

## ELCOT- TNSWAN (Tamilnadu State Wide Area Network)

### Business Case

ELCOT is the implementing agency of the TNSWAN project. Tata Consultancy Services Limited (TCS Ltd.) was selected in the tender process as the operating agency of the network, to set up and run the network on BOOT(Build ,Own, Operate and Transfer) basis over a period of 5 years.

TCS placed an order with CMC for the supply, installation and warranty support of Cisco networking equipments; implementation of LAN at 708 POP locations across Tamil Nadu; operation of TNSWAN for a period of 5 years with necessary manpower, using Network Monitoring System and Service Desk.

### Background

Tamilnadu State Wide Area Network (TNSWAN) has been identified as one of the core e-Governance backbone infrastructures by National e- Governance Action Plan (NeGP). DIT, GOI has issued guidelines for setting up of State Wide Area Network and also extended partial financial support to the states. GOI approved the SWAN proposal of Tamil Nadu and ELCOT is the implementation agency. ELCOT appointed HCL as their consultant, and ELCOT elected TCS as the operating agency after due open tender process.

Tamil Nadu State Wide Area Network would link all the government departments to provide Voice, Data and Video connectivity for improving the delivery of services to the public and for improving the response-time and transparency.

### Scope of Project

The project has two stages: Stage 1 for setting up of the network and Stage 2 for operation management and maintenance of the network.

#### *Stage 1 (Setting up of the Network)*

The network would be installed and commissioned by TCS/CMC and BSNL after the completion of the site preparation work by the district administration. Both TCS/CMC & BSNL would install, test and commission their network infrastructure at each TN State WAN Center. Also, the network would be monitored from the NOC at Perungudi, ELCOT through a Network Monitoring system ( NMS ) and NMS report generated for each centre. The NMS report during this trial period would adhere to the Service Level Agreement (SLA) entered with both TCS/CMC and BSNL.

The implementation was successfully completed on 30 November 2007. The Boot operations started from 01 December 2007. We will be operating TNSWAN for next five years by providing our dedicated services.

#### *Stage 2 (Operation Management & Maintenance of the Network)*

The Network would be operated, managed and maintained by TCS/CMC during the BOOT period of five years. TCS/CMC will deploy maintenance personnel (24x7) at State Secretariat, NOC and Disaster Recovery NOC ( Madurai District Centre).Dedicated maintenance personnel would be posted in all the District Centers and Metro Centers. Adequate manpower would be made available to meet the SLA. A help desk will be operational at NOC by TCS and BSNL would operate a dedicated help desk for TN State WAN. During the operation of the network, necessary coordination and support was to be extended by the respective office towards the effective utilisation of the network.

### Challenges

- Highest of all in order value
- Materials worth many crores received and dispatched to various locations. TNSWAN warehouse identified and managed. Special logistics team formed to track the movement of goods

- Consists of 708 locations across Tamil Nadu, State Ceenter 1, MAN center 7, Special Center 6, District Centers 30, Revenue Division offices 73, Taluk Head Quarters 206, and Block Dev offices 385
- Currently 65 persons are working in the project. Most of them are recruited and deputed to the project. Recruitment and training was a challenging task
- Coordination with various agencies and vendors like customer (ELCOT), consultant (HCL), networking equipments (Cisco), Numeric (UPS), sun beam (DG Set), Athera (VC), Voltas (AC), Transtrade (transportation), Valrack (racks), Nomus (modems), DAX (passive components), BSNL (leased lines) 5 LAN vendors, 2 outsourced vendors and internally logistics, finance HR and Administration
- Activities involved were site survey, sample testing, material receipts, centralised configuration, pre-dispatch inspection, transportation, installation, modems delivery to BSNL, leased line commissioning, forming of NOC center with DR site, forming of service desk
- Service Desk to receive incidents from NMS system and end users; assign calls to concerned engineers; notify to respective agencies where ever required; escalate the calls horizontally and vertically and get the problems resolved and close the incident. Generate weekly, monthly, and quarterly reports on performance of operating agency and band width service providers
- Special s/w program was developed to automatically calculate UP time reports for SLA monitoring and penalty calculations
- DG set operation is new area, activities involves diesel filling, coolant observation and other first level support to DG set
- Almost all the software used are open sources

### Implementation

We have implemented the project without attracting any penalty despite of challenges

We have implemented HP Openview products for Network monitoring, control and Service Desk

We have developed a tool for automatic calculation of SLA parameters which has resulted in transparency in the operation

It is 2 years since the Operation and Maintenance phase started, and we have operated and maintained the network meeting the stringent SLAs and ensured no penalty is levied .

### Services available through TNSWAN

- 1 • Data
  - 2 • Intranet
  - 3 • Internet
  - 4 • Voice
  - 5 • Video Conferencing Facility
  - 6 • Video Streaming
- Dial-up Access to TNSWAN

### Benefits

CMC gained very good project management skills of managing a very large project with strict SLAs

We have gained very good knowledge and skill on high end Cisco products implementation and HP Openview products implementation

Ability to showcase this project for future customers