

RFP Ref: CO/ITD/CNW/411/R3/2019-20 dt 13.12.2019 for "Providing MPLS connectivity for wide area network"

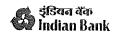
Clarifications

S.No	RFP Point No/Title	Page no in RFP	Clause as per RFP	Query/ Changes requested	Clarifications from the Bank
1	Section I: 1.Invitation for Bids (IFB)	7	(v) The L1 vendor will be identified through reverse auction and order will be placed with L1 vendor. The offer to commission link in 40% of locations (approximately 235 locations) mentioned in RFP for L1 price will be given to L2 bidder. If L2 bidder is not willing to provide the link at L1 Price, then L3 bidder will be offered to provide the link at L1 Price and if L3 bidder is not willing to provide the link at L1 Price, then L4 bidder will be offered to provide the link at L1 Price, then L4 bidder will be offered to provide the link at L1 Price. If none of the bidders are ready to match with L1 price, order will be placed with L1 vendor for total number of links mentioned in RFP. Accordingly, Purchase orders will be placed with successful bidders to deliver the link.	As the requirement is for MPLS connectivity, two separate MPLS cloud providers can only communicate through a common location where both the MPLS provider's link are present, i.e. locations only connected to ISP 1 MPLS cloud can only be connected to locations connected to ISP 2 MPLS through a common location which has both ISP 1 & ISP 2 MPLS links. The configuration of the same can only be done by the SI you will be configuring the CPE at that location or on the L3 device of customer. Bank to confirm if the understanding is as per requirement.	refers to the awarding of Contract to L1 & L2 bidders.
2	Section I:	8	About Banks Network	1. Bank to clarify if the existing CPE will be used for the new connectivity. 2. Bank to confirm If the encryption is done before the packet reaches router. If yes, then will the source IP & destination IP will kept intact?	at bank's end will be arranged by bank. 2. It is clarified that encryption is done in CPE router.



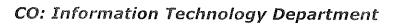
3	Section II: 1.Description	10	The Bid is for providing MPLS connectivity to branches and ATM's. The successful bidder(s) has to provide the backhaul connectivity to bank's Data Center, Chennai and DR site, Hyderabad. Successful Bidder(s) should provide redundant link to the Data Centre and DR Site (free of cost) through connection to 2 different PoPs/link	3. Bank to confirm if DC & DR will have same or different LAN IP Pool. Request customer to clarify / amend as additional point The bidder who are having the existing MPLS connectivity to Bank DC & DR can utilize the existing and upgrade the bandwidth on the existing infra. The new branch locations MPLS can be connected to the same MPLS VRF Request Bank to amend this clause	has a backhaul already, may use the same physical link provided the bandwidth of the backhaul link is upgraded with additional 500 Mbps. Please adhere to the
			under ring topology through two different routes	as both the DC & DR are colocated with the bidder PoP, only cross-connects will be involved. Cross-connect will always be linear and not with ring topology. Also regarding the Dual PoP, as the customer location is colocated with Tata PoP, we can provide dual PE setup for the dual links in active-passive mode. Request Bank to confirm if this will suffice the requirement.	terms and conditions of the RFP.
4	Section II: 1.Description	10	The MPLS links need to be configured either as primary or backup depending on the requirement of the bank	The scope of configuration of primary & secndary has to be done by the SI who will manage the CPE. Request Bank to confirm on the understanding of the requirement.	I I





5	Section II: 2.Qualification Criteria	11	The Bidder should have at least 1,00,000 KM of their own fibre/IRU basis connectivity network across India.	The Bidder should have at least 1,00,000 KM of their own fibre/IRU/Lease basis connectivity network across India.	Please refer Amendment 1
6	Section II: 2.Qualification Criteria	11	The Bidder should produce letter of satisfaction on their MPLS VPN service from at least two of their existing customers who have availed MPLS VPN connectivity from them for at least 1 year.	The Bidder should produce letter or an e-mail for satisfactory on their MPLS VPN service from at least two of their existing customers who have availed MPLS VPN connectivity from them for at least 5 years continuously.	satisfaction or latest e- mail on their MPLS VPN service from at least two of their existing
7	Section II: 3. Scope of work and deliverables	11	Providing of MPLS-VPN bandwidth, establish a separate MPLS Layer 3 network and Integrate with bank's network at all locations. The last mile handoff should be delivered on Ethernet. If at any location V.35 handoff is proposed and if the router has the facility to receive v.35 handoff, the link may be commissioned with v.35 handoff after taking concurrence from the Bank	Request Bank to amend this clause as the scope of integrating the new MPLS network to the existing network falls under SI scope.	It is clarified that the last mile handoff of links should be delivered on Ethernet. In case if the service provider wants to deliver the link on V.35, necessary converter also to be provided by successful bidders. Please adhere to the terms and conditions of the RFP

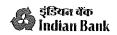






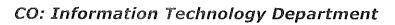
8	Section II: 3. Scope of work and deliverables	12	If the bidder(s) proposes to offer last mile in wireless, then such media should be licensed and the communication on wireless media should be encrypted. If the last mile is on wireless, Service provider has to ensure that no other Radio equipment causes interference to Wireless signals used for Bank's connectivity and the Radio equipment should not be able to trap the signals used for Bank's Network	Request customer to update as per previous RFP Clarifications. Request you to clarify / amend as "If the last mile wireless device is proposed to operate in licenses spectrum then that media should be licensed." (or) removal of this clause Request to change the clause to .If the bidder(s) proposes to offer last mile in wireless and " If licensed spectrum is used then the service provider has to hold a valid licence to operate the same" . If the last mile is on wireless, Service provider has to ensure that no other Radio equipment causes interference to Wireless signals used for Bank"s connectivity and the Radio equipment should not be able to trap the signals used for Bank"s Network. The RF media of bidder is based on UBR which is unlicensed band. Bidder can confirm that no other Radio equipment causes interference to Wireless signals used for Bank's connectivity. Request Bank to confirm if this will	Please adhere to the terms and conditions of the RFP. If the wireless frequency used for connectivity is licensed, then the service provider should have necessary licenses.
9	Section II: 3.	12	Audit of network: Should undertake	suffice the requirement. Such audit of network scope should	It is clarified that the
11/4	Scope of work and deliverables		to implement the observations / recommendations of the Bank's IS- Audit, Security Audit Team or any other audit conducted by the Bank	be mutually agreed upon between the Bank and the bidder and it should be limited to the services	"network infrastructure" includes the devices used for connecting, routing, switching and monitoring





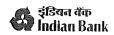
			or External Agencies within 15 days and any cost on this account shall be borne by the bidder(s). The Network infrastructure of the bidder should be made available for inspection by Bank's Audit team or Authorized Representative of the Bank	this RFP. Request bank for clarification on the "network infrastructure" requirement of the bidder	the Banks network. Please adhere to the terms and conditions of the RFP.
10	Section II: 3. Scope of work and deliverables	12	Management Access: Details regarding how the management access to the network infrastructure is controlled for troubleshooting access as well as Operation Support Systems (OSS) system access should be given. The communication between the NOC and bank's network should be encrypted	The NOC will access MPLS network over a management VRF. Bank to confirm if this will suffice the requirement.	has to communicate to
11	Section II: 3. Scope of work and deliverables	12	Co-ordinate with Bank's Network Equipment vendor and system integrator for terminating and commissioning of the links at all locations	We understand the CPE (Customer premises Equipment) / Router will be deployed by Indian Bank's SI. Request Indian Bank to clarify	The CPE devices will be installed by the Bank's SI, however the successful bidder has to coordinate with Bank's SI for commissioning of the link.







12	Section II: 3. Scope of work and deliverables	12	Configure automatic fail over using dynamic routing protocol and without disturbing the existing network between Primary and Secondary links at all locations where Primary link is already available and secondary link is being provided through this RFP process	The BGP fallback to be configured in the CE Router, where the CE Router configuration is under the scope of Bank / Bank's SI. Request you clarify / amend as "The routing as PE end has to be done by the successful bidder and Bank end router configuration will be done by the Bank team" Request Bank to amend this clause as the scope of configuration of primary & secondary has to be with the SI who will manage the CPE.	It is clarified that the routing at PE end has to be done by the successful bidder and Bank end router configuration will be done by the Bank team. Please adhere to the terms and conditions of RFP.
13	Section II: 3. Scope of work and deliverables	13	All the CPE devices provided in the Network and their internal components should be new and original	We are going to provide MPLS connectivity and same will be terminated in the existing CPE as per RFP. Request Indian Bank to clarify Request Bank to confirm if the CPE has to be provided by Bidder.	It is clarified that any devices /equipments/cables required for commissioning the link till the CPE router should be new and original.
14	Section II: 3. Scope of work and deliverables	13	Upgradation of Bandwidth: Any Upgradation in the bandwidth requirements at any of the locations has to be made available within 21 days from the date of work order and the same should be provided after the working hours at the respective location with predetermined downtime, in consultation with Bank, not exceeding four hours for the existing systems and network. Also the Upgradation in Bandwidth on demand should be provided, wherever feasible, without any	Upgradation in Bandwidth, wherever feasible, without change in the media already provided. Request Bank to note that upgrade PO is required and will attract commercials based on the BW required Request clarification on Bandwidth on demand	It is clarified that the exact bandwidth requirements will be provided as and when required by the bank in the form of Purchase order indicating the commercials payable.



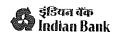
			change in the media already provided		
15	Section II: 3. Scope of work and deliverables	13	Shifting of Links: Whenever bank wishes to shift the location of any site, the links should be shifted to the new site within 2 weeks if last mile proposed is on copper/fiber & within 4 weeks if last mile proposed is on RF. The charges for shifting of links irrespective of the type of the last mile connectivity/Bandwidth should be quoted by the provider in the Commercial Bid. Also the successful bidder should co-ordinate with Bank's System Integrator/Network equipment vendor to shift to the new locations. Whenever the bank wishes to relocate the link/infrastructure within the premises of the bank (e.g. shifting of link from the banking hall to ATM room, shifting of infrastructure from first floor to second floor etc.), the same should be arranged without any extra cost	a)Need to be modified as Whenever bank wishes to shift the location of any site, the link should be shifted to new site within 2 weeks if the lastmile provided is on copper & within 4 weeks if lastmile proposed on RF. b)Need to be modified as Whenever the bank wishes to relocate the link/infrastructure wherever feasible within premises of the bank(e.g shifting of link from the banking hall to ATM room, shifting of the infrastructure from first floor to second floor etc.) the same should be arranged without any cost	Please adhere to the terms and conditions of the RFP
16	Section II: 3. Scope of work and deliverables	13	Surrendering of Links: The Bank reserves the right to surrender the links in case of merger of locations or for any other administrative reasons by giving notice period of 30 days	Request for deletion of the clause, in case of surrendering of links the bank should pay the balance ARC for the contract period	Please adhere to the terms and conditions of the RFP





17	Section II: 3. Scope of work and deliverables	13	Non-functioning of Links: After commissioning of links, when the link has become non-functional due to LOS issues, infrastructure issues etc., the provider has to make all the necessary arrangements immediately to restore the link. In case it is not possible to restore the link within a reasonable time, the links should be provided in an alternate media (wired/RF/Wimax) in consultation with the Bank	Request Bank to clarify / Amend as additional point: "If the restoration of the link is not possible even after the necessary efforts / arrangements made by successful bidder then the link may be declared as TNF and no penalty will be levied for the same.	It is clarified that after commissioning of links, when the link has become non-functional due to LOS issues, infrastructure issues etc., the provider has to make all the necessary arrangements immediately to restore the link. In case it is not possible to restore the link within a reasonable time, the links should be provided in an alternate media (wired/RF/Wimax) in consultation with the Bank. If it is not feasible in wired/RF/Wimax then the link may be declared as TNF.
18	Section II: 4. Time frame for completion of the project	14	The monitoring and maintenance of links should start from the next day of commissioning	Once the link is handed over, the SI / NMS vendor has to move the links to monitoring and maintenance. Bank to clarify and confirm.	Yes.
19	Section II: 5. Specifications of services	14	500 Mbps MPLS VPN(DC/DRS) Termination is Ethernet-Fiber- Multimode-LC	Request to Modify as Singlemode - LC. Sify offers Singlemode - LC by default Bank to confirm if GE (1000-Base- SX) MMF will suffice the handoff interface requirement at DC & DR.	It is clarified that termination can be single mode (GLC-LH-SMD)





20	Section II: 5. Specifications of services	14	Branches : Monthly Uptime required is 99.00% and MTTR is 3 hours. DC/DR site : Monthly Uptime required is 99.99% and MTTR is 1 hour	Branch uptime Need to be modified as 98.5% Request to Modify as MTTR < 4 Hours for Tier 1 city, MTTR < 8 Hours for Tier 2 city and MTTR: Next Business Day for Tier 3 city. Request to Modify Uptime as 99.5% and MTTR: 4 Hours. Fiber on Ring Architecture terminating on two different POP's generally provides an uptime of > 99.5%	Please adhere to the terms and conditions of the RFP
			V	1. Request Bank to relax the clause of Monthly uptime of DC & DR from 99.99% to 99.70%. 2. Request Bank to relax the MTTR requirement as this will depend on the Tier of the location. Tier 1 sites can be provided with MTTR of 2hrs; Tier 2 with 4hrs & Tier 3 with 8hrs. Branches Uptime 98.50% (UBR) & 99.50% (FIBER). DC/DR Uptime: 99.50%. Branches MTTR: 4Hrs. DC/DR Uptime: 4 Hrs.	
21	Section II: 5. Specifications of services	15	The availability of Data centre/DR site should be 99.99% uptime per month, which includes down time due to the preventive maintenance. Preventive maintenance should be done only with prior concurrence of the Bank	Request Bank to clarify that the clause is applicable only when both DC & DR are down / traffic not getting switched over to DC to DR in case of DC goes down or vice versa due to the bidder.	terms and conditions of





	γ			·	
22	Section II: 5. Specifications of services	15	When there is downtime in any of the data centres, all the locations which are connected to the respective data centre will be reckoned as down	Request Bank to clarify that the clause is applicable only when both DC & DR are down / traffic not getting switched over to DC to DR in case of DC goes down or vice versa due to the bidder Request Bank to amend the clause to consider all the locations are down when the data center is down. As the requirement is for a full mesh where each branch can talk to each other without coming to DC & DR, each location should be considered as separate & the penalty of the downtime should only be considered for the link which is down & not the whole solution.	Please adhere to the terms and conditions of RFP. The Down time for DC/DR connectivity is calculated when all links connecting DC/DR are down and branches are unable to communicate to DC/DR
23	Other service requirement	16	Internet Traffic: The WAN traffic of Bank should be totally separated from internet traffic and the links should not connect to Internet at any point. The bidder(s) should ensure the separation of traffic. The architecture diagram showing the network topology of banks network and the service provider's internet network should be provided.	As the Internet & MPLS cloud of bidder is separate, a pictorial representation of the same will not be possible. Bidder can provide a confirmation on the same. Request Bank to confirm if this will suffice the requirement.	Accepted.

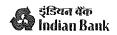






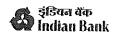
	1	1	THE STATE OF THE S	· · · · · · · · · · · · · · · · · · ·	
24	Other service requirement	16	Should enable the network for functioning of all the client-server, web based applications deployed/to be deployed by the Bank. The network should be enabled for functioning of videoconferencing on IP etc.	and segregate the provided bandwidth for different type of	Accepted.
25	Other service requirement	16	Acceptance tests will be carried out after the completion of the implementation and delivery of link at each location. Bank will carry out acceptance tests at each location and certify completion based on the results of the tests.	feedback/acceptance, the link will	
26	Other service requirement	16	Ping from any location to any location including Data Center and DR site for 1000 packets without disruptions. The size of ping echo packet will be 100 bytes, with less than 50 ms response time, under no load conditions. Any response greater than 100ms for 1 hour or more will be considered as down time	to be modified as Ping from any to any location including DC and DR site for 1000 packets without	terms and conditions of





27	Other service requirement	17	Secondary Backhaul link of 500 Mbps at DC & DR should be provided free of cost and Whenever the converging bandwidth reaches the threshold limit (80%) of bandwidth presently provided at Data centre /DR site, necessary upgradation of primary &	Request to modify the same in bandwidth requirement.	Please adhere to the terms and conditions of RFP
			Secondary Backhaul bandwidth at these centres should be provided by the bidder without incurring any additional cost to bank.	Request Bank to amend this clause as any upgrade of bandwidth will be subjected to feasibility and relevent commmercials.	
28	Other service requirement	17	Ensure the availability of hardware, software, manpower and other facilities required to manage and monitor the network to meet the agreed SLA terms	Request you to clarify on requirement of manpower.	It is clarified that necessary field support to be provided for maintaining the uptime as per SLA terms.
29	Other service requirement	17	Monitor and manage all links for strict compliance with SLA, QoS and security requirements. The monitoring should be done from the service providers own NOC using SNMP V3.	Necessary SNMP V3 Configurations in Customer premises equipments to be configured to send SNMP traps to Service Provider NMS system, kindly mention the same.	Please adhere to the terms and conditions of RFP. For compliance, SNMP V3 only will be used. SNMP V3 configuration at Banks router will be taken care by Bank.
30	Other service requirement	17	Demonstration of jitter sensitive and delay intolerant transport for voice, and video whenever the bank uses them.	Need to be clarified as the SI is maintaining the end configuration. COS % to be defined COS 1 : Voice COS 2 : Video COS 3 : Data COS 4 : Best effort Basis Kindly mention b/w % for each cos	COS 100% voice.





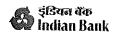
				Request Bank to confirm on the percentage of bandwidth required to be alloted for Voice & Video which can be alloted by Class of Service based on IP or Bank DSCP marking.	
31	Other service requirement	17	Liaison and co-ordinate with System integrator of the Bank to demonstrate end-to-end IPSec tunnel (business data/mail).	The CE Router, where the CE Router configuration is under the scope of Bank / Bank's SI is under scope of bank Request Bank to amend this clauses as this will in the scope fo the SI who will be configuring the CPE at each location.	
32	Other service requirement	17	Liaison with System integrator of the Bank to demonstrate link redundancy/fail over and fall back	The BGP fallback to be configured in the CE Router, where the CE Router configuration is under the scope of Bank / Bank's SI. Request you clarify / amend as "The routing as PE end has to be done by the successful bidder and Bank end router configuration will be done by the Bank team"	It is clarified that the successful bidder has to coordinate with System Integrator of Bank and provide necessary support as and when required, Bank end router configuration will be done by Bank Team.
33	Other service requirement	17	NMS-MIS reports on utilization, response times of link, uptime reports, number of connectivities in the MPLS cloud, addition and deletion of the connections should be submitted manually or ported in NMS portal on monthly basis or whenever required by the Bank without any errors	Kindly remove uptime reports.	Please adhere to the terms and conditions of RFP.





34	Other service requirement	17	Interface errors: Service Provider(s) shall provide PE interface errors to quickly identify faulty interface and take corrective action when the issue is reported on mail or a trouble ticket raised in case of any issues.	Reques to kindly remove the clause since PE Interface errors will be identified and rectified by service providers NOC team and reporting shall not be aviable for customer to interface with trouble ticketing system. Need to modify as Service provider will trouble shoot and quickly identify the faulty interface and take corrective action when the issue is reported over mail ot trouble ticket raised in case of any issues	Please adhere to the terms and conditions of RFP.
35	Other service requirement	17	NMS shall have out of the box tools as per the NMS parameters requested in RFP. Data Collection should be possible on MIB Expressions using specific formulas like Utilization of Links in Kilo Bits Per Second, Mega Bits Per Second	Kindly request to remove this clause since NMS will not support.	Please adhere to the terms and conditions of RFP.
36	Documents constituting the bid	20	All the documents and certificates as per Section VI – formats 1 to 11 should be submitted along with the technical bid.	Format 6 to 10 are not applicable for technical bid. Request Bank to confirm on the same.	Please adhere to the terms and conditions of RFP.
37	Section III: 20. Performance Security	24	Within 15 (fifteen) days of the acceptance of purchase order issued for the project by the Bank, the successful Bidder(s) shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the Bidding Documents (format -7 in Section VI) for 10 % of the	"Request to changed the duration of PBG to one year at a time subject to renewal every year ".	Please adhere to the terms and conditions of RFP.





			contract amount valid for a period of sixty six months (with further one month claim period), in the form of a Bank Guarantee.		
38	Section IV: 5. Liquidated damages	29	Bank reserves the right to charge an LD (Liquidated Damages) at the rate of 0.50% of the total 5 years lease rentals (TCO) per week for the portion for which there is delay, subject to a maximum of 10% of the total 5 years lease rentals of the undelivered link. Part of week will be treated as a week for this purpose	Request Bank to modify this to 2% per week of the ACV of the non delivered portion of the links up to a maximum of 10%. Request the clause to be changed to maximum 10% of ARC LD should be 0.05% of ARC value of the link payable per week subject to maximum of 10% ARC value of the link. Request Bank to amend this clause	
39	Section IV: 9	30	Termination for Convenience		Please adhere to the terms and conditions of RFP
40	Section IV: 11	32	Limitation of Liability	Liability including third party claims should be limited to maximum of the contract Value. Request Bank to amend this clause.	Please adhere to the terms and conditions of RFP





41	Technical BID: MIS reports	41	VPN Links view: NMS shall monitor all VPN links by providing detailed view of all interfaces, with traffic, utilization, and error statistics, which helps to gain visibility into the performance of VPN.	, ,	Please adhere to the terms and conditions of RFP.
42	Technical BID	41	Shall publish NMS reports for bandwidth, application wise utilization and prove SLA compliance.	ł	Please refer Amendment - 2
43	SECTION VI:CHECKLIST FOR DOCUMENTS TO BE SUBMITTED BY THE BIDDER	54	Proof of having at least one year' experience in supplying, installing, commissioning and maintenance of MPLS VPN and should have implemented MPLS VPN in two Banks/ Financial Institutions/Government Organisation/PSU in India and one of them should be a Public Sector Bank in India.	experience in supplying, installing, commissioning and maintenance of MPLS VPN and having implemented MPLS VPN in Bank/Financial Institutions/Gov. Organization in India and one of them should be a Public Sector Bank in India (Copy	,



