFR Part 160 and Part 164.

   a. **Agency Procurement Officer** shall mean the appropriate Agency individual listed at: http://www.state.wv.us/admin/purchase/vrc/agencyli.html.

   b. **Agent** shall mean those person(s) who are agent(s) of the Business Associate, in accordance with the Federal common law of agency, as referenced in 45 CFR § 160.402(c).

   c. **Breach** shall mean the acquisition, access, use or disclosure of protected health information which compromises the security or privacy of such information, except as excluded in the definition of Breach in 45 CFR § 164.402.

   d. **Business Associate** shall have the meaning given to such term in 45 CFR § 160.103.

   e. **HITECH Act** shall mean the Health Information Technology for Economic and Clinical Health Act. Public Law No. 111-05. 111th Congress (2009).

1

f. **Privacy Rule** means the Standards for Privacy of Individually Identifiable Health Information found at 45 CFR Parts 160 and 164.

g. **Protected Health Information or PHI** shall have the meaning given to such term in 45 CFR § 160.103, limited to the information created or received by Associate from or on behalf of Agency.

h. **Security Incident** means any known successful or unsuccessful attempt by an authorized or unauthorized individual to inappropriately use, disclose, modify, access, or destroy any information or interference with system operations in an information system.

i. **Security Rule** means the Security Standards for the Protection of Electronic Protected Health Information found at 45 CFR Parts 160 and 164.

j. **Subcontractor** means a person to whom a business associate delegates a function, activity, or service, other than in the capacity of a member of the workforce of such business associate.

2. Permitted Uses and Disclosures.

a. **PHI Described.** This means PHI created, received, maintained or transmitted on behalf of the Agency by the Associate. This PHI is governed by this Addendum and is limited to the minimum necessary, to complete the tasks or to provide the services associated with the terms of the original Agreement, and is described in Appendix A.

b. **Purposes.** Except as otherwise limited in this Addendum, Associate may use or disclose the PHI on behalf of, or to provide services to, Agency for the purposes necessary to complete the tasks, or provide the services, associated with, and required by the terms of the original Agreement, or as required by law, if such use or disclosure of the PHI would not violate the Privacy or Security Rules or applicable state law if done by Agency or Associate, or violate the minimum necessary and related Privacy and Security policies and procedures of the Agency. The Associate is directly liable under HIPAA for impermissible uses and disclosures of the PHI it handles on behalf of Agency.

c. **Further Uses and Disclosures.** Except as otherwise limited in this Addendum, the Associate may disclose PHI to third parties for the purpose of its own proper management and administration, or as required by law, provided that (i) the disclosure is required by law, or (ii) the Associate has obtained from the third party reasonable assurances that the PHI will be held confidentially and used or further disclosed only as required by law or for the purpose for which it was disclosed to the third party by the Associate; and, (iii) an agreement to notify the Associate and Agency of any instances of which it (the third party) is aware in which the confidentiality of the information has been breached. To the extent practical, the information should be in a limited data set or the minimum necessary information pursuant to 45 CFR § 164.502, or take other measures as necessary to satisfy the Agency's obligations under 45 CFR § 164.502.

3. **Obligations of Associate.**

   a. **Stated Purposes Only.** The PHI may not be used by the Associate for any purpose other than as stated in this Addendum or as required or permitted by law.

   b. **Limited Disclosure.** The PHI is confidential and will not be disclosed by the Associate other than as stated in this Addendum or as required or permitted by law. Associate is prohibited from directly or indirectly receiving any remuneration in exchange for an individual's PHI unless Agency gives written approval and the individual provides a valid authorization. Associate will refrain from marketing activities that would violate HIPAA, including specifically Section 13406 of the HITECH Act. Associate will report to Agency any use or disclosure of the PHI, including any Security Incident not provided for by this Agreement of which it becomes aware.

   c. **Safeguards.** The Associate will use appropriate safeguards, and comply with Subpart C of 45 CFR Part 164 with respect to electronic protected health information, to prevent use or disclosure of the PHI, except as provided for in this Addendum. This shall include, but not be limited to:

      i. Limitation of the groups of its workforce and agents, to whom the PHI is disclosed to those reasonably required to accomplish the purposes stated in this Addendum, and the use and disclosure of the minimum PHI necessary or a Limited Data Set;

      ii. Appropriate notification and training of its workforce and agents in order to protect the PHI from unauthorized use and disclosure;

      iii. Maintenance of a comprehensive, reasonable and appropriate written PHI privacy and security program that includes administrative, technical and physical safeguards appropriate to the size, nature, scope and complexity of the Associate's operations, in compliance with the Security Rule;

      iv. In accordance with 45 CFR §§ 164.502(e)(1)(ii) and 164.308(b)(2), if applicable, ensure that any subcontractors that create, receive, maintain, or transmit protected health information on behalf of the business associate agree to the same restrictions, conditions, and requirements that apply to the business associate with respect to such information.

   d. **Compliance With Law.** The Associate will not use or disclose the PHI in a manner in violation of existing law and specifically not in violation of laws relating to confidentiality of PHI, including but not limited to, the Privacy and Security Rules.

   e. **Mitigation.** Associate agrees to mitigate, to the extent practicable, any harmful effect that is known to Associate of a use or disclosure of the PHI by Associate in violation of the requirements of this Addendum, and report its mitigation activity back to the Agency.

3

f. **Support of Individual Rights.**

    i.   **Access to PHI.** Associate shall make the PHI maintained by Associate or its agents or subcontractors in Designated Record Sets available to Agency for inspection and copying, and in electronic format, if requested, within ten (10) days of a request by Agency to enable Agency to fulfill its obligations under the Privacy Rule, including, but not limited to, 45 CFR § 164.524 and consistent with Section 13405 of the HITECH Act.

    ii.   **Amendment of PHI.** Within ten (10) days of receipt of a request from Agency for an amendment of the PHI or a record about an individual contained in a Designated Record Set, Associate or its agents or subcontractors shall make such PHI available to Agency for amendment and incorporate any such amendment to enable Agency to fulfill its obligations under the Privacy Rule, including, but not limited to, 45 CFR § 164.526.

    iii.   **Accounting Rights.** Within ten (10) days of notice of a request for an accounting of disclosures of the PHI, Associate and its agents or subcontractors shall make available to Agency the documentation required to provide an accounting of disclosures to enable Agency to fulfill its obligations under the Privacy Rule, including, but not limited to, 45 CFR §164.528 and consistent with Section 13405 of the HITECH Act. Associate agrees to document disclosures of the PHI and information related to such disclosures as would be required for Agency to respond to a request by an individual for an accounting of disclosures of PHI in accordance with 45 CFR § 164.528. This should include a process that allows for an accounting to be collected and maintained by Associate and its agents or subcontractors for at least six (6) years from the date of disclosure, or longer if required by state law. At a minimum, such documentation shall include:
- the date of disclosure;
- the name of the entity or person who received the PHI, and if known, the address of the entity or person;
- a brief description of the PHI disclosed; and
- a brief statement of purposes of the disclosure that reasonably informs the individual of the basis for the disclosure, or a copy of the individual's authorization, or a copy of the written request for disclosure.

    iv.   **Request for Restriction.** Under the direction of the Agency, abide by any individual's request to restrict the disclosure of PHI, consistent with the requirements of Section 13405 of the HITECH Act and 45 CFR § 164.522, when the Agency determines to do so (except as required by law) and if the disclosure is to a health plan for payment or health care operations and it pertains to a health care item or service for which the health care provider was paid in full "out-of-pocket."

    v.   **Immediate Discontinuance of Use or Disclosure.** The Associate will immediately discontinue use or disclosure of Agency PHI pertaining to any individual when so requested by Agency. This includes, but is not limited to, cases in which an individual has withdrawn or modified an authorization to use or disclose PHI.

4

g. **Retention of PHI.** Notwithstanding section 4.a. of this Addendum, Associate and its subcontractors or agents shall retain all PHI pursuant to state and federal law and shall continue to maintain the PHI required under Section 3.f. of this Addendum for a period of six (6) years after termination of the Agreement, or longer if required under state law.

h. **Agent's, Subcontractor's Compliance.** The Associate shall notify the Agency of all subcontracts and agreements relating to the Agreement, where the subcontractor or agent receives PHI as described in section 2.a. of this Addendum. Such notification shall occur within 30 (thirty) calendar days of the execution of the subcontract and shall be delivered to the Agency Procurement Officer. The Associate will ensure that any of its subcontractors, to whom it provides any of the PHI it receives hereunder, or to whom it provides any PHI which the Associate creates or receives on behalf of the Agency, agree to the restrictions and conditions which apply to the Associate hereunder. The Agency may request copies of downstream subcontracts and agreements to determine whether all restrictions, terms and conditions have been flowed down. Failure to ensure that downstream contracts, subcontracts and agreements contain the required restrictions, terms and conditions may result in termination of the Agreement.

j. **Federal and Agency Access.** The Associate shall make its internal practices, books, and records relating to the use and disclosure of PHI, as well as the PHI, received from, or created or received by the Associate on behalf of the Agency available to the U.S. Secretary of Health and Human Services consistent with 45 CFR § 164.504. The Associate shall also make these records available to Agency, or Agency's contractor, for periodic audit of Associate's compliance with the Privacy and Security Rules. Upon Agency's request, the Associate shall provide proof of compliance with HIPAA and HITECH data privacy/protection guidelines, certification of a secure network and other assurance relative to compliance with the Privacy and Security Rules. This section shall also apply to Associate's subcontractors, if any.

k. **Security.** The Associate shall take all steps necessary to ensure the continuous security of all PHI and data systems containing PHI. In addition, compliance with 74 FR 19006 Guidance Specifying the Technologies and Methodologies That Render PHI Unusable, Unreadable, or Indecipherable to Unauthorized Individuals for Purposes of the Breach Notification Requirements under Section 13402 of Title XIII is required, to the extent practicable. If Associate chooses not to adopt such methodologies as defined in 74 FR 19006 to secure the PHI governed by this Addendum, it must submit such written rationale, including its Security Risk Analysis, to the Agency Procurement Officer for review prior to the execution of the Addendum. This review may take up to ten (10) days.

l. **Notification of Breach.** During the term of this Addendum, the Associate shall notify the Agency and, unless otherwise directed by the Agency in writing, the WV Office of Technology immediately by e-mail or web form upon the discovery of any Breach of unsecured PHI; or within 24 hours by e-mail or web form of any suspected Security Incident, intrusion or unauthorized use or disclosure of PHI in violation of this Agreement and this Addendum, or potential loss of confidential data affecting this Agreement. Notification shall be provided to the Agency Procurement Officer at www.state.wv.us/admin/purchase/vrc/agencyli.htm and,

unless otherwise directed by the Agency in writing, the Office of Technology at incident@wv.gov or https://apps.wv.gov/ot/ir/Default.aspx.

The Associate shall immediately investigate such Security Incident, Breach, or unauthorized use or disclosure of PHI or confidential data. Within 72 hours of the discovery, the Associate shall notify the Agency Procurement Officer, and, unless otherwise directed by the Agency in writing, the Office of Technology of: (a) Date of discovery; (b) What data elements were involved and the extent of the data involved in the Breach; (c) A description of the unauthorized persons known or reasonably believed to have improperly used or disclosed PHI or confidential data; (d) A description of where the PHI or confidential data is believed to have been improperly transmitted, sent, or utilized; (e) A description of the probable causes of the improper use or disclosure; and (f) Whether any federal or state laws requiring individual notifications of Breaches are triggered.

Agency will coordinate with Associate to determine additional specific actions that will be required of the Associate for mitigation of the Breach, which may include notification to the individual or other authorities.

All associated costs shall be borne by the Associate. This may include, but not be limited to costs associated with notifying affected individuals.

If the Associate enters into a subcontract relating to the Agreement where the subcontractor or agent receives PHI as described in section 2.a. of this Addendum, all such subcontracts or downstream agreements shall contain the same incident notification requirements as contained herein, with reporting directly to the Agency Procurement Officer. Failure to include such requirement in any subcontract or agreement may result in the Agency's termination of the Agreement.

m. **Assistance in Litigation or Administrative Proceedings.** The Associate shall make itself and any subcontractors, workforce or agents assisting Associate in the performance of its obligations under this Agreement, available to the Agency at no cost to the Agency to testify as witnesses, or otherwise, in the event of litigation or administrative proceedings being commenced against the Agency, its officers or employees based upon claimed violations of HIPAA, the HIPAA regulations or other laws relating to security and privacy, which involves inaction or actions by the Associate, except where Associate or its subcontractor, workforce or agent is a named as an adverse party.

4. Addendum Administration.

a. **Term.** This Addendum shall terminate on termination of the underlying Agreement or on the date the Agency terminates for cause as authorized in paragraph (c) of this Section, whichever is sooner.

b. **Duties at Termination.** Upon any termination of the underlying Agreement, the Associate shall return or destroy, at the Agency's option, all PHI received from, or created or received by the Associate on behalf of the Agency that the Associate still maintains in any form and retain no copies of such PHI or, if such return or destruction is not feasible, the Associate shall extend the protections of this Addendum to the PHI and limit further uses and disclosures to the purposes that make the return or destruction of the PHI infeasible. This shall also apply to all agents and subcontractors of Associate. The duty of the Associate and its agents

6

and subcontractors to assist the Agency with any HIPAA required accounting of disclosures survives the termination of the underlying Agreement.

c. **Termination for Cause.** Associate authorizes termination of this Agreement by Agency, if Agency determines Associate has violated a material term of the Agreement. Agency may, at its sole discretion, allow Associate a reasonable period of time to cure the material breach before termination.

d. **Judicial or Administrative Proceedings.** The Agency may terminate this Agreement if the Associate is found guilty of a criminal violation of HIPAA. The Agency may terminate this Agreement if a finding or stipulation that the Associate has violated any standard or requirement of HIPAA/HITECH, or other security or privacy laws is made in any administrative or civil proceeding in which the Associate is a party or has been joined. Associate shall be subject to prosecution by the Department of Justice for violations of HIPAA/HITECH and shall be responsible for any and all costs associated with prosecution.

e. **Survival.** The respective rights and obligations of Associate under this Addendum shall survive the termination of the underlying Agreement.

5. **General Provisions/Ownership of PHI.**

a. **Retention of Ownership.** Ownership of the PHI resides with the Agency and is to be returned on demand or destroyed at the Agency's option, at any time, and subject to the restrictions found within section 4.b. above.

b. **Secondary PHI.** Any data or PHI generated from the PHI disclosed hereunder which would permit identification of an individual must be held confidential and is also the property of Agency.

c. **Electronic Transmission.** Except as permitted by law or this Addendum, the PHI or any data generated from the PHI which would permit identification of an individual must not be transmitted to another party by electronic or other means for additional uses or disclosures not authorized by this Addendum or to another contractor, or allied agency, or affiliate without prior written approval of Agency.

d. **No Sales.** Reports or data containing the PHI may not be sold without Agency's or the affected individual's written consent.

e. **No Third-Party Beneficiaries.** Nothing express or implied in this Addendum is intended to confer, nor shall anything herein confer, upon any person other than Agency, Associate and their respective successors or assigns, any rights, remedies, obligations or liabilities whatsoever.

f. **Interpretation.** The provisions of this Addendum shall prevail over any provisions in the Agreement that may conflict or appear inconsistent with any provisions in this Addendum. The interpretation of this Addendum shall be made under the laws of the state of West Virginia.

g. **Amendment.** The parties agree that to the extent necessary to comply with applicable law they will agree to further amend this Addendum.

h. **Additional Terms and Conditions.** Additional discretionary terms may be included in the release order or change order process.

7

AGREED:

Name of Agency: WV Office of Technology

DocuSigned by:

Signature: *Joshua D. Spence*
51D03A13652649B...

Title: Chief Information Officer

Date: 8/30/2022

Name of Associate: Ensono, LLC

DocuSigned by:

Signature: *Chris Garcia*
A8CFACA4CAB7451...

Title: VP, Deputy General Counsel

Date: 8/24/2022

Form - WVBAA-012004
Amended 06.26.2013

APPROVED AS TO FORM THIS 26th
DAY Of ~~June~~ 20 ~~13~~
Patrick Morrisey
Attorney General
BY

8

Appendix A

Name of Associate: **West Virginia Office of Technology**

Name of Covered Entities: **West Virginia Public Employees Insurance Agency, Department of Health and Human Resources, Department of Veterans Assistance**

Describe the PHI:

Any individually identifiable health information held or maintained by the above covered entities including information related to an individual's health condition, the provision of care to the individual, payment information for the provision of healthcare. The PHI may be the past, present or future protected health information of an individual in the context of this agreement The PHI may contain induvial identifiers including name, address, birthdate or Social Security numbers. This information includes but is not limited to health insurance information; testing, lab results or diagnostic information; health status; medical history including past physical or mental health conditions; healthcare providers rendering services; all related to individuals.

APPENDIX
IRS Publication 1075 Service Level Agreement

As required by the Internal Revenue Service Publication 1075 (hereinafter "IRS 1075"), the WV Office of Technology (hereinafter "WVOT") and Ensono, LLC [Ensono] agree to the following terms.

Ensono has agreed to provide technology services to the WVOT by the underlying Contract. The WVOT is charged with providing enterprise technology services to state agencies that are authorized to receive Federal Tax Information (hereinafter "FTI") and is responsible for ensuring the protection of FTI. As a provider of mainframe services, WVOT shares in the responsibility to protect FTI.

A. PERFORMANCE

1. All work will be done under the supervision of the WVOT employees.

2. No work involving FTI furnished under this contract will be subcontracted without prior written approval of the IRS.

3. Ensono employees or contractors with access to or who use FTI must meet the background check requirements defined in IRS Publication 1075.

4. Any return or return information made available in any format shall be used only for the purpose of carrying out the provisions of this agreement. Information contained in such material will be treated as confidential and will not be divulged or made known in any manner to any person except as may be necessary in the performance of this agreement. Disclosure to anyone other than an employee or contractor of Ensono will be prohibited.

5. All returns and return information will be accounted for upon receipt and properly stored before, during, and after processing. In addition, all related output will be given the same level of protection as required for the source material.

6. Ensono certifies that the data processed during the performance of this agreement will be completely purged from all data storage components maintained by Ensono at the conclusion of the contract, and no output will be retained by Ensono. If immediate purging of all data storage components is not possible, Ensono certifies that any IRS data remaining in any storage component will be safeguarded to prevent unauthorized disclosures.

7. Any spoilage or any intermediate hard copy printout that may result during the processing of IRS data will be given to the WVOT. When this is not possible, Ensono will be responsible for the destruction of the spoilage or any intermediate hard copy printouts and will provide the WVOT with a statement containing the date of destruction, description of material destroyed, and the method used.

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8. All computer systems receiving, processing, storing or transmitting FTI must meet the requirements defined in IRS Publication 1075. To meet functional and assurance requirements, the security features of the environment must provide for the managerial, operational, and technical controls. All security features must be available and activated to protect against unauthorized use of and access to FTI.

9. Ensono will maintain a list of employees or contractors with authorized access. Such list will be provided to the WVOT and, upon request, to the IRS reviewing office.

10. The WVOT will have the right to void the agreement if Ensono fails to provide the safeguards described above.

B. INSPECTION

The IRS and the WVOT, with 24-hour notice, shall have the right to send its inspectors into the offices of the contractor to inspect facilities and operations performing any work with FTI under this agreement for compliance with requirements defined in IRS Publication 1075. The IRS's right of inspection shall include the use of manual and/or automated scanning tools to perform compliance and vulnerability assessments of information technology assets that access, store, process or transmit FTI. On the basis of such inspection, corrective actions may be required in cases where the WVOT is found to be noncompliant with contract safeguards.

C. CRIMINAL/CIVIL SANCTIONS

1. Each officer or employee of any person to whom returns or return information is or may be disclosed will be notified in writing by such person that returns or return information disclosed to such officer or employee can be used only for a purpose and to the extent authorized herein, and that further disclosure of any such returns or return information for a purpose or to an extent unauthorized herein constitutes a felony punishable upon conviction by a fine of as much as $5,000 or imprisonment for as long as 5 years, or both , together with the costs of prosecution. Such person shall also notify each such officer and employee that any such unauthorized further disclosure of returns or return information may also result in an award of civil damages against the officer or employee in an amount not less than $1,000 with respect to each instance of unauthorized disclosure. These penalties are prescribed by IRCs 7213 and 7431 and set forth at 26 CFR 301.6103(n)-1.

2. Each officer or employee of any person to whom returns or return information is or may be disclosed shall be notified in writing by such person that any return or return information made available in any format shall be used only for the purpose of carrying out the provisions of this contract. Information contained in such material shall be treated as confidential and shall not be divulged or made known in any manner to any person except as may be necessary in the performance of the contract. Inspection by or disclosure to anyone without an official need-to-know constitutes a criminal

misdemeanor punishable upon conviction by a fine of as much as $1,000 or imprisonment for as long as 1 year, or both, together with the costs of prosecution. Such person shall also notify each such officer and employee that any such unauthorized inspection or disclosure of returns or return information may also result in an award of civil damages against the officer or employee [United States for Federal employees] in an amount equal to the sum of the greater of $1,000 for each act of unauthorized inspection or disclosure with respect to which such defendant is found liable or the sum of the actual damages sustained by the plaintiff as a result of such unauthorized inspection or disclosure plus in the case of a willful inspection or disclosure which is the result of gross negligence, punitive damages, plus the costs of the action. These penalties are prescribed by IRC 7213A and 7431 and set forth at 26 CFR 301.6103(n)-1.

3. Additionally, it is incumbent upon the contractor to inform its officers and employees of the penalties for improper disclosure imposed by the Privacy Act of 1974, 5 U.S.C. 552a. Specifically, 5 U.S.C. 552a(i)(1), which is made applicable to contractors by 5 U.S.C. 552a(m)(1), provides that any officer or employee of a contractor, who by virtue of his/her employment or official position, has possession of or access to agency records which contain individually identifiable information, the disclosure of which is prohibited by the Privacy Act or regulations established there under, and who knowing that disclosure of the specific material is prohibited, willfully discloses the material in any manner to any person or agency not entitled to receive it, shall be guilty of a misdemeanor and fined not more than $5,000.

4. Granting a contractor access to FTI must be preceded by certifying that each individual understands the agency's security policy and procedures for safeguarding IRS information. Contractors must maintain their authorization to access FTI through annual recertification. The initial certification and recertification must be documented and placed in the agency's files for review. As part of the certification and at least annually afterwards, contractors must be advised of the provisions of IRCs 7431, 7213, and 7213A (see Exhibit 4, Sanctions for Unauthorized Disclosure, and Exhibit 5, Civil Damages for Unauthorized Disclosure). The training provided before the initial certification and annually thereafter must also cover the incident response policy and procedure for reporting unauthorized disclosures and data breaches. (See Section 10) For both the initial certification and the annual certification, the contractor must sign, either with ink or electronic signature, a confidentiality statement certifying their understanding of the security requirements.

DocuSigned by:	DocuSigned by:
Joshua D. Spence	*Chris Garcia*
51D03A130520425...	A8CFACA4CAB7451...
WV Office of Technology	**Ensono, LLC**
Chief Information Officer	VP, Deputy General Counsel
Title:	**Title:**
8/30/2022	8/24/2022
Date:	**Date:**

3

NASPO ValuePoint
PARTICIPATING ADDENDUM

Cloud solutions 2016-2026
Led by the State of Utah

NASPO
ValuePoint

IN WITNESS WHEREOF, the parties have executed this Addendum as of the date of execution by both parties below.

Participating Entity:	Contractor: Ensono, LLC
Signature:	Signature:
Name:	Name:
Title:	Title:
Date:	Date:

For questions on executing a participating addendum, please contact:

NASPO ValuePoint

Cooperative Development Coordinator:	Shannon Berry
Telephone:	775-720-3404
Email:	sberry@naspovaluepoint.org

Please email fully executed PDF copy of this document to
PA@naspovaluepoint.org
to support documentation of participation and posting in appropriate data bases.

Approved as to form prior to acknowledgment therof
this _____ day of _____ 20___

Patrick Morrisey, Attorney General
By: _____

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Statement of Work – Mainframe Managed Services

1. Introduction

This Statement of Work ("**SOW**") is entered into as of August 24, 2022 ("**SOW Effective Date**"), by and between State of West Virginia ("**Client**") and Ensono, LLC ("**Ensono**"). This SOW sets forth the scope of work and terms and conditions applicable to the Services to be provided to Client by Ensono (for purposes of this SOW, the "**Services**"). This SOW is governed by that certain Participating Addendum having an Effective Date of August 24, 2022 by and between Client and Ensono (the "**Agreement**").

2. Scope of Work

Ensono will provide the Services as detailed in the Charges section and described in the applicable Service Descriptions. "**Service Descriptions**" refers to the product-specific technical descriptions of the Services, which are attached to this SOW and identified below. The Services include the use of the hardware and software referenced on the Hardware/Software Schedule attached to this SOW as **Exhibit A** (collectively, the "**Scope of Work**"):

| Services	Service Description
Mainframe Managed Services (Mainframe Remote Infrastructure Management Service ("**RIM Service**") and Hosted Managed Dedicated Mainframe Service ("**Hosted Service**")	Exhibit B
Ensono Service Management	Exhibit C

3. Acceptance

Client will be deemed to have accepted all Services (including any applicable billing milestones) and documents provided in connection with this SOW that materially conform to the specifications set forth herein, unless Client provides Ensono with written notice describing any failure to conform in reasonable detail promptly, but in any event not later than three (3) business days following Client's receipt thereof. In the event of any such failure to conform, Ensono shall have a reasonable period of time based on the severity and complexity of the non-conformance to deliver a conforming Service or document.

4. Term and Schedule

The RIM Transition Services under this SOW will begin on the date Ensono begins performing the Service and will continue for one (1) month ("**RIM Transition Term**"), at the conclusion of which the RIM Services will begin and continue for two (2) months ("**RIM Service Term**"). The Hosted Migration Services under this SOW will begin on the date Ensono begins performing the Service and will continue for three (3) months ("**Hosted Migration Term**"), at the conclusion of which the Hosted Services will begin and continue for fifty-eight (58) months ("**Hosted Service Term**"). The RIM Transition Term, RIM Service Term, Hosted Migration Term, and Hosted Service Term will be collectively referred to as the "**Service Term**". The tentative schedule is as follows:

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WVOT RIM to Hosted Timeline
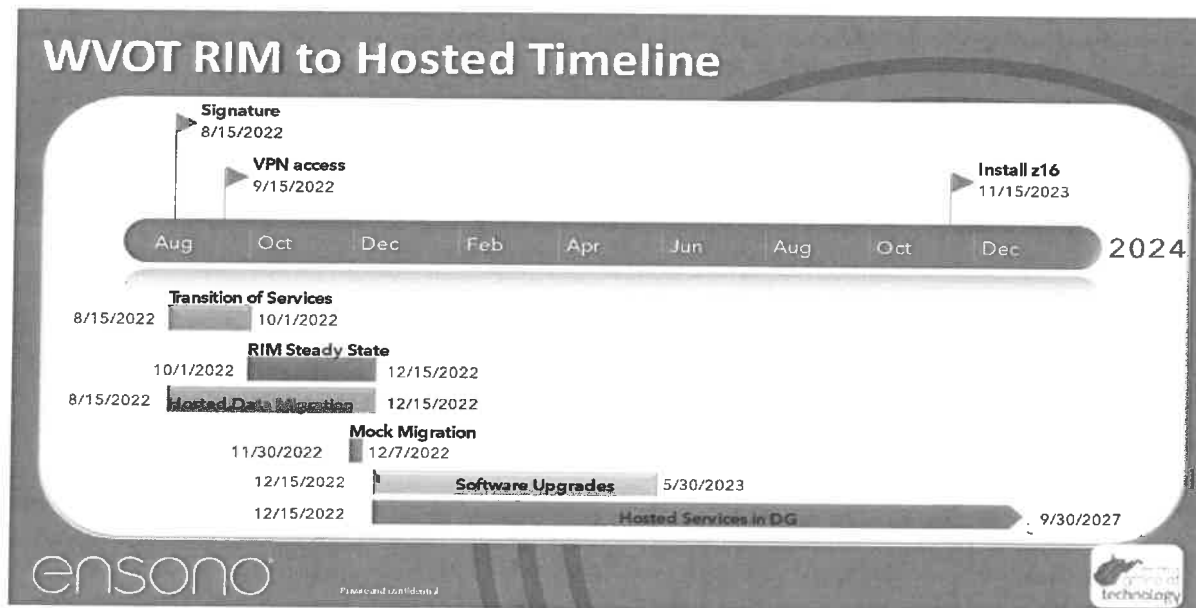
5. Assumptions

The following assumptions apply to the Services throughout the Service Term:

a. While performing the Services, if Ensono encounters: (i) any concealed or unknown condition, (ii) a Client responsibility contained in this SOW which has not been met, or (iii) a delay, including NRC project delays or holds, caused by Client, then the scope, schedule, and/or fees for this SOW may be equitably adjusted as necessary via execution of a Change Order. If the parties cannot agree to the Change Order, Ensono shall not be obligated to deliver the affected Services.

b. The Services may be performed at a Client facility or remotely, at Ensono's sole discretion. Client acknowledges and agrees that Ensono Services utilize a global support model.

c. All project documentation, presentations, and communication will be in the English language using standard Ensono templates and formats, which constitute Ensono proprietary and confidential information.

d. Ensono has the sole discretion to determine the staffing assignments for its Services.

e. If, in connection with the provision of the Services, Ensono requires access to any Client facilities, systems or applications, for purposes of obtaining all applicable user IDs, badges or other forms of identification or authorization for all applicable Ensono associates, Ensono agrees to perform Ensono's standard background screens (information relating to which is available upon request) and to provide the applicable associates' full legal names, work phone numbers, and work e-mail addresses. If Client requires any additional information, screening, or training Client agrees to request such information prior to execution of this SOW and acknowledges that such additional information, screening, or training may result in additional charges.

f. Anything not expressly specified in the Scope of Work is out of scope. Any request to modify the Scope of Work will be subject to a Change Order. If Ensono, in its discretion, agrees to perform any out of scope services upon Client's request without a Change Order, such services will be provided at Ensono's then-current list rates.

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Date Published:	11 August 2022
Release:	15 November 2021 R.2
Version:	1.0
Ensono Reference:	US N/A
Opportunity ID:	202001-33923

g.   Hosted Services for Disaster Recovery in Omaha, NE will commence at the same time as Hosted Services for production in Downers Grove, IL.

h.   Duration for initial upgrade of software products to vendor supported levels is estimated at (six) 6 months provided however, that the software scope and timeline will be identified during knowledge transfer during the Migration Term. Due diligence will be required to confirm. Begin initial project to bring software up to vendor supported levels upon completion of data center migration. Duration of project estimated at 6-months but will require due diligence to finalize initial project to bring software up to vendor supported levels upon completion of data center migration. Duration of project estimated at 6-months but will require due diligence to finalize.

i.   The following subcontractors are deemed approved by Client for purposes of this SOW:
   - MajorKey Technologies – ITSM integration
   - Hardware and Software specified in Exhibit A as required

j.   Client acknowledges and agrees that, while Ensono may provide certain security services hereunder, Ensono is not responsible for Client's compliance with legal and regulatory requirements and guidelines, including but not limited to IRS Publication 1075 (Tax Information Security Guidelines for Federal, State and Local Agencies). Any such regulatory or standard-based compliance remains the obligation of the Client. Ensono is solely responsible for providing the Services as described in this SOW.

6. Client Obligations

In supporting delivery of the Services, Client will perform the obligations described below:

a.   Provide any notices and obtain any consent required for Ensono to perform Services.

b.   Provide Ensono with access to any necessary Client environments (including third-party products) to receive and support the Services.

c.   Make available such subject matter experts as required by Ensono.

d.   Ensure that any applicable third-party service providers attend any workshops as reasonably required by Ensono. Client will further ensure that any such third-party service providers have signed commercially reasonable non-disclosure agreements governing any information exchanged in connection with such workshops. Ensono will use commercially reasonable efforts to provide Client with not less than five (5) days' prior notice before any workshop where third-party service providers are required to attend.

e.   Ensure that existing Client procedural and business process documentation is made available to Ensono in a timely manner prior to the start of the Services.

f.   Notify Ensono promptly, but in no event later than three (3) business days, following discovery of any inaccuracies or incomplete information in any project documents provided by or to Client.

g.   Provide a single point of contact to be the primary interface to Ensono (the **"Client Contact"**). The Client Contact will be empowered to allocate resources and make decisions on behalf of Client in a timely fashion and responsible for:

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    i.   Specifically identifying and providing Ensono with access to all relevant Client-controlled information, resources and locations required in connection the Services.

    ii.   Providing Ensono the contact information (including name office, and mobile phone numbers) for all Client team members with whom Ensono will interface.

    iii.   Attending periodic status meetings to discuss progress and any other issues that arise during the Service Term.

h.   Ensure Client team members fulfill their obligations and assigned tasks as defined in the SOW and as agreed between the parties.

i.   Manage all necessary communications and change management activities within Client organization in connection with the Services, including but not limited to: Corporate communications, Business process changes, procedural or policy changes, and escalation management on behalf of Client.

j.   Ensure that any third parties that may have or acquire an interest in Client's assets are informed and understand that all equipment, peripherals and other assets owned by Ensono that are used in providing the Services belong to Ensono and that Client does not own or have any interest therein, and Client shall cooperate with Ensono in providing any notices or making any filings with governmental entities or otherwise that Ensono deems necessary to clarify or denote its ownership of such assets.

k.   Ensure that Client does not provide third party system access to a Client environment managed by Ensono, without: (i) first providing Ensono with at least five (5) business days' prior written notice which shall include a description of such access; and (ii) ensuring such access is subject to a confidentiality agreement no less restrictive than the obligations under the Agreement. Ensono shall not be responsible for any degradation or failure of the Service resulting from such access including but not limited to Service Level failures.

l.   Perform the following tasks prior to Transition or Migration Service commencement:
- VPN Connectivity and login ID creation for Ensono within fifteen (15) days of the SOW Effective Date

7. Charges

Client shall pay to Ensono all Service Fees and Expenses as further specified below (collectively, the "**Charges**") in accordance with the invoice and payment schedule described in the Agreement.

a.   **MRC (and Fixed and Variable Charges)**. Client shall pay Ensono the Monthly Recurring Charges ("**MRC**") set forth in Exhibit E for work described under this SOW ("**Service Fees**") in accordance with the timeline set forth therein beginning on October 1, 2022. The MRC is based on the Baseline Units set forth in Exhibit E. Client may increase or decrease the baselines for non-Fixed Fee services at the Unit Rate set forth therein.

b.   **NRC.** For the avoidance of doubt the Non-Recurring Charge ("**NRC**") for RIM Transition Service, Hosted Migration Service, and Software Upgrade Project is $1,149,286.71 and is included in the MRC and will be performed in accordance with the terms of this SOW and the Milestones set forth in the table below.

RIM Transition Service Milestones.

Reference	Transition Phase	Transition Milestones	Transition Criteria
1	Initiation	SOW Signature	All contractual documents are executed, solution finalized.

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2	Planning	Baseline Project Plan Complete	Mutually agreed timeline and project plan Communication cadence established Formal Client Kick Off completed
3	Execution	Knowledge Transfer	Knowledge Transfer between Client and Ensono completed
4	Go Live	Go Live	Full cutover of environment to Ensono support

Hosted Migration Service Milestones

Reference	Migration Phase	Migration Milestones	Milestone Criteria
1	Planning	Baseline Project Plan Complete	Mutually agreed timeline and project plan Communication cadence established Formal Client Kick Off completed
2	Network	Data migration network established	Complete data migration circuit installation and establishment of end-to-end connectivity
3	Data Synch	Data synchronization	Complete first data synchronization goal
4	Go Live	Go Live	Full cutover of environment to Ensono support

Monthly Minimum Fees. In no event will the Monthly Recurring Charges (MRCs) billed for such Services be less than the following Minimum Monthly Fee: All Fixed Fees identified in the pricing table above.

Recovery of Costs for Services Provided. In the event this SOW is terminated by Client for convenience, or by Ensono for cause, after the SOW Effective Date but prior to the conclusion of the Service Term, Ensono is entitled to recover from Client unpaid costs associated with any services provided, which includes, but is not limited to, unpaid transition costs, pre-paid hardware and software maintenance, and capital expenditures made on behalf of the project and not otherwise recoverable as described in Exhibit E attached hereto.

c. **Expenses.** Notwithstanding anything to the contrary in the Agreement, in addition to the above-described Service Fees, Client shall reimburse Ensono for all reasonable and documented expenses incurred by Ensono in the performance of the Services (collectively, "Expenses"). All travel and related costs and expenses shall be subject to Ensono's current expense guidelines. Ensono will invoice Client for Expenses incurred on a regular basis and Client shall pay Ensono invoices in full in accordance with the payment terms specified in the Agreement.

d. Notwithstanding any other provision to the contrary and not more than once per calendar year, Ensono may either decrease or increase the charges applicable to any Service provided hereunder in an amount not to exceed the latest annual increase in the Consumer Price Index, specifically, the U.S. Department of Labor, Bureau of Labor Statistics "All Items Consumer Price Index for All Urban Consumers (CPI-U) for the U.S. City Average." Such adjustment shall be effective upon the date set forth in Ensono's written notice thereof to Client.

e. Client hereby acknowledges and agrees that Ensono will be using Client's corporate address, as set forth herein, as transactional tax situs unless otherwise agreed to by the parties in writing. Client's corporate address is as follows: [**1900 Kanawha Blvd. East Bldg 5, 10th floor, Charleston, WV 25305**]

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Controls

a. **Status Reports**. Ensono and Client will each make reasonable efforts to meet or speak periodically to review the progress of this SOW and adherence to any applicable schedule. Prior to the performance of this SOW, each party will designate the appropriate personnel to take part in any such meetings.

b. **Change Control**. Client or Ensono may, at any time, request changes to this SOW by submitting a written change request which identifies in reasonable detail each of the following, collectively (each a "**Change Request**"): summary of the requested change, why the change is needed and timing of when the change is needed. Proposed changes to this SOW may impact the project schedule, price, or scope. Ensono and Client will evaluate each Change Request, considering the feasibility of the change and impact on other project components. Once a Change Request is accepted by the parties, Ensono will prepare a "**Change Order**" documenting the revisions to the SOW. Changes to the SOW become effective when the Change Order is executed by both Client and Ensono. In the event of any conflicts or inconsistency, the terms of an executed Change Order prevail over those of this SOW. Notwithstanding the foregoing, Client acknowledges and agrees that if a Change Request is raised by Ensono due to a change in assumption or dependency listed in Section 5 (Assumptions) or a failure of the Client to perform a Client Obligation listed in Section 6 (Client Obligations), such Change Request shall be deemed a mandatory change ("**Mandatory Change**"). If Client does not agree to a Mandatory Change, Ensono may terminate this SOW for cause and Client will be obligated to pay Recovery of Costs for Services Provided as described in this SOW.

Service Level Agreement

The Service Level Agreement, which provides Client's sole and exclusive remedies for any Service quality or performance deficiency or failure of any kind applicable to the Services is set forth in **Exhibit D** to this SOW.

10. Miscellaneous

This SOW may be executed in one or more counterparts, which may include the use of electronic signature tools, all of which collectively comprises the final executed and binding SOW. Notwithstanding anything to the contrary in the Agreement, the Service Fees for this SOW are available until the date thirty (30) days following Client's receipt of this SOW (the "**Quote Expiration Date**"). In the event this SOW is not executed by the parties on or before the Quote Expiration Date the SOW shall be cancellable by Ensono in its discretion.

IN WITNESS WHEREOF, Client and Ensono have agreed to this Statement of Work as of the SOW Effective Date.

ENSONO, LLC	**State of West Virginia**
┌DocuSigned by:	┌DocuSigned by:
Chris Garcia	*Joshua D. Spence*
└─ABCFACA4CAB7451...	└─51D03A130520498...
Signature	Signature
Chris Garcia	Joshua D. Spence
Printed Name	Printed Name
	Chief Information Officer
VP, Deputy General Counsel	

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Title

Title

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EXHIBIT A HARDWARE & SOFTWARE SCHEDULE

Ensono will provide the Services for the following Supported Hardware and Supported Software, combined to comprise the **"Environment."** This Exhibit A is intended to clarify, among other things, which parts of the Environment are owned by and belong to each of Ensono and Client.

1. DEFINITIONS:

"Owner"	The party who legally owns the product and is responsible for the service charges, purchase price, lease payments or other acquisition costs.
"Maintenance Financial (Ensono)"	Indicates that Ensono is responsible for: - the cost of maintenance and support, excluding any extended support contracts for any End of Life Products; - transacting with relevant third-party vendors for and applying any maintenance contracts, separate from its cost.
"Maintenance Financial (Client)"	Indicates that the Client is responsible for: - the cost of maintenance and support, including any extended support contracts for any End of Life Products; - transacting with relevant third-party vendors for and applying any maintenance contracts, separate from its cost.
"Maintenance Operational"	The party responsible for installing, patching and/or maintenance (as applicable) for the relevant software (at the relevant Ensono-defined standard or premium service levels per Software Management Service).
"End of Life Product"	Any third-party hardware or third-party software or firmware (including but not limited to operating systems, databases, applications, and infrastructure in relation to any component of Client's services under Ensono's control or management) that is out of maintenance and/or support or the manufacturer or provider has ceased to provide updates and/ or patches for, including security patches. For the avoidance of doubt, the availability in the market by the manufacturer of an extended support contract shall not prevent the product from being an End-of-Life Product. Ensono will notify the Client in writing within a reasonable time period once it becomes aware that there is potential for End-of-Life Product. In which case, Ensono and the Client shall collaborate in identifying a succession plan for such. Ensono and the Client may agree to: i. Where appropriate, replace the product with an alternative and fully supported product, in which case, via a Change Order at the Client's cost, the Parties shall identify any commercial and operational impact to the End-of-Life Product, as may be required to ensure that the End of Life Product remains compatible and functioning to the vendor's support requirements; and ii. If the Client fails to agree to the implementation of the change above such that the End-of-Life Product would continue in an unsupported manner, then Ensono shall not be bound by the terms of any SLA insofar as any SLA impact has been caused by such End-of-Life Product (in relation either to that such End-of-Life Product or to any other affected service).

2. SUPPORTED HARDWARE (EQUIPMENT AND PERIPHERALS)

2.1. Ensono-Provided Equipment and Peripherals

Ensono will use the following equipment and peripherals at the locations noted below in support of the Services, all of which belong solely to Ensono and shall remain Ensono's property at all times:

a. Mainframe Hardware

EQUIPMENT MANUFACTURER	DESCRIPTION	MODEL NUMBER	QUANTITY	LOCATION	OWNER	MAINTENANCE FINANCIAL	MAINTENANCE OPERATIONAL
IBM	CPU	3907-K03	1	Downers Grove, IL	Ensono	Ensono	Ensono
Dell	DASD	Powermax 8000	15 TB	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	VTS	TS7770	80 TB	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	VTS	TS7770	80 TB	Downers Grove, IL	Ensono	Ensono	Ensono

b. Mainframe Hardware Refresh

EQUIPMENT MANUFACTURER	DESCRIPTION	MODEL NUMBER	QUANTITY	LOCATION	DATE OF REFRESH	OWNER	MAINTENANCE FINANCIAL	MAINTENANCE OPERATIONAL
IBM	CPU	TBD*	1	Downers Grove, IL	11/15/2023	Ensono	Ensono	Ensono

* CPU model is TBD – Expected to be z16 generation which has not yet been announced by IBM as of the SOW Effective Date.

c. Network Hardware/Services

DEVICE/SERVICE	MAKE	MODEL	QUANTITY	LOCATION	OWNER	MAINTENANCE FINANCIAL	MAINTENANCE OPERATIONAL
Network Ports 1Gb	Cisco	Nexus 9K	20	Downers Grove, IL	Ensono	Ensono	Ensono
Site-to-Site VPNs 10Mb			2	Downers Grove, IL/Charleston, WV	Ensono	Ensono	Ensono
Site-to-Site VPNs 500Mb			1	Downers Grove, IL/Charleston, WV	Ensono	Ensono	Ensono
Site-to-Site VPNs 250Mb			2	Downers Grove, IL/Charleston, WV	Ensono	Ensono	Ensono
Backbone Bandwidth – 275Mb			1	Downers Grove, IL	Ensono	Ensono	Ensono

d. Security Hardware

DEVICE/SERVICE	MAKE	MODEL	QUANTITY	LOCATION	OWNER	MAINTENANCE FINANCIAL	MAINTENANCE OPERATIONAL
Firewall	Palo Alto	PA-3220	2	Downers Grove, IL	Ensono	Ensono	Ensono
Firewall Mgmt Station	Palo Alto	Panorama	1	Downers Grove, IL	Ensono	Ensono	Ensono

Ensono reserves the right to substitute functionally equivalent hardware products in place of those products shown above, provided that such substituted products do not materially and adversely affect the Services.

2.2. Client-Provided Equipment and Peripherals

Client will provide the following equipment and peripherals at the locations noted below in support of the Services:

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a. Mainframe Hardware

EQUIPMENT MANUFACTURER	DESCRIPTION	MODEL NUMBER	QUANTITY	LOCATION	OWNER	MAINTENANCE FINANCIAL	MAINTENANCE OPERATIONAL
IBM	CPU	2828-S02	1	Charleston, WV	Client	Client	Client
Dell	DASD	VMAX 20k	15 TB	Charleston, WV	Client	Client	Client
IBM	VTS	TS7720	68 TB	Charleston, WV	Client	Client	Client

b. Network Hardware

DEVICE/SERVICE	MAKE	MODEL	QUANTITY	LOCATION	OWNER	MAINTENANCE FINANCIAL	MAINTENANCE OPERATIONAL
Site-to-Site VPNs 10Mb			2	Charleston, WV	Client	Client	Client
Site-to-Site VPNs 250Mb			2	Charleston, WV	Client	Client	Client
Site-to-Site VPNs 500Mb			1	Charleston, WV	Client	Client	Client

3. SUPPORTED SOFTWARE

3.1. Ensono-Licensed Software

Ensono will provide the following software licenses in support of the Services:

a. Mainframe Software

SOFTWARE MANUFACTURER	PRODUCT NAME	LOCATION	OWNER	MAINTENANCE FINANCIAL	MAINTENANCE OPERATIONAL
BMC	TrueSight Capacity Optimization for MVS*	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	Enhanced ACIF**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	CICS Transaction Server for z/OS**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	Connect:Direct for z/OS**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	DB2 for z/OS **	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	Ent COBOL z/OS**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	Enterprise PL/I z/OS**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	IBM DB2 CONNECT UNLIMITED EDITION FOR SYSTEM Z FOR LINUX ON Z MILLIONS OF SERVICE UNITS PER HOUR LICENSE**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	IBM DB2 CONNECT UNLIMITED EDITION FOR SYSTEM Z MILLIONS OF SERVICE UNITS PER HOUR LICENSE**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	IBM Tivoli Key Lifecycle Manager for z/OS renamed to: SKLM for z/OS**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	Overlay Generation Language (OGL/370)**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	SDFII/CICS**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	z/OS Base**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	z/OS DFSMS dss**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	z/OS DFSMS dsshsm**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	z/OS DFSORT**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	z/OS GDDM-PGF**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	z/OS Infoprint Server**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	z/OS RMF**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	z/OS SDSF**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	z/OS Security Server**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	z/OS XL C/C++**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	DITTO/ESA for MVS**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	MFA (Multi-factor Authentication**	Downers Grove, IL	Ensono	Ensono	Ensono

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SOFTWARE MANUFACTURER	PRODUCT NAME	LOCATION	OWNER	MAINTENANCE FINANCIAL	MAINTENANCE OPERATIONAL
IBM	Page Printer Formatting Aids/370**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	Print Services Facility**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	Tivoli AF/Operator for z/OS**	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	Tivoli Storage Manager for z/OS **	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	Z Software Asset Management (SAM)*	Downers Grove, IL	Ensono	Ensono	Ensono
IBM	z/VM**	Downers Grove, IL	Ensono	Ensono	Ensono
Vanguard Integrity Professionals	Vanguard/Administrator*	Downers Grove, IL	Ensono	Ensono	Ensono
Vanguard Integrity Professionals	Vanguard/Advisor*	Downers Grove, IL	Ensono	Ensono	Ensono
Vanguard Integrity Professionals	Vanguard/Analyzer*	Downers Grove, IL	Ensono	Ensono	Ensono
Vanguard Integrity Professionals	Vanguard/Security Center*	Downers Grove, IL	Ensono	Ensono	Ensono

*The Software will be located in the Client data center in Charleston, WV during the RIM Migration Term and RIM Service Term.

** The Software will be located in the Client data center in Charleston, WV during the RIM Migration Term and RIM Service Term and Client will be identified as the Owner and Maintenance Financial responsibilities.

3.2. Client-Licensed Software/Systems

Client will provide the following software and systems in support of the Services. Client is responsible for any third-party access fees associated with any Client-licensed software and systems used in support of the Services. Client retains legal and financial responsibility for the software set forth below and, as such, it is not reflected in the Charges for the Services.

a.   Mainframe Software*

SOFTWARE MANUFACTURER	PRODUCT NAME	LOCATION	OWNER	MAINTENANCE FINANCIAL	MAINTENANCE OPERATIONAL
ASG	DocumentDirect	Downers Grove, IL	Client	Client	Client
ASG	ViewDirect for MVS	Downers Grove, IL	Client	Client	Client
BMC	Control-M	Downers Grove, IL	Client	Client	Client
BMC	Control-M/Restart	Downers Grove, IL	Client	Client	Client
Broadcom/CA	Batch Processor Unicenter RBP	Downers Grove, IL	Client	Client	Client
Broadcom/CA	CA Intertest for CICS	Downers Grove, IL	Client	Client	Client
Broadcom/CA	CA Librarian	Downers Grove, IL	Client	Client	Client
Broadcom/CA	CA LOOK	Downers Grove, IL	Client	Client	Client
Broadcom/CA	CA PMA	Downers Grove, IL	Client	Client	Client
Broadcom/CA	CA Report Facility	Downers Grove, IL	Client	Client	Client
Broadcom/CA	CA TPX	Downers Grove, IL	Client	Client	Client
Broadcom/CA	CA Vision	Downers Grove, IL	Client	Client	Client
Broadcom/CA	CA VS	Downers Grove, IL	Client	Client	Client
Broadcom/CA	CA-1	Downers Grove, IL	Client	Client	Client
Broadcom/CA	InfoRefiner MVS	Downers Grove, IL	Client	Client	Client
Broadcom/CA	Plan Analyzer for DB2 for z/OS	Downers Grove, IL	Client	Client	Client
Broadcom/CA	RC/Migrator Unicenter RCM	Downers Grove, IL	Client	Client	Client
Broadcom/CA	RC/QUERY Unicenter RCQ	Downers Grove, IL	Client	Client	Client
Broadcom/CA	RC/Secure Unicenter RCS	Downers Grove, IL	Client	Client	Client
Broadcom/CA	RC/Update Unicenter RCU	Downers Grove, IL	Client	Client	Client
Broadcom/CA	SYSVIEW Realtime Performance Management Option for CICS	Downers Grove, IL	Client	Client	Client

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SOFTWARE MANUFACTURER	PRODUCT NAME	LOCATION	OWNER	MAINTENANCE FINANCIAL	MAINTENANCE OPERATIONAL
Broadcom/CA	SYSVIEW Realtime Performance Management Option for DB2	Downers Grove, IL	Client	Client	Client
Broadcom/CA	VISION:Report	Downers Grove, IL	Client	Client	Client
Broadcom/CA	VISION:RESULTS	Downers Grove, IL	Client	Client	Client
Chicago-Soft	MVS/QuickRef	Downers Grove, IL	Client	Client	Client
Dovetailed Technologies	Co:Z Toolkit	Downers Grove, IL	Client	Client	Client
MacKinney Systems	Batch To CICS	Downers Grove, IL	Client	Client	Client
MacKinney Systems	CICS/MESSAGE	Downers Grove, IL	Client	Client	Client
MacKinney Systems	CICS/MORNING NEWS	Downers Grove, IL	Client	Client	Client
MacKinney Systems	KWIK-KEY	Downers Grove, IL	Client	Client	Client
Merrill Consulting	MXG	Downers Grove, IL	Client	Client	Client
Novell	SuSE Linux Enterprise Server	Downers Grove, IL	Client	Client	Client
Oracle	Oracle 9i, 10G, and 11G	Downers Grove, IL	Client	Client	Client
Pitney Bowes	StreamWeaver	Downers Grove, IL	Client	Client	Client
SAS Institute	SAS	Downers Grove, IL	Client	Client	Client
SAS Institute	SAS ACCESS/DB2	Downers Grove, IL	Client	Client	Client
SAS Institute	SAS/SHARE (for DOT use Only)	Downers Grove, IL	Client	Client	Client
Serena International	COMPAREX	Downers Grove, IL	Client	Client	Client
Serena International	Serena StarTool FDM	Downers Grove, IL	Client	Client	Client
Software AG	ADABAS	Downers Grove, IL	Client	Client	Client
Software AG	ADABAS CICS Interface	Downers Grove, IL	Client	Client	Client
Software AG	EntireX Broker	Downers Grove, IL	Client	Client	Client
Software AG	NATURAL	Downers Grove, IL	Client	Client	Client
Software AG	NATURAL CICS Interface	Downers Grove, IL	Client	Client	Client
Software AG	NATURAL for DB2	Downers Grove, IL	Client	Client	Client
Software AG	NATURAL Security	Downers Grove, IL	Client	Client	Client
Software AG	NATURAL TSO Interface	Downers Grove, IL	Client	Client	Client
Software AG	PREDICT	Downers Grove, IL	Client	Client	Client
Software AG	SYSTEM MAINTENANCE AID	Downers Grove, IL	Client	Client	Client
SourceForge	CPS Tools for Developers	Downers Grove, IL	Client	Client	Client
Tibco	CyberFusion MFT	Downers Grove, IL	Client	Client	Client

*The Software will be located in the Client data center in Charleston, WV during the RIM Migration Term and RIM Service Term.

4. DISASTER RECOVERY ENVIRONMENT

Ensono will provide disaster recovery services as described in the applicable Service Order or Statement of Work for the equipment and systems listed below.

EQUIP MFR	PRODUCT/ MODEL NO.	QTY	DESCRIPTION	STORAGE	LOCATION	OWNER	MAINTENANCE FINANCIAL	MAINTENANCE OPERATIONAL
IBM	Subscription	1	CPU*	NA	Corus Group	Client	Client	Client
IBM	Subscription	1	VTS*	68 TB	Corus Group	Client	Client	Client
IBM	Subscription	1	DASD*	15 TB	Corus Group	Client	Client	Client
IBM	TS7740	1	VTS*	5 TB	Flatwoods, WV	Client	Client	Client
IBM	TS3500	1	ATL*	1	Flatwoods, WV	Client	Client	Client
IBM	TS1120	6	Tape Drives*	6	Flatwoods, WV	Client	Client	Client
IBM	3907-A01	1	Shared CBU CPU**	NA	Omaha, NE	Ensono	Ensono	Ensono
Dell	Powermax 8000	1	Shared DASD**	30 TB***	Omaha, NE	Ensono	Ensono	Ensono
IBM	TS7770	1	Shared VTS**	80 TB	Omaha, NE	Ensono	Ensono	Ensono
Palo Alto	PA-3220	2	Firewall**		Omaha, NE	Ensono	Ensono	Ensono10

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EQUIP MFR	PRODUCT/ MODEL NO.	QTY	DESCRIPTION	STORAGE	LOCATION	OWNER	MAINTENANCE FINANCIAL	MAINTENANCE OPERATIONAL
Cisco	Nexus 9K	20	Network Ports**		Omaha, NE	Ensono	Ensono	Ensono

*Provided by Client during the RIM Transition Term and RIM Service Term.

**Provided by Ensono during the Hosted Migration Term and Hosted Service Term.

***Includes SNAP copy space for disaster recovery testing purposes.

The hardware provided for Disaster Recovery may be generation n-1 or n-2 at Ensono's discretion. Should Client utilize functions that require current generation hardware, additional charges will result.

Exhibit B

Service Descriptions – Mainframe Managed Services

1. Service

SKU: US-MF-SVC-0083

Mainframe Remote Infrastructure Management (RIM) Managed Service ("the Service") which consists of providing technical support, management, administration, configuration, and monitoring services to transition and support a Client's defined mainframe environment.

SKU: US-MF-SVC-0091

Hosted Managed Dedicated Mainframe Service (the "Service") which consists of technical support, management, administration, configuration, and monitoring services to support a Client's Mainframe environment that is configured and located at an Ensono facility.

Roles and Responsibilities

The following tables list the tasks and responsibilities for each party for the available Service components, which components if purchased, will be expressly referenced in Client's Service Order or Statement of Work (collectively a SOW).

2. RIM Transition Services/Hosted Migration Services

#	Task	Ensono	Client
	Transition/Migration Plan		
2.1	Ensono will appoint a Project Manager to own the transition plan and an Account Leader to own the relationship with Client.	X	
	Permit Ensono to utilize Ensono's standard ID naming convention and rules for Ensono IDs.		X
2.2	Perform due diligence, clarify assumptions, and validate the transition plan which requires Client support staff with duration depending on the complexity of the transition. Conduct solution reviews, and document findings and results.	X	

2.3	Develop:
	    ▪ A project scope document defining the key documents, major milestones, timeline, transition strategy and risk management plan for the transition project.
	    ▪ A detailed transition project schedule describing the activities, target dates, dependencies and resources required to deliver the solution defined in the SOW.
		X	

#	Task	Ensono	Client
	Transition/Migration Plan		
2.4	Conduct: • Weekly status/review meetings with Client to communicate project status and review and agree upon any revisions and communicate status to Client and Ensono leadership. • A formal transition of Client support functions to Ensono's Client management and production support teams upon completion of the project.	X	
2.5	Interview Client personnel for execution of knowledge transfer process.	X	
2.6	Provide Ensono hardware/software as described in the SOW.	X	
2.7	Prepare any applicable Ensono VPN connectivity.	X	
2.8	Install, configure, and test any necessary Ensono hardware/software as defined in the SOW at the applicable Client facility.	X	
2.9	Review and standardize Systems Managed Facility (SMF) collection and processing.	X	
2.10	Implement Ensono standard capacity planning data collection and reporting.	X	
2.11	Coordinate the setup of the Ensono Envision portal.	X	
2.12	Develop code as needed to produce metrics for the applicable SLAs.	X	
2.13	Create standard internal tracking metrics reporting processes.	X	
2.14	Exercise commercially reasonable efforts to migrate Client products or services to Ensono's standard products or services.	X	
2.15	Install software replacements in line with the hardware/software set forth in the SOW.	X	
2.16	Install Ensono standard software tools listed in the applicable Client Hardware/Software Schedule.	X	
2.17	Implement: • Ensono operating system and software standard deployment process. • Ensono defined security standards. • Network access (FTP) between Client LPARs and Ensono lab. • AUTHCODE tracking process. • Automation standardization tasks.	X	
2.18	If required by EMC, procure storage required for EMC Secure Remote Services (ESRS).	Option	
2.19	Decommission Client requested Selected hardware or software.	Option	
2.20	Provide hardware maintenance agreements for Ensono provided equipment.	X	
2.21	Define and configure Disaster Recovery (DR) requirements, provided that, Client purchases DR Services as defined in the SOW)	X	X

#	Task	Ensono	Client
	Transition/Migration Plan		
2.22	Mutually agree upon regularly scheduled maintenance outage windows.	X	X
2.23	Document issues and provide timely escalation of unresolved issues to Ensono.		X
2.24	Document issues, allocate resources to provide resolution, and provide timely escalation of unresolved issues to Ensono and Client management.	X	
2.25	Create a Client project team to participate in transition meetings beginning at project kickoff through the end of the transition period.		X
2.26	Conduct a kick-off session with the Client project team to review the project scope and objectives. Schedule regular meetings to track progress, maneuver obstacles, and manage change.	X	
2.27	Provide (in line with the applicable Ensono hardware/software as defined in the SOW): ▪ Access to hardware and software leases, agreements, and entitlements. ▪ Application mapping, including requirements for resources external to the mainframe systems. ▪ Current hardware inventory and access to systems for software and system infrastructure review. ▪ Access to technical and operational diagrams and documentation.		X
2.28	Provide Ensono technical staff network connectivity and security access into the systems(s).		X
2.29	Initiate vendor contact for any hardware or software licenses to be retained by Client and allow Ensono third party access to any such licenses prior to the transition		X
2.30	Integrate pre-transition changes in the Client environment deemed essential to the transition.		X
2.31	Approve the solution, transition plan, and subsequent changes and provide project sign-off at completion.		X
2.32	Appoint a Project Manager to provide a single point of contact for the transition process and a technical liaison to act as the primary technical contact.		X
2.33	Participate in due diligence and transition activities at both the business and technical levels.		X
2.34	Application installation and configuration (if required).		X
2.35	Ownership of application testing activities.		X
2.36	Provide Go/No-Go approval prior to full production cutover.		X
	System Reporting and Connectivity to Environment		

#	Task	Ensono	Client
	Transition/Migration Plan		
2.37	Provide Ensono with at least one current Sub-Capacity Reporting Tool (SCRT) report from Client's current environment to identify hardware and software that is in use and licensed. This includes current NO89 parameters used in the SCRT. If SCRT is not being performed, allow for meetings between Client and Ensono to identify Client licensed hardware and software.		X
2.38	Verify software contracts including all software identified in the SCRT report.	X	
2.39	Allow System Management Facilities (SMF) records and DCOLLECT report used for system performance measurements to be transmitted to Ensono Reporting Platform (CUS1). This is a z/OS LPAR used for automated and consolidated capacity management reporting. SMF data is an audit record that does not contain Client data.		X
2.40	Implement Ensono standard reporting from SMF records.	X	
2.41	Allow permission and infrastructure (IPSEC VPN) to securely transfer software distribution packages from Ensono (LAB1) to the Client Environment.		X
2.42	Implement system communication between Client LPAR and LAB system for software distribution packages	X	
2.43	Allow: • Access to IPSEC VPN, multifactor authentication (MFA) access for Ensono to access the supported systems. • Acceptance to the supported systems or provide Ensono with the requirements/process. • Ensono role-based security rule implementation, acceptance of Ensono background check, and user IDs.		X
2.44	Allow Ensono to implement Ensono role-based security rules in the current z/OS security tool.		X
2.45	Implement Ensono role-based security.	X	
2.46	Allow Ensono to implement or provide permission for Ensono to create APIs and implement platform integration.		X
2.47	Implement Envision Connect Service,	X	
2.48	Allow Ensono to implement automated ticketing from system events to the Ensono Service Now (SNOW) ITSM tool utilizing (IPSEC / VPN) connections to Ensono Services.		X
2.49	Implement automated ticketing in environment.	X	
2.50	Allow Ensono to implement Integrated Console Controller (ICC), for console monitoring utilizing (IPSEC / VPN) connections to Ensono services.		X
2.51	Implement and define ICC, for Console monitoring.	X	

#	Task	Ensono	Client
	Transition/Migration Plan		
2.52	Allow Ensono to implement storage subsystem metering, Simple Mail Transfer Protocol (SMTP) communications, and Simple Network Management Protocol (SNMP) utilizing IPSEC / VPN, for subsystem utilization and event notification.		X
2.53	Implement storage subsystem metering, SMTP, and SNMP communications for subsystem utilization and event notification.	X	
2.54	Allow Ensono to implement CA-Automation Point for console monitoring and automation.		X
2.55	Implement CA-Automation Point for console monitoring and automation.	X	
	Mainframe Testing		

2.56	Functional System Testing
	▪ Ensono will conduct Functional System testing prior to mock testing.
	▪ Test activities consist of:
	   o Tech IPL
	   o System connectivity confirmation
	   o Database connectivity conformation
		X	

2.57	Mock Testing
	▪ Ensono will provide one mock test prior to cutover
	▪ Mock testing is scheduled two weeks prior to cutover
	▪ Batch and online processing are included
	   o Client will provide batch monitoring during mock testing
	▪ External connectivity for mock testing is not included
	▪ DASD and tape testing are available
	   o Scope is determined based on replication requirements
		X	

2.58	DR Validation
	▪ Ensono will conduct a functional DR technical validation test (provided the Client purchases DR Services as defined in the SOW for a Mainframe Hosted solution, this is not applicable for Remote Infrastructure Management solutions or a Mainframe Remote Hosted solution unless specified in the SOW)
	▪ Test activities consist of:
	   o Tech IPL
	   o System connectivity confirmation
	   o Database connectivity conformation
	   o Client access and testing is not in scope for this activity
		X	

#	Task	Ensono	Client
	Transition/Migration Plan		
2.59	Production Go-Live Support • Performs technical system validation • Performs application validation	X	X

3. Standard Software Management

#	Task	Ensono	Client
3.1	Manage the operating system configuration and components with inventory and act upon non-used software and compliance issues. Apply authorization codes for in-scope software.	X	
3.2	Plan, coordinate, install, define, support, configure settings, and maintain the operating system and third-party software at vendor-supported version levels, apply software authorization codes, and schedule software upgrades[1] to vendor-supported version levels using the Ensono standard software maintenance and deployment process.[2] Services do not include, and Ensono does not perform, certain tasks which include but are not limited to the following: • Creating and maintaining custom processes • Modifying custom process / adding custom process parameters • Creating custom skeletons and panels • Creating deployment environments • Incident management related to Client change control including but not limited to ABEND resolutions • Duplicating and/or replicating application environments in whole or partially • Maintaining and/or creating custom interfaces or processes • Building or maintaining custom CICS screens or logon exits • Managing Client custom and home-grown applications These tasks can be requested as supplemental chargeable services.	X	
3.3	Inform Ensono at least two (2) months in advance of a Client-requested software upgrade not included in the SOW.		X

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[1] Software upgrades are scheduled when software vendors have announced end-of-support dates. A limited number of software products are upgraded and maintained at more current version levels at Ensono's sole discretion. Typically, these upgrades apply to key subsystems such as database and security software products. COBOL application and/or recompilation upgrades are excluded from this task.

[2] In the event Client's software environment transitioned to Ensono is: (i) approaching out of vendor support and has less than one year of vendor support remaining at the commencement of steady state services, Ensono will have up to 12 months to upgrade the software to supported level; or (ii) out of vendor support, Ensono will have up to 18 months to upgrade the software to a supported level (note: N-3 or older environments will require additional discussion to determine the applicable upgrade timeframe).

#	Task	Ensono	Client
3.4	Plan, schedule, and perform Client requested software upgrades.[3]	X	
3.5	Monitor software usage to identify and remove obsolete and unauthorized software from the system.	X	
3.6	Review software maintenance fixes and software alerts on a monthly basis for high impact/pervasive (HIPER) product temporary fixes (PTFs) and notify the Client of any HIPER PTFs that Ensono determines should be treated as a maintenance emergency. Ensono will work with the Client to mutually agree to an upgrade schedule for the identified maintenance emergency.[4]	X	
3.7	Perform maintenance updates and PTFs as needed, on a schedule mutually agreed upon between Ensono and Client.[5] If client is in a shared environment, Ensono will advise all clients in this shared environment if urgent changes are required that may necessitate system downtime	X	
3.8	Maintain software products that integrate with or depend on other commercially available software products in Client environment at functionally compatible versions.	X	
3.9	Maintain and manage software authorization codes for software outlined in the Client Hardware/Software Schedule. Client will maintain its own software as applicable.	X	X
3.10	Provide support for Client-supported software with initial unloads (only) for third-party application software products.	X	
3.11	Troubleshoot and resolve system software failures; work directly with software and hardware vendors as needed to resolve defects.	X	
3.12	Provide: - Development, support, and debugging for Client-written and purchased applications including validating compatibility with Ensono. - Regularly scheduled outage windows for a minimum of four hours for required hardware maintenance. - Support for product installation, customization, and maintenance for Client-supported software as indicated in the Hardware/Software Schedule.		X

4. Intentionally Deleted

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[3] Client will be responsible for payment of necessary hardware upgrade or extended maintenance agreements associated with a software upgrade.

[4] Applying HIPER PTFs may impact scheduled upgrades. Ensono shall not be responsible for any degradation or failure of the Services resulting from such application of HIPER PTFs.

[5] For software products that are out of vendor support, no upgrades or updates will be performed. Break/fixes only will be applied, and support will be provided on best-effort basis with no SLAs applied.

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5. Storage Management

#	Task	Ensono	Client
5.1	Convert Client's storage management environment to Ensono's standard management tools as required; implement or convert to Ensono's tape management system if one is not installed on Client's system.	X	
5.2	Manage disk, tape, and virtual tape data to Client-defined levels of usage and service. Backup operating system and third-party software to disk and/or virtual tape, to remote site and/or tape, or to an offsite location including support of tape-related hardware and software.	X	
5.3	Refresh Client-retained storage devices or subsystems.	Option	
5.4	Automate tape retention and offsite rotation as defined by Client for Client data backups through tape management definitions and parameters.	X	
5.5	Provide recommendations for improved storage processes and assist with storage capacity planning.	X	
5.6	Assist with Client backup and recovery processes, provide tape retention and rotation support as applicable, and restore datasets from backups as reasonably requested by Client.	X	
5.7	Perform: • Code tape management definitions per Client's requirements • Changes to the tape management definitions as required for tape retention and offsite vaulting rules	X	
5.8	Provide: • Schedule for backups required by Client application programmers to allow for restoration of an application back to a single point of time. Client can choose to base this schedule on current storage management practices. • Client backup recovery and processes with retention, data management policies, and offsite rotation requirements, provide storage data management criteria, and perform offsite tape vaulting for the operating and system software volume backups. Client can choose to base this schedule on current storage management practices. • Storage requirements; future capacity or technology needs; retention policies including special hardware and/or software requirements and business projections for disk, tape, and virtual tape; and high utilization periods. This information must be explicitly documented and provided by Client, as it cannot be derived by Ensono from any systems.		X
5.9	Enable Ensono's storage metering tooling to connect securely to Client's storage systems for reporting.	X	X

6. Standard Capacity Planning and Performance Management

#	Task	Ensono	Client
6.1	Provide: ▪ Monthly operational review of capacity-planning reports. ▪ Trend workloads, forecast sizing requirements, and performance impact analysis for technology upgrades, planned changes, and application deployments. ▪ Problem determination and recommendations to resolve performance issues, including analysis with application deployments.	X	
6.2	Perform the following analytics for system capacity: ▪ Monthly review of CPU and LPAR storage. ▪ Annual review of basic LPAR configuration and weight recommendations. ▪ Linear future trend on CPU, performed every six (6) months, specifically on the MIPS/storage, excluding selecting the machines and/or engines. Storage will be a daily snapshot. ▪ Yearly workload management policy review.	X	
6.3	Perform the following analytics for performance: ▪ Provide annual high-level system performance and tuning recommendations. ▪ Identify, analyze, and resolve issues and perform analysis of system-level service degradation to determine root cause. ▪ Provide support of currently employed performance tools, monitoring, and performance automation.	X	
6.4	Respond to Client incident tickets, which may include: ▪ Jobs delayed ▪ Workload ▪ Capacity and performance questions/incidents	X	
6.5	Respond to ad-hoc requests pertaining to capacity management.	X	
6.6	Provide: ▪ Forecast updates for annual growth and added and/or removed business applications. ▪ Defined and scheduled reports on current resource usage and future capacity projections. ▪ Mapping of business applications to mainframe applications and services (e.g., CICS transactions and related data)		X
6.7	Resolve application issues causing performance problems.		X

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7. Configuration and Hardware Management

#	Task	Ensono	Client
7.1	Manage the configuration of all mainframe equipment including the operating system and related components.	X	
7.2	Create documentation of system requirements if system requirement documentation is not available to facilitate the original system build.	X	
7.3	Maintain hardware configuration and central database documentation for Ensono's internal use and inventory management.	X	
7.4	Perform definition, support, and configuration changes for I/O gens, MCL upgrades, and new implementations pertaining to the mainframe hardware environment.	X	
7.5	Configure/install mainframe hardware; schedule and coordinate installation with third party vendor and Client acquisition teams.	X	
7.6	Provide advance notification of required updates to Client in accordance with agreed upon change management policies and procedures.	X	
7.7	Provide documentation of existing system requirements to facilitate original system build and specific business requirements that would impact the configuration, as they occur.		X
7.8	Manage and maintain hardware maintenance contracts for Client-owned hardware and otherwise be financially responsible. Any support required by Ensono will be subject to a Change Order and provided at an additional charge.		X
7.9	Provide for support of services: • Supply intelligent hands for activities required in the WVOT's data center • Any electrical connections for equipment to be installed in WVOT's data center • Any cables and cabling for equipment to be installed in WVOT's data center		X

8. System Automation

#	Task	Ensono	Client
8.1	Implement: ▪ Ensono Standard automation tools and rules; implement automation if it does not currently exist. ▪ Message suppression, initialization and process load, and automation. ▪ Leveled startup and shutdown for IPL, automated system started task management initialization, shutdown and monitoring, and additional Client requested automation.	X	

#	Task	Ensono	Client
8.2	Identify system tasks and/or messages that are candidates for automation, supplement existing automation rules with Ensono standard automation rules as applicable and implement additional or custom automation as identified or requested by the Client.	X	
8.3	Client must provide required security IDs to allow access to install and run Ansible when Client has retained all security tasks (i.e., did not buy Standard or Premium Security Services).		X
8.4	Client must provide network access (including opening firewall ports) to the Ensono deployed Ansible environment. If Client is unable to provide such access, a standalone, Client-specific Ansible environment must be established. This standalone access is provided by Ensono at an additional charge.		X
8.5	Provide: • The required information to build the SOP if such procedures are not available. • Necessary network access to support Ensono standard automated event management activities.		X
8.6	Accept the Ensono event monitoring solution automation standard product.		X

9. Mainframe Network Administration

#	Task	Ensono	Client
9. 1	Perform: • Mainframe network product installation, version upgrade, maintenance, configuration, and documentation for mainframe network components. • Definition, support, and configuration changes for TCP/IP definitions, BARR configuration, and file transfer. • Network system level problem determination and resolution and assist with application issues.	X	
9. 2	Provide network documentation for existing and provisioned network components; and manage file transfer process and script setup, configuration, testing, and implementation with third parties.		X

10. CICS Management

#	Task	Ensono	Client
10.1	Plan, coordinate, install, define, support, configure settings; maintain CICS and related components, processes, and software; and apply maintenance updates and upgrades using the Ensono standard deployment process and per the applicable Standard or Premium Software Management section of this Service Description.	X	
10.2	Perform CICS system level problem determination and resolution and assist with application issues.	X	
10.3	Provide: • Development, support, and debugging for Client-written and purchased applications; validate with Ensono the compatibility of Client installed/supported software. • Application architecture and knowledge transfer for Client application teams or application providers. • WSDL generation, if required by Client.		X

11. System Database Administration Services

#	Task	Ensono	Client
11.1	Plan, coordinate, install, define, support, configure settings, monitor and maintain the Database employed and related components, processes, catalogs, software and apply maintenance updates and upgrades to supported levels using the Ensono standard deployment process and per the applicable Standard or Premium Software Management section of this Service Description.	X	
11.2	Monitor database systems and perform database system level problem determination and notify Client of potential issues.	X	
11.3	Back up database systems and perform restore/recovery as needed or requested.	X	
11.4	Perform database system level problem determination and resolution and assist with application issues.	X	
11.5	Provide application architecture, development, support and knowledge transfer for Client application teams, providers or Client written or purchased applications.		X
11.6	Provide application database design and changes.		X
11.7	Validate compatibility of Client installed software with Ensono.		X
11.8	Perform application database backups, monitoring, recovery, utilities, and security.		X

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12. Mainframe Disaster Recovery ("DR") Service

Unless otherwise expressly set forth in the SOW, the DR Service includes one (1) DR Drill per calendar year. Client will request a DR Drill by providing Ensono six (6) months advance written notice, and the DR Drill will be scheduled on a date mutually agreed to by the parties. The DR Drill will not exceed forty-eight (48) hours Monday through Friday, during Ensono standard business hours. The DR Drill scope is to recover 1 Production LPAR, unless otherwise expressly set forth in this the SOW. The Charges for the DR Service are set forth in the SOW and are based on the initial scope as of the SOW Effective Date. All DR planning, DR Drills, and post DR Drill follow-up assume that the Client organization(s) will be in a single meeting (multiple planning sessions will not be required to support multiple Client business organizations). The Charges are subject to change based on completion of the DR Drill Planning and Execution - Scoping phase further described below, which will be agreed to by the parties in a Change Order. In the event the parties do not execute a Change Order, Ensono is not obligated to provide the Service.

Technical Recovery Plan ("TRP") Creation - Standard

#	Task	Ensono	Client
12.1	Provide Client's existing DR Plan and TRP for Ensono review. If either the DR Plan or the TRP do not exist this will be an additional Transition Charge to create (see the TRP Creation section of this document).		X
12.2	Review and modify Client's existing DR Plan and TRP to adhere to Ensono standards, guidelines, and designed solution. Ensono will utilize Ensono's validation procedures and processes.	X	
12.3	Present modified DR Plan for Client review.	X	
12.4	Approve the DR Plan.		X

Disaster Recovery and Disaster Recovery Drill Planning and Execution

#	Task	Ensono	Client
	Scoping		
12.9	Provide DR coordinator to coordinate overall DR Drill and coordinate Ensono team.	X	
12.10	Provide a DR coordinator to work with Client business/application and Client technical teams.		X
12.11	Confirm scope of environment/systems to be recovered for DR or DR Drill.		X
12.12	Confirm and configure Ensono in scope DR environment based on Client requirements specified in the SOW.	X	

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#	Task	Ensono	Client
12.13	Confirm recovery components such as applications, LPARs, physical systems, and virtual machines.		X
12.14	Identify for the DR Drill: • Applications and processes • Network-LAN/WAN and firewall (if in scope for Client). • Recovery platforms – Linux, Windows, Unix, etc. • Client in scope recovery equipment • Client owned software license keys • Client Suppliers and vendors. • Data sources requirements. • Dependencies and inter-dependencies. Document Client support recovery teams.		X
12.15	Identify: • Network-LAN/WAN and firewall, if in scope for Ensono. • Ensono in scope recovery equipment. • Ensono managed software license keys. • Suppliers and vendors. • Dependencies and inter-dependencies. Document support recovery teams.	X	
12.16	Update the TRP which are developed per platform and by application (if needed).	X	
12.17	Validate the TRP manual and work with recovery teams to update each section of the manual as required.	X	
12.18	Confirm roles and responsibilities matrix.	X	
12.19	Approve the roles and responsibilities matrix.		X
Disaster Recovery Drill Planning			
12.20	Maintain and validate the preplanning project plan and restoration timeline.	X	

#	Task	Ensono	Client
12.2 1	Maintain the DR Plan: ▪ Define the high-level tasks to complete the maintenance process of the DR Plan. ▪ Review and update the following: o Contact Information for all Client participants and stakeholders involved in the DR Drill (name, phone, address, etc.). o System configuration o Production processes o Restore procedures o Communication and activation o Compile updates to Technical Services Recovery Plan manual	X	
12.2 2	Participate in planning sessions.		X
12.2 3	Identify testing participants.		X
12.2 4	Develop testing objectives.		X
12.2 5	Develop testing scripts.		X
Execution (of DR Drill or Disaster failover)			
12.2 6	Provide DR environment as indicated in the SOW (if applicable). Recovery can be in a reduced scope environment if Client specifies.	X	
12.2 7	Coordinate DR meetings and ensure the DR Drill Plan and updates are communicated to Client and published.	X	
12.2 8	Coordinate the execution of the DR Drill.	X	

#	Task	Ensono	Client

12.2 9	Prepare for system startup. DR will be performed off a copy to preserve resiliency.
	
	• For Mainframe Environments:
	
	    o For recovery from tape environments (Physical & Virtual Tape): zOS and data are recovered via full volume backups residing on physical or virtual tape.
	
	    o DASD Replication (Global Mirror or SRDF): A DR Drill for a Client with replicated DASD: snapshot a copy of the DASD and perform the DR Drill off a snapshot so production disk replication is uninterrupted. (Periodic point-in-time copies of the file system are taken using the functionality such as SnapCopy on the mainframe DASD. This copy in conjunction with other replication capabilities are used for isolated testing of disaster recovery procedures.
	
	    o Tape Replication: When conducting a DR Drill for a Client, the tape subsystem is placed into DR mode. DR mode preserves the current state of the Virtual Tape Subsystem to the point-in-time and for the duration of the recovery exercise. Production tape volume replication is uninterrupted.
		X	

12.3 0	Validate that in scope recovered items are available and functioning as expected. Ensono will determine the best method to validate the recovery. Validation is outside of RTO times unless otherwise noted.	X	
12.3 1	Confirm in scope LPARS are available within RTO and RPO as indicated in the TRP.	X	
12.3 2	Monitor activities and record problems, resolutions, and gaps, updating the timeline and providing status and escalation as required to all stakeholders.	X	

12.3 3	Prepare:
	
	    And process third party DR contracts that Ensono has responsibility for.
	
	    Draft Recovery Exercise Report, distribute and conduct post exercise review meetings with recovery teams.
		X	

12.3 4	Prepare and process Client owned third party DR contracts		X
12.3 5	Maintain post-exercise improvement project plan with platform and team representatives on a regular basis to track the resolution of exceptions and improve recovery capabilities for each platform and team.	X	
12.3 6	Discuss the options available to resolve any noted exceptions and update the project plan with the selected actions to be completed.	X	
12.3 7	Approve Ensono's recommended improvements with applicable cost estimates to the Client.		X

#	Task	Ensono	Client
12.38	Request DR Drill date six months in advance.		X
12.39	Schedule recovery tests six months in advance in accordance with Ensono DR Drill calendar and availability. The date must be mutually agreed upon by the parties.	X	
12.40	Provide currently used DR Drill plan for Ensono review and update.		X
12.41	For tape environments, forward recover application data and test applications using application-level backups.		X
12.42	Ensure that application recovery exercise scripts are developed for each process.		X
12.43	Approve recommended change implementation, review DR Plan, communicate changes to the Ensono DR team and formally validate and approve final DR Plan.		X
12.44	Perform system / application testing.		X
12.45	Communicate all system and/or application issues so they can be documented and re-mediated for future tests.		X
12.46	Participate in post DR Drill review.		X
12.47	Provide sign off on DR Drill success or failure.		X
12.48	Identify: • TRP gaps. • Process improvements or enhancements.	X	
12.49	Validate technical (not application): • Recovery processes. • Restore procedures.	X	
12.50	Coordinate the DR Drill and perform the following: Work with Client to determine the exercise date, scope, objectives, and success criteria. Coordinate the exercise planning meetings with Client and support personnel. Execute the DR Drill, monitor activities, and record status updates to distribute to exercise participants and appropriate interested parties. Perform post DR Drill meetings to gather and validate information. Produce final DR Drill report for Client.	X	
	Planning and Execution of DR Technical Validation Drill		

#	Task	Ensono	Client
12.5 1	The planning of a technical validation will be within the Ensono team to review the steps required to recover the environment	X	
12.5 2	Recover the environment to the point where Ensono validates that it can be recovered.	X	
12.5 3	Provide report of DR technical validation drill results.	X	
Post DR Drill Follow-up and Closure			
12.5 4	Schedule, lead and conduct post-DR exercise follow-up meetings with each platform and team representative to document gaps, problems, resolutions, and improvement recommendations.	X	
12.5 5	Attend and contribute to post DR exercise follow-up meetings.		X
12.5 6	Follow-up and work with action item owners to ensure successful remediation of the identified DR lessons learned action items.	X	
12.5 7	Take ownership and track Client owned follow-up action items.		X
12.5 8	Prepare Recovery Exercise Report documenting if recovery objectives were met, actual testing recovery timeframes by application and/or platform, and issues encountered. Distribute to team for review. Final report is deemed accepted by Client if, Client doesn't object within five (5) business days.	X	
12.5 9	Formally close out DR Drill.	X	

Definitions:

- **"DR Drill"** means the activities to validate and test the DR environment which includes the DR Plan, TRP and Client testing activities. A DR Drill will failover a Client's environment to the defined DR site and recover the data and systems. The validated systems are then turned over to the Client for testing or use. The DR Drill will be executed during Ensono standard business hours.

- **"DR Plan"** is the document that outlines the high level plan in a disaster exercise or recovery plan used to recover the data and systems as specified in the SOW. This can be created either by the Client and delivered to Ensono or created by Ensono.

- **"Draft Recovery Exercise Report"** means a report that outline strengths and weaknesses in people, processes, and documentation to ensure the team is well versed in the DR orchestration necessary to meet the Clients recovery objectives.

31

- **"Technical Recovery Plan"** or (**"TRP"**) means the document that covers the step-by-step technical procedure to recover platforms/applications in the event of a disaster.

13. Intentionally Deleted

14. Systems Console Monitoring

#	Task	Ensono	Client
14.1	Provide: • Event/exception driven monitoring and console operations 24x7. • Standard daily ticket report in a mutually agreed upon format. • System maintenance timeline for change management process.	X	
14.2	Perform system recycles (shutdown/IPL procedures).	X	
14.3	Respond to exception notification and perform analysis, recovery processes, and escalation to restore services using Ensono incident management processes.	X	
14.4	Maintain current and/or develop SOP that includes system maintenance (shutdown/IPL initial program load procedures), problem management, escalation procedures, and Client's specific procedures as provided by Client.	X	
14.5	Provide the required information to build the SOP playbook.		X

15. Mainframe z/Linux Management

#	Tasks	Ensono	Client
15.1	Develop, build, and manage the z/Linux configurations, including instances on mainframe resources such as operating systems, network definitions, and file systems as required.	X	
15.2	If z/Linux system requirement documentation is not available to facilitate the original system build, Ensono will create it.	X	
15.3	Maintain z/Linux configurations and central database documentation for Ensono's internal use and inventory management.	X	
15.4	Perform ongoing z/Linux maintenance with definitions, support, performance, reporting, and configuration changes.	X	
15.5	Configure and install z/Linux system-related software and mainframe hardware changes and coordinate installation with third-party vendor software.	X	
15.6	Apply security certificate as appropriate for Systems operation.	X	
15.7	Perform z/VM SSI (Single System Image) design, configuration, and implementation as well as Linux virtual machine placement in cluster.	X	
15.8	Perform virtual machine instantiation, modification, and deletion (as necessary).	X	

#	Tasks	Ensono	Client
15.9	Provide standard Linux patching at agreed upon intervals for all production and non-production systems.	X	
15.10	Perform DR design and recovery as agreed to by client adhering to a set RTO and RPO.	X	
15.11	Apply security certificate as appropriate for applications.		X
15.12	Perform and document all z/Linux application builds with scripts, procedures, executable modules, source members, and run-recovery documentation.		X
15.13	Provide: • Resolution for application issues causing performance problems • Required information to build the standard operating procedures if such procedures are not available • Necessary network access to support Ensono standard automated event management activities • Network documentation for existing and provisioned network components • Manage file transfer process and script setup, configuration, testing, and implementation with third-party partners • Forecast updates for annual growth and added and/or removed business applications		X

16. Batch Job Scheduling

#	Task	Ensono	Client

16. 1	Perform code promotions in the production environment:
	
	• Code Promotions will be implemented during normal business hours and on weekends as mutually agreed to in advance.
	• Ensono will use some or all of the following tools for this service:
	  ○ Scheduling:
	    - BMC Control-M
	    - Broadcom Automic
	    - IBM Workload Scheduler
	    - Broadcom CA7
	  ○ Code Promotions:
	    - Endevor
	    - ChangeMan
		X	

#	Task	Ensono	Client
16. 2	The following tasks are involved in setup, configuration, and operations for batch job scheduling: • Ensure job schedules and configurations are functioning correctly. • Remove obsolete jobs and schedules. • Configure job schedules. • Adjust jobs and schedules as needed. • Review and validate recovery procedures. • Automate processes as applicable.	X	
16. 3	Tasks involving scheduler maintenance, such as duplicating application scheduling environments or duplicating complete scheduling environments for a new or copied application.	Optional	
16. 4	Configure the scheduling tool to automatically validate the successful completion of each job in accordance with Client's specifications.	X	
16. 5	Provide standard automatic daily ticket from existing/standard tools report in Envision (not manual).	X	
16. 6	Client is responsible for production for items not included within the scheduling tool.		X
16. 7	Provide: • Process design for job flow modifications, current/accurate Runbook documentation, escalation documentation. • Documented schedule/job playbooks documentation, contact, and escalation process.		X
16. 8	Validate schedule configuration(s), test results, documentation, and user access to manage scheduling.	X	

17. Batch Monitoring

#	Task	Ensono	Client
17. 1	Monitor production batch processing schedules for ABENDS and batch delays; respond and escalation to exceptions based on Client process documentation.	X	
17. 2	Monitor production batch processing schedules for ad-hoc and batch delays; respond and escalation to exceptions based on Client process documentation.	X	
17. 3	Client is responsible for production schedule to the extent the schedule is not included within the scheduling tool.		X

#	Task	Ensono	Client
17.4	Provide: • Process design for job flow modifications, current/accurate Runbook documentation, escalation documentation. • Documented schedule/job playbooks documentation, contact, and escalation process.		X
17.5	Validate schedule configuration(s), test results, provide documentation and user access to manage scheduling.		X
17.6	Resolve application batch processing job failures.		X

18. Mainframe Standard Security Services

#	Task	Ensono	Client
18.1	Provide: • Security support, review settings, and modify mainframe security environments to meet Ensono's minimum requirements retaining highest security level administration. • Client with scoped authority to administer the security for Client users and resources.		X
18.2	Plan, coordinate, install, define, support, configure settings, monitor, and maintain the employed security software and associated databases along with related components, processes, exits, and catalogs. Apply security software maintenance as applicable.		X
18.3	Perform Ensono user ID provisioning and access administration for base and add-on security tools (i.e., RACF/AFC2/TSS).		X
18.4	Manage Ensono security policies for systems and resources, security administration users, and access control with user ID administration and security policies.		X
18.5	Capture and record security event logging records.		X
18.6	Respond to audit questions relative to the system security of the mainframe security environments and assist with security improvement initiatives to meet audit requirements.		X
18.7	Make recommendations regarding industry standard practices.	X	
18.8	Review system security reports daily for critical security events.		X
18.9	Administer and manage all non-RACF Client software and external security processes.		X
18.10	Perform Client user ID provisioning and access administration for base and add-on security tools.		X

#	Task	Ensono	Client
18.11	Provide: ▪ Security requirements for software and settings. ▪ A list of application-specific security environments and procedures for channeling security problems to Client's security team. ▪ A list of sensitive resources Ensono support personnel should not access and any other security requirements.		X
18.12	Work with Ensono to standardize security exits.		X
18.13	Notify Ensono of any security abnormalities or breaches.		X
18.14	Document access requirements by Ensono users to Client resources.		X
18.15	8Gain approval from Federal agency for any changes to compliance requirements (for example, using offshore resources for IRS data).		X

19. Intentionally Deleted

20. Encryption Key Management Service

For Hardware Encryption of Data-at-Rest on Tape and Disk Media

#	Task	Ensono	Client
20.1	Plan, coordinate, install, define, support, configure settings, and maintain out-of-band (non-resident device encryption) hardware encryption key management software. Ensono's standard offerings for the Hardware Encryption Key Management Service are: ▪ SKLM (IBM) ▪ OKM (Oracle Key Manager)	X	
20.2	For key management systems housed in Ensono data centers: ▪ Implement and manage the key management access process to physically secure servers, appliances, and other key management equipment. ▪ Conduct periodic reviews and re-authorization of individual access to the physical location where key management infrastructure is stored.	X	
20.3	For key management systems housed in the Client's data center: ▪ Manage processes around the physical security of encryption key materials housed in Client's data centers.		X
20.4	For key management systems housed in a third-party data center: ▪ If Ensono holds the contract with the third-party provider, work with provider to manage processes around the physical security of encryption key materials housed in the data center.	X	

#	Task	Ensono	Client
20.5	For key management systems housed in a third-party data center: ▪ If Client holds the contract with the third-party provider, work with provider to manage any required processes around the physical security of encryption key materials housed in the data center.		X
20.6	Provide: ▪ Requirements for encrypting data-at-rest. ▪ Requirements for management of encryption keys (e.g., re-keying requirements). ▪ Requirements for disaster recovery support. ▪ Requirements for ensuring encryption key management software and hardware is on vendor supported levels. ▪ Documentation regarding existing key management components, processes, procedures, and practices utilized by Client for daily operations and disaster recovery. ▪ Documentation regarding the ongoing support required for encrypted media components.		X
20.7	Administer encryption keys using vendor-supplied solutions for providing out-of-band (non-resident device encryption) hardware encryption key management.	X	
20.8	Respond to Client and Client third-party audits regarding Encryption Key Management processes/procedures.	X	
20.9	Make recommendations regarding industry standard and Ensono standard practices.	X	
20.10	Support of encryption key management that differs from Ensono's processes.		X
20.11	Support of encryption key management that differs from Ensono's processes (e.g., Ensono will support FDRCrypt).	Option	
20.12	Encrypt software application components Cryptographic Processor feature and ICSF *KDS files.	X	
20.13	Support any software-related keys that provide encryption of Client applications.		X
20.14	Install Cryptographic Processor feature on the processor.	X	
20.15	Act as custodian of all master key parts and performance of key rotation activities in production and Disaster Recovery environments that relate to changing the master keys on the Cryptographic Processor feature.		X
20.16	Perform ancillary activities necessary to support master key setup/maintenance (i.e., allocation of new *KDS files and related system PARMLIB updates).	X	
20.17	Populate *KDS files if Ensono is responsible for the maintenance of digital certificates and the digital certificates need to be stored in the ICSF *KDS files.	X	

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#	Task	Ensono	Client
20.18	Populate *KDS files if Client has applications that use keys that must be stored in the ICSF *KDS files.		X

21. Mainframe Multi-Factor Authentication (MFA) for Ensono Associates

MFA consists of tasks in support of providing Ensono associates access to a Client's Mainframe using multi-factor authentication.

#	Task	Ensono	Client
21.1	Conduct zMFA design review to understand the following: • Data is being protected. • Timeframes for backups/snapshots. • Network requirements and constraints. • Allowed users.	X	X
21.2	Ensono associates will authenticate with an OKTA pin instead of SMS.	X	
21.3	Install and configure IBM MFA for z/OS or use Client's licensed version of IBM MFA for z/OS.	X	
21.4	Enable ICSF on Client LPAR(s).	X	
21.5	Review firewall rules with Client.	X	X
21.6	Configure network access from z/OS to Ensono OKTA (Client OKTA will not be used).	X	
21.7	Configure Ensono OKTA.	X	
21.8	Configure UserID provisioning to use MFA in RACF, TSS, or ACF2 if the Client has purchased Standard or Premium Security Services.	X	
21.9	Configure UserID provisioning to use MFA in RACF, TSS, or ACF2 if the Client has not purchased Standard or Premium Security Services.		X
21.10	Identify LPAR(s) that are required for MFA protection.		X
21.11	Identify UserIDs that require MFA.	X	
21.12	Test MFA for selected subset of UserIDs.	X	
21.13	Approve test from selected subset of UserIDs.		X
21.14	Provide ongoing management of Ensono UserIDs in both ESM and OKTA if Client has purchased Standard and Premium Security Services.	X	

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#	Task	Ensono	Client
21.15	Provide ongoing management of Ensono UserIDs in both ESM and OKTA if Client has not purchased Standard and Premium Security Services. Client will request required updates to Ensono's OKTA via a Service Request ticket.		X

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Exhibit C

Service Description - Ensono Service Management Service

Ensono Service Management Service (the "**Service**") is based on an ITIL framework designed to manage activities and interactions between Ensono and Client to ensure Ensono services are delivered, aligned, and sustained to manage Client's business requirements. The Service is divided into seven (7) service categories.

Service Categories

The Service consists of the following service categories:

1. Service Delivery Management Resource
2. Ensono Service Desk
3. Incident Management
4. Change Management
5. Service Request Management
6. ITIL Process Management
7. Ensono Standard Reports

Tasks and Role and Responsibilities

Each service category details the tasks and roles and responsibilities to be performed by Ensono and/or Client.

1.   Service Delivery Management Resource

A designated Client Success Manager and Technical Delivery Manager will provide support of the solution in accordance with the tasks set forth in the tables below.

Client Success Manager ("CSM")

The CSM will be the primary business contact for support of Ensono's services. The CSM will be responsible for business coordination including oversight of service levels, lifecycle process, governance, and service changes. The CSM will coordinate critical governance meetings including monthly and quarterly business reviews as outlined in the governance overview which is available upon request.

Table #1

Standard Tasks & Responsibilities	Ensono	Client
Governance – align and coordinate with Client on Monthly and Quarterly business reviews. Review Ensono and Client business updates and align execution of operational functions to business strategies.	X	

Standard Tasks & Responsibilities	Ensono	Client
Continual Service Improvement – proactive service improvement, development of formal Service improvement plans, follow-up on feedback, complaints and Client satisfaction surveys.	X	
Insight Management – Coordination and presentation of Ensono Insights on a monthly basis designed to improve efficiency, improve stability, or reduce cost	X	

Technical Delivery Manager ("TDM")

The TDM will act as an advocate for the Client and work with Ensono support teams, providing oversight and guidance in support of the Client's environment and operational requirements. The TDM will coordinate technical resources, when necessary, identify and communicate opportunities for operational, technical, and process improvements, oversee updates and integrity of operational documentation and advocate on behalf of the Client to provide ITSM Governance per Ensono's standard operating practices.

Table #2

Standard Tasks & Responsibilities	Ensono	Client
Service Level Management – Management of Ensono services and the SLA; conduct monthly service review meetings, provide executive summary on performance, availability, recoverability, and insights. Serve as the point of escalation for operational issues.	X	
Demand Management – Highlight potential service issues, understand Client requirements, and manage business moves, adds, and changes.	X	X
Lifecycle Management – Hardware/Software maintenance, subscription renewals, communication, and management of end-of-life products and services.	X	X
Risk Management – Documentation and communication of operational risks, coordination of disaster recovery activities, and management of security services.	X	X

2. Ensono Service Desk

The Client is responsible for first-level service desk operation related to Service Requests, Change Requests, and Incidents (as defined below) for the Client environment ("**Client Service Desk**") including the initial triage of calls or electronic requests from Client end-users until it is determined that an Incident or Service Request is related to an Ensono Service. Upon determination, Client or Ensono Service Desk will open a ticket with the Ensono Service Desk using either the Ensono Envision Portal and/or via the Client's service management platform, integrated with Ensono via the Envision Connect Service. *

Ensono will perform second-level service desk functions. Ensono Service Desk will review the ticket and will route it to the applicable Ensono resolution team. ***Note: The Client is required to open a Priority 1 Incident ticket by calling the Ensono Service Desk.***

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Ensono Service Desk manages Client transferred tickets in the following two categories during Ensono's Primary Hours of Operation:

- **"Incident"** means an unplanned interruption to an Ensono service or reduction in the quality of an Ensono service. Failure of a configuration item that has not yet affected an Ensono service is also an Incident (e.g., failure of one disk from a mirror set).
- **"Service Request"** means a formal request from a user for something to be provided or modified (e.g., a request for information or advice, a password reset).
- **"Change Request"** means a formal request from a user to modify the Service (e.g., move, add, change, or delete).

Envision Connect Service is an API-supported integration platform that requires Client to configure connectivity of the Client's existing service management platform to Ensono's Service Now platform. The Envision Connect Service is a separate service offering and is further described in the Service Description – Envision Connect Service.

Primary Hours of Operations for Incidents, Service Requests and Change Requests are outlined in the table below. Ensono's Primary Hours of Operation are Client Region / Time Zone Dependent (GMT or CST) means 07:00 to 18:00 Monday to Friday excluding regional or national holidays within Ensono's support regions.

Table #3

Incident Requests – Ensono "Primary Hours of Operation"	
Incident Priority Level	**Availability of Ensono Resolver Teams**
1	24X7X365
2	24X7X365
3	Ensono Regional Business Hours
4	Ensono Regional Business Hours
Service Requests and Change Requests – Primary Hours of Operation	
Service Requests	Ensono Regional Business Hours
Change Requests	Ensono Regional Business Hours

3. Incident Management

Incident Management Process

The Ensono Service Desk will perform the following tasks during the Primary Hours of Operation set forth in Table #3, upon receipt of a Client transferred Incident in accordance with Ensono's standard operating practices:

- Acknowledge the receipt of the Incident.
- Assign the Incident to an analyst on the appropriate Ensono resolver team.

- Commence efforts to address the Incident.
- Ensono will work on an open Incident until one of the following occurs:
  - The underlying problem has been resolved.
  - Both the Client and Ensono agree to close it.
  - The Incident is determined by Ensono to be a Client responsibility that is outside the scope of the service provided by Ensono and will be transferred back to the Client for resolution.

Incident Priority Level Assignments

The Client Service Desk will assign a Priority Level to each Incident opened with the Ensono Service Desk. Priority Level assignments must align to the Incident Priority Level Definition set forth in in Table #4. In the event a Priority Level is not assigned by the Client service desk, the Ensono Service Desk will assign the Priority Level based upon the information provided by the Client in accordance with the definitions set forth in Table #4. One ticket is opened per Incident.

Incident Priority Level Definitions

Incident Priority Level definitions set forth in the table below and will be used for assigning a Priority Level to an Incident as the basis for measuring SLA metrics.

Table #4

Incident Priority Level Definition	"Priority Level"
Critical Business Impact • The Incident causes complete loss of application(s) supported in the production service environment. • The business operation is mission-critical to Client's business. • Work cannot reasonably continue. • The situation is an emergency.	P 1
Significant Service Impact • Incidents that result in a severe loss of application(s) supported by the production and non-production services environment. • No acceptable workaround is available, however, business operations in the services environment can continue to be conducted in a restricted fashion.	P 2
Some Degradation of Service • The problem causes minor loss of the application(s) supported by the production and non-production services environment. • The impact is an inconvenience, which may require a workaround to restore functionality.	P 3
Minimal Degradation of Service • The problem causes no loss of use of the applications supported by the production and non-production services environment.	P 4

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Incident Priority Level Definition	"Priority Level"
▪ The result is a minor error, incorrect behavior, or a documentation error that does not impede the operation of the system within the application's environment.	

Incident Priority Level Adjustments

Client may, during the Incident process, downgrade or upgrade an Incident Priority Level in accordance with the Incident Priority Level Definitions as follows:

- Downgrades of Priority Levels: The Incident no longer warrants the Priority Level currently assigned based on its current impact on the Client's environment, the Priority Level will be downgraded to the Priority Level that most appropriately reflects its current impact.
- Upgrade of Priority Levels: The Incident warrants the assignment of a higher Priority Level than that currently assigned based on the current impact on the Client environment, the Priority Level will be upgraded to the Priority Level that most appropriately reflects its current impact as referenced in above table.

4. Change Management: Ensono Governance Standard and Policy

Ensono Governance Standard

- Ensono is required to follow Ensono's change procedure for any changes made to a Client's environment. Batch-related scheduling updates, report distribution, and ad hoc job runs are considered exceptions and the Client change ticket is deemed Client's approval to proceed with the requested change (see Table 6 for additional details).
- Ensono is audited for the ticket support provided to Ensono Clients; therefore, Ensono must ensure that the Ensono process is followed and adhered to. Ensono is responsible for carefully planning and documenting each step required to implement, test, and potentially back out a change made to a Client's system. Ensono will provide ticket reporting for Change Mangement as set forth in Section 7 (Ensono Standard Reports) and will provide additional documentation related to Client tickets to assist with a Client's audit upon reasonable request.
- Ensono will not log into Client ITSM systems and create Client tickets; however, Ensono will work with the Client to provide applicable information needed to meet Client's internal requirements.

Policy

The objective of the Ensono Change Policy is to enforce strict Change Management Controls and disciplines across the Ensono's operations organization that shall:

- Govern the Ensono process that will be used for managing all Change Management.
- **Risk Reduction** - Control and management of authorized change minimize the risk of unexpected results due to the introduction of a change to all environments.
- **Optimize Efficiencies** - Keep a record of changes, facilitate continuous process improvement of operational processes in the environment, and expedite resolution of issues related to a change.

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- **Service Quality Improvement** - Proper impact assessment of changes helps to prevent unscheduled outages, thereby increasing service quality.

Policy Scope

Change Management is a multi-tiered process that manages the planning, approval, scheduling, implementation, and key performance metrics of changes to recorded configuration items ("CIs"), including hardware and software products, applications, networks, and facilities. CIs can be categorized as either an asset or non-asset.

CI items added to the production and non-production environments are also within scope. Change Management is applicable to, but not limited to, the following:

Table 5

Examples: In Scope Change Management Use Cases
- Local and remote hardware   - Local and remote systems software   - Applications   - Telecommunication networks   - Local and remote environments (facilities and infrastructure)   - Ensono Core Infrastructure including but not limited to network, compute, mainframe, and storage.

Batch-related scheduling updates, report distribution, and ad hoc job runs are considered exceptions and the Client change ticket is deemed Client's approval to proceed with the requested change. Examples include:

Table 6

Examples: Out of Scope - Change Management Use Cases
Batch processing schedule change, including: - Hold Job   - Cancel Job   - Restart Job
Password resets, user adds/deletes/modifications
User account locks/unlocks
Adding new users to an application or other system access.
Server reboots where no other changes are being applied.
Ensono Internal Development and Lab environments
Proof of Concept (POC) environments

A demonstration whose purpose is to verify that certain concepts or theories have the potential for real-world application. POC is therefore a prototype designed to determine feasibility but does not represent deliverables.

5. Service Request Management

The Ensono Service Desk will perform the tasks during the Ensono Operational Support Hours set forth in Table #3 upon receipt of a Client transferred Service Request.

Request Type Examples:

Table #7

"Request Type"	Examples
1. Service Request Execution of pre-defined and qualified work activities that do not require a Change Request.	User Admin Request — User account administration to domain, Linux, mainframe — Password reset — Client contact administration Backup or restore request Request for information or comments — Database queries (select query only not include alter/update/delete — Request for technical information such as audit requests, log files, configuration data, reporting or monitoring data Request for technical consultation — Scheduled technical bridge call with Client and an Ensono workgroup

Service Request Priority Levels

All Service Request will be worked as a Priority 3

Service Request Methods

Ensono will execute a Service Request executing the following method.

Table #8

"Execution Method"	Definition
First-in-First Out	• Ensono standard method of execution when the Service Request appears in the Ensono queue, and will be automatically marked with Priority 3, and will be executed within the Stated SLA Requirements.

6. ITIL Process Management

Monitoring Management

Ensono identifies multi-platform health issues across the data center to provide event and alert analysis to ensure continuity of Client business service performance which includes the following tasks.

Table #9

Task	Ensono	Client
Monitoring scope – Ensono managed platforms, configuration items, environmental conditions, software, security, and activities (utilization/performance).	X	
Provide standard service-specific reports via the Ensono Envision Portal.	X	
Event monitoring management exceptions will be governed and supported by the Ensono Incident Management Process and problem management practices.	X	

Service Level Management

The following service level objectives will be coordinated during the onboarding process and maintained and refreshed as part of the Ensono services lifecycle.

Table #10

Task	Ensono	Client
Review SLAs, standard monitoring, and reporting.	X	
Establish, support and improve communication between Ensono and Client.	X	X
Perform SLA reviews quarterly with Client and explore opportunities for service improvement.	X	

Performance Reporting

Ensono reviews and monitors performance and advises Client on existing performance and demand which includes the following tasks.

Table #11

Task	Ensono	Client
Ensono defined policies and procedures are documented and adhered to for all performance managed systems.	X	
Generate the data needed for the Client-specific performance reports only for pre-defined systems based on agreed-upon scope.	X	
Provide performance management reports to Client via self-service on the Ensono Envision Portal.	X	X
Provide high-level quarterly overview of Client's performance.	X	X

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Task	Ensono	Client
Maintain and understand performance and utilization of each IT component under Ensono management.	X	
Utilize reactive performance management whenever necessary for successful performance.	X	

Change Management

Change Management services consist of the planning, implementation, and record-keeping of all changes for a configuration item ("CI").

Table #12

Task	Ensono	Client
Responsible for managing the Ensono CAB.	X	
Collect information to integrate Client into Ensono's technical change management process.	X	
Validate that the Client can accommodate e-mail notification.	X	
Ensono-defined policies and procedures are documented and adhered to for all change requests.	X	
Provide schedule of predefined system downtimes for routine maintenance and other work.	X	
Provide change management reports to Client via self-service on the Ensono Envision Portal	X	
Perform change management within the Ensono service management platform.	X	
Schedule and execute changes in accordance with the Ensono change windows.	X	
Present changes for final scheduling during the Ensono internal CAB.	X	
Execute changes for Client.	X	
Escalates emergency changes.	X	
Upon change completion, Ensono will perform and execute a standard post-implementation review.	X	
Identify Client associates authorized to request, view and authorized to approve changes.		X
Identify list of Client associates to be trained in the use of Ensono's change management process and ticketing system.		X
Provide monthly standard KPI reporting via the Ensono Envision Portal.	X	
Provide continual review and process improvement recommendations on Ensono internal policy.	X	

Configuration Management

Configuration Management services consist of the management of CIs within the configuration management database ("CMDB").

Table #13

Task	Ensono	Client
Ensono defined policies and procedures are documented and adhered to for all CIs.	X	
Create initial CI records.	X	
Maintain accuracy of data for all Ensono-managed CI records.	X	
Document and maintain all Ensono-managed CIs in the CMDB.	X	
Standard CI attributes will be maintained by the CI contact group based on Ensono attribute definitions.	X	
Maintain standard CI relationship for Ensono-managed CIs.	X	
Maintain colocation CIs within the CMDB.	X	
Provide standard CI reporting to Client via self-service on the Ensono Envision Portal.	X	
Audit CIs per internal audit schedule and procedure.	X	
Perform configuration management within Ensono's service management platform.	X	

Asset Management

Asset management services provide for the inventory and management of all equipment set forth in the Hardware/Software Schedule or other mutually agreed to technical documentation. The asset information management system will serve as a record of the asset list.

Table #14

Task	Ensono	Client
Ensono defined policies and procedures are documented and adhered to for all assets.	X	
Creates initial asset record.	X	
Maintain accuracy of the asset data for all Ensono-managed assets.	X	
Collect and store Ensono-owned assets for redeployment.	X	
Dispose of Ensono-owned assets.	X	
Dispose of Client owned assets.		X
Provide standard asset reporting to Client via self-service on the Ensono Envision Portal.	X	
Audit assets residing in an Ensono data center per Ensono audit schedule and procedure.	X	
Document and maintain Ensono-owned asset maintenance contracts.	X	

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Problem Management

Problem Management services include the activities required to diagnose the root cause of Incidents and determine actions for resolution.

Table #15

Task	Ensono	Client
Ensono defined policies and procedures are documented and adhered to for all problems.	X	
Oversee the problem management process.	X	
Perform a root cause analysis on all valid Priority 1 Incidents and upon mutual agreement for all other Incidents.	X	
Deliver documented root cause analysis ("**RCA**") summaries (problem reviews) to Client for review.	X	
Provide standard KPI reporting to Client via self-service on the Ensono Envision Portal.	X	
Perform problem management within the Ensono service management platform.	X	
Maintain workarounds and known errors in a known error database.	X	
Deliver documented RCA summaries (problem reviews) to Client for review.	X	

7. Ensono Standard Reports

Ensono will provide the reports for a particular service area and at the frequency set forth in the table below upon request and/or via the Ensono Envision Portal. Ensono will provide Client access and training to obtain reports via the self-service option on the Ensono Envision Portal.

Table #16

Service Area	Report	Is Sample Report Available?	Frequency	Where is the Report Stored?
Mainframe	Performance Planning	Yes	Monthly	Envision Portal
	DASD Utilization	Yes	Monthly	Envision Portal
	Self Service - Ticketing Data Supports reporting for: Console Monitoring/Job Schedule Monitoring/Application Change Control & Schedule Configuration	Yes	On Demand	Envision Portal
	Backup	Yes	Monthly	Envision Portal
Server	CPU Usage (%)	Yes	On Demand	Envision Portal

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Service Area	Report	Is Sample Report Available?	Frequency	Where is the Report Stored?
	Physical Memory Usage %	Yes	On Demand	Envision Portal
	Disk Usage %	Yes	On Demand	Envision Portal
	Data Protection	Yes	On Demand	Envision Portal
Security	CA-ACF2/CA-TSS/IBM RACF	No	Daily	Mainframe
ITIL Governance	Change Management	Yes	Monthly	Envision Portal
	Problem Management	Yes	Monthly	Envision Portal
	Asset Management	Yes	Daily	Envision Portal
	Weekly Operations Report	Yes	Weekly	By Request
	DR Drill Execution Report	Yes	By Request	By Request
	Quarterly Executive Review	Yes	Quarterly	Envision Portal
	Daily Service Review	Yes	Daily	By Request
	Voice of the Client	Yes	Bi-Annual	By Request
	Monthly Operations Review	Yes	Monthly	Envision Portal
	Service Level Reporting	Yes	Monthly	Envision Portal
	Annual Service Review	Yes	Annual	By Request
	Project Status	Yes	By Request	By Request

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Exhibit D

Service Level Agreement (SLA)

1. General

This SLA (together with Attachment A; Definitions) and SLA Schedule 1 [*SLA Metrics*], sets forth the agreement between the parties relating to Service Levels and Key Performance Indicators, against which Ensono's performance of the Services will be measured. Ensono will perform each Service for which a Service Level or Key Performance Indicator has been established in accordance with the terms of this SLA.

2. Overview of Service Level Credit Process for Service Level Failures

If a Service Level Failure occurs in any calendar month during the Service Term (subject to the terms of this SLA), Ensono shall provide a Service Level Credit to Client in accordance with this section. Ensono may earn back an applicable Service Level Credit in accordance with section 3 [*Invoicing and Earnback Credits*]. Ensono's performance with respect to each Critical Service Level will be measured in accordance with the reports described in section 4 [*Reporting*].

Calculation. For each Service Level Failure, Ensono will provide to Client a Service Level Credit computed in accordance with the following formula:

Service Level Credit = A x B

Where:

A = the Critical Service Level Credit Weighting Allocation percentage specified in SLA Schedule 1 [*SLA Metrics*] for the applicable Critical Service Level; and

B = the At-Risk Amount for the month in which the Service Level Failure occurs.

For example, assume that Ensono fails to meet the Minimum Service Level with respect to "P1 Incident Response" (i.e., a Service Level Failure). Assume further that Ensono's Monthly Charges for Services for the month in which the Service Level Failure occurred were $100,000 and the At-Risk Amount is 10% or $10,000. Assume further the Critical Service Level Credit Weighting Allocation for P1 Incident Response is 5%. The Service Level Credit due to Client for such Service Level Failure would be $500 and is computed as follows:

A = 5% (the Critical Service Level Credit Weighting Allocation percentage),

multiplied by

B = $10,000 ($100,000 Monthly Fee X 10% At Risk Amount),

equals $500.

Limitations. The total amount of all Service Level Credits credited to Client for Service Level Failures in any single calendar month shall not exceed the At-Risk Amount for such month. If more than one Service Level Failure occurs in a single month, the sum of the corresponding Service Level Credits will be credited to Client as set forth in this SLA, provided however, that if a single incident results in the failure of Ensono to meet more than one Critical Service Level, then Ensono will issue the largest single Service Level Credit amount and Client shall not be eligible for additional Service Level Credits for the other related failures.

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3. Invoicing & Earnback Credits

In the event of a Service Level Failure, if Ensono fails to achieve an Earnback Credit during the Earnback Period, Ensono will apply the applicable Service Level Credit to the Client's account no later than two months following the applicable Earnback Period. In the event Client earns a Service Level Credit in the final month of the Term, Ensono shall pay to Client the amount of such Service Level Credit on the same as the Client's payment terms pursuant to the Agreement after the effective date of the termination or expiration of the SOW. Notwithstanding the foregoing, in no event shall Client be entitled to a Service Level Credit if the applicable SOW is terminated or expires prior to the conclusion of the applicable Earnback Period.

4. Reporting

Ensono will issue a report on Ensono's standard template within 20 business days of the end of each month, that details Ensono's monthly performance with respect to each Critical Service Level Metric for each month during the last twelve (12) months (or rolling average when in the first twelve ((12)) months of the applicable Service Term). Ensono shall, on the calculation of such, provide Client details of any (i) Service Level Credits to which Client is entitled and (ii) the total monetary value of all Service Level Credits earned by Client during the prior month and during the last twelve (12) months.

5. Establishing Critical Service level Metrics and Minimum Service Levels

FOR HOSTED SOLUTIONS:
The Critical Service Level Metrics and the corresponding Minimum Service Levels are identified in SLA Schedule 1 [*SLA Metrics*].

FOR RIM SOLUTIONS:
The Critical Service Level Metrics are identified in SLA Schedule 1 [*SLA Metrics*] and the Minimum Service Levels for each Critical Service Level Metric will be established in one of the following ways:

- During the benchmark measurement period that follows, Ensono will establish Service Level Objectives (SLOs) listed in SLA Schedule 1 [*SLA Metrics*], to promote service and quality targets to the Client and its end users. SLO metrics are not subject to Service Level Credits or any other remedies.

- Where at least nine (9) months of verifiable performance measurements exist for a particular Service, the Minimum Service Level for such Critical Service Level will be equal to the average performance achieved during the two (2) lowest months of such nine (9) month period or the SLO targets whichever is lower; or

- Where there are fewer than nine (9) months of verifiable service measurements for a particular Service, Ensono will measure and, on a monthly basis, document its actual performance of such Services for nine (9) consecutive months. The Minimum Service Level will be equal to the average of the documented monthly performance achieved during the two (2) lowest months of such nine (9) month period or the SLO targets whichever is lower.

6. Low Volumes

For Performance Standards that do not require perfect performance by Ensono (i.e., not 100%) and for which the volume of the applicable tasks, metrics, events, or incidents measured has low volumes of data points in any given Measurement Window (i.e., CPIs and KPIs where the number of measured data points occurring in a given Measurement Window is so low that a single failure would result in an SLR default), Ensono shall have the right to eliminate one (1) data point from the calculation of compliance with each such SLA or KPI, as applicable. For example, if the Service Level Target is 95% for a Performance Standard, there would need to be at least 20 measured tasks to allow Service Provider to meet the Performance Standard in a Measurement Window in which it has one failure to meet, achieve, or perform the tasks measured as part of such Performance Standard (e.g., 1 miss in 20 = 95% success rate). Thus, if the volume of tasks, metrics, events, or incidents is less than 20, one miss shall be compliant with the Performance Standard.

7. Reclassification of Service Level and Modification of Allocation of Pool Percentages

Reclassification of Service Levels: Client may reclassify any Service Level (e.g., from KPI to Critical Service Level or from Critical Service Level to KPI) upon 30 days' notice and no more than twice a year and no sooner than six months after the Effective Date, by sending written notice to Ensono.

Modifications of Allocation of Pool Percentages: When reclassifying a Critical Service Level, Client's notice shall include an appropriately modified Critical Service Level Credit Weighting Allocation for the affected Critical Service Level(s), provided however, that the total Allocation of Pool Percentages shall not exceed the amount noted in the Service Level Credit Weighting Allocation definition.

8. Performance Exceptions

In no event will Ensono be responsible, or will Client be eligible to receive any Service Level Credits, in the extent Ensono's failure to achieve a Critical Service Level is due to an Excluded Event. Client will not be eligible to accrue any otherwise applicable Service Level Credits if Client is in material breach of the Agreement at the time the Service Level Failure occurred, nor will Client be entitled to receive any otherwise available Service Level Credits if Client is in material breach of the Agreement at the time the Service Level Credit is to be issued, provided that the Service Level Credit will be issued once such material breach has been cured, if such breach is cured prior to termination of the SOW.

This Service Level Agreement provides Client's sole and exclusive remedies for any failure to meet the Critical Service Levels. These remedies are as follows:
- In the event of a Service Level Failure that does not constitute a Service Level Termination Event, as Client's sole and exclusive remedy for such Service Level Failure, Client shall be entitled to receive the applicable Service Level Credits, subject to the terms of this SLA; and
- In the event of a Service Level Termination Event, Client shall be entitled to pursue the remedies described in [Service Level Termination Events].
- To clarify, such sole and exclusive remedies shall not apply to breaches of unrelated obligations under the Agreement such as infringement, confidentiality, etc.

9. Service Level Termination Events

In the event of a Service Level Termination Event, Client may either (i) accept the applicable Service Level Credits, in which event such Service Level Credits shall represent Client's sole and exclusive remedy for the applicable Service Level Termination Event or (ii) decline the applicable Service Level Credits by delivering Ensono written notice not later than thirty (30) days following Client's receipt of the invoice containing the Service Level Credits indicating that Client intends to decline the applicable Service Level Credits and terminate, in whole, this SOW. If Client declines the applicable Service Level Credits and elects to terminate this SOW, Ensono agrees to reimburse Client for its reasonable and documented out-of-pocket costs to transition the Services in-house or to another service provider not to exceed the initial installation costs for the terminated Services paid by Client to Ensono, subject to the terms of the Agreement.

10. Improvement Plans for Critical Service Level

If Ensono fails to meet any Minimum Service Level(s), Ensono will promptly provide to Client a written plan, subject to Client review, for improving Ensono's performance to meet or exceed the applicable Minimum Service Level(s). Following the implementation of such plan, Ensono will provide to Client monthly status reports containing progress updates until such time as Ensono's performance is in compliance with the applicable Minimum Service Level.

11. Commencement of Obligations

The obligations set forth herein shall commence upon the date one (1) month following the Service Commencement Date, unless otherwise specified in SLA Schedule 1 [*SLA Metrics*]. The dates used in the Measure Begins column in SLA Schedule 1 [*SLA Metrics*] represent when Ensono will be responsible for Service Level Credits for any Service Level Failures, subject to the terms of this SLA.

12. Stabilization Periods

During the term of the Services, Ensono or the Client may make changes to hardware or software that affect Ensono's ability to meet the Critical Service Levels. When such changes arise, a performance ramp period shall apply (a "**Stabilization Period**"). The Client shall work with Ensono reasonably and in good faith to agree upon:
- The length of the Stabilization Period, and
- Any related changes to the previously established service level metrics.

By way of example but not limitation, the following changes may require a Stabilization Period:
- Major release upgrades to the software in the applicable environment;
- The addition of third-party software to the applicable environment;
- The addition of additional modules to the applicable environment; or
- Major functionality changes (e.g., enabling AWS auto-scaling functionality to the applicable environment).

For any change not listed here, the parties shall work in good faith to agree upon whether a Stabilization Period is required and as to the length of such period.

SLA ATTACHMENT A: DEFINITIONS

Capitalized terms used in the Agreement but not otherwise defined shall take the following meanings:

"At Risk Amount"   means, for any calendar month during the Term, ten percent (10%) of the Monthly Charges, which is the aggregate amount that Ensono will have at risk for Critical Service Level Credits as set forth in SLA Schedule 1 [*SLA Metrics*].

"Critical Service Level"   means a measurable aspect of performance specified in SLA Schedule 1 [*SLA Metrics*] with respect to certain Services for which a Service Level Credit may be payable (i.e., "Availability"). Critical Service Levels shall only apply to production environments.

"Critical Service Level Metric"   means the numerical measurement for a Critical Service Level (i.e., 99.9%).

"Critical Service Level Credit Weighting Allocation"   means the percentage specified in SLA Schedule 1 [*SLA Metrics*] as **"Allocation"** with respect to each Critical Service Level. The sum of the Critical Service Level Credit Weighting Allocation percentages will equal one hundred percent (100%) and each Critical Service Level Credit Weighting Allocation will be subject to the limitations described in SLA Schedule 1 [*SLA Metrics*].

"Earnback Credit"   means a credit to be applied to Ensono to offset any otherwise applicable Service Level Credit if, during the Earnback Period, Ensono achieves a Critical Service Level Metric equal to or greater than the applicable Minimum Service Level(s) in effect during the month in which the related Service Level Failure occurred.

"Earnback Period"   means the one (1) month period immediately following a month in which a Service Level Failure occurs.

"Ensono Outages"   means the cumulative total unavailability for the Service Environment, as reported by Priority 1 Incident tickets, during the Reporting Window within the Measurement Window of the Service Environment, excluding Client outages and planned scheduled maintenance.

"Excluded Event"   means any event that adversely impacts the Service that is caused by (a) the acts or omissions of Client, its employees, customers, contractors or agents; (b) the failure or malfunction of equipment, applications or systems not owned or controlled by Ensono or its designees; (c) force majeure events; (d) Scheduled or emergency maintenance; (e) any suspension of Service pursuant to the Agreement; (f) the unavailability of required Client personnel, including as a result of any failure to provide Ensono with accurate, current contact information (e.g., for approval of emergency control procedures); (g) failure of Client to authorize Ensono to perform recommended changes or maintenance; (h) configurations, equipment or services not supported by Ensono; (i) a hardware failure provided that Ensono has compiled with its maintenance responsibilities as described in the Agreement; (j) a software bug that does not have a patch; (k) hardware and software for which maintenance is no longer available and Client has been advised of such and agrees to run the

hardware or software, or for which only extended support is available; (l) hardware and software provided by or required by Client without a maintenance agreement or (m) the occurrence of any agreed, risks, or single points of failure.

"Service Commencement Date"	means the date on which the relevant service starts pursuant to the relevant SSTCs.
"Key Performance Indicator" or "KPI"	means a performance metric that is not eligible for a Service Level Failure or Service Level Credit but will still be measured and reported by Ensono.
"Minimum Service Level"	means the level of performance specified in SLA Schedule 1 [*SLA Metrics*] as "Minimum" for each Service for which a Critical Service Level Metric is established.
"Measurement Window"	means the periodic evaluation and reporting frequency identified for each individual Critical Service Level as specified in SLA Schedule 1 [*SLA Metrics*].
"Resolution Time"	means the difference between the time the first Ensono resolver group(s) receives accepts a ticket for resolution and the time when Ensono resolves the incident or provides a work-around for the incident.
"Response Time"	means the difference between the time an incident ticket is submitted and the time a member of the Ensono first resolver group(s) accepts a ticket for resolution.
"Service Environment"	means a collection of Ensono Services or Service components that are designed to perform in accordance with this SOW. Service Environment may include (without limitation) data center facilities, compute hardware and software (Operating System, Database, Middleware), network and storage used to provide Services.
"Service Environment Availability"	means the material features and functions of the Service are available in accordance with this SOW. The percentage availability calculation formula measured over the Measurement Window, is as follows (where "A" = Service Environment Availability, "T" = Total Available Service Time (minutes), and "O_{EA}" = Ensono Outages): $A = (T - O_{EA}) \times 100\% / T$.
"Service Level Credit"	means a credit in an amount calculated in accordance with paragraph 2 [*Overview of Service Level Credit Process for Service Level Failures*] which will be credited to Client by Ensono in connection with Service Level Failures.
"Service Level Failure"	means, with respect to Critical Service Levels, each month during the Term that Ensono performs a Service at a level below the applicable Minimum Service Level for reasons other than an Excluded Event.
"Service Level Objective"	means performance metrics designed to be used during a transition or benchmarking process, which are not eligible for Service Level Credits.
"Service Level Termination Event"	means if Ensono suffers four (4) Service Level Failures due to a failure to achieve the applicable Minimum Service Level for the same Critical Service Level with the same root cause in any rolling six (6) month period.

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"Performance Standard"	means the target threshold of Ensono's performance of the Service as detailed in any CSL and/or KPI.
"Total Available Service Time"	means, the total time in the relevant Reporting Window (i.e.: Monthly Reporting Window: 43,800 minutes of Total Available Service Time = 30.41 calendar days X 24 hours per day X 60 minutes per day).

Exhibit D SLA Schedule

SLA Scheduel 1 RIM Services Critical Service Level Metric and Key Performance Indicator Summary

Ensono Recuring Service(s):		ALL	
Monthly Service Fee	$	135,205	
At Risk Amount:	$	13,521	

Total Ensono's At Risk Amount - Expressed in term of percentage of the Monthly Charge	10%
SLA Weighting Summary (Must Equal 100%)	100%

Ensono Service(s)	Critical Service Levels	Measure Begins	Ensono RIM/RIM Hosted Minimum Service Levels	Measurement Window	Reporting Window	Critical Service Level Credit Weighting Allocation	Min Critical Service Level Weighting Allocation	Max Critical Service Level Weighting Allocation	Monthly At Risk $ Amount	Service Level Objectives*
Mainframe Service Environment	Solution Availability	End of BM	9 months of data or Benchmark	7x24	Monthly	25.00%			$ 3,380.13	99.50%
Mainframe Service Environment	Mainframe Transaction Response Time	End of BM	9 months of data or Benchmark	7x24	Monthly	20.00%			$ 2,704.10	95% <=TBD
Mainframe Service Environment	Mainframe Critical Batch Processing	End of BM	9 months of data or Benchmark	7x24	Monthly	15.00%	5%	25%	$ 2,028.08	95.00%
Incident Management	P1 Incident Response	Go Live + 1 month	90% <=15 min	7x24	Monthly	15 00%			$ 2,028.08	N/A
Incident Management	P1 Incident Resolution	Go Live + 1 month	90% <=4 Hours	7x24	Monthly	15 00%			$ 2,028.08	N/A
Backup & Retention	Back Up Success	End of BM	9 months of data or Benchmark	Per Run Book	Monthly	10.00%			$ 1,352.05	95.00%
					Check—>	100.0%			$ 13,521	
					Target—>	100.0%				

Key Performance Indicators To Be Used In Monthly Business Reviews

Ensono Service(s)	Critical Service Levels	Measure Begins	KPI Target Metric	Measurement Window	Reporting Window
Incident Management	P2 Incident Resolution	Go Live + 1 month	90% <= 8 Hours	7x24	Monthly
Incident Management	P2 Incident Response	Go Live + 1 month	90% <= 60 Min	7x24	Monthly
Incident Management	P3 Incident Resolution	Go Live + 1 month	90% <= 8 Business Hours	7x24	Monthly
Incident Management	P3 Incident Response	Go Live + 1 month	90% <= 4 Business Hours	7x24	Monthly
Incident Management	P4 Incident Resolution	Go Live + 1 month	90% <=24 Business Hours	7x24	Monthly
Incident Management	P4 Incident Response	Go Live + 1 month	90% <=4 Business Hours	7x24	Monthly
Client Satisfaction	CSAT	Go Live + 1 month	Baseline Per Client	All Day/Every Day	Bi Annual
Change Management	Change Request Success Rate	Go Live + 1 month	90%	7X24	Monthly
Mainframe	CICS Region Availability	Go Live + 1 month	99.50%	7x24	Monthly
Mainframe	DB2 Availability	Go Live + 1 month	99.50%	7x24	Monthly
Mainframe	Non-Prod LPAR Availability	Go Live + 1 month	90.00%	7x24	Monthly
Mainframe	Prod LPAR Availability	Go Live + 1 month	99.50%	7x24	Monthly
Mainframe	MQ Availability	Go Live + 1 month	99.50%	7x24	Monthly
Cross Functional	Root Cause Analysis (RCA) Report	Go Live + 1 month	90%	Monthly	Monthly

SLA Schedule 1 Mainframe Hosted Services Critical Service Level Metric and Key Performance Indicator Summary

Ensono Recuring Service(s):	ALL	
Monthly Service Fee	$	344,433
At Risk Amount:	$	34,443

Total Ensono's At Risk Amount - Expressed in term of percentage of the Monthly Charge	10%
SLA Weighting Summary (Must Equal 100%)	100%

Ensono Service(s)	Critical Service Levels	Measure Begins	Ensono Hosted Minimum Service Level	Measurement Window	Reporting Window	Critical Service Level Credit Weighting Allocation	Min Critical Service Level Weighting Allocation	Max Critical Service Level Weighting Allocation	Monthly At Risk $ Amount
Mainframe Service Environment	Solution Availability	Go Live + 1 month	99.50%	7x24	Monthly	25.00%			$ 8,610.83
Mainframe Service Environment	Mainframe Transaction Response Time	Go Live + 1 month	95% <=TBD	7x24	Monthly	20.00%			$ 6,888.66
Mainframe Service Environment	Mainframe Critical Batch Processing	Go Live + 1 month	95.00%	7x24	Monthly	15.00%	5%	25%	$ 5,166.50
Incident Management	P1 Incident Response	Go Live + 1 month	90% <=15 min	7x24	Monthly	15.00%			$ 5,166.50
Incident Management	P1 Incident Resolution	Go Live + 1 month	90% <=4 Hours	7x24	Monthly	15.00%			$ 5,166.50
Backup & Retention	Back Up Success	Go Live + 1 month	95.00%	7x24	Monthly	10.00%			$ 3,444.33
					Check---->	100.0%			$ 34,443
					Target--->	100.0%			

Key Performance Indicators To Be Used In Monthly Business Reviews					
Ensono Service(s)	Critical Service Levels	Measure Begins	KPI Target Metric	Measurement Window	Reporting Window
Incident Management	P2 Incident Resolution	Go Live + 1 month	90% <= 8 Hours	7x24	Monthly
Incident Management	P2 Incident Response	Go Live + 1 month	90% <= 60 Min	7x24	Monthly
Incident Management	P3 Incident Resolution	Go Live + 1 month	90% <= 8 Business Hours	7x24	Monthly
Incident Management	P3 Incident Response	Go Live + 1 month	90% <= 4 Business Hours	7x24	Monthly
Incident Management	P4 Incident Resolution	Go Live + 1 month	90% <=24 Business Hours	7x24	Monthly
Incident Management	P4 Incident Response	Go Live + 1 month	90% <=4 Business Hours	7x24	Monthly
Client Satisfaction	CSAT	Go Live + 1 month	Baseline Per Client	All Day/Every Day	Bi Annual
Change Management	Change Request Success Rate	Go Live + 1 month	90%	7X24	Monthly
Mainframe	CICS Region Availability	Go Live + 1 month	99.50%	7x24	Monthly
Mainframe	DB2 Availability	Go Live + 1 month	99.50%	7x24	Monthly
Mainframe	Non-Prod LPAR Availability	Go Live + 1 month	90.00%	7x24	Monthly
Mainframe	Prod LPAR Availability	Go Live + 1 month	99.50%	7x24	Monthly
Mainframe	MQ Availability	Go Live + 1 month	99.50%	7x24	Monthly
Cross Functional	Root Cause Analysis (RCA) Report	Go Live + 1 month	90%	Monthly	Monthly

Critical Service Levels

Reference Number	ITIL Service Area	Ensono Service(s)	Service Level Description	SLA Calculation	Minimum Service Level (Opening)	Specific Exclusions	Reporting Interval	What Tool Is Used To Collect The Data
CSL 1.4	Solution Availability	Mainframe Service Environment	Service Environment shall take the meaning in the SLA.	Availability means the provision of the relevant Services in accordance with the requirements of the Agreement. The % availability calculation formula is as follows, measured over the Reporting Period, as follows (where "A" = Availability, "T" = Total Available Service Time (minutes), OEA = "Ensono Outages"): A = (T – OEA) x 100% / T	99.50%	In terms of measuring the relevant service metrics as part of any responsiveness/restore/availability based Critical Service Level Metrics, the 'clock' will be suspended whilst: a) waiting for the Client; or b) waiting for a Client subcontractor (e.g. an application developer) in respect of a particular activity that the Parties have agreed is the responsibility of the Client.	Monthly	P1 Ticket(s) and RMF Type 70 CPU Interval records
CSL 1.5	Mainframe Transaction Response Time	Mainframe Service Environment	Provide response time for the selected mainframe Client transactions in defined production CICS environments within agreed upon response time. Meet response time Service Level Target XX% of the time for the following transactions: Critical Mainframe Client Transactions: (See Table xx for Client list of specific transactions) Response time Service Level Target is x.xx seconds The parties will agree upon up to 20 selected transactions (typically in different CICS regions) for this SLA and will agree upon the timeline and methodology of agreeing such transactions within 30 days of contract Effective Date. NOTE: selected transactions must be production, not query, not conversational, and reliably and consistanly performing so that SLA reporting can be fairly reported upon. This list of Critical Mainframe Client Transactions will be measured by the average of each transactions' response times. The Service Level Target will be set as the average + 2 standard deviations. This SLA requires 6 months of future data to be collected in order to set the target. CICS Transaction Records and use of SAS and MXG are required to calculate this metric. This will be revisited at the 12 month period to reset if needed based on peak months.	Percent met = Total number of Critical Mainframe Client Transactions that met their response time Service Level Targets divided by the total number of Critical Mainframe Client Transactions that occurred for the month.	95% <=TBD	For Dedicated mainframe environments, missed Service Level Targets caused by capacity constraints are not included in the "target not met" category.	Monthly	CICS Transaction Records and use SAS and MSG
CSL 1.6	Mainframe Critical Batch Processing	Mainframe Service Environment	Ensure on-time completion of defined production batch processes according to agreed upon service schedule. The parties will agree upon up to 20 defined batch processes for this SLA and agree upon the timeline and methodology of agreeing such transactions within 30 Days of contract Effective Date. NOTE: selected batch processes for this SLA must have consistent performance with predictable run times so that SLA generation can be fairly reported upon.	# of defined batch processes - # completed late divided by # defined batch processes	95.00%		Monthly	Must have defined end of cycle batch jobs that are used to identify when cycle completes each day
CSL 1.7	P1 Incident Response	Incident Management	Response Time shall take the meaning in the SLA Exhibit.	Total number of incidents responded within specified time / total number of incidents.	90% <=15 min	Tickets promoted from lower priority levels Duplicate tickets Tickets opened in error Test tickets Tickets that are informational only or internal to Ensono Insufficient or incorrect information provided (e.g. LPAR, user, team, etc.) Tickets that are the Client issue to resolve	Monthly	CASD / Service Now
CSL 1.8	P1 Incident Resolution	Incident Management	Resolution Time shall take the meaning in the SLA Exhibit.	Total number of incidents resolved within specified time / total number of incidents.	90% <=4 Hours	Tickets promoted from lower priority levels Duplicate tickets Tickets opened in error Test tickets Tickets that are informational only or internal to Ensono Insufficient or incorrect information provided (e.g. LPAR, user, team, etc.) Tickets that are the Client issue to resolve	Monthly	CASD / Service Now
CSL 1.9	Backup & Retention	Back Up Success	Successful completion of scheduled backups of all in-scope production servers as set out in the run book or standard operating procedures. The backup jobs will be captured and reported on by the acceptable return code for successful completion.	Measurement: Backups successfully completed on schedule / total backups.	95.00%	Mutually agreed upon backup schedule and definitions. Ensono Private Cloud Servcies excluded unless option is purchased.	Monthly	OpcCenter and/or MF RunStats US backups

Key Performance Indicators

Reference Number	ITIL Service Area	Classification	Service Level Description	SLA Calculation	Service Level Objective	Specific Exclusions	Reporting Interval	What Tool Is Used To Collect The Data
KPI 1.0	Incident Management	P2 Incident Resolution	Resolution Time shall take the meaning in the SLA.	Total number of incidents resolved within specified time / total number of incidents.	90% <= 8 Hours	Tickets promoted from lower priority levels. Duplicate tickets. Tickets opened in error. Test tickets. Tickets that are informational only or internal to Ensono. Insufficient or incorrect information provided (e.g. LPAR, user, team, etc.). Tickets that are the Client issue to resolve.	Monthly	Ensono elected
KPI 1.1	Incident Management	P2 Incident Response	Response Time shall take the meaning in the SLA.	Total number of incidents responded within specified time / total number of incidents.	90% <= 60 Min	Tickets promoted from lower priority levels. Duplicate tickets. Tickets opened in error. Test tickets. Tickets that are informational only or internal to Ensono. Insufficient or incorrect information provided (e.g. LPAR, user, team, etc.). Tickets that are the Client issue to resolve.	Monthly	Ensono elected
KPI 1.2	Incident Management	P3 Incident Resolution	Resolution Time shall take the meaning in the SLA.	Total number of incidents resolved within specified time / total number of incidents.	90% <= 8 Business Hours	Tickets promoted from lower priority levels. Duplicate tickets. Tickets opened in error. Test tickets. Tickets that are informational only or internal to Ensono. Insufficient or incorrect information provided (e.g. LPAR, user, team, etc.). Tickets that are the Client issue to resolve.	Monthly	Ensono elected
KPI 1.3	Incident Management	P3 Incident Response	Response Time shall take the meaning in the SLA.	Total number of incidents responded within specified time / total number of incidents.	90% <= 4 Business Hours	Tickets promoted from lower priority levels. Duplicate tickets. Tickets opened in error. Test tickets. Tickets that are informational only or internal to Ensono. Insufficient or incorrect information provided (e.g. LPAR, user, team, etc.). Tickets that are the Client issue to resolve.	Monthly	Ensono elected
KPI 1.4	Incident Management	P4 Incident Resolution	Resolution Time shall take the meaning in the SLA.	Total number of incidents resolved within specified time / total number of incidents.	90% <=24 Business Hours	Tickets promoted from lower priority levels. Duplicate tickets. Tickets opened in error. Test tickets. Tickets that are informational only or internal to Ensono. Insufficient or incorrect information provided (e.g. LPAR, user, team, etc.). Tickets that are the Client issue to resolve.	Monthly	Ensono elected
KPI 1.5	Incident Management	P4 Incident Response	Response Time shall take the meaning in the SLA.	Total number of incidents responded within specified time / total number of incidents.	90% <=4 Business Hours	Tickets promoted from lower priority levels. Duplicate tickets. Tickets opened in error. Test tickets. Tickets that are informational only or internal to Ensono. Insufficient or incorrect information provided (e.g. LPAR, user, team, etc.). Tickets that are the Client issue to resolve.	Monthly	Ensono elected
KPI 1.6	Client Satisfaction	CSAT	The CSAT survey measures how satisfied a client is with their partnership with Ensono. The score range is from 0% - 100%.	Based on CSAT scores provided by Client POC(s).	>=8	N/A	Bi-Annual	Ensono elected

KPI 1.7	Mainframe	CICS Region Availability	Production CICS system environment up to the point of demarcation is available for normal service delivery according to the agreed upon Service Schedule.	Availability for the production CICS regions in production LPAR expressed as a percent = (Availability + Approved Downtime) / (Measurement Window x 100)	99.50%	N/A	Monthly	SMF Type 30 Interval Records
KPI 1.8	Mainframe	DB2 Availability	Production DB2 system environment up to the point of demarcation is available for normal service delivery according to the agreed upon Service Schedule.	Availability for the production DB2 regions in production LPAR expressed as a percent = (Availability + Approved Downtime) / (Measurement Window x 100)	99.50%	N/A	Monthly	SMF Type 30 Interval Records
KPI 1.9	Mainframe	Non-Prod LPAR Availability	Non Production LPARS are up to the point of being available for normal service according to the agreed upon Service Schedule.Note, this would not include TEST LPARs since they do not have any fixed scheduled and can be IPL'd anytime without prior notification.	Availability for Non Production mainframe LPARs expressed as a percent = (Availability for the Non production LPARs + Approved Downtime) / (Measurement Window x number of LPARS being measured x 100)	90.00%	Non prod LPARs include both DEV and TEST LPARs and there is no fixed schedule of TEST LPARs to IPL hence outage report is not programmable for TEST LPARs.	Monthly	RMF Type 70 CPU Interval records
KPI 1.10	Mainframe	Prod LPAR Availability	Production LPARS are up to the point of being available for normal service according to the agreed upon Service Schedule.	Availability for production mainframe LPARs expressed as a percent = (Availability for the production LPARs + Approved Downtime) / (Measurement Window x number of LPARS being measured x 100)	99.50%	N/A	Monthly	RMF Type 70 CPU Interval records
KPI 1.11	Mainframe	MQ Availability	Production MQ system environment up to the point of demarcation is available for normal service delivery according to the agreed upon Service Schedule.	Availability for the production Websphere MQ in production LPAR expressed as a percent = (Availability + Approved Downtime) / (Measurement Window x 100)	99.50%	N/A	Monthly	SMF Type 30 Interval Records
KP 1.12	Cross Functional	Root Cause Analysis (RCA) Report	Measurement and analysis of all applicable Sev 1 Incients	Measurement: Number of Sev 1 tickets / Number of RCAs	90%	N/A	Monthly	RCA Template
KPI 1.7	Change Management	Change Request Success Rate	Change requests implemented by Ensono will be closed with a successful status. A successful change is defined as one that completes within the scheduled time frame, doesn't cause an incident and does not require a backout or partial backout.	Measurement for: Total changes closed with a successful code / total changes. Tool / Report for (a): On time Change Service Breaches and Change Management Implementation Report	90%	N/A	Monthly	Ensono elected

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Exhibit E

Charges

Timeline, MRC, and Detailed Charges Schedule

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Date Published:	11 August 2022
Release:	15 November 2021 R.2
Version:	1.0
Ensono Reference:	US N/A
Opportunity ID:	202001-33923

Timeline

BAU Term	60			1	2	3	4	5	6	7	8
Contract Term	61	0	1	2	3	4	5	6	7	8	9
Contract Month		Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23
	Months										
Signing	1	1									
RIM Transition	1		1								
RIM Steady State	2			1	2						
Hosted Migration	3		1	2	3						
SW Upgrade Project	6					1	2	3	4	5	6
Hosted Steady State	58					1	2	3	4	5	6

Detailed Charges Schedule

	Unit of Measure	Baseline Units	Mo Unit Rate	Total MRC	M1	M2	M3	M4	M5	M6	M7	M8	M9
Ongoing MFaaS													
DR													
MaaS - DR (Fixed)	Fixed	1	$ 6,615.38	$ 383,692				$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	6,615
MaaS - DR DASD (Variable)	per GB	36,864	$ 0.17	$ 363,479				$ 6,267	$ 6,267	6,267	$ 6,267	$ 6,267	6,267
MaaS - DR VTS (Variable)	per GB	69,632	$ 0.078	$ 315,015				$ 5,431	$ 5,431	5,431	$ 5,431	$ 5,431	5,431
Prod													
MaaS - Prod (RIM)	Fixed	1	$ 39,554.84	$ 79,110		$ 39,555	39,555						
MaaS - Prod (Hosted)	Fixed	1	$167,704.00	$ 9,726,832				$ 167,704	167,704	167,704	$ 167,704	167,704	167,704
MaaS - Prod VTS (Variable)(RIM)	per GB	69,632	$ 0.078	$ 10,863		$ 5,431	5,431						
MaaS - Prod VTS (Variable) (Hosted)	per GB	139,264	$ 0.078	$ 630,030				$ 10,863	10,863	10,863	$ 10,863	10,863	10,863
MaaS - Prod DASD (Variable)	per GB	15,360	$ 0.31	$ 276,173				$ 4,762	4,762	4,762	$ 4,762	4,762	4,762
MaaS - Prod CPU MSUs (Variable)	per MSUs	75	$ 246.55	$ 1,072,493				$ 18,491	18,491	18,491	$ 18,491	18,491	18,491
MaaS - LPAR	per LPAR	3	$ 19,498.58	$ 3,509,744		$ 58,496	58,496	$ 58,496	58,496	58,496	$ 58,496	58,496	58,496
MaaS - CICS Region	per CICS Region	17	$ 359.67	$ 366,863		$ 6,114	6,114	$ 6,114	6,114	6,114	$ 6,114	6,114	6,114
MaaS - zLinux	per Guest	10	$ 588.56	$ 353,136		$ 5,886	5,886	$ 5,886	5,886	5,886	$ 5,886	5,886	5,886
MaaS - Batch Processing/Scheduling	per 10k jobs	7	$ 4,868.77	$ 1,976,721				$ 34,081	34,081	34,081	$ 34,081	34,081	34,081
MaaS - Database (DB2+ADABAS)	per Database	12	$ 1,643.61	$ 1,183,399		$ 19,723	19,723	$ 19,723	19,723	19,723	$ 19,723	19,723	19,723
Total Charges				$ 20,247,550	$ -	$ -	$ 135,205	135,205	$ 344,433	344,433	344,433	$ 344,433	344,433 $ 344,433

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Date Published:	11 August 2022
Release:	15 November 2021 R.2
Version:	1.0
Ensono Reference:	US N/A
Opportunity ID:	202001-33923

Timeline

BAU Term	60	9	10	11	12	13	14	15	16	17	18	19	20		
Contract Term	61	10	11	12	13	14	15	16	17	18	19	20	21		
Contract Month		Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24		
Signing	Months														
	1														
RIM Transition	1														
RIM Steady State	2														
Hosted Migration	3														
SW Upgrade Project	6														
Hosted Steady State	58	7	8	9	10	11	12	13	14	15	16	17	18		

Detailed Charges Schedule

Ongoing MFaaS	Unit of Measure	Baseline Units	Mo Unit Rate	Total MRC	M10	M11	M12	M13	M14	M15	M16	M17	M18	M19	M20	M21
DR																
MaaS - DR (Fixed)	Fixed	1	$ 6,615.38	$ 383,692	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615
MaaS - DR DASD (Variable)	per GB	36,864	$ 0.17	$ 363,479	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267
MaaS - DR VTS (Variable)	per GB	69,632	$ 0.078	$ 315,015	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431
Prod																
MaaS - Prod (RIM)	Fixed	1	$ 39,554.84	$ 79,110												
MaaS - Prod (Hosted)	Fixed	1	$167,704.00	$ 9,726,832	$167,704	$ 167,704	$ 167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704
MaaS - Prod VTS (Variable)(RIM)	per GB	69,632	$ 0.863	$ 10,863												
MaaS - Prod VTS (Variable) (Hosted)	per GB	139,264	$ 0.078	$ 630,030	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863
MaaS - Prod DASD (Variable)	per GB	15,360	$ 0.31	$ 276,173	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762
MaaS - Prod CPU MSUs (Variable)	per MSUs	75	$ 246.55	$ 1,072,493	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491
MaaS - LPAR	per LPAR	3	$ 19,498.58	$ 3,509,744	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496
MaaS - CICS Region	per CICS Region	17	$ 359.67	$ 366,863	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114
MaaS - zLinux	per Guest	10	$ 588.56	$ 353,136	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886
MaaS - Batch Processing/Scheduling	per 10k jobs	7	$ 4,868.77	$ 1,976,721	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081
MaaS - Database (DB2+ADABAS)	per Database	12	$ 1,643.61	$ 1,183,399	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723
Total Charges				$ 20,247,550	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433

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Timeline

BAU Term		60											
Contract Term		61	21	22	23	24	25	26	27	28	29	30	31	32
Contract Month			22	23	24	25	26	27	28	29	30	31	32	33
			Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25
Signing		Months												
RIM Transition		1												
RIM Steady State		1												
Hosted Migration		2												
SW Upgrade Project		3												
Hosted Steady State		6												
		58	19	20	21	22	23	24	25	26	27	28	29	30

Detailed Charges Schedule

	Unit of Measure	Baseline Units	Mo Unit Rate	Total MRC	M22	M23	M24	M25	M26	M27	M28	M29	M30	M31	M32	M33
Ongoing MFaaS																
DR																
MaaS - DR (Fixed)	Fixed	1	$ 6,615.38	$ 383,692	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615
MaaS - DR DASD (Variable)	per GB	36,864	$ 0.17	$ 363,479	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267
MaaS - DR VTS (Variable)	per GB	69,632	$ 0.078	$ 315,015	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431
Prod																
MaaS - Prod (RIM)	Fixed	1	$ 39,554.84	$ 79,110												
MaaS - Prod (Hosted)	Fixed	1	$167,704.00	$ 9,726,832	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704
MaaS - Prod VTS (Variable)(RIM)	per GB	69,632	$ 0.078	$ 10,863												
MaaS - Prod VTS (Variable) (Hosted)	per GB	139,264	$ 0.078	$ 630,030	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863
MaaS - Prod DASD (Variable)	per GB	15,360	$ 0.31	$ 276,173	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762
MaaS - Prod CPU MSUs (Variable)	per MSUs	75	$ 246.55	$ 1,072,493	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491
MaaS - LPAR	per LPAR	3	$ 19,498.58	$ 3,509,744	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496
MaaS - CICS Region	per CICS Region	17	$ 359.67	$ 366,863	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114
MaaS - zLinux	per Guest	10	$ 588.56	$ 353,136	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886
MaaS - Batch Processing/Scheduling	per 10k jobs	7	$ 4,868.77	$ 1,976,721	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081
MaaS - Database (DB2+ADABAS)	per Database	12	$ 1,643.61	$ 1,183,399	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723
Total Charges				$ 20,247,550	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433

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Timeline

BAU Term				60	33	34	35	36	37	38	39	40	41	42	43	44	
Contract Term				61	34	35	36	37	38	39	40	41	42	43	44	45	
Contract Month					Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26	May-26	
Signing				Months 1													
RIM Transition				1													
RIM Steady State				2													
Hosted Migration				3													
SW Upgrade Project				6													
Hosted Steady State				58	31	32	33	34	35	36	37	38	39	40	41	42

Detailed Charges Schedule

	Unit of Measure	Baseline Units	Mo Unit Rate	Total MRC	M34	M35	M36	M37	M38	M39	M40	M41	M42	M43	M44	M45
Ongoing MFaaS																
DR																
MaaS - DR (Fixed)	Fixed	1	$ 6,615.38	$ 383,692	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615
MaaS - DR DASD (Variable)	per GB	36,864	$ 0.17	$ 363,479	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267
MaaS - DR VTS (Variable)	per GB	69,632	$ 0.078	$ 315,015	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431
Prod																
MaaS - Prod (RIM)	Fixed	1	$ 39,554.84	$ 79,110												
MaaS - Prod (Hosted)	Fixed	1	$167,704.00	$ 9,726,832	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704
MaaS - Prod VTS (Variable)(RIM)	per GB	69,632	$ 0.078	$ 10,863												
MaaS - Prod VTS (Variable) (Hosted)	per GB	139,264	$ 0.078	$ 630,030	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863
MaaS - Prod DASD (Variable)	per GB	15,360	$ 0.31	$ 276,173	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762
MaaS - Prod CPU MSUs (Variable)	per MSUs	75	$ 246.55	$ 1,072,493	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491
MaaS - LPAR	per LPAR	3	$ 19,498.58	$ 3,509,744	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496
MaaS - CICS Region	per CICS Region	17	$ 359.67	$ 366,863	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114
MaaS - zLinux	per Guest	10	$ 588.56	$ 353,136	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886
MaaS - Batch Processing/Scheduling	per 10k jobs	7	$ 4,868.77	$ 1,976,721	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081
MaaS - Database (DB2+ADABAS)	per Database	12	$ 1,643.61	$ 1,183,399	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723
Total Charges				$ 20,247,550	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433

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Timeline

BAU Term		60	45	46	47	48	49	50	51	52	53	54	55	56		
Contract Term		61	46	47	48	49	50	51	52	53	54	55	56	57		
Contract Month			Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27	Apr-27	May-27		
Signing		Months 1														
RIM Transition		1														
RIM Steady State		2														
Hosted Migration		3														
SW Upgrade Project		6														
Hosted Steady State		58	43	44	45	46	47	48	49	50	51	52	53	54		

Detailed Charges Schedule

Ongoing MFaaS	Unit of Measure	Baseline Units	Mo Unit Rate	Total MRC	M46	M47	M48	M49	M50	M51	M52	M53	M54	M55	M56	M57
DR																
MaaS - DR (Fixed)	Fixed	1	$ 6,615.38	$ 383,692	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615	$ 6,615
MaaS - DR DASD (Variable)	per GB	36,864	$ 0.17	$ 363,479	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267	$ 6,267
MaaS - DR VTS (Variable)	per GB	69,632	$ 0.078	$ 315,015	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431	$ 5,431
Prod																
MaaS - Prod (RIM)	Fixed	1	$ 39,554.84	$ 79,110												
MaaS - Prod (Hosted)	Fixed	1	$167,704.00	$ 9,726,832	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704	$167,704
MaaS - Prod VTS (Variable)(RIM)	per GB	69,632	$ 0.078	$ 10,863												
MaaS - Prod VTS (Variable) (Hosted)	per GB	139,264	$ 0.078	$ 630,030	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863	$ 10,863
MaaS - Prod DASD (Variable)	per GB	15,360	$ 0.31	$ 276,173	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762	$ 4,762
MaaS - Prod CPU MSUs (Variable)	per MSUs	75	$ 246.55	$ 1,072,493	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491	$ 18,491
MaaS - LPAR	per LPAR	3	$ 19,498.58	$ 3,509,744	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496	$ 58,496
MaaS - CICS Region	per CICS Region	17	$ 359.67	$ 366,863	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114	$ 6,114
MaaS - zLinux	per Guest	10	$ 588.56	$ 353,136	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886	$ 5,886
MaaS - Batch Processing/Scheduling	per 10k jobs	7	$ 4,868.77	$ 1,976,721	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081	$ 34,081
MaaS - Database (DB2+ADABAS)	per Database	12	$ 1,643.61	$ 1,183,399	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723	$ 19,723
Total Charges				$ 20,247,550	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433	$ 344,433

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Timeline

BAU Term		60	57	58	59	60
Contract Term		61	58	59	60	61
Contract Month			Jun-27	Jul-27	Aug-27	Sep-27
		Months				
Signing		1				
RIM Transition		1				
RIM Steady State		2				
Hosted Migration		3				
SW Upgrade Project		6				
Hosted Steady State		58	55	56	57	58

Detailed Charges Schedule

Ongoing MFaaS	Unit of Measure	Baseline Units	Mo Unit Rate	Total MRC	M58	M59	M60	M61
DR								
MaaS - DR (Fixed)	Fixed	1	$ 6,615.38	$ 383,692	$ 6,615	$ 6,615	$ 6,615	$ 6,615
MaaS - DR DASD (Variable)	per GB	36,864	$ 0.17	$ 363,479	$ 6,267	$ 6,267	$ 6,267	$ 6,267
MaaS - DR VTS (Variable)	per GB	69,632	$ 0.078	$ 315,015	$ 5,431	$ 5,431	$ 5,431	$ 5,431
Prod								
MaaS - Prod (RIM)	Fixed	1	$ 39,554.84	$ 79,110				
MaaS - Prod (Hosted)	Fixed	1	$167,704.00	$ 9,726,832	$ 167,704	$ 167,704	$ 167,704	$ 167,704
MaaS - Prod VTS (Variable)(RIM)	per GB	69,632	$ 0.078	$ 10,863				
MaaS - Prod VTS (Variable) (Hosted)	per GB	139,264	$ 0.078	$ 630,030	$ 10,863	$ 10,863	$ 10,863	$ 10,863
MaaS - Prod DASD (Variable)	per GB	15,360	$ 0.31	$ 276,173	$ 4,762	$ 4,762	$ 4,762	$ 4,762
MaaS - Prod CPU MSUs (Variable)	per MSUs	75	$ 246.55	$ 1,072,493	$ 18,491	$ 18,491	$ 18,491	$ 18,491
MaaS - LPAR	per LPAR	3	$ 19,498.58	$ 3,509,744	$ 58,496	$ 58,496	$ 58,496	$ 58,496
MaaS - CICS Region	per CICS Region	17	$ 359.67	$ 366,863	$ 6,114	$ 6,114	$ 6,114	$ 6,114
MaaS - zLinux	per Guest	10	$ 588.56	$ 353,136	$ 5,886	$ 5,886	$ 5,886	$ 5,886
MaaS - Batch Processing/Scheduling	per 10k jobs	7	$ 4,868.77	$ 1,976,721	$ 34,081	$ 34,081	$ 34,081	$ 34,081
MaaS - Database (DB2+ADABAS)	per Database	12	$ 1,643.61	$ 1,183,399	$ 19,723	$ 19,723	$ 19,723	$ 19,723
Total Charges				$ 20,247,550	$ 344,433	$ 344,433	$ 344,433	$ 344,433

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Recovery of Cost for Services Provided

Recovery of Cost for Services Provided

Contract Month	Calendar Month	ETC	Contract Month	Calendar Month	ETC	Contract Month	Calendar Month	ETC
1.00	Sep-22	$ 4,407,807	13.00	Sep-23	$ 3,540,698	25.00	Sep-24	$ 2,673,588
2.00	Oct-22	$ 4,335,548	14.00	Oct-23	$ 3,468,439	26.00	Oct-24	$ 2,601,329
3.00	Nov-22	$ 4,263,289	15.00	Nov-23	$ 3,396,179	27.00	Nov-24	$ 2,529,070
4.00	Dec-22	$ 4,191,030	16.00	Dec-23	$ 3,323,920	28.00	Dec-24	$ 2,456,811
5.00	Jan-23	$ 4,118,771	17.00	Jan-24	$ 3,251,661	29.00	Jan-25	$ 2,384,552
6.00	Feb-23	$ 4,046,512	18.00	Feb-24	$ 3,179,402	30.00	Feb-25	$ 2,312,292
7.00	Mar-23	$ 3,974,253	19.00	Mar-24	$ 3,107,143	31.00	Mar-25	$ 2,240,033
8.00	Apr-23	$ 3,901,993	20.00	Apr-24	$ 3,034,884	32.00	Apr-25	$ 2,167,774
9.00	May-23	$ 3,829,734	21.00	May-24	$ 2,962,625	33.00	May-25	$ 2,095,515
10.00	Jun-23	$ 3,757,475	22.00	Jun-24	$ 2,890,365	34.00	Jun-25	$ 2,023,256
11.00	Jul-23	$ 3,685,216	23.00	Jul-24	$ 2,818,106	35.00	Jul-25	$ 1,950,997
12.00	Aug-23	$ 3,612,957	24.00	Aug-24	$ 2,745,847	36.00	Aug-25	$ 1,878,738

Contract Month	Calendar Month	ETC	Contract Month	Calendar Month	ETC	Contract Month	Calendar Month	ETC
37.00	Sep-25	$ 1,806,478	49.00	Sep-26	$ 939,369	61.00	Sep-27	$ 72,259
38.00	Oct-25	$ 1,734,219	50.00	Oct-26	$ 867,110			
39.00	Nov-25	$ 1,661,960	51.00	Nov-26	$ 794,851			
40.00	Dec-25	$ 1,589,701	52.00	Dec-26	$ 722,591			
41.00	Jan-26	$ 1,517,442	53.00	Jan-27	$ 650,332			
42.00	Feb-26	$ 1,445,183	54.00	Feb-27	$ 578,073			
43.00	Mar-26	$ 1,372,924	55.00	Mar-27	$ 505,814			
44.00	Apr-26	$ 1,300,664	56.00	Apr-27	$ 433,555			
45.00	May-26	$ 1,228,405	57.00	May-27	$ 361,296			
46.00	Jun-26	$ 1,156,146	58.00	Jun-27	$ 289,037			
47.00	Jul-26	$ 1,083,887	59.00	Jul-27	$ 216,777			
48.00	Aug-26	$ 1,011,628	60.00	Aug-27	$ 144,518			

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