



REQUEST FOR PROPOSAL

Adding one extra Stacks with LTO-9 to the
Existing SpectraLogic Library

1. INTRODUCTION

1.1 Purpose and Scope

Ministry of Information invites bidders to submit their best offers for Adding **1 x extra Stacks** with **LTO-9** for Existing SpectraLogic Library for the Production Department. The bidders are to offer MOI also the official platform support plan to cover the stacks to allow for any technical inquiries and achieve the minimum response time provided by the manufacturer SpectraLogic for a period of 12 months as well.

1.2 GENERAL TERMS

- All services, Software and hardware needed to complete the required expansion shall be provided by the bidder.
- All installation material or equipment required to complete the project but not mentioned in the RFP, shall be provided by the bidder with no additional cost.
- It's the bidder's responsibility to repair any error, network failure, disconnection or damage at any part of the existed main TV Production Network which may happen during the project execution.
- The minimum of 10 years of experience with a such upgrade, including the system installation, configuration and commissioning is a must for all bidders.
- Bidder must be ISO 9001 certified
- It is required for the bidder to have partnerships with all vendors whom he is proposing a certificate of partnership should be submitted.
- The bidder should have a local support personnel to support the system after the sign off.
- The bidder must submit with his offer a reference list of his previous similar projects.
- The bidder must submit with his offer a step-by-step description about the upgrade workflow will be applied.
- The site survey is mandatory .During the field visit, it is necessary to ascertain what the project needs are the responsibility of the company.
- The Bidder shall include in his proposal a description of the proposed system. This information shall be in the form of drawings, written description of the overall system including details of the purpose, theory and method of operation of various items included, equipment lists, equipment layouts and any other information required to enable the MOI to determine the Bidder's intent in meeting the objectives of the Technical Specifications
- All cables at source & destinations will be marked with proper labeling equipment or markers, sleeved with color-coded sleeves in par with the schematic diagrams provided.
- Technical specs. for all proposed equipment should be added
- Advanced Service Level Agreement for main components: **one year**

2. Hardware

The proposed Tape Library Solution should be a 560 slots tape library with 150 slots enabled and with 3 x LTO9 Fiber Channel Tape drives. The proposed tape library should be a modular tape library, that should be expandable with additional drives and should support upto 42 drives and 560 Media slots. The proposed library should have redundant power supply and should include 4 x power cords IEC C14-C13, 6ft/2m, Library partitioning option that lets one library appear as multiple virtual libraries, Media with lifetime guarantee and support for Media Lifecycle Management, Drive Lifecycle Management, and Data Integrity Verification features, Installation, integration, and maintenance services.

3. Desired features

Modular Scalable tape library with:

- At least 150 Media Slots and expandable to 560 Slots with additional expansion enclosures
- Support up to 42 half height drives
- Must include Dual redundant power supply
- Should support library slots expansions in multiples of 10
- Include 3 cleaning and 160 data media with barcode labels pre-applied.
- 3 years onsite support
- Professional service for installation of the tape library.
- The library must offer the option of built-in data encryption support.
- The library must support data integrity verification, integrated into the standard interface, that checks tapes prior to writing data, making sure the tapes can be written to, and can complete both quick and complete scans to make sure the data is written to the tape in a way that can be retrieved—confirming the integrity of data stored on tape.

Required Services

- Installation of Stack to be performed by Spectra Engineer.

Solution Expectations

- The solution, as configured, is estimated to perform at 200 TB/hours and has a theoretical maximum throughput of 600 TB / hour combined read and/or write under ideal conditions.

Major Tasks

- Installation Preparation
- Reviewing solution materials.
- Confirming logistics and installation schedule.
- Confirm MOI workflows in scope based on Professional Service purchased. Spectra will provide estimates of PS needed for out-of-scope needs.
- Unpack and verify all equipment condition identify possible issues from shipping or time in storage. Any damage or issues with the condition of components could result in additional charges for both equipment and time.
- Equipment ready for installation.
- Spectra Stack Installation.
- Robotic connectivity.
- Creating SINGLE partitions.

- Installing 3 X LTO-9 drives and media
- All hardware functional, test reads and writes from host software are successful.
- System Integrator to test with existing MAM/DAM system

Environmental Recommendations

- The environment for the tape library must meet environmental specifications as defined for the tape generation in use. For data reliability, Spectra recommends an environment that includes a dry-bulb temperature range of 16C to 25C (60F to 77F) with a maximum temperature rate of change of 5C per hour (9F per hour). Spectra also recommends an environment that includes a relative humidity (non-condensing) of 20% to 50% (22C dew point max) with a maximum humidity rate of change of 5% per hour with no condensation. The maximum altitude for operations is 3048m (10,000 ft). Operating your tape environment outside of these parameters puts your data at risk of not being recoverable.

System Sizing

- Spectra Logic does not guarantee that customer's system as configured will provide enough storage for all possible configurations of your current or future environment (both data and software). Various software configuration may require vastly different amounts of storage. It is the responsibility of the customer, in cooperation with their software vendors, to specify the needed amount of data storage for any given workflow.

Additional Tasks need to be performed if required

- Network configuration and tuning, BlackPearl performance tuning, RIOBroker performance tuning, Active Directory configuration, and Virtual Machine configuration and tuning are to be handled by the System Integrator.

Location of Services

- After onsite installation of any physical equipment, the software installation, testing and training in some cases will be provided remotely.

4. The Following Equipment is an Upgrade to Serial Number DE68103410

4.1 Spectra Stack LTO9 Spare Drives

QTY=1

Spectra Stack libraries are designed for growing enterprises and growing data. From a single control module to as many as six expansion modules, Spectra Stack solutions deliver the right capacity and performance at every stage of growth. Its remarkable 100% duty cycle makes it an ideal choice for handling unanticipated or dynamic workloads with ease.

Control Modules | # Expansion Modules - 1 | 0

Max Slot Count | Media Type - 80 | LTO-9

Max Native Capacity¹ - 1.4PB

Max Compressed Capacity^{1,2} - 3.6PB

Max Drives - 6 HH | 3 FH

Max Native Throughput¹ (TB/hr.) - 4.3

Max Compressed Throughput¹ (TB/hr.) - 9.7

Max SLS Partitions – 20

Tape Drives Supported - LTO-5 | LTO-6 | LTO-7 | LTO-8 | LTO-9

Stated maximums based on exclusive use of full height LTO-9 drives.

LTO-9 assumed compression ratio is 2.5:1.

4.2 Spectra Stack Bundle

Qty=1

Spectra Stack Bundle- includes **2x LTO-9 Fibre Channel Half-Height Drive**, 80x Slots, Rail Kit, 2x US and European Power Cords.

4.3 Stack Exp

Qty=1

Spectra Stack Expansion - includes Rail Kit, 2x US and European Power Cords.

4.4 10 Slot COD License

Qty=7

10 Slot COD License, Spectra Stack

4.5 Redundant Power Supply

Qty=2

Redundant Power Supply, Spectra Stack

4.6 Slot License Activation

Qty=1

Slot License Activation

4.7 Power Cord

Qty= 4

Power Cord, 110-240V, 50-60Hz, IEC C14-C13, 6ft/2m

4.8 Optical Cable

Qty=3

Optical Cable, LC-LC Duplex Multi-Mode, OM4,10Gb, 20 meters

4.9 LTO Universal Cleaning Cartridge

Qty=3

LTO Universal Cleaning Cartridge (non-repeating barcode sequence) and jewel case

4.10 LTO-9 BaFe MLM Media

Qty=8

LTO-9 BaFe MLM Media (Certified) - 20 Tape Cartridges with Certified Pre-applied Barcode Labels in clamshells (no jewel case). Capacity 18TB native.

5. Support

5.1 Years 1-3, Base 2 Drive Bundle

Qty=1

Years 1-3, Base 2 Drive Bundle, SpectraGuard Next Business Day on Site repair and 5x9 telephone/email support with software updates, Spectra Stack, Zone 2

5.2 Years 1-3, Expansion Chassis

Qty=1

Years 1-3, Expansion Chassis, SpectraGuard Next Business Day On Site repair and 5x9 telephone/email support with software updates, Spectra Stack, Zone 2

5.3 Years 1-3, Drives (ea)

Qty=1

Years 1-3, Drives (ea), SpectraGuard Next Business Day On Site repair and 5x9 telephone/email support with software updates, Spectra Stack

6. Servers

6.1

- HPE DL380 Gen10 8SFF NC CTO Svr - Europe - Multilingual Localization - Intel Xeon-S 4214 FIO Kit for DL380 G10 - HPE 16GB 2Rx8 PC4-2933Y-R Smart Kit - HPE 300GB SAS 10K SFF SC DS HDD - HPE SN1100Q 16Gb 2p FC HBA - HPE Ethernet 10Gb 2-port 562SFP+ Adptr - HPE 96W Smart Storage Battery 145mm Cbl - HPE Smart Array P408i-a SR Gen10 Ctrlr - HPE Ethernet 1Gb 4P 331FLR Adptr - HPE BLc 10G SFP+ SR Transceiver - HPE 800W FS Plat Ht Plg LH Pwr Sply Kit - HPE 2U SFF Easy Install Rail Kit - HPE 3Y Foundation Care NBD Service - HPE DL38x Gen10 Support . **Qty=1**
- Red Hat Enterprise Linux Server, Standard (Physical or Virtual Nodes) **Qty=1**
- 850nm VCSEL, PIN, 10GBASE-SR/SW, 1200-Mx-SNL-I, 10.5 Gb/s multi-rate transceiver, limiting interface, RoHS/lead free, multimode, SFP+ footprint, LC connector, 0/70°C operation, 82m/300m. **Qty=1**

6.2

Installation - Library Implementation & Database Server Implementation Library Preparation of the new AST server and Library · Team: Installations · Task: Install the new AST server with the required version of Redhat and AST. To have the new server defined in the network and system · Task: Define the new library and drives so that the new devices are available to the system. Verification - Library Implementation **Qty=1**

7. Evolution HSM - Hierarchical Storage Management

Evolution HSM

- Additional aSTORM server Licence (2x Drives control) **Qty=1**
- Licence for reading /writing operation management, with priority control Additional LTO9 SLOT Licence (1x150) **Qty=150**

8. Service level agreement for the existing Stack

Qty=1

- SpectraGuard Next Business Day On Site Support, Stack, 1 Expansion Nodes, 5LTO8, 151 Slots Supported, SN DE68103407
- SpectraGuard Next Business Day On Site Support, Stack, 1 Expansion Nodes, 3LTO8, 151 Slots Supported, SN DE68103410

9. Professional Services

Professional Services, Stack Library Implementation

Qty=1

Professional Services (except Preventive Maintenance) .

10. Bill Of Quantity (BOQ)

NO	Description	Qty	Price Each	Price Extended
1	Spectra Stack - 2 x LTO9 Spare Drives			
1.1	The Following Equipment is an Upgrade to Serial Number DE68103410			
1.2	Spectra Stack LTO-9 Half-Height Fibre Channel Drive	1		
2	Spectra Stack			
2.1	Spectra Stack Bundle- includes 2x LTO-9 Fibre Channel Half-Height Drive, 80x Slots, Rail Kit, 2x US and European Power Cords	1		
2.2	Spectra Stack Expansion - includes Rail Kit, 2x US and European Power Cords	1		
2.3	Spectra Stack LTO-9 Half-Height Fibre Channel Drive	1		
2.4	10 Slot COD License, Spectra Stack	7		
2.5	Redundant Power Supply, Spectra Stack	2		
2.6	Slot License Activation - Mandatory Sales Order Line Item - DO NOT DELETE.	1		
2.7	Power Cord, 110-240V, 50-60Hz, IEC C14-C13, 6ft/2m	4		
2.8	Optical Cable, LC-LC Duplex Multi-Mode, OM4,10Gb, 20 meter	3		
3	Spectra Certified Media - Spectra Stack			
3.1	LTO Universal Cleaning Cartridge (non-repeating barcode sequence) and jewel case	3		
3.2	LTO-9 BaFe MLM Media (Certified) - 20 Tape Cartridges with Certified Pre-applied Barcode Labels in clamshells (no jewel case). Capacity 18TB native.	8		
4	Support - Spectra Stack			
4.1	Years 1-3, Base 2 Drive Bundle, SpectraGuard Next Business Day On Site repair and 5x9 telephone/email support with software updates, Spectra Stack, Zone 2	1		
4.2	Years 1-3, Expansion Chassis, SpectraGuard Next Business Day On Site repair and 5x9 telephone/email support with software updates, Spectra Stack, Zone 2	1		
4.3	Years 1-3, Drives (ea), SpectraGuard Next Business Day On Site repair and 5x9 telephone/email support with software updates, Spectra Stack	1		
5	Professional Services - Spectra Stack			
5.1	Professional Services, Stack Library Implementation. Professional Services (except Preventive Maintenance) expire 12 months after receipt of purchase order, other Terms and Conditions apply - see http://sl.spectrallogic.com/MSA	1		
6.	Commissioning – Remotely			
6.1	Servers			
	<ul style="list-style-type: none"> HPE DL380 Gen10 8SFF NC CTO Svr - Europe - Multilingual Localization - Intel Xeon-S 4214 FIO Kit for DL380 G10 - HPE 16GB 2Rx8 PC4-2933Y-R Smart Kit - HPE 300GB SAS 10K SFF SC DS HDD - HPE SN1100Q 16Gb 2p FC HBA - HPE Ethernet 10Gb 2-port 562SFP+ Adptr - HPE 96W Smart Storage Battery 145mm Cbl - HPE Smart Array P408i-a SR Gen10 Ctrlr - HPE Ethernet 1Gb 4P 331FLR Adptr - HPE BLc 10G SFP+ SR Transceiver - HPE 800W FS Plat Ht Plg LH Pwr Sply Kit - HPE 2U SFF Easy Install Rail Kit - HPE 3Y Foundation Care NBD Service - HPE DL38x Gen10 Support 	1		
	<ul style="list-style-type: none"> Red Hat Enterprise Linux Server, Standard (Physical or Virtual Nodes) 	1		

	<ul style="list-style-type: none"> • 850nm VCSEL, PIN, 10GBASE-SR/SW, 1200-Mx-SNL-I, 10.5 Gb/s multi-rate transceiver, limiting interface, RoHS/lead free, multimode, SFP+ footprint, LC connector, 0/70°C operation, 82m/300m. 			
6.2	Installation - Library Implementation & Database Server Implementation Library Preparation of the new AST server and Library · Team: Installations · Task: Install the new AST server with the required version of Redhat and AST. To have the new server defined in the network and system · Task: Define the new library and drives so that the new devices are available to the system	1		
7.	Evolution HSM - Hierarchical Storage Management			
	Additional aSTORM server Licence (2x Drives control)	1		
	Licence for reading /writing operation management, with priority control Additional LTO9 SLOT Licence (1x150)	150		
8.	Service level agreement for the existing Stack			
	SpectraGuard Next Business Day On Site Support, Stack, 1 Expansion Nodes, 5LTO8, 151 Slots Supported, SN DE68103407	1		
	SpectraGuard Next Business Day On Site Support, Stack, 1 Expansion Nodes, 3LTO8, 151 Slots Supported, SN DE6810341	1		
	Total Price KWD			

Delivery terms:

- All services, Software and hardware needed to complete the required expansion shall be Delivered and signed off by a period of 3 months from contract signature .