Tender No. and Date	400/2018/1270/BYO/ITV Dated September 19, 2017
Purpose	EoI for Implementation of SD-WAN.
Date of Pre-bid Meeting	September 26, 2017, 11:30am

PRE-BID MEETING – QUERIES AND CLARIFICATIONS

S.N.	Section	Clause	Bidder Query	SIDBI Response
1	4.4.3	The objective of implementation of SD-WAN is to: 1. Implement transport independent overlay network to connect all the offices of the Bank using all options of available transport options including MPLS, Internet and cellular network (3G/LTE). Bonding of multiple transport media.	Different Transport media have different latency, bandwidth traits etc. Bonding multiple transport media to make a single wan link would affect the application performance. Load balancing based on application and link performance is predictive and is a best practice to achieve application performance. The clause to be changed as: The objective of implementation of SD-WAN is to: 1. Implement transport independent overlay network to connect all the offices of the Bank using all options of available transport options including MPLS, Internet and cellular network (3G/LTE). Application based Load balancing on multiple transport media.	**Clarification** Based on response to EoI by the bidders, presentation and discussions the specifications would be normalized / finalized and Limited tender or Open RfP would be issued.
2	5.1.1	5. Bank should be able to aggregate bandwidth (Bonding) from both the service providers though they are terminating on different CE	Aggregating bandwidth from diff providers on different CE is a proprietary feature to a particular OEM. We suggest to do multi path based on application load balance which is predictive and is a best practice to achieve application performance. The clause to be removed.	
3	5.1.2	4. Bank should be able to aggregate bandwidth (Bonding) of MPLS and Internet / Broadband / Cellular links terminated on the CE.	Different Transport media have different latency, bandwidth traits etc. Bonding multiple transport media to make a single wan link would affect the application performance. Load balancing based on application and link performance is predictive and is a best practice to achieve application performance. The clause to be changed as: Bank should be able to do Application based Load balancing	

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			on all the available transport media MPLS and Internet / Broadband / Cellular links terminated on the CE.	
4	4.4.2	Providing IP MPLS VPN connectivity, which should support multicast,	Request SIDBI to consider the Multicast in PIM Sparse mode or in SSM mode only, as Dense mode is not a recommended mode of multicast.	**Clarifications** Based on response to EoI by bidders, presentation and discussion appropriate multicast mode would be selected and the same would be incorporated in proposed Limited tender or open RfP which would be issued subsequently.
5	4.4.2	Setting up and managing Network Management Center (in-house) and deployment of onsite resource for managing the network from Bank's premises.	Request bank to confirm whether Service provider is required to provide the separate NMS for this network or they can use the existing NMS of SIDBI?	**Clarification** The service provider has to provide appropriate NMS for monitoring links and SD-WAN devices and management.
6	4.6.1	The bank would shortlist single service provider for providing IP MPLS VPN links, procuring and providing IP MPLS VPN links from alternate service provider (different cloud), supply of CE at all the locations, setting up of NMC and management etc. The service provider would be single point of contact for all the services.		**Clarification** Based on response to EoI, bank would finalize appropriate model for short-listing of service providers. Accordingly, Limited tender or Open RfP would be issued.
7	4.6.2	SD-WAN CE at all the locations of the bank. Necessary hardware and software for setting up of NMC. Deploy technical manpower for setting up and management of NMC for centralized configuration, management, monitoring, control and analytics	Who will be managing the SD WAN appliance ? Is it the L1 bidder or L2 bidder?	**Clarification** L1 bidder has to supply and manage the SD-WAN appliances.
8	5.1.1	The service provider has to provide two IP MPLS VPN link, one of his own and the other from alternate service provider. Both the clouds should be different. The last miles should not	There will be some locations which might not be feasible on wired media. Request SIDBI to consider the RF media (i.e. Wireless) media too.	**Clarification.** Please refer to clause No.5.2 of EoI.

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		be on wireless.		
9	5.1.1	The service provider has to provide dual CEs. Each link to be terminated on separate CE.	As understand that SIDBI has existing routers deployed at all the locations? Do the current routers at the remote locations need refresh. So also, the hub routers at the HQ will continue to function or they too need refresh so that the same can be proposed. Request bank to confirm the same.	**Clarification** Currently, SIDBI does not own any router. The existing routers are taken on lease from service providers and are to be returned on expiry of contract.
10	5.1.1	The service provider has to provide dual CEs. Each link to be terminated on separate CE.	Request SIDBI to specify the Model Number & make of the HO, Branch & location router. This will help us to verify functionality of SD WAN on Existing router.	
11	5.1.1	The service provider has to provide dual CEs. Each link to be terminated on separate CE.	Request SIDBI to confirm whether existing routers can be re used On top of it SD WAN functionality solution? Please confirm.	
12	5.1.2	In this category bank proposes to use Internet/broadband/Cellular links as alternate transport media, which would be procured separately and not in scope of this EoI, However the monitoring of the links is under the scope of service provider.	Monitoring of Broadband or Cellular based links is not technically possible. Request SIDBI to delete the same.	**Clarification** Here monitoring refers to status of the link (UP / Down) and intimation to respective location for follow-up with service provider.
13	5.2.2	The maximum height of pole should preferably be not more than 6M from roof top. However acceptance of the same is subject to availability of permission from landlord	For better conversion of feasibility & for deployment - Request SIDBI to consider the Pole height for Wireless link beyond 6 meter too.	**Clarification** The same will be decided based on response from service providers to EoI.
14	5.3.1	The solution should have security features - stateful firewall, web-filtering, antivirus, malware protection, DoS Protection, IDS/IPS, SSL encryption/decryption	All these technical requirements mentioned are available with either UTM/NGN Firewall & with On premised DDOS Solution. Request SIDBI to consider this technical requirement with additional appliance as solution.	**Clarification** SIDBI prefers to have all the security features in single device. However, based on service providers response to EoI, the solution would be normalized.
15	5.3.1	The solution should have minimum of 6 GE ports	Request SIDBI to confirm whether is it a mandate to have minimum 6 ports on the proposed router as specified OR maximum of 6 ports would comply.	**Clarification** SIDBI intends to terminate 2 MPLS links, 1 Broadband link in addition to LAN and HA connectivity on SD-WAN CE device. SIDBI would
16	5.3.1	The solution should have minimum of 6 GE ports	Request SIDBI to share us the technical reason for requirement of 6 nos. of GE Port in CPE.	not be using any router in

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				the proposed design.
17	8.2	Annexure - III	Request SIDBI to provide background for Annexure - III	**Clarification** Bidder to submit response to all the points mentioned in Annexure - III, to enable bank to normalize the design and issue Limited tender or Open RfP subsequently.
18	N/a	Extension for EOI Submission	Request SIDBI to extend the EOI submission till 17th Oct 17.	**Change** Last date for bid submission extended till October 16, 2017.
19	4.6.2(5)	Managing Internet/ cellular links and MPLS link procured by bank directly from other Service providers at all / some locations in future.	Hope SLAs are managed by SIDBI with respective providers. Please confirm	**Clarification** Monitoring and SLA management of MPLS links (procured from other service providers) is under the scope of NMC service provider. In case of Internet / cellular links, the scope of NMC service provider would be monitoring of links.
20	4.6.2(6)	The bidder also needs to manage SLA of all the service providers.	Is there any specific SLA requirement from bank ? We request bank to procure and manage SLAs directly with other Service provider links	**Clarification** Based on response to EoI, bank would finalize appropriate model for short-listing of service providers. Accordingly, Limited tender or Open RfP would be issued.
21	5.1.1(1)	The service provider has to provide two IP MPLS VPN link, one of his own and the other from alternate service provider. Both the clouds should be different. The last miles should not be on wireless.	Shall we consider Wireless last mile if wireline is not feasible?	**Clarification.** Please refer to clause No.5.2 of EoI. However, the same will be decided based on response from service providers to EoI.
22	5.1.2(4)	Bank should be able to aggregate bandwidth (Bonding) of MPLS and Internet / Broadband / Cellular links terminated on the CE.	Please elaborate on this bonding requirement between MPLS /Internet/ Broadband/Cellular link	**Clarification.** Bidder to propose appropriate solution.
23	5.1.1(5)	Bank should be able to aggregate bandwidth (Bonding) from both the service providers though they are terminating on different CE.	Please elaborate on this bonding requirement	
24	5.1.2(2)	Bank would procure and	Cellurar/Broadband links means	**Clarification**

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		terminate Internet / Broadband / Cellular links from any SP and terminate on the SD-WAN CE.	3G/4G ? Please elaborate how these links will be delivered to SDWAN CPE.	The link handoff would be on RJ45.
25	5.1.2(4)	The service provider has to provide single IP MPLS VPN link along with CE. The link provided at 50% of the locations should be of the service provider and at other 50% of locations should be from alternate service provider.	We request SIDBI to procure links directly from other service provider for redundant links(Category A and B) and 50% links of Category C	**Clarification** Based on service providers response to EoI, appropriate model would be finalised and Limited tender or Open RfP would be issued.
26	5.8.3	The bidder solution design should take into consideration redundancy/high availability of NMC.	Please clarify if redundancy required at component level or Datacenter level and also confirm if component level redundancy required both the datacenters	**Clarification** Bidder to propose appropriate redundancy for NMC. The design would be normalized after presentation and discussion with bidders and accordingly limited tender or open RfP would be issued.
27	5.1.3 (C)	Primary and backup links to be extended from two different PoP's to ensure PoP level redundancy.	Locations where SIDBI Category D offices present, Service providers may not have dual PoP. Shall we consider single PoP at these locations?	**Clarification** Dual PoP requirement is for aggregation locations i.e. Data Center and DR Site.
28	5.1.4	The service provider has to provide Point to point links between DC and DR for log shipment. One P2P link should be of the service provider and the second from alternate service provider. The links should be terminated on two different CEs	Shall bank procure directly other service provide P2P links	**Clarification** Based on service providers response to EoI, appropriate model would be finalized and Limited tender or Open RfP would be issued.
30	8.2.8	Details about End computing device (for onsite resource) and display screen proposed.	Hope bank will procure the computer and display screens etc. Bidder to give recommendations only.Pls confirm	**Clarification** Bidder to provide the computers and display screens for setting up and management of NMC.
32	6.5	Tender Cost	It is requested to exempt BSNL from paying Rs.5000/-, being 100% owned by Central Government	**Clarification** Central Public Sector Undertakings are exempted from payment of tender cost for the EoI.
34	6.6	Initial EMD	It is requested to exempt BSNL from paying EMD of Rs.1,00,000, being 100% owned by Central	**Clarification** Central Public Sector Undertakings are

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			Government	exempted from payment of initial EMD along with EoI.
36	7.2.1(4)	The bidder should have positive networth and cash profit (i.e., no cash loss) in 2 years out of last 3 years.	BSNL may be exempted being CPSU	**Clarification** Central Public Sector Undertakings are exempted.
38	7.2.1	Sr.No.6 The Bidder should have following certifications for VPN network services: a) ISO 9001:2008 / TL 9000 and b) ISO 27001/ BS7799	BSNL may be exempted being CPSU	**Clarification** Central Public Sector Undertakings are exempted from certification. However, security and quality of service may be ensured.
40	N/a	Last date of Bid submission	Last date of Bid submission may please be extended from 10th Oct-2017 to 17th Oct-2017.	**Change** Last date for bid submission extended till **October 16, 2017, 1600hrs**.
42	3.3	Disclaimer	It is suggested that both parties shall be responsible for direct damages due to either parties' breach of confidentiality obligations, infringement of intellectual property or willful misconduct, gross negligence or any fraudulent misrepresentation on which the other party has relied on in propriety. However, neither party shall be liable for any indirect, special or consequential loss/damage towards the other.	No Change
44	3.4	Costs to be borne by Respondents	It is suggested that any cost or expense for additional submission of responses in relation to modification of the tender document leading to change in scope of services shall be borne by SIDBI	No Change
46	5.8	Important Note	We understand that time is of the essence and it shall verily be vital for the completion of work by Vodafone. Kindly mention the values in % for SLs to be agreed between the parties under the captions provided in the clause in RFP. Liquidated damages based out of SLs- Latency, Uptime, Packet Drop, Jitter, MTTR shall not be acceptable unless preventive mechanism to determine the breach in SLs between the parties	**Clarification** The details would be provided in limited tender or open RfP which SIDBI would be issuing subsequently.

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			and any such loss should be documented with a prior notice to be given by SIDBI to the successful bidder and a reasonable opportunity be granted to rectify such delay and catch up with the lost time. Any such attributable delay in delivery on account of successful bidder shall also be met with service credits to SIDBI post any non-fulfillment of rectification of delay. It is suggested that upon such default, the bidder should be given reasonable time to remedy such failure/ delay post prior notice for such delay/failure by the SIDBI to the Bidder. The penalty should be imposed only after Bidder fails to rectify the default after to failing to remedy such default. Also the clause fails to address the concern when the default is due to force majeure event or for the reasons attributable to SIDBI. The bidder cannot be held liable for penalty in case the default is due to force majeure event or reasons attributable to SIDBI.	
48	6.10	Modification and/or Withdrawal of Bids.	It is suggested that any modification in the contract document shall be in writing with mutual consent of both parties and DGH alone cannot have this right alone by itself. Such amendment shall be after due negotiation and as per instructions relayed to the respondent by SIDBI which will be recorded in writing and made part of the contract	**Clarification** The clause pertains to modification and/or withdrawal of bids submitted in response to the current EoI / RfP issued by SIDBI subsequently.
50	4.6.2	SD-WAN CE at all the locations of the bank.	AS the design planned for SDWAN is on premise including the controller and NMC setup, it is recommended to let Network Integrator to provide and manage the same and keeping it out of the scope of Service Provider	**Clarification** Based on service providers response to EoI, appropriate model would be finalised and Limited tender or Open RfP would be issued.
52	4.6.2	Necessary hardware and software for setting up of NMC. Deploy technical manpower for setting up and management of NMC for centralized	AS the design planned for SDWAN is on premise including the controller and NMC setup, it is recommended to let Network Integrator to provide and manage the same and keeping it out of the	

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		configuration, management, monitoring, control and analytics.	scope of Service Provider	
54	4.6.2	Managing Internet/ cellular links and MPLS link procured by bank directly from other Service providers at all / some locations in future.	Managing dual CPE setup is OK from SP scope of work, but it would be operationally very difficult to manage Internet\Cellular\MPLS Links from OSP.	**Clarification** Here monitoring refers to status of the link (UP / Down) and intimation to respective location for follow-up with service provider.
56	5.1.1	The service provider has to provide two IP MPLS VPN link, one of his own and the other from alternate service provider. Both the clouds should be different. The last miles should not be on wireless.	Design consideration for dual cloud is adequate for your business, however it is recommended to take the services directly from individual Service Providers. You can have L1 as Primary provider and L2 as Secondary provider matching L1's commercials.	**Clarification** Based on service providers response to EoI, appropriate model would be finalized and Limited tender or Open RfP would be issued.
58	5.1.1	Both the service provider links should be active / active and each should act as failover to the other	This is a CPE specific design and if both the CPE are under single owner control then the active-active setup can be implemented and managed effectively, however the design would require Service providers support for network configuration which should be individual SP's responsibility to comply and SIDBI's responsibility to command from each SP.	
60	5.1.2	The service provider has to provide single IP MPLS VPN link along with CE. The link provided at 50% of the locations should be of the service provider and at other 50% of locations should be from alternate service provider.	Design consideration for dual cloud is adequate for your business, however it is recommended to take the services directly from individual Service Providers. You can have L1 as Primary provider and L2 as Secondary provider matching L1's commercials.	
62	5.1.2	Bank would procure and terminate Internet / Broadband / Cellular links from any SP and terminate on the SD-WAN CE.	Managing dual CPE setup is OK from SP scope of work, but it would be operationally very difficult to manage Internet\Cellular\MPLS Links from OSP.	
64	5.1.2	Bank should be able to aggregate bandwidth (Bonding) of MPLS and Internet / Broadband / Cellular links terminated on the CE	This is a CPE specific design and if both the CPE are under single owner control then the active-active setup can be implemented and managed effectively, however the design would require Service providers support for network configuration which should be	**Clarification** Based on service providers response to EoI, appropriate model would be finalized and Limited tender or Open RfP would be issued.

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			individual SP's responsibility to comply and SIDBI's responsibility to command from each SP	
66	5.1.4	The service provider has to provide Point to point links between DC and DR for log shipment. One P2P link should be of the service provider and the second from alternate service provider.	Service provider cannot resell OSP P2P link, hence it is recommended to procure the P2P links from individual SP	
68	5.2.2	The maximum height of pole should preferably be not more than 6M from roof top. However acceptance of the same is subject to availability of permission from landlord.	Ideally the recommended Pole\Mast height should not be exceeding 9 mtrs as beyond that the business case doesn't fit commercially, request you to increase the height limitation to 9 mtrs with exceptions incase.	**Clarification** The same will be decided based on response from service providers to EoI.
70	5.2.2	The frequency should be restricted / licensed	It should not be mandate to use Licensed frequency as service Providers provide links with committed SLA with adequate penalty clauses and it would be SP's responsibility to manage the link under committed SLA	No Change The bidders are required to provide details of locations where they propose to offer licensed and unlicensed frequency.
72	5.3.1	The solution should have minimum of 6 GE ports.	Need more clarity, any specific reason of 6 GE port in CPE	**Clarification** SIDBI intends to terminate 2 MPLS links, 1 Broadband link in addition to LAN and HA connectivity on SD-WAN CE device. SIDBI would not be using any router in the proposed design.
74	5.7.1	Bidder shall provide on-site engineers (L1 and L2) to monitor & manage SIDBI SDWAN.	AS the design planned for SDWAN is on premise including the controller and NMC setup, it is recommended to let Network Integrator to provide and manage the same and keeping it out of the scope of Service Provider	**Clarification** Based on service providers response to EoI, appropriate model would be finalized and Limited tender or Open RfP would be issued.

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