



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

Solicitation

NUMBER
ISCN0003

PAGE
1

ADDRESS CORRESPONDENCE TO ATTENTION OF
KRISTA FERRELL 304-558-2596

VENDOR	RFQ COPY
	TYPE NAME/ADDRESS HERE

SHIP TO	DEPARTMENT OF ADMINISTRATION IS&C - DATA CENTER MANAGER BUILDING 6, ROOM B110 1900 KANAWHA BOULEVARD, EAST CHARLESTON, WV 25305-0135 304-558-5914
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DATE PRINTED

08/27/2012

BID OPENING DATE: 09/04/2012 BID OPENING TIME 1:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		920-20		
ADDENDUM NO. 2 THIS ADDENDUM IS ISSUED TO AMEND THE ORIGINAL SOLICITATION PER THE ATTACHED DOCUMENTATION. DISASTER RECOVERY SERVICES AGREEMENT ***** THIS IS THE END OF RFQ ISCN0003 ***** TOTAL:						

SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO SOLICITATION, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'

SOLICITATION NUMBER: ISCN0003
Addendum Number: 2

The purpose of this addendum is to modify the solicitation identified as ("Solicitation") to reflect the change(s) identified and described below.

Applicable Addendum Category:

- | Modify bid opening date and time
- | Modify specifications of product or service being sought
- | Attachment of vendor questions and responses
- | Attachment of pre-bid sign-in sheet
- | Correction of error
- | Other

Description of Modification to Solicitation:

To provide answers to technical questions submitted in accordance with the provisions of the original Request for Quotation (ISCN0003); to provide revised specifications reflective of the technical question answers; and to extend the bid opening date.

Bid Opening Date is extended to: 09/04/2012
Bid Opening Time remains: 1:30 PM EST

Additional Documentation: Documentation related to this Addendum (if any) has been included herewith as Attachment A and is specifically incorporated herein by reference.

Terms and Conditions:

1. All provisions of the Solicitation and other addenda not modified herein shall remain in full force and effect.
2. Vendor should acknowledge receipt of all addenda issued for this Solicitation by completing an Addendum Acknowledgment, a copy of which is included herewith. Failure to acknowledge addenda may result in bid disqualification. The addendum acknowledgement should be submitted with the bid to expedite document processing.

ATTACHMENT A

TECHNICAL QUESTIONS

ISCN0003

- Q. Will you require connectivity to the Internet? If so, how much bandwidth and what firewall is required?
- A. Yes, with a minimum 10Mb route out of the recovery center. There is no firewall requirement; we just need the vendor to translate a public IP to our network.
- Q. There is a specification for the following in the requirements for a 3845 router:
- NM-1T3/E3 One port T3/E3 network module**
How will this module be used? No T3 was specified.
- A. We will use T1 instead of T3. Disregard the reference to a NM-1T3/E3 network module.
- Q. **VWIC2-2MFT-T1/E1 2 port 2nd Gen Multiflex Trunk Voice/WAN Int. Card-T1/E1**
How will this module be used?
- A. This module will provide our WAN connectivity to the recovery center.
- Q. Question for the MainFrame: Are there any encryption requirements such as Crypto Express3 or tape encryption?
- A. Must support TKLM tape encryption. Must be able to access the ISKLMSRV(encryption server) on our z/OS system at the recovery center. Crypto Express3 is not required at this time.

RFQ ISCN0003 SPECIFICATIONS

1. **PURPOSE AND SCOPE:** The West Virginia Purchasing Division is soliciting bids on behalf of the West Virginia Office of Technology (WVOT) to establish an open-end contract for mainframe and network disaster recovery services. The services will include the use of an alternate processing facility / recovery center, both for testing purposes and in the event of an Agency-declared disaster. WVOT (the Agency) provides essential IT services, including mainframe and network/backbone support, to State agencies. Disaster recovery services are critical to that mission.

2. AGENCY'S CURRENT ENVIRONMENT

2.1 BACKUP PROCEDURES: Agency and system backup tapes are stored off-site. In the event of a disaster recovery test or declared disaster, the Agency will be responsible for transporting the tapes to the recovery center. The Agency does not, at this time, contemplate writing data directly to the recovery center.

2.2 HARDWARE / SOFTWARE

2.2.1 HARDWARE

Quantity	Machine/Product	Product Description
1	2098-V02	<p>IBM enterprise server configured with 3 processors and 24 GB of memory. (Two processors are CP with 797 MIPS; one processor is an IFL with 366 MIPS.) Contains PR/SM feature, 3 LPARS, and an IFL:</p> <p><u>LPAR1 (z/OS production LPAR # 1);</u></p> <p><u>LPAR2 (z/OS production LPAR # 2);</u></p> <p><u>LPAR3 (z/OS test LPAR # 3);</u></p> <p><u>IFL (z/VM IFL with Linux).</u></p>
1	2105-800	<p>IBM enterprise storage server configured with 6TB of usable storage. The device supports the following types of full-volume formatted storage: 3390-9 and 3390-3 (enterprise); and 3390-9 and 3390-3 (open systems – Linux).</p>

1	3584-L23	IBM TS3500 Tape Library capable of supporting IBM 3592 extended-data tape cartridges
6	3592-E05	IBM TS1120 Tape Drives
1	3957-V06	IBM TS7740 Virtualization Engine
1	3957-VEA	IBM TS7720 Virtualization Engine Server
2	OSA Express 1000 Base-T	Total of 4 ports.
1	OSA Express GbE	Total of 2 ports
2	OSA Express 10 GbE	Total of 4 ports

2.2.2 SOFTWARE

Partition 1

z/OS V1.11 operating system (in transition to V1.13)

CICS R3.2

DB2 V9 (in transition to V10)

Numerous ISV products

Partition 2

z/OS V1.11 operating system (in transition to V1.13)

CICS R3.2

CA-Datacom products

Partition 3 (IFL)

z/VM (Version 6.1) operating system

Linux SUSE 9, 10, 11

Oracle 9i, 10g, 11g

3. TECHNICAL REQUIREMENTS AT RECOVERY CENTER

The following equipment and capacity, or equal, shall be available to the Agency at the recovery center for scheduled testing, and immediately upon Agency-declaration of a disaster.

<u>Quantity</u>	<u>Machine/Product</u>	<u>Product Description</u>
1	IBM z-Series Enterprise Server	Capable of at least 797 MIPS utilizing, at a minimum, 2 CP processors, 1 IFL, 24GB of memory; partitioned using PR/SM into two LPARs; with a dynamic storage area of up to 8000 KB (for use on CICS). <u>LPAR1 (z/OS production LPAR)</u> <u>LPAR2 (VM LPAR)</u>
1	Enterprise Storage Server	Configured with 6TB of usable storage; capable of supporting both 3390-9 and 3390-3 types of full-volume storage; and capable of performing, at a minimum, 3500 I/Os per second.
1	IBM 3584-L23	TS3500 Tape Library, capable of supporting IBM 3592 extended-data tape cartridges
6	IBM 3592-E05	IBM TS1120 Tape Drives
200	IBM 3592 I/O slots	Slots for extended-data tape cartridges
6	PC Workstations	For use as operator consoles and TN3270 sessions
1	OSA Express GbE SX	Total of 2 ports.

2	OSA Express 1000 Base-T	Total of 4 ports.
2	OSA Express 10 GbE SR	Total of 4 ports.
1	T1	The State of WV will be responsible for providing the line and any necessary expenses involving T1 connections at the vendor recovery center. The T1 connection will terminate at a customer-supplied router located at the recovery center. (Also see Section 4, item 8.)
1	Line	Analog Line for Dial-In to Router
1	Modem	V.92 for router connectivity
1	CISCO 3845	Router with the following features: 3845 w/AC PWR,2GE,1SFP,4NME,4HWIC, IP Base, 64F/256D
1	S384AISK9-12418	CISCO 3845 ADVANCED IP SERVICES
2	NM-1GE	1 Port GE Network Module
1	VWIC2-2MFT-T1/E1	2-Port 2nd Gen Multiflex Trunk Voice/WAN Int. Card - T1/E1
2	GLC-T=	1000BASE-T SFP
1	CISCO GbE Switch with the following features: WS-C3560G-24TS-S Catalyst 3560 24 10/100/1000T + 4 SFP Standard Image; 2 GLC-SX-MM= GE SFP, LC connector SX transceivers; fiber cables as required to connect the switch to the OSA ports on the recovery enterprise server.	
1	CISCO SMARTNET 24x7x4	for above equipment

4. GENERAL SPECIFICATIONS

- 4.1 The Vendor shall make an alternate processing facility / disaster recovery center available to the Agency for use in scheduled disaster recovery testing and, immediately, in the event of an Agency-declared disaster. Requirements are identified in the following subsections.
- 4.2 Recovery services in support of the Agency shall be concentrated at a single recovery center. The recovery center shall be located no further than 500 miles from the customer's site, which is located at 1900 Kanawha Boulevard East, Charleston, WV 25305. Considering the imperatives of prompt system restoration, and the uncertainties of post-disaster transportation, the Agency deems 500 miles to be the maximum distance its recovery team can travel to reach the recovery center and still have adequate time to rebuild its system.
- 4.3 The Vendor shall maintain technical compatibility with the Agency as the Agency upgrades hardware, software, and network configurations during the life of the contract resulting from this RFQ. The Agency will notify the Vendor of such upgrades, and the Vendor shall work with the Agency to update the contract accordingly.
- 4.4 At no additional cost, the Agency shall have access to, and use of, the vendor's recovery center, and equipment configuration (as specified in Section 4 of this RFQ), for up to 80 hours each year, in order to test its disaster procedures. The Agency anticipates performing one inclusive test each calendar year, but it reserves the right to perform multiple tests. In either case, the total test-time will not exceed 80 hours a year.
- 4.5 The Agency will consult with the vendor in scheduling test time. The Vendor shall provide the Agency with a scheduled block of test time within 30 days of Agency request. The actual test shall start no less than 60 days thereafter, in order for the Agency to have time to prepare properly. The Agency's testing shall include, but not be limited to: loading and testing the Agency's mainframe operating systems, restoration of the State's backbone network, restoration of critical State applications and databases, batch processing, and communications testing.
- 4.6 Immediately upon the conclusion of each of the agency's tests and actual disaster recovery events, the vendor shall perform a minimum initialization of the Direct Access Storage Device (DASD) volumes that were used by the Agency. If the agency requires a more thorough erasure of its data from DASD, the Agency will be responsible for performing the task, and will perform it after each test (within the 60 hour window) or immediately upon the conclusion of any actual disaster recovery event.

- 4.7 The Vendor shall provide technical support personnel, including systems programmers and network engineers, to assist the Agency in the planning of tests, and during events at the recovery facility. The same support shall be available to the Agency 24/7 during tests and customer-declared disasters.
- 4.8 The Agency will ship a router to the vendor after award of bid. The Vendor shall install the router, house it in a secure cabinet, and ensure that it remains fully operational at all times. At the time of a scheduled disaster recovery test or declared disaster, the Vendor shall connect the Agency's router to the vendor's router. The Vendor shall, upon Agency request, provide the exact cabinet location of the router.
- 4.9 The recovery center shall feature uninterruptible power supply (UPS) units, batteries, diesel generators, redundant transformers, redundant chillers/air conditioners, smoke and water detectors, fire suppression systems, 24-hour guard service, and closed circuit TV monitoring.
- 4.10 The Vendor shall provide the Agency with office facilities during testing and disasters. The facilities shall be located at the recovery center and shall include at least 600 square feet of office space, chairs, work surfaces, terminals connected to the recovery CPU, at least six (6) telephones connected to long-distance service, a printer, and Internet access.
- 4.11 The Vendor shall have at least three (3) years of experience in assisting clients in recovering IBM mainframe-based applications at its recovery center(s).
- 4.12 The Vendor shall provide an overview of the its proposed recovery center. The overview shall include at least a written description of the facility, and should include photographs of the facility; driving directions to the facility from the Agency's site at 1900 Kanawha Boulevard East, Charleston, WV; driving directions to the facility from nearby airports; and a map(s) indicating the location of the facility, recommended routes, and nearby lodging.

5. PRE-TEST SPECIFICATIONS

- 5.1 At least two weeks prior to the start of disaster recovery tests, the Vendor shall provide the Agency with the names, phone numbers, electronic mail (e-mail) addresses, and hours of availability, of individuals who will be assisting the Agency, remotely, in preparation for the test, and at the recovery center during the test. The Vendor shall also indicate who will be available to provide similar assistance to the Agency, at the recovery site, during hours outside of prime shift (8:00 a.m.- 5:00 p.m.) and shall provide similar contact information for those individuals.

- 5.2 **MODEM TEST** Approximately 12 hours prior to a scheduled disaster recovery test, the Vendor shall work with the Agency's networking staff to facilitate an end-to-end mini-test to ensure connectivity between the Agency's modem and the recovery center's modem and router. After successful connectivity to the disaster recovery center's modem and router, the Agency will remotely configure the T1 interface of the router located at the recovery center.
- 5.3 **T-1 TEST** At the start of the disaster recovery test, the Agency and the Vendor shall work together to establish connectivity between the Agency's data center and the Vendor's router. During the entire testing period, the Vendor shall provide modem connectivity into the router located at the recovery center.
- 5.4 After the conclusion of the disaster recovery test, the Vendor shall save the Agency's router settings. The Vendor shall load the configuration during the Agency's next mini-test, disaster recovery test, or Agency-declared disaster.

6. **BID EVALUATION PAGE**

- 6.1 The Vendor should complete the attached bid evaluation page and include it with the bid response.
- 6.2 The Monthly Subscription Cost shall be based on the requirements identified in Sections 3 and 4 of this RFQ.
- 6.3 The Comprehensive Disaster Declaration Fee shall include all charges associated with the Agency declaring a disaster. For bid preparation purposes, the Vendor shall assume that the Agency will declare one disaster during the initial 12 months of the contract.
- 6.4 Recovery Daily Usage Charge shall include all costs for the Agency to use the recovery center in the event of an Agency-declared disaster or Agency test. For bid preparation purposes, the Vendor shall assume that the Agency will need to use the recovery center for three (3) days, during the initial 12 months of the contract, to recover from an Agency-declared disaster.
- 6.5 The Vendor shall provide the cost, if any, of installing and housing the Agency-supplied router referred to in Section 4, item 8, above.
- 6.6 Costs quoted shall be all-inclusive. No separate reimbursement will be made to the Vendor for travel or any other expense.

ISCN0003 Price Sheet

Please enter "0", "zero" or "no charge" for any no-cost line items. Blank field will be interpreted as items not bid.

Item/Service	Unit Price	Unit of Measure	Est. Quantity	Extended Price
Monthly Description Cost		Per Month	12	\$0.00
Comprehensive Disaster Declaration Fee		Each	1	\$0.00
Recovery Daily Usage Charge		Per Day	3	\$0.00
Cost of Installing and Housing Agency Supplied Router		Each	1	\$0.00
Total				\$0.00

Vendor Name

Vendor Address

Vendor Contact

Vendor Phone Number

ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.: 2

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

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

Addendum Numbers Received:

(Check the box next to each addendum received)

- | | |
|---|--|
| <input type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Company

Authorized Signature

Date

NOTE: This addendum acknowledgement should be submitted with the bid to expedite document processing.

Revised 6/8/2012