

Section-E: SCOPE OF WORK

The scope of work includes understanding the requirement, designing, supply and commission, install, test, configure, integrate with the corporate network/solution the items provided under this RFP and provide support for the same at Five Co-located Data Centers which are Bengaluru FAR-DR, Rabale, Noida, Bhubaneswar and Hyderabad. The bidder has to provide support for the items provided under this RFP for a period of five years .This is not an all-inclusive list. The Bidder is expected to provide the end to end solution and vendor is expected to absorb any other cost of material / services if any not particularly listed below.

1. The following are covered under Scope of Work for this RFP

- 1) All conditions defined regarding delivery and installation and support shall be applicable.
- 2) Obtaining of the Road/entry permits, other entry/security forms, etc. will be the sole responsibility of the vendor. However, LIC may sign the necessary forms as purchaser as per requirement on receipt of written request(s).
- 3) To de-commission the existing network devices in the setup and commission the new network devices in the setup in such a manner, that there is a minimum downtime (mutually agreed between LIC and the successful bidder) involved for the installation of data center switches.
- 4) To supply, install, configure, integrate, commission, test with the corporate network/solution the equipment/solution procured under this RFP.
- 5) To support the networking/other equipment/solution procured under this RFP at various locations.
- 6) Any device/ equipments/components/ software supplied under this RFP should not be end of support in the next seven years and should not be end of sale in the next 2 years.
- 7) Devices/ Equipment/Components/ Software supplied under this RFP should seamlessly integrate with existing network setup of LIC without requiring purchase of additional equipments/components/Software etc. and also without requirement of downgrading of existing equipments/ components/software used by LIC. However, if any additional equipments/components/Software etc. is required for seamless integration with existing network setup of LIC; the same has to be provided at no additional cost to LIC. In such cases, the balance 20% payment on delivery will made after the vendor demonstrate seamless integration of the router/equipment/component etc.
- 8) LIC is re-designing its Data Centers architecture and the vendor has to do end to end, designing, configuration of the network devices, implementation and customization of the network as per LIC's requirement. This will include complete study of the existing network, network changes being proposed benchmarking, documentation, testing and actual migration. This may also involve configuration of network switches which are already there in the existing network. LIC will make available to the vendor the configuration management tools present with it.
- 9) The vendor has to specify various infrastructure requirements which will be required for smooth functioning of the entire project. This will include site requirements, power, cables, UPS, environmental conditions etc.
- 10)The vendor will be responsible for ensuring end-to-end maintenance of Network/equipment and also undertake all the post failure repair/replacement of all equipment/components supplied & installed by it.
- 11)The bidder shall be responsible to provide within scope of work all facilities like labour, transportation, tool Kits, testing equipment, cables, connectors, power cords etc. which is necessary for successful deployment of solution.
- 12)The successful bidder need to install all the associated equipment needed to

complete the job as per the technical specification described in this tender.

- 13) Clause Deleted
- 14) Termination of LAN cables/OFC patch cords on equipment and end to end testing
- 15) Clause Deleted
- 16) Clause Deleted
- 17) Vendor has to do end-to-end configuration of network devices, designing, implementation and customization of network level policies as per LIC's requirements.
- 18) All the networking equipment/components, etc. should be configured for the high availability (wherever applicable) and no single point of failure, wherever redundancy is provided by LIC.
- 19) Vendor shall pass on the benefit of discount / reduction in prices/ Govt. duties, if any, to LIC voluntarily. In case of failure, LIC reserves the right to terminate the rate contract with immediate effect.
- 20) Vendor shall provide and implement the latest versions/upgrades of software/IOS (same class) etc. at no extra cost to LIC.
- 21) Vendor will provide details of features covered under back-lining support and warranty provided by the OEM. This should be supported by OEM's documentation and validated by the OEM on the OEM's letterhead. This should also mention exclusion explicitly.
- 22) LIC will also have periodic review of technology and may consider an alternate model in consultation with the OEM in case of need. In case a product or part of the product (component) which has been quoted for a certain cost/free of cost, is rendered End-of-Sale (EoS) / End-of-Life or Support (EoL) during the contract period, a substitute of equivalent or higher capacity should be provided at the same cost/free of cost to LIC in place of the original product given in the bidding document submitted by the vendor. The replacement model specifications have to be validated by OEM as the same or higher. Such equipments should support all the existing components and should not have any adverse effect on functioning or restrictions in functionalities on LIC's Network as a result of supply of such equipments.
- 23) If required by LIC, vendor shall arrange to shift the equipment and install and commission the same at the shifted location depending upon the need and at no extra cost to LIC (only transportation cost, taxes, Octroi, insurance as per actual will be borne by LIC).
- 24) Vendor should maintain adequate functional spares at each of their service-centers so as to meet uptime commitment for each office of LIC. Vendor shall submit location-wise list of such spares to LIC (CO and Zones) at beginning of every Quarter.
- 25) The details of information required from LIC for the implementation of scope of Work should be sought within eight weeks from the date of receipt of purchase order from LIC. The successful bidder may physical verify the sites involved.
- 26) Vendor has to submit User Acceptance Test (UAT) plan (to be prepared jointly with LIC) and undertake the UAT at the various locations where the equipment/solution/component will be installed.
- 27) In case there is a cost incurred to LIC due the wrong BoM/Specification/feature-set of network equipment at any location, the same will have to be replaced by vendor at no extra cost to LIC.
- 28) The vendor has to act as a technical-advisor for evaluation of new technologies, improvement in the existing network setup , routing-protocols/migration, in LIC, suggest best, cost-effective and feasible mode of connectivity etc. if required by LIC. Necessary resources (including Level-3 support) have to be deployed by the vendor for technical assistance along with the detailed documentation. No additional cost will be payable by LIC.
- 29) The vendor has to conduct an onsite detailed design workshop to gather data and initiate the network detailed design development process (for the equipment/solution/component/devices under the scope of this RFP) , which may include, review and evaluation of the existing LIC network setup and existing LIC

network designs, verification of the existing platforms, features, equipment , gathering of information on the application, setup and network design etc. that may be required for implementation.

- 30)The vendor has to prepare HLD and LLD in consultation with OEM and LIC for rollout. The design should be OEM certified.
- 31)The vendor has to design and document a Project implementation plan with significant milestones marked on it.
- 32)Create Low Level Design Document: The vendor should prepare an OEM validated Low Level Design document that typically includes (indicative and not exhaustive):
 - Network logical and physical topology
 - Scalability and redundancy (considering the end-to-end setup)
 - Security considerations such as authentication, VLANs, subnet isolation, and so on
 - Hardware and software protocols, features, and functions recommendations
 - Required changes to network infrastructure to accommodate the Low Level Design.
- 33)Present and Discuss Low Level Design (indicative and not exhaustive):
 - Integrate technical requirements and design goals into LIC network infrastructure design with the OEM certified/validated and proven design principles.
 - Minimizes expensive, time-consuming, and network-intrusive redesign by helping ensure proper design early in the lifecycle of Network.
 - Proactively improves the performance, resiliency, and availability of LIC network infrastructure & its services
 - Identifies potential security risks, helping LIC to take appropriate, corrective action to reduce the risk of network /service downtime.
- 34)The vendor may have to conduct a POC, at LICs request, in Mumbai for all models of equipment supplied, before the supply of the Network equipments.
- 35)Prepare test-plan, migration plan and rollback strategies:
 - Prepare draft of network migration plan document.
 - Prepare test-plan.
 - Provide configuration templates.
 - Review & develop detailed failure recovery procedure and risk-mitigation and rollback strategy.
 - Review interconnection and interoperability requirements
 - Prepare acceptance (UAT) plan and formats.
 - Submission of detailed documentation to LIC of India.
- 36)The vendor has to provide onsite support at Central Office and 4 Co-located Data centers, for monitoring of the network infrastructure (for the equipment/devices/component/solution provided under this RFP). The onsite support will be responsible for the day-to-day maintenance, configuration changes, trouble shooting, and follow up/coordinating with the various stake holders for early resolution of the problems.
- 37)Back-to-back (back-lining support with OEMs): The vendor needs to mandatorily backline all equipments/products/components/software-upgrades etc. with the respective OEMs for service support-line items.
 - a) The contract should be back lined with OEM for the complete contract period). The bidder will be required to provide a proof of back-lining, in writing in the form of an e-mail / letter confirmation, from the OEM within 30 days from the date of PO release, before any payment what so ever can be released by LIC.
 - b) Login-IDs should be created by the vendor for LIC for logging into the OEMs portal for the support and logging/viewing the status of calls/TAC cases raised by/for LIC of India.
- 38)The bidder has to perform an OEM audit immediately after the deployment of the solution. The OEM audit has to provide a detailed report on the implementation, routing/switching patterns, access lists, integration with SIEM, hardening and best practices to be adopted etc. All aspects of technical specifications should be verified for the implementation. IS Audit requirements as per the IRDAI/other regulatory guidelines should be complied with. The audit should also cover compliance with any legal, regulatory or industry

requirements.

- 39) After the first OEM audit, immediately after deployment the bidder has to perform a yearly OEM audit and provide a detailed report on the other aspects. IS Audit requirements as per the IRDAI/other regulatory guidelines should be complied with. The audit should also cover compliance with any legal, regulatory or industry requirements and should provide recommendations on the latest security posture to be adopted in view of the evolving threat landscape.
- 40) The OEM Audit report should be made available within seven days of conducting the OEM Audit. The System Integrator has to ensure that all the shortcomings pointed out in the OEM Audit report are rectified and all the recommendations are complied with within thirty working days.
- 41) The identity of the Auditors conducting the OEM audit has to be suitably established, through the names and other attributes such as Aadhar Card Details/Passport Details, mail-id etc. provided on the letterhead of the OEM .
- 42) The bidder has to demonstrate seamless HA of deployed components at each respective site. No downtime will be provided for demonstrating HA feature. This activity is to be carried out twice a year.

43) Service-Delivery and Project Management:

The selected vendor will have to post a full time onsite Service-Delivery Manager (SDM) immediately after the signing of the Contract. The detail of SDM should be conveyed in writing to LIC within 8 weeks of receipt of purchase order. The onsite Service-Delivery Manager will be required to be posted for the entire implementation period and has to be present on site at LIC-CO-IT, Mumbai office. The onsite SDM should have the following minimum profile:

- a) Minimum 5 years of IT experience
- b) Minimum 2 years of Program Management experience.
- c) 2 years' experience of Network deployments.
- d) Experience of handling/managing teams (Minimum 5 reportees).

The responsibilities of the On-site Service-Delivery Manager as a part of support are as follows (indicative but not exhaustive):

- a) Act as a Single Point of Contact (SPOC) for the entire project
- b) Responsibility for the entire execution & management of the project after receipt of purchase order. (ii) Overall monitoring of project
- c) Coordination for Delivery/Installation of New hardware in stipulated time frame
- d) Call flow management, Quality Service Delivery
- e) Overall monitoring and management
- f) SLA management and reporting
- g) Submission of periodical Reviews and reports required by LIC.
- h) Crisis management and Emergency response procedures.
- i) Preparation and submission of detailed Project documentation to LIC (Purchase Order wise) and progress of initiatives taken by LIC.
- j) He should be placed at LIC premises in Mumbai during LIC's office hours. However, the hours may be extended whenever required.

The Vendor shall submit to ED (IT/BPR), CO, Mumbai the name and contact details, including address, telephone number, mobile number, FAX number/email address of the nominated Service-Delivery Manager.

It is mandatory for the concerned Service-Delivery Manager to have structured meeting with the ED (IT/BPR)/Chief (IT/BPR), Secretary (IT/BPR)/Dy. Secretary

(IT/BPR)/Assistant Secretary (IT/BPR), Network Section of Central Office once a week, preferably on Monday, during the implementation period from the date of receipt of the first Purchase Order by the vendor. Weekly meetings should be held till the project is entirely rolled out. The vendor should submit the name & the latest contact details of service engineer and escalation matrix during each such meeting. The minutes of the meeting shall be signed by the representatives of LIC and the Service Delivery Manager.

In short, Onsite Service-Delivery Manager shall carry out and coordinate the various tasks involved in the project like Project scheduling, tracking, monitoring, identifying risks, liasioning with all stake holders (OEM, vendor's back-end teams etc.) and reporting to LIC on the overall progress of the project, etc. No charges will be payable by LIC for the onsite Service-Delivery Manager.

2. On-site support (Facility management)

As part of On-site support, the vendor should post L1 engineers as per details given below. The vendor will have to submit the Curriculum Vitae (CV) of the proposed Service-Delivery Manager, L1 engineers matching the qualification criteria as defined in this RFP. The successful bidder has to submit a Background Verification Report conducted by Police of all resources deployed (L1 support, Offsite L3 support and Service Delivery Manager).

SN	Location	Level	Number of Resources
1	Central Office at Mumbai	SDM	One
2	Central Office at Mumbai	Level 1	One
3	Bengaluru FAR-DR	Level 1	One
4	Noida	Level 1	One
5	Bhubaneswar	Level 1	One
6	Hyderabad	Level 1	One

- a) The onsite-engineers at LIC offices and Data Centers should be capable of monitoring and troubleshooting any problem related to LIC's network and networking equipment deployed in LIC. Co-ordinate with all the stake-holders and resolve the network related issue.
- b) The vendor will also have to earmark an Offsite L3 Network Engineer for LIC, who will act as the advisor/consultant for issues and may have to come for meeting at LIC and work on the new initiatives that LIC may take from time-to-time. No charges will be payable by LIC for this purpose.
- c) Normal office timings will be an hour before and after the office hours of LIC (Monday to Friday). However, as per the changing business needs, LIC may ask the Personnel to report for duty in different time Windows as per the need of LIC.

Note:

No telephone connection, No PC and No laptop will be provided by LIC to the onsite support persons. The on-site L1 and L2 support may also be required to work on Sunday/LIC holidays or beyond office hours on working days, for which an advance notice will be given.

3. Responsibilities of on-site Level-one (L1) resource:

The responsibilities of L1 engineer as a part of On-Site support are as follows (list is indicative and not exhaustive :

- a) Technical aspect of project implementation.
- b) The support Personnel provided should be conversant with SDN and the regular configuration from scratch.
- c) Day-to-day maintenance of the network equipments etc. under the entire zone, covered under the scope of this RFP
- d) The support Personnel provided should be conversant with the regular configuration from scratch.
- e) Upgradation of existing routers IOS and troubleshooting.
- f) Liaisons with the field personal/channel partners/service-providers for prompt resolution of problems and ensure best site-uptimes and Network uptimes.
- g) QOS/Access list etc. designing and implementation in consultation with LIC Network team
- h) Network equipment installation at the locations where Network Engineers are based.
- i) Manage Network equipment configuration (as per LIC's NISP / templates).
- j) Trouble shooting and debugging of problems, if any
- k) Changes in configuration on the Network devices
- l) Monitoring of QOS performance
- m) Liasioning with the LIC-users for prompt resolution of problems
- n) Escalation of unresolved issues to L2 engineer(s)
- o) Ensure proper functioning of network and Overall SLA management
- p) Integration of networking equipments with ACS/TACACS and Configuration Management Tools
- q) Update call status in the ticketing system installed by LIC

4. Submission of CV, selection of the onsite Engineers by LIC, other conditions:

Following conditions shall be applicable regarding the onsite L1/SDM support:

- a. Details of the concerned candidates along with his/her Curriculum Vitae (CV) are to be provided to LIC along with the photo-identity and supporting documents (duly verified and attested by vendor) within 8 weeks from the date of issue of purchase order/Letter-of-Intent.
- b. If required, the candidates (for onsite support at LIC) may be interviewed by LIC officials or LIC's consultant or persons nominated by LIC; including hands on troubleshooting etc. based on which the candidate will be assessed and shortlisted.
- c. If the candidate is not found to be suitable, vendor will have to provide an alternate candidate. The selected candidate has to report to the LIC, within 2 weeks of being intimated of the selection by LIC.
- d. Shortlisted candidates will also form a standby pool for LIC. Engineers from this pool only will be accepted by LIC for the onsite support (including the standby resource). In case of attrition/resignation, the pool has to be updated on regular basis following the process defined above.
- e. In case of a person going on leave, suitable replacement shall be provided from the pool for that leave-period failing which penalty as per the SLA conditions shall be applicable.
- f. If any on-site support person leaves before expiry of one year, penalty as per SLA conditions shall be applicable. This will be cumulative in nature for each occurrence.
- g. In case the on-site support person is to be changed by the vendor, minimum of one- and-half month (45 days) advance notice shall be given by the vendor to LIC, for reasons other than termination, death and hospitalization.
- h. On-site support person may have to be changed by the vendor, if LIC so desires. Notice period for the same will be of 30 days from LIC.
- i. The selected vendor will also have to earmark an Offsite L3 Engineer for LIC, who will act as the advisor/consultant for issues and may have to come for meeting at LIC and work on the new initiatives that LIC may take from time-to-time. No charges will be payable by LIC for this purpose

5. Minimum Qualification criteria for the onsite L1 Engineer:

- a) BE/B Tech/Diploma in Egg. Or MCA/BSc-IT/BSc-Computers.
- b) A valid CCNA or equivalent certification.
- c) Should be on roll of vendor as on the date of his/her deployment to LIC.
- d) Should have worked in a PSU/Govt./ Pvt Bank or any other organization etc. having a large network and should have handled & managed networking equipments for a period two years.
- e) Should have working experience of minimum two years and expertise in routers, switches and other networking equipment.

6. Work-flow and ticketing:

LIC has implemented Network Monitoring Tools and Service-Manager for SLA Management. The onsite engineers of vendor at CO-IT-Mumbai / Zonal Offices will have to accept the trouble-tickets generated through Service-Manager and work on that. The detailed procedure to be followed for call resolution (work/call-flow) will be conveyed to the vendor by LIC after the execution of this agreement. The vendor will have the entire ownership for the tickets monitoring and closure within the stipulated SLAs. The vendor is expected to undertake the following:

- a) Centralized Management of all network devices and services.
- b) Remote (from LIC's CO-IT)/Onsite Configuration Management of Network Devices
- c) Integration of LICs network devices with Cisco-ACS for AAA services & controls, Network Monitoring Tool, Prime tool etc.
- d) Provide periodic network reports like (indicative and not exhaustive) :
 - a) Device uptime reports.
 - b) Bandwidth utilization reports.
 - c) Link/Device downtime report
 - d) SLA reports
 - e) Report on Round trip time and delay on the network.
 - f) Any other report(s) as required by the LIC

7. Warranties:

- The offer must include comprehensive on-site warranty for five years from the date of installation and acceptance of the systems by LIC. The warranty will include supply and installation of all updates and subsequent releases.
- The warranty will include back-lining with OEM.
- The warranty, which for all practical purposes would mean Comprehensive On- site Warranty, shall start and remain valid for five years from the date of installation of products.
- On-site warranty will start from the date of successful installation of the products.

8. Maintenance during Warranty Period:

- The Bidder shall attend to calls and arrange to solve the problems within the stipulated time lines as mentioned in the SLA.
- LIC reserves the right to terminate the contract earlier, with two months' notice for reasons of non-performance and unsatisfactory services. In any case LIC's decision in this case will be final and binding. In case of vendor being discontinued for deficiency in service, the contract may be terminated and the vendor may be blacklisted by LIC and may not be allowed to participate in the future tenders for a period to be decided by LIC. Also, a lump sum amount as deemed fit by LIC (within the limits of PBG) will be imposed as penalty on the vendor to make good of losses suffered by LIC in

terms of business loss and for making alternate arrangements Spares and support for the appliances should be available for a minimum period of seven years from the date of installation of the appliances irrespective of whether the equipment is manufactured by the Vendor or procured from any other OEM. The entire responsibility will rest on the Vendor for servicing and proper functioning of the equipment. During this specified period if it is found that spares or support is not available, the appliances will have to be replaced by equivalent or higher model subject to evaluation if required by LIC, by the vendor at no extra cost to LIC.

- In the event of replacement of any part of the system, it should be done with a part of equivalent or higher configuration which should be compatible with the system.
- Warranty shall include software upgrades, patches, hot fixes and service support without charging any additional cost to LIC.
- The technology providers, including OEM will be required to submit a written undertaking, explicitly stating their commitment to provide full technical, spares, operational and maintenance support to LIC during the warranty period.
- In case of shifting of any appliance supplied by the vendor at any location of LIC, wherever the appliance has to be shifted from one LIC location to another, the vendor is required to uninstall / reinstall and support the system/s at the new location, without any extra cost to LIC of India on account of reinstallation. LIC will reimburse the transportation charges, LBT, Octroi, Entry tax, GST or any other government taxes.
- Complaint(s) will be deemed to be resolved if the following record is available with the Corporation:
 - a) Customer Call Report (CCR) signed by both the service Personnel and Corporation's Authorized official, confirming that the complaint is resolved.
 - b) Date and time of resolution of the complaint shall be indicated clearly.
 - c) Record of down time for hardware will be maintained by LIC and will be binding on the Vendor.

Service Personnel/ Representatives of vendor shall invariably carry their identity cards with them, without which they will not be allowed to access LIC's Systems. Service Personnel of the vendor shall have access to the servers only after obtaining clearance from LIC's authorized officials. No component of the System/data/ log information will be taken out of LIC's premises without clearance from LIC's Authorized Officials.