PROJECT DESCRIPTION

Tenderer to propose replacement of existing two units of TELLABS 6300 Network Management System (NMS) server, which shall be able for setup, configure and monitor SDH network element. This shall be applying to new and old node that is currently monitored by existing Tellabs 6300 network management server.

SCOPE OF WORK

To Supply, delivery, installation, testing and commissioning of replacement of existing two Tellabs Network Management System (NMS) servers with reliable, high-performance servers that can support next-generation systems and leaves room for growth.

1. Proposed server hardware must be reliable, high-performance and can support existing and new version of Tellabs management system for minimum of 5 years.
2. Proposed servers shall be configured to existing setting as production/main and standby/backup server. The production/main server is located in Wisma SESCO and the standby/backup server is installed at Kuching branch – Western Regional Office. The production server will be used as daily operation (setup, configure and monitoring) and the backup server is to provide exact services when the existing main management server is unresponsive/break down or unreachable.
3. The backup server will be on standby mode when main server is in service but all information that is updated in the main server's database must replicate or update to the backup server immediately (a real time replication/synchronization of information).
4. Proposed servers must come with necessary software and licenses to allow both servers to communicate and transfer data between each other. The proposed NMS platform - software and hardware shall be latest possible feature available in the market. Currently Syarikat SESCo Berhad has 3 configured and 3 concurrent Tellabs users licenses for client to access NMS server. Craft terminals are running TeMIP client v6.3 and Tellabs NM Client 207, FP 3.0.10 EP4.
5. The software version come with the new server must be equivalent or higher than the existing Tellabs network management server. If software version come with new server is higher than existing version, supplier/vendor is required to make sure the software can support existing SDH nodes currently in service and control functions must be the same or better. Also the software should not have any yearly subscription fee.
6. Client license must come together with the craft terminal hardware as one package. The new craft terminal must include additional one unit of terminal client user license to connect to the new server and this license can and able to access the existing main management server.
7. In this tender exercise, supplier is required to supply one unit of latest version of craft terminal PC with software and license. Refer to Appendix A, hardware specification for details.
8. Supplier is required to install, setup, configure and transfer all the existing data/setting in the existing main server (like databases, files, schedule job and nodes/equipment) to the new production/main server. Main server will

replicate/synchronize the database to the new backup/standby server and vice versa when the backup server is on standby mode.

9. For the existing two management servers, supplier must configure at least one of the existing server become backup/standby server and join to the new servers pool, so that existing backup server can co-exist with the two new servers and replicate each other with the latest information for a period of three months after successfully transfer everything from existing servers to new servers. This is to ensure that new servers are functioning exactly like the previous servers before we shutdown/offline both old servers.
10. A failover simulation test must be carried out after new servers installation had completed. The simulation will test to failover from new main server to rollover to the backup server and also test after restore back the main server, backup server will automatically replicate the database back to it.
11. During the failover test, supplier must make sure that existing network services will not be interrupted and nodes/equipment configuration will not be changed.
12. A Full backup inclusive of Operating System (OS), in external backup tape, of the two new servers must be carried out after failover test is completed. This full backup copy will be used as disaster recovery media to restore server back to it working point when there is any hardware failure or software malfunction.
13. All procedures/manuals for server restoration or setup server from fresh must be included (in softcopy) as part of the documentation. The procedure/manuals related to restore server OS and databases or fresh installation of server and client (From fresh installation of OS to Tellabs NMS to Tellabs Client), configuration (backup job, automatic function, transfer site commands and etc.), databases/hard disk maintenance and etc.

Technical Specification

The hardware technical specifications are contained in Appendix A of this tender document. The tenderer is responsible to verify that the proposed equipment is technically sound and can be implemented to meet the specified objectives. All proposals submitted must comply with these specifications. However, should the tenderer consider that he can offer any advantages in cost and/or performance to SESCo by an alteration to any portion of these specifications, he may submit alternative proposals highlighting such advantages. All solutions proposed must be in line with the objectives stated in the preceding sections.

Functional Requirements

The Tenderer is required to provide services for the installation, testing and commissioning of all hardware and software supplied.

It is mandatory for tenderer to provide a detailed implementation or migration plan and their propose acceptance testing procedures during the tender submission. This shall include the schedule of delivery, installation, commissioning and acceptance testing of the servers. All installation works that will incur downtime for end users shall be scheduled **after SESCo's office hours**. All installation and testing must be carried out successfully in the presence of authorized Officer in Charge before system acceptance.