

General LAN Guidelines and Sign off process as mentioned in the Tender Document for High Court Coordinator

➤ Survey and Document preparation

- Agencies employed for providing LAN System Integration Services are required to carry out survey for each site to study the exact requirements, after the placement of job order. **The requirement will be setting up of new LANs.**
- Purpose of this exercise is to understand the site layout & user's network requirements, take stock of all existing network components & network infrastructure and to gather any other information required for providing required services at each site.
- NIC/District Courts will do the necessary coordination required to carry out this activity.
- Agency will prepare a detailed Project report for the site which should address LAN design, Engineering (wherever required), Structured cabling installation, Commissioning, testing & certification (wherever required) & documentation for easy maintenance. **The aspects to be covered in detailed project report are as below:**
 - ✓ **LAN design** - address total LAN node requirement (e.g. conduct survey & prepare list of nodes locations within the rooms) , modular with provision for easy additions , meet all the application requirements , capable for data & video , use latest Gigabit fiber / CAT 6 technologies for backbone & edge.
 - ✓ **Engineering** - should prepare LAN IP addressing scheme , proxy & anti virus requirements , create in building VLAN for segregation between user's, address all the LAN security issues, list civil & electrical requirement for Server room & active devices, list power requirements , fire safety, **Bill of material of LAN active devices** .
 - ✓ **Structured cabling installation** - cable routing on building blueprint / plan with scales & distances , integration of existing cabling infrastructure if required , identification of existing cable risers and equipment closets to be used , labeling plan for cabling infrastructure , marking & identification of entire LAN infrastructure , creation of separate cable trays / pathways / raceways if required , documentation required to be handed to building administration / CPWD for safe keep of cabling infrastructure , **Bill of material of LAN passive devices** .
 - ✓ **Commissioning , testing & documentation for maintenance** – strategy for phased wise installation & commissioning of LAN , Testing & certification of LAN components & cabling infrastructure , **tools & manuals required for maintenance** , **suggest list items to stocked as spares for immediate fault rectification** , schedules for periodic onsite maintenance of items / servers .

- ✓ Two copies of the detailed Project report will be submitted to NIC Project coordinator in form of printed, hard bound copies & two nos. of soft copies in CD.

Note: The above activity will be done by the vendor at his own cost.

➤ **Laying of cables installation & configuration.**

- ✓ The empanelled agency will follow the **Detailed Project report (DPR) for the cabling routing plan, labeling of the cabling infrastructure and the documentation of the cabling infrastructure for maintenance & handing over to the Court.**
- ✓ The **empanelled agency** will get all the new **site installations certified for 20 year performance warranty from the OEM** wherever 50 or more nodes have been established in the court complexes.(Vendor will submit this to NIC(HQr))
- ✓ Performance testing of the laid UTP cable (**Pentascanner report**).
- ✓ Performance testing of laid Fibre Optic cable by **OTDR** for continuity, length & db loss.
- ✓ The **LAN IP addressing, creation of in building VLAN for segregation** between users, configuration for all the LAN security issues will be carried out by the empanelled agency (wherever required) as per the Project Report.
- ✓ The empanelled agency will also configure the client nodes for LAN. **For this the empanelled agency should have the required trained manpower for above.**
- ✓ **All the switch & IP addressing scheme at clients need to be documented** for maintenance purposes by the empanelled agency.
- ✓ The empanelled agency will supply, install & configure all the WAN devices like Routers & Modems for making the WAN operational at the Site. (L2 2960G and L3 3750G switches will be supplied by NIC through NICS I because it is not in empanelment of E-Court Project).
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➤ **Payment:**

- ✓ A pre-receipt PURCHASE ORDER WISE bill (five copies) shall be submitted in the name of "National Informatics Centre" at NIC HQRS.
- ✓ Vendor has to install/INTEGRATE the ordered items and will prepare **installation report for each District Court/Taluka Courts** as per the purchase order and get it signed by the concerned **In-charge Judge or his/her authorized person/nodal officer** and DIO of NIC or its representative.
- ✓ Based on these installation reports, the vendor will further prepare a **consolidated installation report** consisting of serial no. of each ordered and installed item, location of installation, date of installation, etc. Please refer to format attached below. **This consolidated installation report will be District-wise only.**
- ✓ The **consolidated installation report** will be duly signed with date and stamped by:

➤ **Submission of Bill by the vendor :**

The Vendor has to submit the **following documents along with the bills** for final settlements:

- ✓ Building VLAN for segregation between user's, address all the LAN security issues.
- ✓ All the switch & IP addressing scheme at clients need to be documented for maintenance purposes.
- ✓ List of Proper tagging / flooring of UTP Cables / Optical fiber cable labeling plan for cabling infrastructure.
- ✓ Pentascanner report
- ✓ OTDR report
- ✓ Excel Sheet of the Pentascanner report
- ✓ Excell sheet of the LAN node distance for measurement of duct and conduit.
- ✓ Copy of installation report for each District Court/Taluka Courts
- ✓ Consolidated installation report.
- ✓ OEM Certificate for Rack, Cables etc
- ✓ Site installations certified for 20 year performance warranty from the OEM.
- ✓ Copy of Detailed Project report (DPR) with the cabling routing plan, labeling of the cabling infrastructure.
- ✓ Installed LAN Plan with node details on the Map / Floor plan.
- ✓ Logical LAN diagram with L2 & L3 switch etc after installation.
- ✓ Calibration Certificate of Pentascannner and OTDR instrument – Validation od one years from date of Calibration Certificate.