

UCO BANK

Department of Information Technology

Request for Proposal (RFP) For "Supply, Commissioning, Maintenance & Management of MPLS Link on Wired/RF/3G-4G media and VSAT links at branches

RFP REF NO: DIT/BPR&BTD/OA/4157/2017-18 Date: 12/02/2018"

Pre-Bid Responses/ Clarifications to Queries raised by the Bidder(s), Amendments, Addendums and Corrigendum's

SI. No.	RFP Page no	RFP Section / Clause No.	Description	Description of Query/ Clarification sought by Bidder	Bank Response
1	60	Annexure – C Eligibility Criteria	Point no. 10 The bidder for category B link should have their own operational 3G/4G based MPLS network. The bidder /consortium partner also must have valid license to operate 3G/4G based MPLS network in India and should be valid throughout the contract period. Proof of supporting documents to be submitted: Copy of license should be submitted.	 Can Telco participate in two bid one direct bid and second bid with consortium with Bidder B. Request Bank to relax the clause to Bidder / Consortium should have their own operational 3G/4G based MPLS network. Can bidder deliver these services through a strategic partner? 	There is no consortium. Bidder may participate in multiple categories. The Modified Clause to be read as: The bidder for category B link should have their own operational 3G/4G based MPLS network. The bidder must have valid license to operate 3G/4G based MPLS network in India and should be valid throughout the contract period. Proof of supporting documents to be submitted: Copy of license should be submitted.
2				Please confirm if TSP is bidding for Category A and B only then he needs	Please refer point no. 4.1 to point no. 4.67 for all category of links

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				to meet eligibility criteria for these two category only and not for Cat2gory C	For Category A – Point no. 4.68 to point no. 4.72 For Category B – Point no. 4.73 to point no. 4.75 For Category C – Point no. 4.76 to point no. 4.81
3	81	Annexure – N Technical Requirement	Point no.1 Bidder should provide MPLS link feasibility report last mile on Wire/RF and 3G&4G separately for branches as per list mentioned in Annexure – W. The links will be used either primary or back up of existing MPLS links from BSNL/MTNL or VSAT links with auto-failover option.	Please provide Annexure – W, As CPE device is being provided and managed by Bank, so failover will be Bank's responsibility.	Please refer the Revised Annexure - N in the Corrigendum.
4	81	Annexure – N Technical Requirement	Point no. 7 If the last mile is on wireless, bidder has to ensure that no other Radio equipment causes interference and should not be able to trap the wireless signals used for Bank's network.	RF links are on unlicensed band, Interference may cause after installation, which may be troubleshoot. Service provider does not having control on any other RF device in the vicinity.	Clause Stands as per RFP.
5	81	Annexure – N Technical Requirement	Point no. 8 In the case of wireless link (RF) or VSAT link the responsibility of obtaining the roof top permissions / base area for erection of Pole / Mast etc., lies with the selected bidder.	 Permission to install MUX/MAST/RF antenna/VSAT/Modems etc. At customer premises along with security of infrastructure/devices shall be provided by customer. Suggest site installation permission arrangement to be in scope of customer. Bidder will proceed with installation only after permission confirmation from customer. All clearances, wherever required, in respect of the mast / pole / antenna at branch, from any government / local / statutory bodies etc. like municipal 	Please refer to Point no. 12 in Corrigendum.

				corporations, airport authorities are the responsibility of the customer. Further, the rooftop rights, permissions, rentals & any other miscellaneous charges are the responsibility of the customer.	
6	82	Annexure – N Technical Requirement	Point no: 24 Bidder will monitor the links and Bidder must have their own Network Operation Centre for monitoring of the Network. Bidder will monitor all the links from their NOC through NMS and submit the reports like Uptime, Bandwidth utilization, Link error, latency, etc. on monthly basis and as per the Bank's requirement. Bank will provide the SNMP access (read only) of the router for monitoring of the link.	Please provide make and model of CPE devices, in case CPE are non Cisco then link up down report can be provided, as other may not be integrated with our NMS for detailed reporting.	The Modified Clause to be read as: Bidder will monitor the links and Bidder must have their own Network Operation Centre for monitoring of the Network. Bidder will monitor all the links from their NOC through NMS and submit the reports like Uptime, Bandwidth utilization, Link error, latency, etc. on monthly basis and as per the Bank's requirement. Bank will provide the SNMP access (read only) of the router of any OEM for monitoring of the link.
7	83	Annexure – N Technical Requirement	Point no. 31 The proposed network by the bidder should support: a) All web and client–server based application b) Video Conferencing c) Voice over IP (VOIP) d) End to end QOS e) IPsec	 Following are not supported for category B type connectivity. b) Video Conferencing c) Voice over IP (VOIP) d) End to end QOS These shall be applicable for Category A links only. As per the Commercial Template for VSAT Table K, bank is asking rate for 1 kbps BW. With only 1 Kbps BW the VC and VOIP application would not run on network. Hence requesting bank to confirm the applications details at VSAT branches along with VSAT BW requirement It is assumed that IPSEC will be 	 Clause Stands as per RFP. 1 Kbps BW is for TCO Calculation only.

				originate from branch router and terminate on banks VPN concentrator at DC /DR. Please confirm • In RF Circuit we don't give any	YES - Pidder should provide link bandwidth
				commitment on Video & Voice traffic. It needs to be validated before implementations	Bidder should provide link bandwidth as per Annexure V
8	84	Annexure – N Technical Requirement	Point no. 40 Average Jitter of the connectivity should be less than 45ms measured for a minimum 1000 packets.	Technology used in Category B link does not guarantee Jitter parameter. It shall be applicable for Category A links only.	Clause stands as per RFP
9	84	Annexure – N Technical Requirement	Point no. 42 The connectivity should be capable of provide end to end Quality of Service (QoS) for critical applications.	This clause shall be applicable for Category A links only and not for Category B links.	Clause stands as per RFP
10	84	Annexure – N Technical Requirement	Point no. 43 The connectivity should be capable of provide End to end differentiated services code point (DSCP) and class of service (CoS) continuation.	This clause shall be applicable for Category A links only and not for Category B links.	Clause stands as per RFP
11	84	Annexure – N Technical Requirement	Point no. 49 Bidder's network should support Incident management: Prevention mechanism for mis-configuration, Alert mechanism should be in place for any incident occurred etc., Every incident reported should be notified to Bank and documented, System should have capability to send alerts through email and SMS to respective authorities/stakeholders.	This clause shall be applicable for Category A links only and not for Category B links. However for Category B links customer can raise an Trouble ticket and troubleshooting can be carried-out by Service Provider	Clause stands as per RFP
12	85	Annexure – N Technical Requirement	Point no. 57 Bank will only provide Rack space, required earthing voltage and UPS Power supply for installation or commissioning of required links in branches/offices. All other required infra should be arranged by bidder at no extra	Permission to install MUX / MAST / RF antenna / VSAT / Modems etc. At customer premises along with security of infrastructure/devices shall be provided by customer.	Clause stands as per RFP.

			cost to Bank. Bank will not take any responsibility for installation of MUX/MAST/RF antenna/VSAT/Modems etc. Bidder should take adequate insurance for deploying hardware at no cost to Bank for preventing the equipment from any kind of damages.	Basic Hygine Factor such as UPS Power, earthing with E/N Voltage Less than 2 V, dust free environment, and Air Conditioner to be provided by customer. All clearances, wherever required, in respect of the mast / pole / antenna at branch, from any government / local / statutory bodies etc. like municipal corporations, airport authorities are the responsibility of the customer. Further, the rooftop rights, permissions, rentals & any other miscellaneous charges are the responsibility of the customer.	Please refer to Point no. 12 in Corrigendum.
13	85	Annexure – N Technical Requirement	Point no. 59 Bidder should provide the complete site readiness requirement to Banks designated team and local branch officials in writing during the site-survey.	This activity will be done after receiving the PO from customer. Customer need to give authorization letter to TSP to complete the survey up to router location.	Clause stands as per RFP
14	85	Annexure – N Technical Requirement	Point no. 61 Bidder has to deliver the link up to the router and terminate on the required interface of branch router with prior approval from Bank designated team.	As per clause 35 Ethernet interface to be given. Both are contradicting.	The Modified clause to be read as: Bidder has to deliver the link up to the router Ethernet port and terminate on the required interface of branch router with prior approval from Bank designated team.
15	85	Annexure – N Technical Requirement	Point no. 67 Bidder shall ensure that all supplied hardware, software etc. must not be End of Support / End of Service and spares/upgrades should be available for at least 5 years from date of commissioning	Service Provider will take care of their	Bidder should provide all hardware, software for execution of project, if required.
16	11	3. Eligibility Criteria	Point no. 3 The bidder should have made operating /positive profit in any two of the last three financial years (i.e. 2014-15, 2015-16 and	Please amend the clause as "The bidder should have made operating /positive profit/positive net worth in any two of the last three	Clause stands as per RFP

			2016-17)			financial years (i.e. 2014-15, 2015-16 and 2016-17)."	
			The table below specifies the end-to-end link uptime matrix.		 Packet drop 0.1% is acceptable for Data centre location. For spoke locations please amend the SLA for packet drops to <=1% Uptime (Monthly basis) DC DR Link - 99% For Category A Links: Metro, Urban, Semi Urban Area Links - 		
			SI. No.	Link category	Uptime (24X7 basis)	(24X7 basis) 99.9% 1% packet drop should be acceptable.	
		12. SLA for Network	1	DC DR Link	99.9%		
17			2	Metro, Urban, Semi Urban Area	99.5%		
17	45			Links	0007		Clause statios as pet KFF
			The round trip d time should not	be more that	work at any n 100 msec	Copper LM ::: 98.5% RF LM ::: 98% 4G LM ::: Best effort basis.	
			(average) with packet drop sh case of high late of the Service preither by replaci	ould be less thency, it will be ovider to rectifying the local pai	nan 0.1%. In responsibility the latency r or by other	SLA- Uptime should be considered basis the Last mile only. RF last mile uptime should be 98.5% and Wired last mile uptime should be 99.5%	
			the stipulated lim	well? If yes the	Is SLA applicable on 3G/4G as well? If yes then bank has to rethink on SLA parameters for 3G.		
						As all the links are un-managed (I,e router management and configuration control is with Bank)	

				MPLS links hence considering single	
				links at DC and DR; TCL can	
				propose 99.9% from TCL PoP to	
				PoP. Customer to confirm whether	
				our understanding is in concurrence with the Bank.	
				The Bidder(s) must submit Earnest	
			The Bidder(s) must submit Earnest Money	Money Deposit in the form of Demand	
			Deposit in the form of Bank Guarantee valid	Draft / Bank Guarantee valid for a	
18	15	5. Earnest	for a period of 180 days with a further claim	period of 180 days with a further claim	Clause de la company DED
10	15	Money Deposit	period of 30 days in favour of Bank payable	•	Clause stands as per RFP
			at Kolkata for an amount mentioned	period of 30 days in favour of Bank payable at Kolkata for an amount	
			hereunder:	mentioned hereunder:	
			In the event the bidder is not feasible for	memoned hereonder.	
			category A or Category B links for all		
		Part – III 3. Commercial Evaluation	branches, for evaluation purposes the	Please clarify this clause in detail Clause i	Clause is self-explanatory
	27		highest cost of link for that category of link		
19			as well as for that area category, if any, in		
17			the submitted bids would be used to		
			calculate the TCO. For the purposes of		
			payment and finalization of the contract,		
			the value of the lowest bid would be used.		
			In case bidder will not be in a position to	In case bidder will not be in a position	
		Part – V	deliver ordered feasible link at the specified	to deliver ordered feasible link at the	
20	39	1. Order	locations. Bank will impose the penalty	specified locations. Bank will impose	Clause stands as per RFP
20	07	Details	equal to 10% of annual rental for each such	the penalty equal to 5% of annual	Clause startas as per Kiri
		Delans	location	rental for each such location.	
				The Selected bidder, within 45 days	
			The Selected bidder, within 30 days from the	from the date of each purchase order	
		Part – V	date of each purchase order will have to	will have to furnish a Performance Bank	
21	41	5. Performance	furnish a Performance Bank Guarantee,	Guarantee, format as Annexure – E,	Clause stands as per RFP
	-	Bank	format as Annexure – E, issued by any	issued by any scheduled commercial	
		Guarantee	scheduled commercial Bank equal to 10%	Bank equal to 5% of the first year order	
			of the order value.	value	

22	41	Part – V 5. Performance Bank Guarantee	The Bank will require the selected bidder to provide a Performance Bank Guarantee as per the format of Annexure – E, issued by any scheduled commercial Bank (other than Bank), within 15 days from the date of acceptance of the order or signing of the contract whichever is earlier, for a value equivalent to 10% of the total cost of ownership/order value valid for 39 months (36 Months + 3 Months Claim Period) from the date of purchase order indemnifying any loss to the Bank, as per the format of Annexure – E.	The Bank will require the selected bidder to provide a Performance Bank Guarantee as per the format of Annexure – E, issued by any scheduled commercial Bank (other than Bank), within 45 days from the date of acceptance of the order or signing of the contract whichever is earlier, for a value equivalent to 5% of the first year total cost of ownership/order value valid for 39 months	Clause stands as per RFP
23	44	Part – V 10. Liquidated Damage	Any delay in commissioning/shifting of the link beyond the stipulated time period as per the clause of – Installation and Commissioning, Bank will charge penalty at 1 % of the order value for that link (link by link basis) per week or part thereof, subject to a maximum of 10% of the order value of that link excluding GST and other applicable taxes (if any). The Bank may at its discretion also waive or reduce the penalty if the reasons for delay are considered to be justified.	 Any delay in commissioning/shifting of the link beyond the stipulated time period as per the clause of – Installation and Commissioning, Bank will charge penalty at 0.5 % of the first year order value for that link (link by link basis) per week or part thereof, subject to a maximum of 5% of the first year order value of that link excluding GST and other applicable taxes (if any). No penalty must be applicable in case the delay reason is beyond the control of bidder. In case the penalty is applicable it should be 0.5% per week capped up to 5% of the value of pending site for delivery. Request Bank to charge the penalty at 0.5% of the order value for the particular link per week or part thereof, subject to a maximum of 5% of the order value of that link. 	Clause stands as per RFP

24	45	Part – V 13. Payment against delivery of SLAs :		Increase the payment percentage: DC-DR up to 80% And Spoke site up to 85%	Clause stands as per RFP
25	90	Annexure – Q Commercial Template for MPLS on Wire/RF	Table C – Link Cost for MPLS backhaul links bandwidth 100 Mbps on OFC	Please confirm if BW upgrade on existing Backhaul links meet the requirement or new links are need to be provided. For new link please confirm port availability on existing router.	New backhaul to be provided.
26	84	Annexure – N	Point no.41 The MTU (maximum transmission unit) size should be 1500 bytes.	Please change the clause as follows: For Category A links, MTU (maximum transmission unit) size should be 1500 bytes. For Category B links, MTU (maximum transmission unit) size should be 1320 bytes.	Clause stands as per RFP
27	86	Annexure – N	Point no. 79 Latency should not be more than 100 ms (End to End i.e. Branch router to DC & DR router) for a 1500 byte packet size measured for a minimum of 1000 packets.	Please change the clause as follows: Latency should not be more than 500 ms (End to End i.e. Branch router to DC & DR router) for a 1300 byte packet size measured for a minimum of 1000 packets, with no load.	Clause stands as per RFP
28	12	Part – I 3. Eligibility Criteria	Point no.9 The bidder for category B link should have deployed MPLS link based on 3G/4G media in at least one Scheduled Commercial Bank in India with minimum 300 locations and maintained for more than 3 years. Proof of Supporting documents to be submitted: Purchase order and execution certificate from existing customer(s).	 Please change the clause as follows: The bidder for category B link should have deployed MPLS link based on 3G/4G media in at least one Scheduled Commercial Bank in India with minimum 300 locations. MPLS over 3G/4G is a new technology. Please accept the proof for commissioning as email/letter/any other credential/self-certificate by the 	The Modified Clause to be read as: The bidder for category B link should have deployed MPLS link based on 3G/4G media in at least one Scheduled Commercial Bank in India with minimum 100 locations and maintained for more than 1 year. Proof of Supporting documents to be submitted: Purchase order and execution certificate from existing customer(s).

	1					
					bidder accompanied with PO	
					copy, however, proof of	
					maintaining the same for 3 years will	
					not be available. Request you to	
					remove this requirement.	
					Request Bank to relax the clause to 100sites on 3G/4G s from any Govt / PSB and maintenaning it for 1 yr as it is new technology of LM connectivity. Request Bank to accept Customer Satisfaction letters/Self-Declaration	
					to this effect since customers refrain	
					from confirming the media on	
					which links are delivered.	
				•	Please change the clause as below:	
					The bidder should have had an	
					annual turnover of more than Rs. 50	
					Crores during each of the last three	
			Point no. 2		financial years as evidenced by the	The Modified Clause to be read as:
			The bidder should have had an annual		audited accounts of the company /	The bidder should have had an annual
			turnover of more than Rs. 100 Crores during		division.	turnover of more than Rs. 50 Crores during
			each of the last three financial years as			each of the last three financial years as
		Part – I	evidenced by the audited accounts of the	•	Proposed options :	evidenced by the audited accounts of
29	11	3. Eligibility	company / division.		1. Nelco Limited & Tatanet Service	the company / division.
		Criteria			Ltd provide VSAT Services in the	
			Proof of supporting documents to be		following way, Nelco Limited deals	Proof of supporting documents to be
			submitted:		with VSAT HW, Installations &	submitted:
			Copy of the audited Balance Sheets for the		Maintenance and Tatanet Services	Copy of the audited Balance Sheets for
			preceding three years (i.e. 2014-15, 2015-16		_	the preceding three years (i.e. 2014-15,
			and 2016-17).		Govt of India to provide satellite BW	2015-16 and 2016-17).
					Services. Tatanet is a subsidiary	
					company of Nelco Limited,	
					together both the company	
				<u></u>	meeting the Eligibility Criteria of Rs.	

				100 Crores during each of the last three financial years as evidenced by the audited accounts. Kindly clarify that if Nelco & Tatanet together can comply this Eligibility criteria.	
30		General	For the Category C Vendor	It is understood that Annexure – C, eligibility criteria clauses no. 5, 6, 7, 8, 9, 10, 11, 15 are not applicable for Category C Links bidders.	Please refer point no. 4.1 to point no. 4.67 for all category of links For Category A – Point no. 4.68 to point no. 4.72 For Category B – Point no. 4.73 to point no. 4.75 For Category C – Point no. 4.76 to point no. 4.81
31		General	Requesting to allow 2 PO clause, separate for rental, HW and BW	Please allow billing on two separate entity for HW and BW for category C VSAT Services Vendors	Bank will finalise the modality with the selected bidder.
32	20	Part – II 23. Authorized Signatory	The selected bidder shall indicate the authorized signatories who can discuss, sign negotiate, correspond and any other required formalities with the Bank, with regard to the obligations. The selected bidder shall submit, a certified copy of the resolution of their Board, authenticated by Company Secretary, authorizing an official or officials of the company to discuss, sign with the Bank, raise invoice and accept payments and also to correspond. The bidder shall furnish proof of signature identification for above purposes as required by the Bank.	Please allow Power of attorney also in Itern of signing authority.	Authorized Signatory should have Power of Attorney.
33	20	Part – II 24. Merger & Acquisition	In case the selected bidder's company merges or amalgamates with any another company, the said contract will be stand still in case of either parties.	Please clarify on this. Considering that Tatanet will be amalgamated with NELCO as per the scheme which is pending approval of NCLT.	The holding company will be the other party and in this regard a Deed of Novation should be submitted.

34	42	Part – V 7. Payment Terms	Payment of VSAT equipment – 80% on successful implementation of VSAT equipment & commissioning of VSAT link and remaining 20% will be paid after 3 months of the successful commissioning of VSAT link. • One time cost, if any, will be paid after successful commissioning of the link and subsequent acceptance by the Bank. Bidder should raise the invoice for one time charges on monthly basis.	 The payments are linked to implementation and commissioning. However, what is meant by commissioning is not defined. Please clarify the difference between the implementation and commissioning of link and successful commissioning. VSAT testing will be done immediately after making the site up by the bidder. Bank should release the acceptance after the site delivery and bidder should be allowed to raise the invoice from the date of acceptance. Request Bank to amend the payment terms as 80% on delivery and remaining 20% on Installation & Commissioning. 	Clause stands as per RFP
35	46	Part – V 14. Force Majeure	Force Majeure is herein defined as any cause, which is beyond the control of the selected bidder or the Bank as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance, such as: -> Natural phenomenon, including but not limited to floods, droughts, earthquakes, epidemics, -> Acts of any government, Situations, including but not limited to war, declared or undeclared, priorities, quarantines, embargoes, -> Terrorist attacks, public unrest in work area,	 Please include sun outage, satellite failure/ transponder failure part of force majeure etc. Transponder Failure/Satellite Failure and Sun Outage should be included in the list of force majeure. 	The Modified Clause to be read as: Force Majeure is herein defined as any cause, which is beyond the control of the selected bidder or the Bank as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance, such as: • Natural phenomenon, including but not limited to floods, droughts, earthquakes, epidemics, • Acts of any government, Situations, including but not limited to war, declared or undeclared, priorities,

					 quarantines, embargoes, Terrorist attacks, public unrest in work area, Sun outage, satellite failure/transponder failure.
36	47	Part – V 17. Acceptance Testing	The Bank will carry out the acceptance tests within 15 days of link handover for testing of successfully integration of MPLS on Wired/RF, 3G-4G and VSAT link with Bank's network as per scope of work in Part IV. The Vendor shall assist the Bank in all acceptance tests to be carried out by the Bank. The provisioned items will be deemed accepted only on successful acceptance of those products and the vendor would need to provision insurance of those items till successful acceptance. The Bank at its discretion may modify, add or amend the acceptance tests which then will have to be included by the vendor. The Vendor shall arrange for the tests at the relevant sites in the presence of the officials of the Bank. The Vendor should ensure that the tests will involve trouble-free operation of the complete system apart from physical verification and testing and that there shall not be any additional charges payable by the Bank for carrying out this acceptance test.	 Please accept deemed acceptance after 15 days. Testing period to be changed to 2 days. In case of failure to conduct the acceptance test within 2 days of completing the particular deliverable, the same shall be deemed to have been accepted and the acceptance certificate shall be deemed as released within 3 days after the deemed completion of the acceptance test. Bank should complete the testing within 3 to 4 days of link delivery. Bidder engineer will test the link on laptop and check the wan to wan ping check. Delivery and installation report will be signed by the local customer at site. Bank network system integrator spoc should be available at site to check link after the termination of cable on customer router. Bank has to ensure the availability of all the resources before conducting the testing to avoid the revisit. Bidder will not be liable to arrange the resource if the connectivity is fine and testing is cancelled due to any issue at bank/ bank network 	Clause stands as per RFP

				integrator end.	
37	48	Part – V 18. Order Cancellation	In case of cancellation of order, any payments made by the Bank to the Vendor would necessarily have to be returned to the Bank, further the Vendor would also be required to compensate the Bank for any direct loss suffered by the Bank due to the cancellation of the contract/purchase order and any additional expenditure to be incurred by the Bank to appoint any other Vendor. This is after repaying the original amount paid.	This is too harsh. The termination clauses in this RFP are entirely one sided	Clause stands as per RFP
38	55	Part – V 33. Limitation of Liability	Bidder's aggregate liability under the contract shall be limited to a maximum of the contract value. This limit shall not apply to third party claims for a. IP Infringement indemnity. b. Bodily injury (including Death) and damage to real property and tangible property caused by Bidder/s' gross negligence. For the purpose of this section, contract value at any given point of time, means the aggregate value of the purchase orders placed by Bank on the Bidder that gave rise to claim, under this RFP. c. Bidder shall be liable for any indirect, consequential, incidental or special damages under the agreement/ purchase order.	Both clauses on page 49 and 55 contradicts	Clause stands as per RFP
39	53	Part – V 27. Termination	The Bank shall be entitled to terminate the agreement with the selected bidder at any time by giving ninety (90) days prior written notice to the selected bidder.	 Termination by convenience – please remove this part. It will lead to financial loss for the Bidder, therefore, kindly remove it. 	Clause stands as per RFP
40	62	Annexure – D	Format of Bank Guarantee (EMD)	Please change the BG Format and BG Amount for Category C	Clause stands as per RFP
41	9	BID Control	Last Date and Time for receipts of tender	Date of Bid submission needs to be	Please refer to the Bid Extension notice.

		Sheet	bids & Opening of technical bids	mentioned correctly	
42	13	Part – III 3. Eligibility Criteria	Point no. 15 The Bidder should have preferably service support center in all state capitals and Undertake to provide seamless service to branches from the service support centers. Proof of supporting documents to be submitted: List of Support Service Centre with Address & contact details, Manpower Strength, Value of Stocks of Spares, Model and type of WAN devices serviced etc. should be specified in Annexure – O.	It is assumed that Model and type of WAN devices serviced etc. should be specified in Annexure – O. is not applicable for VSAT provider. Please confirm.	Clause valid for all link category
43	31	Part – IV Broad Scope of the Work	Point no. 4.24 Besides monitoring from NOC, bidder should provide Manpower for monitoring links on daily basis during Monday to Saturdays 10 A.M to 7 P.M at Bank NOC Centre as per following criteria.	 The VSAT link can be monitor and managed by bidder's skill help desk engineers through bidders central HUB operates on 24X7X365 days basis. The bidder can also provide online monitoring portal to bank to know the VSAT UP /Down status. Hence requesting bank to delete onsite manpower requirement for VSAT service provider. Please confirm if onroll resource is required or bank will be ok with the outsource resource. Also space, power and internet connectivity for the RE laptop/desktop will be provided by bank. As per the RFP sow, all links will be monitored through NOC hence no need to have additional man power. 	Clause stands as per RFP

44	10	Part – I 4. Overview of Tendering Process	Bank intends to engage bidders for providing the secondary link at branches from Alternate Service Provider other than BSNL & MTNL as per the terms and conditions mentioned in this RFP document. The purpose of the RFP is to seek a detailed technical and commercial proposal for Supply, Commissioning, Maintenance & Management of MPLS on Wired/RF media or MPLS on 3G-4G media or VSAT link at branches as elaborately detailed under Scope of Work on behalf of Bank. Through the RFP process Bank will select vendors for following different link categories: A. MPLS link on wired or Wireless or RF Media B. MPLS link on 3G / 4G based mobile network media C. VSAT link	 Requesting bank to confirm the no of remote locations where VSAT is required. what happen if branch is having existing VSAT and not feasible for Categories A and B 	 No of VSAT location will be decided by after feasibility for link A & B. No additional VSAT will be required.
			Separate L1 & L2 bidders will be selected for above mentioned three link categories. Bank will primarily go for category A link for the feasible branches. For non-feasible category A link branches, Bank will go for category B link. In case of non-feasible of both categories A & B link branches, Bank will go for Category C link except branches where already VSAT link is running. Branches, which will feasible for both categories A & B, category A link will be deployed. In case of common feasible links in between L1 & L2 bidders under same category, the order for		

			links will distributed among L1 & L2 in a ratio of 60:40, provided that L2 bidder matches the cost of link as of L1. Bidder has to specify clearly in Clause D of Annexure – B the category (ies) of link(s) for which they submit the bids. For any category of links, no bid / single bid situation arrived, the tendering process for that particular category of links may get cancelled.		
45	15	5. Earnest Money Deposit	RFP for Supply, Commissioning, Maintenance & Management of MPLS on Wired/RF/3G-4G and VSAT links at branches Rs. 10,00,000/-	As per commercial bid format bank is asking rate for 1 VSAT. Hence Rs 10,00,000/- EMD for VSAT requirement is very huge amount. Hence requesting bank to reduce the EMD as Rs 1,00,000/-	Clause stands as per RFP
46	35	Part – IV Broad Scope of the Work	Point no. 4.55 In the case of wireless link (RF) or VSAT link the responsibility of obtaining the roof top permissions/base area for erection of Pole/Mast etc., lies with the selected bidder. The bidder is refrained from installation of any other equipment other than the one required for connectivity of that specific branch and also that equipment should not be used for connectivity of any other building/customer.	 The branch premises is own by bank. Hence requesting bank to please arrange the roof top permission for VSAT installation Permission for Mast/pole installation should be taken up by Bank as SP can't take this up from their end. All permissions and access at site will be arranged and managed by bank only. Roof rights for feasibility check, permission for GBT/RTT pole, tower, mast will be arranged by customer. Bank has to ensure and confirm the site readiness to bidder before the team visit at site to deliver the connectivity. Being customer location Site access/roof right permissions to be 	For land lord permission: • Please refer to Point no. 12 in Corrigendum.

				managed by customer	
				 Request bank to provide permission to put up Mast / Pole for RF connectivity. 	
				• In the case of wireless link (RF) or VSAT link the responsibility of obtaining the roof top permissions/base area for erection of Pole/Mast etc., lies with the selected bidder and all possible assistance will be provided by the bank.	
47		General		It is assumed that bank will provide rack space (1U)/ wall mount for VSAT modem installation. Please confirm	Please refer RFP Clause no. 4.54 under Part – IV Broad Scope of the Work.
48		General		It is assumed that bank will provide online UPS with earthing for VSAT installation at each remote location. Please confirm	Please refer RFP Clause no. 4.54 under Part – IV Broad Scope of the Work.
49		General		Requesting bank to fixed a rate card for Platform /Monkey cage. In case required same can be procured by bank as per rate card	No Change in Clause.
50	37	Part – IV Broad Scope of the Work Category C link	Point no. 4.76 The size of VSAT pool bandwidth will be based on nos. of VSAT equipment required. Per VSAT equipment installation average 30 Kbps bandwidth will be required	 As per the Commercial Template for VSAT Table K Bank is asking rate for 1 kbps. But as per point mention here, bank is asking avg 30 Kbps BW based on no of VSAT equipment required, Which is contradictory. Hence requesting bank to confirm the exact BW requirement and no of VSAT required Does it mean the Number of VSAT 	Commercial Template for VSAT Table K Bank is asking rate for 1 kbps-for TCO Calculation only. Order of Pool Bandwidth depends on no of VSAT link. If order VSAT link N, then pool bandwidth will be NX30 Kbps.
				would be multiplied by 30 Kbps (1:1)	

51	37	Part – IV Broad Scope of the Work Category C link	Point no. 4.77 Supplied VSATs should support any inbound and outbound bandwidth between 50 Kbps to 2Mbps and Antenna Size 1.2 meters. The bidder shall provide VSAT connectivity to all branches/ATMs/e-lobby using the Ku band.	 i.e. full duplex and that much pooled Bandwidth has to be allotted to the Bank by the Successful Bidder. Please confirm. Please confirm the no branches /ATM / e-Lobby for this RFP Please consider Extended-C band also if Ku-band is not feasible. For that, Ex-C Band VSAT Hardware and Bandwidth should be added as a line item in the commercial bid. 	Clause Stands as per RFP.
52	37	Part – IV Broad Scope of the Work Category C link	Point no. 4.78 The vendor will provide dedicated pool bandwidth (1:1) full duplex for the VSATs supplied at various locations identified by the Bank across the country. The pool bandwidth will be dedicated for Bank only and there will not be any sharing with the pool bandwidth. The Pool bandwidth provided must be seamlessly integrated with the existing network of the Bank. However Bank may increase the pool bandwidth as per Bank's requirements.	Please share the existing no of VSAT and provider details. Please note the existing BW Pool of different service provider cannot integrate with new BW Pool provided by another service provider	Pool bandwidth with different service provider will be different and will not be integrate with each other.
53		General		It is assumed that bank will provide router at banks DC and DR to terminate the backhaul link connecting bidder HUB. The bidder will provide required backhaul with redundancy	For Category C link, bank will provide backhaul link between VSAT HUB and Bank Datacentre and routers for terminating backhaul link. For other categories, bidder has to provide the same.
54	31	Part – IV Broad Scope of the Work	Point no. 4.20 The bidders are expected to do a site survey for feasibility and for installation of the required equipments. They should clearly mention the required equipment/s that will be deployed during commissioning. The charges towards cabling & other activities	In order to confirm feasibility, we request bank to share list of VSAT sites to conduct site survey	Bidder should do site survey for feasibility for all location mentioned in Annexure – V for category A & B Links.

			should be included in the cost of link.		
55	46	Part – V 13. Payment against delivery of SLAs	Following will be excluded while calculating the down time: • Down time due to Bank issues. • Schedule down time for maintenance activity. Bidder need to inform to the Bank at least a week before for the schedule down time and for urgent situation at least 24 hours before. Down time due to force measure like Earth quake, Natural calamities, Riots and major power outage.	Raining at HUB end and Remote end.	Clause stands as per RFP.
56	33	Part – IV Broad Scope of the Work	Point no. 4.36 Bidder has to replace/repair faulty/damaged equipment at the bidder's own cost, irrespective of the reason of fault/damage within the SLA time limit, during the contract period. However, the "force majeure" clauses will apply. In any case, the bidder will have to arrange for replacement of the faulty/defective equipment at the earliest. External antennas should have proper lightning conductors, wherever necessary	 It is assumed that this clause is not applicable for Category C Links Basic Hygine Factor such as UPS Power, earthing with E/N Voltage Less than 2 V, dust free environment, and Air Conditioner to be provided by bank. Any failure of hardware due to basic pre-requisite not available & anything related to customer site, will be replaced on charged basis. Responsibility to provide correct power and earthing for equipments will rest with customer and hence if there are any equipment failures due to these issues, charges for replacement will be recovered from customer. In case of any damages of equipment at the branch/ due force majeure conditions bidder will 	Clause stands as per RFP.

				replace the equipment only after getting the commercial approval on email/letter. • Hardware will not be covered under warranty/support in case it is physically damaged, lost or burnt due to earthing / power issue. New PO for the damaged equipment will be required from bank before providing replacement.	
57	33	Part – IV Broad Scope of the Work	Point no. 4.42 The connectivity should be capable of provide End to end differentiated services code point (DSCP) and class of service (CoS) continuation.	It is assumed that this clause is not applicable for Category C Links	Clause 4.1 to 4.67 valid for all category of link.
58	34	Part – IV Broad Scope of the Work	Point no. 4.44 Bidder's network should support dynamic routing protocols like Open Shortest Path First (OSPF), Border Gateway Protocol (BGP) etc	 It is assumed that this clause is not applicable for Category C Links Recommended options are Static & BGP only as Routing Protocol between CE and PE 	Clause 4.1 to 4.67 valid for all category of link.
59	34	Part – IV Broad Scope of the Work	Point no. 4.45 Bidder's network should support access control list (ACL) Support, SNMP & v2 support Network Time Protocol Version 4 (NTPv4), Syslog, Ping, Trivial File Transfer Protocol (TFTP), Secure Shell version 2 (SSHv2) and Internet Protocol version 6 (Ipv6) support.	 It is assumed that this clause is not applicable for Category C Links Bank should exclusively mention why they need NTPv4. Do they need clock synchronization between computer systems to be provisioned? 	Clause 4.1 to 4.67 valid for all category of link.
60	32	Part – IV Broad Scope of the Work	4.28 The prospective selected bidder shall establish the Network and should be capable of maintaining it for a minimum period of 3 years initially based on the performance of network to be reviewed annually and then subsequent extension for	In case of any issues in last mile in terms of LOS/Providers shut down the link will run as per best efforts basis. If any Iternate feasibility is available for that locations during life cycle management bank has to bear the	Clause Stands as per RFP.

			2 years based on the performance of the network link.	extra cost.	
61	12	Part – I 3. Eligibility Criteria	Point no. 12 The bidder for category c link should have deployed VSAT System in at least one Scheduled Commercial Bank in India with minimum 500 VSATs and maintained for more than 3 years. Proof of Supporting documents to be submitted: Purchase order and execution certificate from existing customer(s).	 Please accept a letter/email from the customer stating that bidder is providing VSAT services at least 3 years, as a proof of this clause. Also, the maintenance period can be interpreted from the PO/RFP. Request you to also accept the commissioning certificate/certificates/email/letter as a proof of commissioning and copy of PO/RFP as a proof of maintenance for 3 years. Request Bank to accept Customer Satisfaction letters/Self-Declaration to this effect since customers refrain from confirming the media on which links are delivered. 	The Modified Clause to be read as: The bidder for category c link should have deployed VSAT System in at least one Scheduled Commercial Bank in India with minimum 500 VSATs and maintained for more than 3 years. Proof of Supporting documents to be submitted: Purchase order and execution/commissioning certificate from existing customer(s).
62	29	Part – IV Broad Scope of the Work	Point no. 4.5 Selected bidder should provide connectivity with minimum number of "hop" for all links.	Requesting bank to clarify this point and the clause is not self-explanatory	Bank expects minimum number of hop count while routing packets through network.
63	29-30	Part – IV Broad Scope of the Work	Point no. 4.9 Any deviation with respect to feasibility report submitted such as wired to wireless, increase in pole height, declared as nonfeasible, etc., during implementation of the project will not be accepted. The selected bidder shall be penalized for the deviation.	 Feasibility is a dynamic process and feasibility can change at any point of time. Please consider to delete this clause. Height can change at the time of deployment depending on the backhaul availability from a particular BTS. Also in future bidder may need to increase the tower height to improve the signal strength, bank should allow the bidder to work at site and support to take the 	Clause Stands as per RFP.

				 preventive/required action to stabilize the connectivity. No penality should be applicable on bidder in either case. Considering network dynamic basis site condition feasibility may change. TCL will do the exact speculation for the required deliverables for the Wireless associated links but during the actual implementation there might be some minute changes in the actual material required; hence TCL requests UCO bank to consider the delta additional components at actuals required during the implementation. 	
				Bidder will submit the feasibility report based on the current scenarios and it has a validity period. So therefore, bidder should not be penalized post validity period.	
				Customer should only concentrate upon get the last mile connected through any feasible option maintaing the SLA whicever viable for the last mile option. No penalty should be incurred based on this type of clause.	
64	30	Part – IV Broad Scope of	Point no. 4.13 In case of Category A & Category C links	Requesting bank to clarify the measurement process that bank will	Clause Stands as per RFP.

		the Work	selected bidder shall provide committed bandwidth at each location and make it available continuously. Bidder should ensure that committed bandwidth subscribed by Bank is always available for use. Bank may test the load on the links on time to time. In case of bandwidth subscribed by the branch is not available at any time, the duration of non-availability of committed bandwidth will be treated as downtime of the link. Penalty on downtime will be enforced accordingly.	follow for this type of scenario. In case of any concern bank has to inform the bidder spoc / noc /RE to check and rectify the concern or log the complaint with the bidder. Respective team will check and update the customer. In case the issue is resolved within the committed SLA, no penalty should be applicable on bidder. Its technically not viable to get the complete bandwidth subscribed at all point of time. Factors like attenuation, loss of signal due to enviromental factors, packet loss etc. Hence unless huge deviation is observed these cases shouldn't be treated as downtime and no penalty should be implemented. The penalty clause should be absolutely based on the uptime% calculation.	
65	31	Part – IV Broad Scope of the Work	Point no.4.18 Bidder needs to have a co-ordination with Bank's existing network system integrator i.e. M/s WIPRO for integrating proposed secondary link with present infrastructure in order to run the branches/offices smoothly.	 Please clarify whether this indicate any permanent manpower to be posted at bank. Bank should provide a one spoke from network and one spoke from network system integrator so that bidder PM can coordinate with them for the resolution of all customer end concern. It will not be possible to coordinate with multiple stake holders to deliver the connectivity. 	_

66	31	Part – IV Broad Scope of the Work	Point no. 4.23 Bidder will monitor the links and Bidder must have their own Network Operation Centre for monitoring of the Network. Bidder will monitor all the links from their NOC through NMS and submit the reports like Uptime, Bandwidth utilization, Link error, latency, etc. on monthly basis and as per the Bank's requirement. Bank will provide the SNMP access (read only) of the router for monitoring of the link. All the locations are to be monitored on 24x7x365. Bidder should provide site-wise network link usage and uptime.	 Link error, Latency can't be monitored. Requesting bank to clarify whether Bank will use any Captive NMS for Monitoring of these links. Link error, latency report cannot be provided for VSAT links. VSAT pool bandwidth utilization can be provided and for individual links will be provided on demand basis. It is assumed that this clause is not applicable for Category C Links Router should have and support the IPSLA license. 	Clause 4.1 to 4.67 valid for all category of link.
67	32	Part – IV Broad Scope of the Work	Point no. 4.27 Supply, installation and configuration of WAN end point equipments such as modems, last mile equipment etc. would be done by the selected bidder. IP address used on branch/office end shall remain same as per the existing schema implemented in Bank at all the branches/offices. The same shall be shared to the successful bidder during implementation.	Please clarify who will provide the termination routers. In case of NOC management we will provide the ip address in case existing ip address of Bank clashes with other customers.	The Routers will be provided by the Bank in Bank's Premises. Bidder should terminate link in Bank existing router Ethernet interface.
68	33	Part – IV Broad Scope of the Work	Point no. 4.34 The bidder should provide Ethernet connectivity over RJ45 interface to connect Bank's branch router to the network as well as at data centres also. Cables with required interfaces have to be arranged by the selected bidder.	In case bank is providing the Routers, Bidder can only provide pertial NOC management and Failover if any will be banks Responsibility	Clause Stands as per RFP.
69	33	Part – IV Broad Scope of	Point no. 4.38 Average end to end packet loss should not	Packet drop should be less than 1%.	Clause Stands as per RFP.

		the Work	be more than 1 in 1,000 for wireless connectivity with IMIX packets measured for a minimum of 1000 packets.	 1% packet drop should be acceptable. Packet loss should be considered as <=1%. 1 in 1000 packets is not acceptable We request Bank to amend the packet loss value to "less than 1%" 	
70	33	Part – IV Broad Scope of the Work	Point no. 4.41 The connectivity should be capable of provide end to end Quality of Service (QoS) for critical applications.	This will not be applicable for VSAT links	Clause 4.1 to 4.67 valid for all category of link.
71	34	Part – IV Broad Scope of the Work	Point no. 4.48 Bidder's network should support Incident management: Prevention mechanism for mis-configuration, Alert mechanism should be in place for any incident occurred etc., Every incident reported should be notified to Bank and documented, System should have capability to send alerts through email and SMS to respective authorities/stakeholders.	Request to delete this clouse	Clause Stands as per RFP.
72	34-35	Part – IV Broad Scope of the Work	Point no. 4.54 Bank will only provide Rack space, required earthing voltage and UPS Power supply for installation or commissioning of required links in branches/offices. All other required infra should be arranged by bidder at no extra cost to Bank. Bank will not take any responsibility for installation of MUX/MAST/RF antenna/VSAT/Modems etc. Bidder should take adequate insurance for deploying hardware at no cost to Bank for preventing the equipment from any kind of damages.	 Roof rights to be provided by Bank. Ownership of all the infra, NW equipment provided/installed by bidder at bank end will remain with bank. Bank has to ensure the proper safety and security for all the equipments and the space where all the equipments are installed should be out of the reach of unconcerned persons. 	Clause Stands as per RFP.
73	37	Part – IV Broad Scope of the Work	Point no. 4.73 Latency should not be more than 100 ms (End to End i.e. Branch router to DC & DR	• Requesting to delete the latency clause as this can't be adhered in such solution.	The Modified Clause to be read as Latency should not be more than 300 ms (End to End i.e. Branch router to DC & DR

		For category B link	router) for a 1500 byte packet size measured for a minimum of 1000 packets.	• As 3G/4G solution based on mobility network, Latency cannot be guaranteed.	router) for a 1500 byte packet size measured for a minimum of 1000 packets.
				• 3G/4G based connectivity being a best effort solution, we request Bank to exempt 3G/4G last-miles from the latency measurements	
74	38	Part – IV Broad Scope of the Work For category C link	Point no. 4.81 The VSAT Antenna Size will be 1/1.2 meters and the VSAT indoor unit should have minimum 1 no. of Ethernet Port (RJ45).	 Requesting you to delete the 1M antenna size. In some places in the Tender Bank asking for 1/1.2 Mtr. VSAT Antenna and in some places it is mentioned as only 1.2 Mtr. Kindly amend 1/1.2 Mtr. In all the places of the tender. 	The VSAT Antenna Size will be either 1 or 1.2 meters.
75	29	Part – IV Broad Scope of the Work	Point no. 4.1 Bidder should provide MPLS link feasibility report last mile on Wire/RF and 3G&4G separately for branches as per list mentioned in Annexure – V. The links will be used either primary or back up of existing MPLS links from BSNL/MTNL or VSAT links with Auto-failover option.	 Please confirm if the L2 feasibility is required to submit with the bid. Routers being in Customer's scope, the Auto failover configuration should be taken up by Customer. 	Clause is Self Explanatory. Auto failover configuration will be done at router level by the Bank however, bidder should support the same. Bidder should complete feasibility as per annexure – V. Bank place order based on basis of feasibility report submitted by bidder in RFP, if selected.
76	29	Part – IV Broad Scope of the Work	Point no. 4.7 If the last mile is on wireless, bidder has to ensure that no other Radio equipment causes interference and should not be able to trap the wireless signals used for Bank's network.	Bidder will ensure that the interference not occurred during delivery and installation, but it may occur in near future so bank also has to ensure that no RF device is installed near to RF device from which the connectivity will be provided.	Clause Stands as per RFP.
77	85	Annexure – N Technical Requirement	Point no. 66 All clearances, wherever required, in respect of the mast/pole/antenna from any government/local/statutory bodies etc. like	All clearances, wherever required, in respect of the mast / pole / antenna at branch, from any government / local / statutory bodies etc. like municipal	For Roof Top Permission: Please refer to Point no. 12 in Corrigendum.

			municipal corporations, airport authorities are the responsibility of the bidder.	corporations, airport authorities are the responsibility of the customer. Further, the rooftop rights, permissions, rentals & any other miscellaneous charges are the responsibility of the customer.	
78	30	Part – IV Broad Scope of the Work	Point no. 4.11 The backhaul link to be terminated at Bank's data centre at Bangalore & Disaster Recovery Center at Kolkata should be of Optical Fibre media only with self-healing ring based architecture. The last mile should be coming via two different physical paths. A diagram showing path redundancy at our data centre should be submitted with technical bid. Any cross-connect charges, if required to terminate the link at our Bangalore Data center, will be borne by Bank.	 Bidder will provision, test the link on mux port and share the port details with the bank, cross connect will be arranged by bank and cable connection on router port will be connected by the bank network/system integrator. Please specify who will own the cross connect at DR Kolkata 	 Bidder should terminate link upto Bank's router. Cross – connect charges will be borne by the Bank. Cross connect at DR Kolkata is not required.
79	85	Annexure – N Technical Requirement	Point no. 63 Bidder should do all internal cabling till branch router for successful commissioning of the required MPLS link without any additional cost to the Bank. Bidder should provide all required cables for connecting the modem or any external device to Branch router for termination of link at no extra cost to the Bank.	In building cabling to be in Scope of Customer, Bidder will do the cabling upto CE router except through false ceiling and areas where there are chances of damage to customer infrastructure / choked ducts	Clause Stands as per RFP. Bidder should terminate link upto Bank router.
80	33	Part – IV Broad Scope of the Work	4.33 The solution should provide end to end transparent data reachability, voice, video etc. (no filter of traffic from SP).	Bank is requested to provide the %atge bifurcation of traffic that will flow for Application Data, Voice and Video for each site so that TCL can design QoS mechanism for the MPLS links.	Clause Stands as per RFP. Any traffic at any point of time.
81	31	Part – IV Broad Scope of the Work	Point no. 4.21 Any extra material required for the project execution not mentioned in the commercial bid, shall be supplied and deployed by the bidder at no extra cost to Bank.	 This will be limited to the LM readiness only, anything beyond that will be taken care by bank. If any extra material needs to be 	Clause Stands as per RFP.

82	32	Part – IV Broad Scope of the Work	Point no. 4.25 Responsible for all technical issues concerning the network.	provided in case of any upgradation required for a particular link, which should be considered. • Any extra material required for the project should be at additional costs Will be limited to maintain WAN to WAN connectivity for the delivered links.	Clause Stands as per RFP.
83	32	Part – IV Broad Scope of the Work	Point no. 4.26 Selected Bidder should log a call automatically in case of any issue without waiting for customer complaint and should ensure the necessary action for restoration of the same. Selected Bidder should also inform to the Bank through mail, SMS, etc	 First level troubleshooting will be done by the LC under instruction of bidder NOC/RE. Engineer will be aligned only after the confirmation of access and LC availability. No SLA penalty will be applicable in case the access or LC is not available at site. No Automatic Ticket will be booked except link hard down cases. All other Tickets will be reactive & need to booked by the cust only. Request Bank to remove auto ticketing. 	Clause Stands as per RFP.
84	33	Part – IV Broad Scope of the Work	Point no. 4.35 Bidder should provision all equipment required to provide the wireless connectivity at branch/office for getting usable wireless signal strength i.e. internal/external cabling and antenna etc.	Internal cable routing from false celling, POP wall or any sensitive area will be done by electrician only. In case any ladder, drilling is required, it will be arranged by bank.	Clause Stands as per RFP.
85	85	Annexure – N Technical Requirement	Point no.58 The rooftop permission for installation of Pole/VSAT/other equipment wherever	Site installation permission arrangement to be in scope of customer. Bidder will proceed with	For Roof Top Permission: • Please refer to Point no. 12 in Corrigendum.

			required lies with the selected bidder. The bidder is refrained from installation of any other equipment other than the one required for connectivity of that specific branch and also that equipment should not be used for connectivity of any other building/customer.	installation only after permission confirmation from customer. All clearances, wherever required, in respect of the mast/pole/antenna at branch, from any government/local/statutory bodies etc. like municipal corporations, airport authorities are the responsibility of the customer. Further, the rooftop rights, permissions, rentals & any other miscellaneous charges are the responsibility of the customer.	
86		General	Ordering Criteria The order will be placed to bidder as per above mentioned criteria for minimum 50 distinct links under respective category.	Need clarity on ordering process	Please refer to Clause no.1 Order Details under Part – V.
87	35	Part – IV Broad Scope of the Work	4.63 The bidder will ensure that each location is within a radius of 5 kilometers from any of their BTS/Repeater Towers. However for flatland rural areas, the radius may be extended up to 10 kilometers. Such BTS/Repeater should be in line of sight of Bank's location.	The bidder will ensure to meet LoS/SLA parameters irrespective of distance from BTS/repeater	Clause Stands as per RFP.
88	34	Part – IV Broad Scope of the Work	Point no. 4.46 Bank and/or third party consultants hired by Bank should have rights to audit/review the whole setup of the bidder catering to Bank's application	Will be limited to the project related only, bidder end core network access will not be granted.	Clause Stands as per RFP.
89	32	Part – IV Broad Scope of the Work	4.30 The proposed network by the bidder should support: a) All web and client-server based application b) Video Conferencing c) Voice over IP (VOIP) d) End to end QOS e) IPsec	TCL is clearly stating that QoS and quality of any Real Time traffic for Video especially will not have best of its experience on Wireless as this is technological blockage where due to climatic changes and natural calamity there are multiple disturbances that come into the traffic flowing through the Wireless media. Bank is requested	Clause Stands as per RFP.

				to consider this fact and raise no SLA credit for such instances if it occurs. However, TCL will provide the best of its services on the wireless link and wants to be transparent wherever TCL feels customer should be aware of any Technological facts.	
90	30	Part – IV Broad Scope of the Work	4.16 The bandwidth of backhaul link is factored as 100 Mbps and bidder to quote the cost of the same in commercial bid. However order for backhaul links will be placed based on 50% bandwidth of total bandwidth of MPLS links provided by selected bidder	TCL requests Bank to elaborate this clause in details. Please mention the expectation that the bank has from TCL.	The Clause is Self-Explanatory.
91	35	Part – IV Broad Scope of the Work	Point no. 4.57 "Site Survey, "Installation Certificate" and "Acceptance report for successful commissioning" must be maintained by the selected bidder for future references. The formats would be finalized in consultation with the Bank. This shall be one time activity and the date of successful commissioning of link as these documents shall be considered as the billing's start date.	Soft copy of all the report will be shared on mail with the bank, no hardcopy will be shared/maintained by the bidder. Standard "Site Survey, "Installation Certificate" and "Acceptance report format will be shared by the bidder with the bank which should be acceptable to the bank.	Clause Stands as per RFP.
92	35	Part – IV Broad Scope of the Work	Point no. 4.59 Bidder has to deliver the link up to the router and terminate on the required interface of branch router with prior approval from Bank designated team.	Router port details should share in advance by the bank system integrator. Bidder engineer will terminate the cable on router if free port is available on customer router. Bidder engineer will not swap the cable on router port.	Clause Stands as per RFP.
93	35	Part – IV Broad Scope of the Work	Point no. 4.61 Bidder should do all internal cabling till branch router for successful commissioning of the required MPLS link without any additional cost to the Bank. Bidder should provide all required cables for connecting	 Internal cable routing from false celling, POP wall or any sensitive area will be done by electrician only. In case any ladder, drilling is required, it will be arranged by bank. 	Clause Stands as per RFP.

			the modem or any external device to Branch router for termination of link at no extra cost to the Bank.	Any Internal or LAN side of cabling from the MUX will be Bank's scope of work. TCL request's Bank's	
			Point no. 4.62	concurrence on the same.	
94	35	Part – IV Broad Scope of the Work	Bidders have to provide full support during involvement of additional communication technology or PoC in Bank MPLS network without any additional cost to the Bank.	Please confirm the POC completion and acceptance timelines.	Shall be shared with the selected bidder.
95	36	Part – IV Broad Scope of the Work	Point no. 4.67 Dedicated IP addressing scheme for WAN link will be provided by the Bank. Required connections to terminating the link on Router/Switch (provided by the Bank) should be done by bidder. After installation of network equipment at branches bidder has to ensure that banks application are working properly.	Bank required to use WAN IP's provided by the bidder to activate the proactive monitoring. Proactive monitoring will be activate on cisco/ huawei router. Proactive monitoring on switch will not be possible.	Clause Stands as per RFP.
96	36	Part – IV Broad Scope of the Work	Point no. 4.71 For the pole to be installed in the branch roof top for Wireless link, the height of pole should not be more than 12 meters.	 In case the RF pole height is more than 12 meter then bidder will declare the location technically not feasible and no penalty should be applicable on bidder. Any such mandate shouldn't be made as the pole height is completely dependent on the feasibility carried out and the LOS Since a substantial portion of sites are in the Rural / Semi Urban areas, request Bank to increase the pole / mast height to at least 18M RTT. 	Clause Stands as per RFP.
97	39	Part – V 1. Order	At first Bank will place order to L1 bidder of Category A links for their feasible branches.	Bidder must have the right to declare the location technically not feasible if	Clause Stands as per RFP.
7/	<u>.</u>	1. Order Details	However, in case of common feasible links in	the location is not feasible on any	Ciduse statius as pet KFF.

			between L1 & L2 bidders under category A link, the order for links will distributed among L1 & L2 in a ratio of 60:40, provided that L2 bidder matches the cost of link as of L1. In case L1 bidder will not be in a position to deliver ordered feasible link at the specified locations on wired or on stable wireless RF as last mile. Bank will impose the penalty equal to 10% of annual rental for each such location.	media and no penalty must be applicable on bidder in any case.	
98	39	Part – V 1. Order Details	Branches where no bidder is feasible or not able to provide Category A or category B links, Bank will place order to L1 bidder of category C link for such locations. In case L1 bidder in this category (VSAT) will not in a position to deliver ordered feasible links at the specified locations on VSAT as last mile. Bank will impose the penalty equal to 10 % of VSAT equipment cost for each such location.	Bidder must have the right to declare the location technically not feasible if the location is not feasible on any media and not penalty must be applicable on bidder in any case.	The Clause is Self-Explanatory.
99	42	Part – V 6. Installation and Commissioning	Bidder has to commission the links at DC and DR within 4 weeks and all other links as per table given below from the date of acceptance of purchase order. In short, the entire project shall be implemented within 16 weeks from the date of LOI (Letter of Intent). Ordered Link of any Category Installation & Commissioning Period	 DC & DR will be delivered on fibre LM within 8 weeks in case all required permissions like ROW etc are available. Delivery time lines will be subject to the feasibility outcome. However bidder will put all efforts to deliver the connectivity as per the below details. ->Sites between 50 to 500 - 20 weeks ->Sites between 501 to 1000 - 28 weeks ->Sites More than 1000 - 32 weeks Bidder will like to request - Timeline for DC & DR commissioning to be relaxed to 6 weeks. Also cross connect at DC & DR to be in scope 	Clause Stands as per RFP.

				of bank please provide concurrence. • Bidder will like to request - Timeline for entire project to be extended to 24 weeks & Link Installation & Commissioning Period ->Between 50 to 500 - Within 12 Weeks ->Between 501 to 1000 - Within 20 Weeks ->More than 1000 - Within 24 Weeks - please provide concurrence.	
100	42	Part – V 6. Installation and Commissioning	If link may require to be shifted to new location an onetime cost of Rs. 10,000/- will be payable for the same, which includes dismantling & shifting of network equipment related for the link and re-commissioning of network link at new location. Shifting of link will be completed within 2 weeks from date of PO for shifting the link.	Shifting cost and time lines will be confirmed by the bidder after the feasibility check. In case the new location is not feasible then bidder must have the right to declare the site not feasible and no penalty of any kind will be applicable on bidder.	Clause Stands as per RFP.
101	30	Part – IV Broad Scope of the Work	Point no. 4.14 A separate VPN is to be created only for Bank network and in no way the VPN should be shared with other customers sharing the MPLS backbone. Bank MPLS Network must be accessible to Bank nodes only. Bank has implemented IPSEC VPN in its existing network. Bank will also run IPSEC VPN on this MPLS link and there should not be any dependency from bidder/ service provider on this implementation while integrating their MPLS network. Further, there should not be any dependency on the service provider if Bank decides to implement other VPN variants like GETVPN, DMVPN or any other such technology.	TCL requests the bank to help us with the expectation from the ISP if any for enabling the GETVPN or IPSEC. Note: The CPE router management, configuration will be with the bank and TCL will be providing the pro-active monitoring only as asked by the Bank.	Configuration for implementation of IPSEC/GETVPN etc will be done by the Bank.

102	30	Part – IV Broad Scope of the Work	Point no. 4.12 The connectivity provided by the bidder has to be Layer 3 MPLS solution on dedicated ports with 1:1 full duplex committed information rate with end point as Ethernet. The circuit should be available in full duplex mode with sending and receiving available on the same circuit. (For eg On a 128 Kbps circuit, 128 Kbps sending and 128 Kbps receiving should be possible simultaneously).	As per the MPLS technology, there will be 1% of the port bandwidth for each of the site for monitoring and management purpose. This is a technical requirement. Hence customer is requested to accept these technical considerations.	Clause Stands as per RFP.
103	44	Part – V 10. Liquidated Damage	Bidder should take necessary landlord permission (if required) for installation of outdoor unit, in case of wireless link. Bank officials may co-ordinate / liason with landlord in the matter of obtaining permission.	Bidder will not do any liason with the landlord/building owner to obtain any permission. All the permission/access at site will be arrange and managed by bank and any delay in delivery/restoration caused due to this will not be attribute to bidder and no penalty should be applicable.	Please refer to Point no. 15 in Corrigendum.
104	44	Part – V 10. Liquidated Damage	Please note that the above LD for delay in delivery and delay in commissioning are independent of each other and shall be levied as the case may be. BANK reserves its right to recover these amounts by any mode such as adjusting from any payments to be made by BANK to the bidder.	Single penalty must be applicable and it should be only on delay in end to end delivery i.e. link is considered delivered when it is tested by the bidder engineer on laptop and logs shared with the bank. The time taken by the bank to test the link and get back to the bidder will not be attribute to the bidder.	Clause Stands as per RFP.
105	19	Part – II 18. RFP Response Validity Period	RFPs response will remain valid and open for evaluation according to their terms for a period of at least 12 months from date of opening of technical bids submitted by the bidders	 This is OK subject to any changes in law by GOI. L1 Feasibility is valid for 1 month generally with Onnet reverts max to 2 months. Need to understand the implications of deviations where LM SP might change in later course. 	Clause Stands as per RFP.
106	82	Annexure – N Technical	Point no. 24 Bidder will monitor the links and Bidder must	NMS report from the NMS will not be considered for the SLA calculation.	Clause Stands as per RFP.

		Requirements	have their own Network Operation Centre for monitoring of the Network. Bidder will monitor all the links from their NOC through NMS and submit the reports like Uptime, Bandwidth utilization, Link error, latency, etc. on monthly basis and as per the Bank's requirement. Bank will provide the SNMP	Bidder will share the manually prepared monthly uptime report in which details for the all the complaint with RFO/RCA will be available. Same should be referred for the SLA calculation.	
			access (read only) of the router for monitoring of the link.		
107	37	Part – IV Broad Scope of the Work For Category B link	4.75 Following security measure must be available in category B Link. IPSEC: Security features of IPSEC should be available & configured for the end-to-end encryption.	Will be limited to customer end device only.	Clause Stands as per RFP.
108		General		Network Acceptance would be link wise as per the following criteria - Network Acceptance Test Criteria would be Ping test from CE modem/Mux towards M/s Bharti MPLS PE. Acceptance Test and letter of commissioning signoff would be link wise & it would be signed by Customer. Payment to be released link wise upon acceptance. If the customer doesn't give acceptance within the 5 days on test, it will be considered as deemed acceptance and billing will start from the 4th day onward	Not accepted.
109		General		Basic hygiene, cool & dust free space, power earthing will be arranged, provided and maintained by the customer.	Please refer to RFP Clause no. 4.54 under Part – IV Broad Scope of the Work.

110	53	Part – V 33. Limitation of Liability	Bidder's aggregate liability under the contract shall be limited to a maximum of the contract value. This limit shall not apply to third party claims for a. IP Infringement indemnity. b. Bodily injury (including Death) and damage to real property and tangible property caused by Bidder/s' gross negligence. For the purpose of this section, contract value at any given point of time, means the aggregate value of the purchase orders placed by Bank on the Bidder that gave rise to claim, under this RFP. c. Bidder shall be liable for any indirect, consequential, incidental or special damages under the agreement/ purchase order.	We propose the following clause to replace the current clause "NOTWITHSTANDING ANY OTHER PROVISION HEREOF, NEITHER PARTY SHALL BE LIABLE FOR (A) ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL, EXEMPLARY OR PUNITIVE DAMAGES OR (B) ANY DAMAGES FOR LOST PROFITS, LOST REVENUES, LOSS OF GOODWILL, LOSS OF ANTICIPATED SAVINGS, LOSS OF CUSTOMERS, LOSS OF DATA, INTERFERENCE WITH BUSINESS OR COST OF PURCHASING REPLACEMENT SERVICES, ARISING OUT OF THE PERFORMANCE OR FAILURE TO PERFORM UNDER THIS AGREEMENT, WHETHER OR NOT CAUSED BY THE ACTS OR OMISSIONS OR NEGLIGENCE (INCLUDING GROSS NEGLIGENCE OR WILLFUL MISCONDUCT) OF ITS EMPLOYEES OR AGENTS, AND REGARDLESS OF WHETHER SUCH PARTY HAS BEEN INFORMED OF THE POSSIBILITY OR LIKELIHOOD OF SUCH DAMAGES. IN NO EVENT BIDDER SHALL BE LIABLE IN AN AMOUNT THAT EXCEEDS, IN THE AGGREGATE FOR ALL SUCH LIABILITIES, THE MOST RECENT TWELVE (12) MONTHS OF CHARGES COLLECTED BY BIDDER FROM THE CUSTOMER PURSUANT TO THE APPLICABLE PURCHASE ORDER GIVING RISE TO THE LIABILITY. "	Clause Stands as per RFP.
111	48	Part – V 25. Exit Option and Contract Re-Negotiation	The Bank will reserve a right to re-negotiate the price and terms of the entire contract with the Selected Bidder at more favorable terms in case such terms are offered in the industry at that time for projects of similar	It will lead to loss for the Bidder, therefore, kindly remove it.	Clause Stands as per RFP.

			and comparable size scope and quality		
			and comparable size, scope and quality.	We propose the following clause to replace the current clause "Each Party shall indemnify the other from and against any claims by third parties (including any Governmental Authority) and expenses (including	
112	48	Part – V 19. Indemnity	Vendor shall indemnify, protect and save the Bank and hold the Bank harmless from and against all claims, losses, costs, damages, expenses, action suits and other proceedings, (including reasonable attorney fees), relating to or resulting directly or indirectly from	legal fees and court costs) arising from damage to tangible property, personal injury or death caused by such Party's negligence or willful misconduct. NOTWITHSTANDING ANY OTHER PROVISION HEREOF, NEITHER PARTY SHALL BE LIABLE FOR (A) ANY INDIRECT, INCIDENTAL, SPECIAL, CONSEQUENTIAL, EXEMPLARY OR PUNITIVE DAMAGES OR (B) ANY DAMAGES FOR LOST PROFITS, LOST REVENUES, LOSS OF GOODWILL, LOSS OF ANTICIPATED SAVINGS, LOSS OF CUSTOMERS, LOSS OF DATA, INTERFERENCE WITH BUSINESS OR COST OF PURCHASING REPLACEMENT SERVICES, ARISING OUT OF THE PERFORMANCE OR FAILURE TO PERFORM UNDER THIS AGREEMENT, WHETHER OR NOT CAUSED BY THE ACTS OR OMISSIONS OR NEGLIGENCE (INCLUDING GROSS NEGLIGENCE OR WILLFUL MISCONDUCT) OF ITS EMPLOYEES OR AGENTS, AND REGARDLESS OF WHETHER SUCH PARTY HAS BEEN INFORMED OF THE POSSIBILITY OR LIKELIHOOD OF SUCH DAMAGES. IN NO EVENT BIDDER SHALL BE LIABLE IN AN AMOUNT THAT EXCEEDS, IN THE AGGREGATE FOR ALL SUCH LIABILITIES, THE MOST RECENT TWELVE (12) MONTHS	Clause Stands as per RFP.

				OF CHARGES COLLECTED BY BIDDER FROM THE CUSTOMER PURSUANT TO THE APPLICABLE PURCHASE ORDER GIVING RISE TO THE LIABILITY.	
113	48	Part – V 18. Order Cancellation	h) After award of the contract, if the selected bidder does not perform satisfactorily or delays execution of the contract, BANK reserves the right to get the balance contract executed by another party of its choice by giving one month"s notice for the same. In this event, the selected bidder is bound to make good the additional expenditure, which BANK may have to incur in executing the balance contract. This clause is applicable, if for any reason, the contract is cancelled for any reason, whatsoever.	Bidder is already responsible to pay liquidated damages for delivery failures and it should not be asked to bear risk and cost, kindly amend the clause accordingly.	Clause Stands as per RFP.
114	30	Part – IV Broad Scope of the Work	Point no. 4.15 The initial bandwidth of each category link at branch end should be according to the bandwidth mentioned in Annexure – V. The bandwidth must be capable of upgrading at a later stage as and when required by the Bank.	 Any intimation for upgradation should come atleast 30-45 days prior as that involves further feasibility check for necessary B/W availability at the POP/nodes and in those cases change in last mile option too should be considered. TCL will upgrade the bandwidth based on the new upgrade request from the bank but the same will be subjected to feasibility check and techno-commercial proposal. 	Clause Stands as per RFP.
115	31	Part – IV Broad Scope of the Work	Point no. 4.17 The Category A, B, C link of bidder should be fully isolated from Internet traffic even if running on the same core/backbone. It is desired that same PE Router does not run both customer MPLS VPN traffic and Internet traffic. The MPLS-VPN network offered to the	FLD core is a single converged core which caters to all IP traffic, segregation of Internet and VPN traffic happens at the following levels: 1. Separate control plane for internet and VPN traffic with route segregation happening at individual Route	Clause Stands as per RFP.

116	48	Part – V 18. Order Cancellation	Bank should not carry any internet routes. The bidder has to provide network topology showing how internet traffic is segregated from proposed MPLS cloud. g) In case the selected bidder fails to deliver the link to the mentioned branches as stipulated in the delivery schedule, BANK reserves the right to provide the same link or similar link from alternate sources at the risk, cost and responsibility of the selected bidder.	Reflectors (RR) for internet and VPN traffic 2. Separate Layer 3 aggregation points at Vodafone POPs Bidder is already responsible to pay liquidated damages for delivery failures and it should not be asked to bear risk and cost, kindly amend the clause accordingly.	Clause Stands as per RFP.
117	33	Part – IV Broad Scope of the Work	Point no. 4.32 The architecture used for the complete solution should be end to end enabled with layer-3 routing domain (end to end transparent layer-3 routing using static and dynamic routing).	Customer should specify the routing Protocol opted for.	Will be shared to the Selected bidder.
118	47	Part – V 18. Order Cancellation	BANK reserves the right to cancel the contract/purchase order or terminate the SLA by giving 30 (thirty) days" prior notice in writing placed on the selected bidder and recover damages, costs, and expenses etc., incurred by BANK under the following circumstances:- a) The selected bidder commits a breach of any of the terms and conditions of this RFP or the SLA to be executed between the Bank and the selected Bidder.	Order cancellation should only be for material breach of the RFP.	Clause Stands as per RFP.
119	11	Part – I 3. Eligibility Criteria	Point no. 5 The bidder for category A link should have commissioned and running at least 500 MPLS links over wired/wireless (offered media) as last mile in a Public / Private Sector Bank /Financial Institutions / Government Organization within India as on RFP submission date.	Request bank to accept Customer Satisfaction Letters issued after delivery of links	Clause Stands as per RFP.

120	47	Part – V 18. Order Cancellation	Proof of supporting documents to be submitted: Purchase order and execution certificate from existing customer(s). BANK reserves the right to cancel the contract/purchase order or terminate the SLA by giving 30 (thirty) days" prior notice in writing placed on the selected bidder and recover damages, costs, and expenses etc., incurred by BANK under the following circumstances:-	We understand that Bank will allow the Service Provider a cure period of 30 days to resolve	Clause Stands as per RFP.
121	36	Part – IV Broad Scope of the Work	Point no. 4.64 All clearances, wherever required, in respect of the mast/pole/antenna from any government/local/statutory bodies etc. like municipal corporations, airport authorities are the responsibility of the bidder. In future, if the bidder gets involved in Regulatory issues / Licensing issue with any Govt/Law enforcing agency/ Regulatory authorities, it is the responsibility of Bidder to replace / substitute the wire/wireless Technology at no additional cost to the Bank without compromising SLA and security.	 Clearances with respect to mast/pole installation should be primarily Bank's responsibility. However a SP can get with the Bank to obtain such permissions wherever and whenever required. "All clearances, wherever required, in respect of the mast/pole/antenna from any government/local/statutory bodies etc. like municipal corporations, airport authorities are the responsibility of the bidder and all possible assistance will be provided by the bank." 	Clause Stands as per RFP.
122		Additional Clause SNR	To introduce "Site Not Ready (SNR)" in the RFP document	In case if site is not ready due to reasons attributable to the Bank, the site should be considered as deemed installed post 30 days the Service Provider report the Bank and the Complete Hardware Payment should be released by the Bank. Please confirm.	In case of payment of VSAT equipment, if any delay for installation attributable to Bank, the payment will be released on delivery of equipment.

123		Additional Clause Order Placement	Rental Order and Bandwidth Order for correct Book Keeping	Ordering of Hardware and Recurring Services/Bandwidth should be allowed on two companies if one company is 100% subsidiary of another company. This is essential for correct book keeping. In case Hughes is eligible for order placement it would request the following to the Bank. Hardware & One Time Service Charges to be placed on HCIL COMTEL LTD., 1 Shivji Marg, Westend Greens, New Delhi-110038 and Recurring Services/ Bandwidth to be placed on Hughes Communications India Ltd., Plot No 1, Sector-18, Electronic City, Gurgaon-122015. HCIL COMTEL is 100% subsidiary of HCIL.	Modalities shall be discussed with the selected bidder only.
124	44	Part – V 11. Price	The bidder is required to guarantee that exchange rate fluctuations, changes in GST / other applicable taxes (if any) will not affect the Rupee value of the commercial bid over the price validity period.	account as the Government is the decision authority for such change and Clause Stands as per RFP.	
125	37	Part – IV Broad Scope of the Work	Point no. 4.74 Minimum band width for 3G & 4G as last mile should be 256 Kbps full duplex.	In 3G/4G based connectivity full duplex in not possible Clause Stands as per RFP.	
126	37	Part – IV Broad Scope of the Work	Point no. 4.79 VSAT connectivity should be least preferred and should be provided only in case of non-feasibility of wired/wireless/3G-4G media based MPLS links. Bidders need to submit non-feasibility report for MPLS links & 3G/4G etc. before going for VSAT connectivity	Non-feasibility Report has to be submitted by Category A and Category B Service Provider. Please confirm.	The Clause is Self-Explanatory.

			solution.		
127	24	Part – I 25. SUBMISSION OF OFFER – TWO BID SYSTEM	Audit by Third Party: Bank at its discretion may appoint third party for auditing the activities of onsite services and operations of entire services provided to the Bank.	Audit should be limited to Network and Infrastructure level only which is being utilized under RFP Scope of Work. Please confirm.	Clause Stands as per RFP.
128	15	Part – I 4. Tender Document & Fee	The bidder downloading the tender document from the website is required to submit a non-refundable fee of Rs. 10,000/- (Rupees Ten Thousand Only) in the form of Demand Draft or Banker's OCheque in favour of BANK, payable at Kolkata, at the time of submission of the technical bid, failing which the bid of the concerned bidder will be rejected.	To whom, the DD has to be addressed? Please advise.	Please refer clause no. 4 tender document & fee under Part – I in RFP.
129	12	Part – I 3. Eligibility Criteria	Point no. 11 The bidder for category B link should have Category B MPLS link feasibility in minimum of 10% branches in each area category of branches as mentioned in Annexure – V. Proof of documents to be submitted: Bidder has to submit Feasibility report as per (technical template) Annexure – P. Bank reserves the right to cross check the feasibility of branches on random basis. However, it will be sole responsibility of selected bidder to commission links as per their feasibility report.	We understand that the link feasibility report will be submitted by successful bidder once the contract agreement is signed. Please confirm.	The Clause is Self-Explanatory.
130	91	Annexure – Q Table – E		Request bank to clarify the Commercial Sheet wrt providing MPLS charges for 4/6/8/12/16 Mbps. As the rate are different for different bandwidth so please share the separate line items.	Bidder has to provide rates in separate table for each category of Bandwidth i.e. 4/6/8/12/16. This table is optional item and Price not to be included in TCO).
131	45	13. Payment against		The mentioned Payment against delivery of SLA is very steep. Hence	Clause Stands as per RFP.

132	9	delivery of SLAs : Last Date and Time for receipts of tender bids	Bid Submission	request Bank to relax the payment schedule. Request Bank to provide 30days timeline for Bid Submission as we have to do feasibility for all 1000+ sites in different modes.	Please refer to the Bid Extension notice.
133	11	Part – I 3. Eligibility Criteria	Point no. 4 The bidder should be a Telecom Service Provider and should have a valid DoT, Indian Government License to provide National Long Distance services in India. The validity of the license should be more than five years from the date of this RFP. Proof of documents to be submitted: Copies of the licenses to be provided along with self-attestation by the authorized signatory with company seal. In case the bidder has license where validity is less than 5 years, a declaration should be submitted by the bidder regarding obtaining renewal/fresh license.	 We understand that this clause is not applicable if Bidder is participating under Category B and Category C. Being a VSAT Service Provides, we don't fall under Telecom Service Provider Category. This should only be applicable to Category A. Please confirm. Kindly Clarify, if this clause is only applicable to CAT A & CAT B Service Provider as VSAT License is already been asked separately for CAT C service provider. 	This clause is mandatory for the bidders who are participating for the category A & B.

Corrigendum

SI.	RFP Page No. /	Existing Clauses	Modified Clauses
No.	Part – I 3. Eligibility Criteria Point no.2 &	The bidder should have had an annual turnover of more than Rs. 100 Crores during each of the last three financial years as evidenced by the audited accounts of the company / division.	The bidder should have had an annual turnover of more than Rs. 50 Crores during each of the last three financial years as evidenced by the audited accounts of the company / division.
	Annexure – C Eligibility Criteria Point no.2	Proof of supporting documents to be submitted: Copy of the audited Balance Sheets for the preceding three years (i.e. 2014-15, 2015-16 and 2016-17).	Proof of supporting documents to be submitted: Copy of the audited Balance Sheets for the preceding three years (i.e. 2014-15, 2015-16 and 2016-17).
2	Part – I 3. Eligibility Criteria <u>Point no. 4</u>	The bidder should be a Telecom Service Provider and should have a valid DoT, Indian Government License to provide National Long Distance services in India. The validity of the license should be more than five years from the date of this RFP.	The bidder of category A & B link should be a Telecom Service Provider and should have a valid DoT, Indian Government License to provide National Long Distance services in India. The validity of the license should be more than five years from the date of this RFP.
		The bidder for category A link should have Category A MPLS link feasibility in minimum of 10% branches in each area category of branches as mentioned in Annexure R.	The bidder for category A link should have Category A MPLS link feasibility in minimum of 10% branches in each area category of branches as mentioned in Annexure V .
3	Annexure – C Eligibility Criteria Point no.8	Proof of supporting documents to be submitted: Bidder has to submit Feasibility report as per (technical template) Annexure "R". Bank reserves the right to cross check the feasibility of branches on random basis. However, it will be sole responsibility of selected bidder to commission links as per their feasibility report.	Proof of supporting documents to be submitted: Bidder has to submit Feasibility report as per (technical template) Annexure "P". Bank reserves the right to cross check the feasibility of branches on random basis. However, it will be sole responsibility of selected bidder to commission links as per their feasibility report.
4	Part – I 3. Eligibility Criteria Point no.9 & Annexure – C Eligibility	The bidder for category B link should have deployed MPLS link based on 3G/4G media in at least one Scheduled Commercial Bank in India with minimum 300 locations and maintained for more than 3 years. Proof of Supporting documents to be	The bidder for category B link should have deployed MPLS link based on 3G/4G media in at least one Scheduled Commercial Bank in India with minimum 100 locations and maintained for more than 1 year. Proof of Supporting documents to be submitted:
	Criteria Point no.9	submitted: Purchase order and execution certificate from existing customer(s).	Purchase order and execution certificate from existing customer(s).
5	Part – I	The bidder for category B link should	The bidder for category B link should have their

	3. Eligibility	have their own operational 3G/4G	own operational 3G/4G based MPLS network.
	Criteria	based MPLS network. The bidder	The bidder must have valid license to operate
	Point no. 10	/consortium partner also must have	3G/4G based MPLS network in India and should
	&	valid license to operate 3G/4G based	be valid throughout the contract period.
	Annexure – C	MPLS network in India and should be	
	Eligibility	valid throughout the contract period.	Proof of supporting documents to be submitted:
	Criteria		Copy of license should be submitted.
	Point no.10	Proof of supporting documents to be	
		submitted: Copy of license should be submitted.	
		The bidder for category B link should	
		have Category B MPLS link feasibility in	
		minimum of 10% branches in each	The bidder for category B link should have
		area category of branches as	Category B MPLS link feasibility in minimum of
		mentioned in Annexure R.	10% branches in each area category of
			branches as mentioned in Annexure V .
	Annexure – C	Proof of supporting documents to be	
6	Eligibility	submitted:	Proof of supporting documents to be submitted:
	Criteria	Bidder has to submit Feasibility report	Bidder has to submit Feasibility report as per
	Point no.11	as per (technical template) Annexure	(technical template) Annexure "P". Bank
		"R". Bank reserves the right to cross	reserves the right to cross check the feasibility
		check the feasibility of branches on random basis. However, it will be sole	of branches on random basis. However, it will be sole responsibility of selected bidder to
		responsibility of selected bidder to	commission links as per their feasibility report.
		commission links as per their feasibility	Certification in the desired in the reasonal periods.
		report.	
		The bidder for category c link should	The hidder for egtegory a link should have
		have deployed VSAT System in at	The bidder for category c link should have deployed VSAT System in at least one
		least one Scheduled Commercial	Scheduled Commercial Bank in India with
	Part – I	Bank in India with minimum 500 VSATs	minimum 500 VSATs and maintained for more
7	3. Eligibility	and maintained for more than 3 years.	than 3 years.
'	Criteria	years.	
	Point no. 12	Proof of Supporting documents to be	Proof of Supporting documents to be submitted:
		submitted:	Purchase order and execution/commissioning
		Purchase order and execution	certificate from existing customer(s).
		certificate from existing customer(s).	
		The hidder for a standard O. "	
		The bidder for category C link should have their own operational HUB with a	The bidder for category C link should have their
		requisite wireless planning commission	own operational HUB with a requisite wireless
		(WPC) clearance. The bidder	planning commission (WPC) clearance. The
	Part – I	/consortium partner also must have	bidder also must have VSAT network with valid
8	3. Eligibility Criteria	VSAT network with valid license to	license to operate in India and should be valid
	Point no. 13	operate in India and should be valid	throughout the contract period.
	10	throughout the contract period.	
		Droof of supposition documents to be	Proof of supporting documents to be submitted:
		Proof of supporting documents to be submitted:	Copy of license should be submitted.
		Copy of license should be submitted.	
		Part - II:	Part – II:
	15	4. Tender Document & Fee	4. Tender Document & Fee
9	15	_	
		In case of bidders registered with	In case of bidders registered with NSIC, a

		NSIC under Single Point Registration Scheme, they are exempted from the submission of EMD. However, the Tender Cost / Fee needs to be submitted by the Bidder and a valid NSIC Certificate clearly mentioning that they are registered with NSIC under Single Point Registration	valid NSIC Certificate clearly mentioning that they are registered with NSIC under Single Point Registration Scheme has to be submitted along with the Bid, and then they are exempted from the submission of EMD and Tender Fee / Cost.
		Scheme has to be submitted along with the Bid.	
10	Annexure – N Technical Requirement <u>Point no.1</u>	Bidder should provide MPLS link feasibility report last mile on Wire/RF and 3G&4G separately for branches as per list mentioned in Annexure – W. The links will be used either primary or back up of existing MPLS links from BSNL/MTNL or VSAT links with autofailover option.	Please refer the Revised Annexure – N .
11	Part – IV: Broad Scope of Work <u>Point no. 23</u>	Bidder will monitor the links and Bidder must have their own Network Operation Centre for monitoring of the Network. Bidder will monitor all the links from their NOC through NMS and submit the reports like Uptime, Bandwidth utilization, Link error, latency, etc. on monthly basis and as per the Bank's requirement. Bank will provide the SNMP access (read only) of the router for monitoring of the link. All the locations are to be monitored on 24x7x365. Bidder should provide site-wise network link usage and uptime.	Bidder will monitor the links and Bidder must have their own Network Operation Centre for monitoring of the Network. Bidder will monitor all the links from their NOC through NMS and submit the reports like Uptime, Bandwidth utilization, Link error, latency, etc. on monthly basis and as per the Bank's requirement. Bank will provide the SNMP access (read only) of the router of any OEM for monitoring of the link. All the locations are to be monitored on 24x7x365. Bidder should provide site-wise network link usage and uptime.
12	Part – IV Broad Scope of the Work Point no. 4.55	In the case of wireless link (RF) or VSAT link the responsibility of obtaining the roof top permissions/base area for erection of Pole/Mast etc., lies with the selected bidder. The bidder is refrained from installation of any other equipment other than the one required for connectivity of that specific branch and also that equipment should not be used for connectivity of any other building/customer.	In the case of wireless link (RF) or VSAT link the responsibility of obtaining the roof top permissions/base area for erection of Pole/Mast etc., lies with the Bank. The bidder is refrained from installation of any other equipment other than the one required for connectivity of that specific branch and also that equipment should not be used for connectivity of any other building/customer.
13	Part – IV Broad Scope of Work Point no. 59	Bidder has to deliver the link up to the router and terminate on the required interface of branch router with prior approval from Bank designated team.	Bidder has to deliver the link up to the router Ethernet port and terminate on the required interface of branch router with prior approval from Bank designated team.
14	Part – IV: Broad Scope of the Work Point no. 4.73	Latency should not be more than 100 ms (End to End i.e. Branch router to DC & DR router) for a 1500 byte packet size measured for a minimum	Latency should not be more than 300 ms (End to End i.e. Branch router to DC & DR router) for a 1500 byte packet size measured for a minimum of 1000 packets.

	For category	of 1000 packets.	
		or 1000 packers.	
15	Part – V 10. Liquidated Damage Part – V 14. Force Majeure	Bidder should take necessary landlord permission (if required) for installation of outdoor unit, in case of wireless link. Bank officials may co-ordinate / liason with landlord in the matter of obtaining permission. Force Majeure is herein defined as any cause, which is beyond the control of the selected bidder or the Bank as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance, such as: Natural phenomenon, including but not limited to floods, droughts, earthquakes, epidemics, Acts of any government, Situations, including but not limited to war, declared or	Bank will take necessary landlord permission (if required) for installation of outdoor unit. Bidder should co-ordinate / liason with landlord in the matter of obtaining permission. Force Majeure is herein defined as any cause, which is beyond the control of the selected bidder or the Bank as the case may be which they could not foresee or with a reasonable amount of diligence could not have foreseen and which substantially affect the performance, such as: Natural phenomenon, including but not limited to floods, droughts, earthquakes, epidemics, earthquakes, epidemics, Acts of any government, Situations, including but not limited to war, declared or undeclared, priorities, quarantines, embargoes, Terrorist attacks, public unrest in work
		undeclared, priorities, quarantines, embargoes, • Terrorist attacks, public unrest in work area	orea, Sun outage, satellite failure/ transponder failure.
17	PART-V 7. Payment Terms	Payment of VSAT equipment – 80% on successful implementation of VSAT equipment & commissioning of VSAT link and remaining 20% will be paid after 3 months of the successful commissioning of VSAT link.	months of the successful commissioning of VSAT link. • In case of payment of VSAT equipment, if

Technical Requirements

SL. No.	Technical requirement	Compliance (Yes/No)
1	Bidder should provide MPLS link feasibility report last mile on Wire/RF and 3G&4G separately for branches as per list mentioned in Annexure – V . The links will be used either primary or back up of existing MPLS links from BSNL/MTNL or VSAT links with auto-failover option.	
2	Bidder should provide connectivity through wireline or stable wireless media meeting the bandwidth, latency, uptime, etc. and other requirement mentioned in this RFP. Bank will give the first preference for wired link (Copper/Fiber) and second preference to wireless media (RF). If branches are not feasible on MPLS on Wired/RF, third preference would be given to 3G&4G as last mile. If both MPLS on wired / RF and 3G/4G are not feasible then the last preference will be VSAT.	
3	The prospective service provider/s shall establish the MPLS-VPN Network and should be capable of maintaining it for a period of 3 years based upon performance to be reviewed annually. Bank may extend the contract for further period of 2 years on same terms and conditions on mutually agreed prices.	
4	Branches connected through selected bidder MPLS should communicate each other directly without coming to Data Centre i.e. any to any communication.	
5	Selected bidder should provide connectivity with minimum number of "hop" for all links.	
6	All the POPs from where the MPLS bandwidth is provided to Bank should have redundancy of equipments, links, power, backhaul connectivity etc. Selected bidder needs to confirm it in writing.	
7	If the last mile is on wireless, bidder has to ensure that no other Radio equipment causes interference and should not be able to trap the wireless signals used for Bank's network.	
8	Bidders shall have to submit MPLS link feasibility report for category A & category B link for all branches separately.	
9	Any deviation with respect to feasibility report submitted such as wired to wireless, increase in pole height, declared as non-feasible, etc., during implementation of the project will not be accepted. The selected bidder shall be penalized for the deviation.	
10	The MPLS network of bidder should not be linked with any type of network from BSNL/MTNL at core / distribution / access / last mile level at any location.	
11	The backhaul link to be terminated at Bank's data centre at Bangalore & Disaster Recovery Center at Kolkata should be of Optical Fibre media only with self-healing ring based architecture. The last mile should be coming via two different physical paths. A diagram showing path redundancy at our data centre should be submitted with technical bid. Any cross-connect charges, if required to terminate the link at our Bangalore Data center, will be borne by Bank.	
12	The connectivity provided by the bidder has to be Layer 3 MPLS solution on dedicated ports with 1:1 full duplex committed information rate with end point as Ethernet. The circuit should be available in full duplex mode with sending and receiving available on the same circuit. (For eg On a 128 Kbps circuit, 128 Kbps sending and 128 Kbps receiving should be possible simultaneously).	
13	In case of Category A & Category C links selected bidder shall provide committed bandwidth at each location and make it available continuously. Bidder should ensure that committed bandwidth subscribed by Bank is always available for use. Bank may test the load on the links on time to time. In case of bandwidth subscribed by the branch is not available at any time, the duration of non-availability of committed bandwidth will be treated as downtime of the link. Penalty on downtime will be enforced accordingly.	

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	A separate VPN is to be created only for Bank network and in no way the VPN should be shared with other customers sharing the MPLS backbone. Bank MPLS Network must be	
	accessible to Bank nodes only. Bank has implemented IPSEC VPN in its existing network.	
14	Bank will also run IPSEC VPN on this MPLS link and there should not be any dependency from	
	bidder/ service provider on this implementation while integrating their MPLS network.	
	Further, there should not be any dependency on the service provider if Bank decides to	
	implement other VPN variants like GETVPN, DMVPN or any other such technology.	
3.5	The initial bandwidth of each category link at branch end should be according to the	
15	bandwidth mentioned in Annexure – V . The bandwidth must be capable of upgrading at a later stage as and when required by the Bank.	
	The bandwidth of backhaul link is factored as 100 Mbps and bidder to quote the cost of the	
16	same in commercial bid. However order for backhaul links will be placed based on 50%	
'0	bandwidth of total bandwidth of MPLS links provided by selected bidder.	
	The Category A, B, C link of bidder should be fully isolated from Internet traffic even if	
	running on the same core/backbone. It is desired that same PE Router does not run both	
17	customer MPLS VPN traffic and Internet traffic. The MPLS-VPN network offered to the Bank	
	should not carry any internet routes. The bidder has to provide network topology showing	
	how internet traffic is segregated from proposed MPLS cloud.	
	Bidder needs to have a co-ordination with Bank's existing network system integrator i.e. M/s	
18	WIPRO for integrating proposed secondary link with present infrastructure in order to run the	
	branches/offices smoothly.	
19	Bank desires to subscribe network connectivity for the branches / offices across the country; hence the selected bidder should work seamlessly throughout the country.	
	The bidders are expected to do a site survey for feasibility and for installation of the required	
	equipments. They should clearly mention the required equipment/s that will be deployed	
20	during commissioning. The charges towards cabling & other activities should be included in	
	the cost of link.	
21	Any extra material required for the project execution not mentioned in the commercial bid,	
	shall be supplied and deployed by the bidder at no extra cost to Bank.	
22	Bidder must ensure that it will use products that are intrinsically safe and are approved for use in these locations. It must adhere to Government of India safety regulation and should	
22	use earthing for all its masts.	
	Bidder will monitor the links and Bidder must have their own Network Operation Centre for	
	monitoring of the Network. Bidder will monitor all the links from their NOC through NMS and	
23	submit the reports like Uptime, Bandwidth utilization, Link error, latency, etc. on monthly basis	
23	and as per the Bank's requirement. Bank will provide the SNMP access (read only) of the	
	router of any OEM for monitoring of the link. All the locations are to be monitored on	
	24X7X365. Bidder should provide site-wise network link usage and uptime.	
	Besides monitoring from NOC, bidder should provide Manpower for monitoring links on daily basis during Monday to Saturdays 10 A.M to 7 P.M at Bank NOC Centre as per following	
	criteria.	
	difference.	
	Link Seat	
24	No. of link ≤100 1	
	100 < No. of link ≤ 500 2	
	More than 500 links 3	
	The selected bidder has to adhere to the Law of the Land and Labour Law of the	
	Government as applicable for the project.	
	Brief roles and responsibilities of resources are as given:	
25	Monitor all allotted branches links with due diligence and take follow-up with their	
23	backend team for immediate restoration of all such down links as per the SLA uptime.	
	Contact branches/offices/end users to understand the problem while identifying fault.	

	> Allocate the down-call to all concerned regional engineers for immediate action.	
	Responsible for all technical issues concerning the network.	
	 Point of contact for all technical queries and fault resolution. Shall have the primary responsibility for ensuring a smooth network functioning without 	
	congestion and downtime.	
	 To provide all kind of SLA reports to the designated Bank team as per the schedule 	
	and as and when required by the Bank.	
	Selected Bidder should log a call automatically in case of any issue without waiting for	
26	customer complaint and should ensure the necessary action for restoration of the same.	
	Selected Bidder should also inform to the Bank through mail, SMS, etc.	
	Supply, installation and configuration of WAN end point equipments such as modems, last	
	mile equipment etc. would be done by the selected bidder. IP address used on	
0.7	·	
27	branch/office end shall remain same as per the existing schema implemented in Bank at all	
	the branches/offices. The same shall be shared to the successful bidder during	
	implementation.	
	The prospective selected bidder shall establish the Network and should be capable of	
28	maintaining it for a minimum period of 3 years initially based on the performance of network	
20	to be reviewed annually and then subsequent extension for 2 years based on the	
	performance of the network link.	
	The bidder shall keep the price valid for a period of 1 year from the date of issuance of LOI	
29	(Letter of Intent). Bank may procure additional links during the period as per the business	
	requirement.	
	The proposed network by the bidder should support:	
	a) All web and client–server based application	
	b) Video Conferencing	
30	c) Voice over IP (VOIP)	
	d) End to end QOS	
	e) IPsec	
	,	
0.7	The MPLS VPN should support any to any connectivity and should be a closed user group	
31	for Bank and should not have any physical and logical interference with other customers of	
	the Internet route/traffic.	
32	The architecture used for the complete solution should be end to end enabled with layer-3	
	routing domain (end to end transparent layer-3 routing using static and dynamic routing).	
33	The solution should provide end to end transparent data reachability, voice, video etc. (no	
33	filter of traffic from SP).	
	The bidder should provide Ethernet connectivity over RJ45 interface to connect Bank's	
34	branch router to the network as well as at data centres also. Cables with required interfaces	
	have to be arranged by the selected bidder.	
	Bidder should provision all equipment required to provide the wireless connectivity at	
35	branch/office for getting usable wireless signal strength i.e. internal/external cabling and	
33	antenna etc.	
	Bidder has to replace/repair faulty/damaged equipment at the bidder's own cost,	
	irrespective of the reason of fault/damage within the SLA time limit, during the contract	
36	period. However, the "force majeure" clauses will apply. In any case, the bidder will have to	
	arrange for replacement of the faulty/defective equipment at the earliest. External	
	antennas should have proper lightning conductors, wherever necessary.	
37	Bidder shall meet all the Govt. or other Regulatory directions/ requirements and ensure its	
37	compliance.	
20	Average end to end packet loss should not be more than 1 in 1,000 for wireless connectivity	
38	with IMIX packets measured for a minimum of 1000 packets.	
	Average Jitter of the connectivity should be less than 45ms measured for a minimum 1000	
39	packets.	
40	The MTU (maximum transmission unit) size should be 1500 bytes.	
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41	The connectivity should be capable of provide end to end Quality of Service (QoS) for critical applications.	
42	The connectivity should be capable of provide End to end differentiated services code point (DSCP) and class of service (CoS) continuation.	
43	Bidder should use Simple Network Management Protocol version 1 & 2 (SNMP & v2) managed devices for end to end communication from the branch to data centre of Bank for the proposed wireless solution.	
44	Bidder's network should support dynamic routing protocols like Open Shortest Path First (OSPF), Border Gateway Protocol (BGP) etc.	
45	Bidder's network should support access control list (ACL) Support, SNMP & v2 support Network Time Protocol Version 4 (NTPv4), Syslog, Ping, Trivial File Transfer Protocol (TFTP), Secure Shell version 2 (SSHv2) and Internet Protocol version 6 (IPv6) support.	
46	Bank and/or third party consultants hired by Bank should have rights to audit/review the whole setup of the bidder catering to Bank's application.	
47	The proposed solution should be IPv4 and IPv6 compliant.	
48	Bidder's network should support Incident management: Prevention mechanism for misconfiguration, Alert mechanism should be in place for any incident occurred etc., Every incident reported should be notified to Bank and documented, System should have capability to send alerts through email and SMS to respective authorities/stakeholders.	
49	Network devices should be updated with latest firmware and security patches. Process for performing update should be maintained and approved by Bank.	
50	In case of radio frequency (RF) connectivity, bidder may provide point to point or point to multi point connectivity provided it adheres to the terms and conditions mentioned in the RFP, like committed bandwidth, security parameters etc.	
51	The service provider shall execute a Service Level Agreement (SLA), which must include all the services and terms and conditions of the services to be extended as detailed herein, and as may be prescribed or recommended.	
52	Security being prime concern, Solution should not breach the security of any installations of Bank in any way.	
53	During the contract period, the vendor should upgrade the system / offered Link, if better technology available at no additional cost.	
54	Bank will only provide Rack space, required earthing voltage and UPS Power supply for installation or commissioning of required links in branches/offices. All other required infra should be arranged by bidder at no extra cost to Bank. Bank will not take any responsibility for installation of MUX/MAST/RF antenna/VSAT/Modems etc. Bidder should take adequate insurance for deploying hardware at no cost to Bank for preventing the equipment from any kind of damages.	
55	In the case of wireless link (RF) or VSAT link the responsibility of obtaining the roof top permissions/base area for erection of Pole/Mast etc., lies with the Bank. The bidder is refrained from installation of any other equipment other than the one required for connectivity of that specific branch and also that equipment should not be used for connectivity of any other building/customer.	
56	Bidder should provide the complete site readiness requirement to Banks designated team and local branch officials in writing during the site-survey.	
57	"Site Survey", "Installation Certificate" and "Acceptance report for successful commissioning" must be maintained by the selected bidder for future references. The formats would be finalized in consultation with the Bank. This shall be one time activity and the date of successful commissioning of link as these documents shall be considered as the billing's start date.	
58	The bidders are expected to do a site survey for feasibility and for positioning of the terminating equipment. They should clearly inform about the equipment that will be deployed with its physical, electrical and any other related equipment.	

59	Bidder has to deliver the link up to the router and terminate on the required interface of branch router Ethernet Port with prior approval from Bank designated team.	
	Bidder must ensure that it will use products that are intrinsically safe and are approved for	
60	use in these locations. It must adhere to Government of India safety regulation and should	
	use earthing for all its masts.	
	Bidder should do all internal cabling till branch router for successful commissioning of the	
61	required MPLS link without any additional cost to the Bank. Bidder should provide all	
	required cables for connecting the modem or any external device to Branch router for	
	termination of link at no extra cost to the Bank.	
62	Bidders have to provide full support during involvement of additional communication technology or PoC in Bank MPLS network without any additional cost to the Bank.	
	The bidder will ensure that each location is within a radius of 5 kilometers from any of their	
63	BTS/Repeater Towers. However for flatland rural areas, the radius may be extended up to 10	
03	kilometers. Such BTS/Repeater should be in line of sight of Bank's location.	
	All clearances, wherever required, in respect of the mast/pole/antenna from any	
	government/local/statutory bodies etc. like municipal corporations, airport authorities are	
	the responsibility of the bidder. In future, if the bidder gets involved in Regulatory issues /	
64	Licensing issue with any Govt/Law enforcing agency / Regulatory authorities, it is the	
	responsibility of Bidder to replace / substitute the wire/wireless Technology at no additional	
	cost to the Bank without compromising SLA and security.	
	Bidder shall ensure that all supplied hardware, software etc. must not be End of Support /	
65	End of Service and spares/upgrades should be available for at least 5 years from date of	
	commissioning.	
,,	The network equipment shall support Packet Filtering, TCP spoofing, IPv4 & IPv6 both, QoS	
66	on both inbound and outbound traffic and other industry standard protocol.	
	Dedicated IP addressing scheme will be provided by the Bank. Required connections to	
	terminating the link on Router/Switch (provided by the Bank) should be done by bidder.	
	After installation of network equipment at branches bidder has to ensure that banks	
	application are working properly.	
67	Security being prime concern, Solution should not breach the security of any other	
	installations of Bank in any way.	
	All the locations are to be monitored on 24x7x365. Bidder should provide site-wise network	
	link usage and uptime.	
	All Supplied network equipments should support IPv6 technology.	
	For category A link	
	In case of MPLS on wired/RF connectivity, Bank prefers wired connectivity (fiber/copper) as	
	last mile at branches. In case of non-feasibility of wired media, the Bank shall consider the	
68	stable wireless technology (RF) with licensed /unlicensed band that has been successfully	
	implemented in private/public sector Bank/Financial Institution/ Govt. of India. Bidder has to	
	ensure that no other Radio equipment causes interference to wireless signals or trap the	
	wireless signals used for Bank's connectivity.	
40	The bidders should have their own nation-wide high availability MPLS network backbone. The bidder's core MPLS backbone should be fully meshed. Bidder has to submit the	
69	declaration for this clause during bid submission.	
	The connectivity provided by the bidder has to be Layer 3 MPLS solution on dedicated ports	
70	with 1:1 committed information rate with end point as Ethernet.	
	For the pole to be installed in the branch roof top for Wireless link, the height of pole should	
71	not be more than 12 meters.	
	In order to deliver more links on wire media, the bidder can avail third party network	
72	infrastructure other than M/s BSNL & M/s. MTNL at last mile network. However the ownership,	
	l	
	SLA maintenance, data security & confidentiality of the network links have to be ensured by	

	the bidder. The total responsibility of Liaising, commissioning, maintaining the link including	
	all the commercials involved should be taken care by the bidder.	
	For category B link	
73	Latency should not be more than 300 ms (End to End i.e. Branch router to DC & DR router) for a 1500 byte packet size measured for a minimum of 1000 packets.	
	Minimum band width for 3G & 4G as last mile should be 256 Kbps full duplex.	
74	Alternate MPLS link (Wired/RF/3G-4G) should be configured in active–active or active-passive mode with auto failover mechanism with the existing BSNL/MTNL MPLS or VSAT link at branches/offices.	
75	 Following security measure must be available in category B Link. i. Mobile network based MPLS VPN solution should have strong password protection. ii. Mobile network based MPLS VPN connections should have static Private IP. iii. The network should not be accessible / open to Internet at any point. iv. The Mobile network based MPLS VPN connection should not be voice or SMS enabled. v. IPSEC: Security features of IPSEC should be available & configured for the end-to-end encryption. vi. Only Bank's authorized and approved APN should be configured. viii. The device should not be able to connect any other network or service (including WIFI or WIFI hotspot) except Bank's permitted network / system. viiii. The protection against "Man -in-the Middle" compromise (between the Bank's Network/system and operators' network) should be available 	
	For category C link	
76	The size of VSAT pool bandwidth will be based on nos. of VSAT equipment required. Per VSAT equipment installation average 30 Kbps bandwidth will be required.	
77	Supplied VSATs should support any inbound and outbound bandwidth between 50 Kbps to 2Mbps and Antenna Size 1 or 1.2 meters. The bidder shall provide VSAT connectivity to all branches/ATMs/e-lobby using the Ku band	
78	The vendor will provide dedicated pool bandwidth (1:1) full duplex for the VSATs supplied at various locations identified by the Bank across the country. The pool bandwidth will be dedicated for Bank only and there will not be any sharing with the pool bandwidth. The Pool bandwidth provided must be seamlessly integrated with the existing network of the Bank. However Bank may increase the pool bandwidth as per Bank's requirements	
79	VSAT connectivity should be least preferred and should be provided only in case of non-feasibility of any kind (wired/wireless) of MPLS links & 3G/4G. Bidders need to submit non-feasibility report for MPLS links & 3G/4G etc. before going for VSAT connectivity solution	
80	Bidder has to ensure that network latency for category C link doesn't increase beyond 1000 ms any point of time under load condition.	
81	The VSAT Antenna Size will be 1/1.2 meters and the VSAT indoor unit should have minimum 1 no. of Ethernet Port (RJ45).	