

Amendment-1 to RFP 09/2018-19 dated 15/09/2018 For Supply, Installation, Integration and Maintenance of Software Defined -Wide Area Network (SD-WAN) Solution

It is decided to amend the following in respect of the above RFP:

a. Submission & Opening of Bid -(Page No. 2)

Events	Existing	Amended
	Time & Date	Time & Date
Last Date and Time for Submission of Bids	09/10/2018, Tuesday upto 3.00 pm	16/10/2018, Tuesday upto 3.00pm
Date, Time & Venue for opening of Part A- Conformity to Eligibility Criteria.	09/10/2018, Tuesday at 3.30pm Venue: Canara Bank, Second Floor, Conference Hall, DIT Wing-HO (Annex), Naveen Complex, 14 M G Road, Bengaluru 560001.	16/10/2018, Tuesday at 3.30pm Venue: Canara Bank, Second Floor, Conference Hall, DIT Wing-HO (Annex), Naveen Complex, 14 M G Road, Bengaluru 560001.

Sl. No.	Page No.	Clause No.	Existing	Amended
b.	12	<u>1. Delivery, Installation, Configuration and Integration:</u>	<p><u>1.2. Project Schedule are as follows:</u></p> <p>1.2.1. Supply of Hardware and Software items: Within 7 weeks from the date of acceptance of Purchase Order.</p> <p>1.2.2. Installation, Configuration and Implementation: Within 3 weeks for DC and DR, within 5 Weeks for HO, DIT and 21 Circle offices from the date of Delivery as per clause 1.2.1.</p>	<p><u>1.2. Project Schedule are as follows:</u></p> <p>1.2.1. Supply of Hardware and Software items: Within 8 weeks from the date of acceptance of Purchase Order.</p> <p>1.2.2. Installation, Configuration and Implementation: Within 4 weeks for DC and DR, within 6 Weeks for HO, DIT and 21 Circle offices from the date of Delivery as per clause 1.2.1.</p> <p>1.2.3 WARRANTY will commence from the date of acceptance of the solution.</p>
c.	16	<u>5. Support:</u>	The Support should be available on 24x7X365 basis	5.1 The Support should be available on 24x7X365 basis from OEM for hardware, software, RMA, Technical Assistant Centre
d.	36	<u>9. Security Deposit / Performance Bank Guarantee:</u>	9.7. The security deposit / bank guarantee will be returned to the bidder on completion of Warranty Period.	9.7. The security deposit / bank guarantee will be returned to the bidder on completion of Contract Period (i.e 5 Years).





e.	49	Annexure-2 BIDDER EXPERIENCE Eligibility Criteria Declaration Criteria no. e	<p>Eligibility Criteria: Bidder should have supplied and should have been maintaining SD-WAN (Software Defined -Wide Area Network) solution in any Scheduled Commercial Bank/PSU/ Govt. Organization/Govt. Unit/BFSI in India.</p> <p>Documents to be submitted: The Bidders has to provide order copy/reference Letter from in their name from Scheduled Commercial Bank/PSU/Govt. Organizations/BFSI/Corporates in India duly mentioning the solution name and the no. of Devices/endpoints.</p>	<p>Eligibility Criteria: Bidder should have supplied and should have been maintaining SD-WAN (Software Defined -Wide Area Network) solution in any Scheduled Commercial Bank/PSU/ Govt. Organization/Govt. Unit/BFSI/Company (Publicly listed, minimum 100 offices/units) Globally.</p> <p>Documents to be submitted: The Bidders has to provide order copy/reference Letter from in their name from Scheduled Commercial Bank/PSU/Govt. Organizations/BFSI/Company (Publicly listed, minimum 100 offices/units) Globally duly mentioning the solution name and the no. of Devices/endpoints.</p>
f.	49	Annexure-2 BIDDER EXPERIENCE Eligibility Criteria Declaration Criteria no. f	<p>Eligibility Criteria: The applicant shall have support office in Bengaluru and Mumbai for 24x7 support.</p> <p>Documents to be submitted: The Bidders to furnish their existing service center infrastructure details like contact details with postal address , no of engineers, jurisdiction of the engineer etc. besides local Contact Person Name , Address , Phone No, Mobile No, Email etc.</p>	<p>Eligibility Criteria: The applicant shall have support office in Bengaluru and Mumbai for 24x7 support.</p> <p>Documents to be submitted: The Bidders to furnish their existing service center infrastructure details like contact details with postal address , no of engineers, jurisdiction of the engineer etc. besides local Contact Person Name , Address , Phone No, Mobile No, Email etc.</p>
g.	49	Annexure-2 Solution Experience Eligibility Criteria Declaration Criteria no. g	<p>Eligibility Criteria: Proposed Solution of proposed OEM (not necessarily the model) should have been deployed (not necessarily by the Bidder, in case of Dealer/ Distributor/Partner) in at least one Scheduled Commercial Bank/PSU/ Govt. Organization/Govt. Unit/BFSI in India for minimum 100 locations.</p> <p>Documents to be submitted: The Bidders has to provide order</p>	<p>Eligibility Criteria: Proposed Solution of proposed OEM (not necessarily the model) should have been deployed (not necessarily by the Bidder, in case of Dealer/ Distributor/Partner) in at least one Scheduled Commercial Bank/PSU/ Govt. Organization/Govt. Unit/BFSI/Company (Publicly listed, minimum 100</p>





			copy/reference Letter from in their name from their customers duly mentioning the solution name and the no. of Devices/endpoints.	offices/units) Globally for minimum 100 locations . Documents to be submitted: The Bidder has to provide order copy/reference Letter from the organization duly mentioning the solution name and the no. of Devices/endpoints.
h.	55-60	Annexure-7	Technical Requirements for Software Defined -Wide Area Network (SD-WAN) Solution	Amended Technical Requirements for Software Defined -Wide Area Network (SD-WAN) Solution (Annexure-7) is attached as Annexure.
i.	61-62	Annexure-8	Scope of Work	Amended Scope of Work (Annexure-8) is attached as Annexure.
j.	68-70	Annexure- 14	Bill of Material	Amended Bill of Material (Annexure-14) is attached as Annexure.
k.	NA	New Appendix	Appendix-L Location details	New Appendix-L (Location details) is attached as Annexure.

l. Amended Training (Clause No. 10 of Section B on Page no. 11 of the RFP)

- 10.1 Bidder has to provide hands on Product training of the proposed Solution by OEM/OEMs directly for 10 numbers of Bank officials at Bangalore/Mumbai as per Bank's decision.
- 10.2 Bidder has to arrange the onsite-classroom training with workstations and required necessary amenities to facilitate the training.
- 10.3 Trainer should be well experienced and must have industry certification.
- 10.4 Bidder has to provide User Manual and Technical Documentation both in hand and soft copies to the Bank.
- 10.5 Bidder should provide similar training during the contract period at the same cost, if required by the Bank.

m. Amended Requirement Details (Clause No. 8 of Section B on Page no. 11 of the RFP):

- 8.1. Bank invites sealed offers ('Conformity to Eligibility Criteria', 'Technical Proposal' and 'Commercial Bid') for Supply, Installation, Integration and Maintenance of Software Defined -Wide Area Network(SD-WAN) for Data Center (DC), Data Recovery Center(DRC), Head Office, Department of Information Technology Naveen Complex Building and 21 Circle Offices of the Bank as per the Terms & Conditions, Technical Specifications and Scope of Work described elsewhere in this document. The brief description of SD-WAN Solution is furnished in following tables:





Requirement	DC	DR	Head Office	DIT-Naveen Complex	21 Circle Offices
No Of Devices	2 (in HA) [incase Multi-OEM solution/same OEM's multi-product solution, HA should be built for all products/solution]	2 (in HA) [incase Multi-OEM solution/same OEM's multi-product solution, HA should be built for all products/solution]	2 (in HA)	2 (in HA)	1 in Each Circle Office
No Of Management Console	1 [incase Multi-OEM solution/same OEM's multi-product solution, Management console should be made available for all products/solution] - HA between DC-DR	1 [incase Multi-OEM solution/same OEM's multi-product solution, Management console should be made available for all products/solution] - HA between DC-DR	NA	NA	NA
Training	Bidder has to provide hands on Product training of the proposed solution by OEM/OEM's directly for 10 numbers of Bank officials at Bangalore/Mumbai as per Bank's decision.				

8.2. Detailed technical specification for each of the above is furnished in Annexure-7. All the Hardware / Software ordered for Supply, Installation, Integration and Maintenance of SD-WAN Solution should have comprehensive onsite warranty of 3 years & AMC of 2 Years (if contracted)

8.3. The Bank reserve the right to continue/renew/terminate any of the above services at the discretion of the Bank and shall terminate the services by giving 30 days notice period to the bidder.

8.4. Bank reserves the right to increase or decrease the quantum of purchase by 25% in respect to the quantity specified in this tender at the same rate arrived at on the Terms and Conditions of this Tender.

n. Amended Penalties/Liquidated damages for not maintaining uptime (Clause No. 3.2 of Section C on Page no. 13, 14 and 15 of the RFP):

3.4.1 DC, DR, HO and DIT will be in HA (High Availability) mode and Penalties will be calculated as mentioned below:

Level of availability calculated on monthly basis for DC and DR	Penalty
99.95% to 100%	No penalty
98.95% to 99.949%	0.05% on total order value (5 years TCO of all locations) for every hour. Maximum penalty shall not be more than 20% of total AMC amount payable for one year for the project.
97.95% to 98.949%	0.10% on total order value (5 years TCO of all locations) for every hour. Maximum penalty shall not be more than 20% of total AMC amount payable for one year for the project.
96.95% to 97.949%	0.15% on total order value (5 years TCO of all locations) for every hour. Maximum penalty shall not be more than 20% of total AMC amount payable for one year for the project.

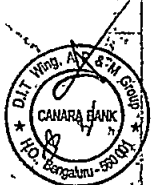


95.95% to 96.949%	0.30% on total order value (5 years TCO of all locations) for every hour. Maximum penalty shall not be more than 20% of total AMC amount payable for one year for the project.
Less than 95.95%	0.5% on total order value (5 years TCO of all locations) for every hour. Maximum penalty shall not be more than 20% of AMC amount payable for one year for the project.

Level of availability calculated on monthly basis for Head Office and DIT	Penalty
99.95% to 100%	No penalty
98.95% to 99.949%	0.30% of total order value (5 years TCO) of that location for every hour. Maximum penalty shall not be more than 20% of AMC amount payable for one year for that location.
97.95% to 98.949%	0.40% of total order value (5 years TCO) of that location for every hour. Maximum penalty shall not be more than 20% of AMC amount payable for one year for that location.
96.95% to 97.949%	0.50% of total order value (5 years TCO) of that location for every hour. Maximum penalty shall not be more than 20% of AMC amount payable for one year for that location.
95.95% to 96.949%	0.60% of total order value (5 years TCO) of that location for every hour. Maximum penalty shall not be more than 20% of AMC amount payable for one year for that location.
Less than 95.95%	1% of total order value (5 years TCO) of that location for every hour. Maximum penalty shall not be more than 20% of AMC amount payable for one year for that location.

3.4.2 For Circle offices monthly uptime of 99.5% should be maintained and Bank shall impose penalty as mentioned below for 21 Circle Offices:

Level of availability calculated on monthly basis for 21 Circle Offices	Penalty
99.5% to 100%	No penalty
98.5% to 99.499%	0.30% of total order value (5 years TCO) of that location for every hour. Maximum penalty shall not be more than 20% of AMC amount payable for one year for that location.
97.5% to 98.499%	0.40% of total order value (5 years TCO) of that location for every hour. Maximum penalty shall not be more than 20% of AMC amount payable for one year for that location.



96.5% to 97.499%	0.50% of total order value (5 years TCO) of that location for every hour. Maximum penalty shall not be more than 20% of AMC amount payable for one year for that location.
95.5% to 96.499%	0.60% of total order value (5 years TCO) of that location for every hour. Maximum penalty shall not be more than 20% of AMC amount payable for one year for that location.
Less than 95.5%	1% of total order value (5 years TCO) of that location for every hour. Maximum penalty shall not be more than 20% of AMC amount payable for one year for that location.

3.4.3 Since the AMC amount shall be released quarterly in arrears, the total penalty per quarter deductible under 3.2.1 and 3.2.2 clause shall be restricted to 25% of the claimed quarterly AMC value/Warranty Value

3.4.4 If monthly uptime is less than 95%, the Bank shall levy penalty as above and shall have full right to terminate the contract under this RFP or AMC, if contracted. The right of termination shall be in addition to the penalty. The above penalty shall be deducted from any payments due to the bidder (including AMC payments).

o. OEM's & Bidder's Previous Experience evaluation process (Clause No. 3.8.4 of Section E on Page no. 28 and 29 of the RFP):

3.8.4 OEM's & Bidder's Previous Experience evaluation process:

3.8.4.1 The bidder should provide details of previous experience in implementing SD-WAN solution. The bidder's past experience shall be evaluated as given below:

Sl. No.	Criteria	Evaluation Parameters	Max Marks	Documents submitted
1.	No. of implementation (not necessarily by the Bidder) of the Proposed Solution of proposed OEM (not necessarily the model) in Scheduled Commercial Bank/PSU/ Govt. Organization/Govt. Unit/BFSI/Company (Publicly listed, minimum 100 offices/units) Globally as on bid submission date. Bidder has to submit Certificate of Satisfactory working from the respective organizations clearly specifying the no. of locations deployed and since period.	5 and above Organizations	25	
		2 to 4 Organizations	20	
		1 Organization	15	
2.	No. of locations covered implementation (not necessarily by the Bidder) of Proposed Solution of proposed OEM (not necessarily the model) in Scheduled Commercial Bank/PSU/ Govt. Organization/Govt. Unit/BFSI/Company (Publicly listed, minimum 100 offices/units) Globally in single purchase order, as on bid submission date.	500 and above locations	25	
		300 to 499 locations	20	
		From 100 to 299 locations	15	

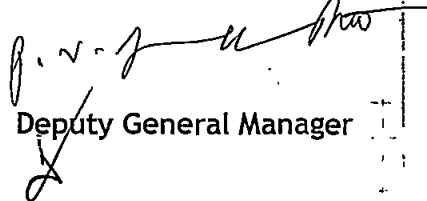


	Bidder has to submit Certificate of Satisfactory working from the respective organizations clearly specifying the no. of locations deployed and since period.			
3.	No. of implementation (and maintenance as well) by the Bidder of SD-WAN (Software Defined -Wide Area Network) solution in any Scheduled Commercial Bank/PSU/ Govt. Organization/Govt. Unit/BFSI/ Company (Publicly listed, minimum 100 offices/units) Globally in India as on the date of the RFP. Bidder has to submit Certificate of Satisfactory working from the respective organization clearly specifying the solution and the period.	5 and above Organizations	25	
		2 to 4 Organizations	20	
		1 Organization	15	
Total Maximum Marks			75	

Note:

- Banks mean scheduled commercial banks in India only.
- The bidder is required to provide documentary evidence for each of the above criteria and the same would be required on the respective client's letter head in case of credentials.
- Calculation of marks would be rounded off to the nearest two decimal places.
- Total Score = (Marks Obtained * 100)/Total Maximum Marks.

Date: 06/10/2018
Place: Bengaluru


Deputy General Manager



Amended Annexure-7

Technical Requirements for Software Defined -Wide Area Network (SD-WAN) Solution

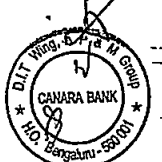
SUB: RFP for Supply, Installation, Integration and Maintenance of Software Defined -Wide Area Network (SD-WAN) Solution.

Ref: Your RFP 09/2018-19 dated 15/09/2018

Note:

1. The Bidder shall specifically mention the make and model of the items offered for all the requirements in terms of RFP without fail, failing which the Bid is liable for rejection.
2. If the Bidder feels that certain features offered are superior to what has been specified by the Bank, it shall be highlighted separately. Information regarding any modification required in the proposed configuration to meet the intent of the specifications and state-of-the-art technology shall be provided. However, the Bank reserves the right to accept the modifications / superior features suggested/offered.
3. The Bidder shall provide all other required equipment and services, whether or not explicitly mentioned in this RFP, to ensure the intent of specification, completeness, operability, maintainability and upgradability.
4. The selected bidder shall own the responsibility to demonstrate that the products offered are as per the specification/performance stipulated in this RFP and as committed by the bidder either at site or in bidder's work site without any extra cost to the Bank.

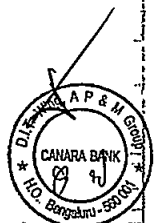
Sl. No.	General Hardware Specification	Mandatory/ Desirable	Fully Complied(FC)/ Partially Complied (PC)/ Not Complied(NC)
1.	Proposed solution should be in the form of Hardware Appliance and must be Rack Mountable with Dual Power Supply for DC, DR & DIT locations. For other locations, Hardware Appliance with 1U/2U form factor with single power supply.	Mandatory	
2.	Proposed solution must be in-premises, management of devices should be in-premises.	Mandatory	
3.	The SD-WAN should be capable of HA: Active/Passive and should be capable of auto failover in case active device fails.	Mandatory	
4.	High Mean Time Between Failure values should be minimum 07 years to ensure long life of hardware.	Desirable	
5.	The SD-WAN devices should be capable of WAN protocols like PPP/Multilink PPP/HDLC/PPOE/PPOA support etc.	Desirable	
6.	The SD-WAN should be capable to use all the available links like		
a.	MPLS	Mandatory	
b.	Internet any kind	Mandatory	
c.	4G LTE	Desirable	
7.	The SD-WAN should have inbuilt/supporting hardware and software for 4G / 4G LTE Technologies.	Desirable	
8.	SD-WAN should support PAP/ CHAP/ PIN based authentication for 4G/4G LTE mode of connectivity.	Desirable	



9.	The SD-WAN should have the ability to bind multiple MPLS links and/or public internet links.	Mandatory	
10.	The SD-WAN should Support L3 protocol functionality like Static Routes, OSPFv2/OSPFV3, BGP v3/v4, Policy Based routing , Tunneling and NAT from day of connectivity.	Mandatory	
11.	The SD-WAN should Support IPv4 and IPv6 from day one	Mandatory	
12.	The SD-WAN should support following IPv6 capability		
a.	IPv6 addressing architecture, IPv6 name resolution, IPv6 statistics, IPv6 neighbour Discovery	Mandatory	
b.	ICMPv6, IPv6 DHCP	Mandatory	
c.	Support for the following IP v6 features : OSPF v3 , BGP Routing Support for IPv6, IP V6 Dual Stack, IP v6 Policy based Routing, and IP v6 QoS.	Mandatory	
13.	Device Operating Conditions:		
a.	SD-WAN should seamlessly operate within Temperature range from 32 to 104°F (0 to 40°C) (Maximum Altitude 1,800m).	Mandatory	
b.	SD-WAN should seamlessly operate within Relative Humidity range from 15 to 85%.	Mandatory	
c.	SD-WAN should seamlessly operate within Altitude range from 0 to 10,000 ft (3,000m).	Desirable	
14.	The SD-WAN should support QoS features.	Mandatory	
15.	The SD-WAN should support SNMP and NTP for monitoring and report purpose	Mandatory	
16.	The SD-WAN device should be able to deploy in “In-line/in-path mode and Off-line/Off-path/Out-of-path mode” in the current Network setup and in the event of device failure, it should act in Pass-through/fail-open/fail-to-wire mode	Desirable	
17.	The SD-WAN must include the ability to support the network topologies like Hub and spoke, Full mesh, Partial/Regional mesh and Dynamic mesh	Mandatory	
18.	The Proposed hardware should be able to communicate with the existing products of different vendors (eg: - Cisco, HP, Juniper, Checkpoint, Nortel, Palo-alto, etc.) Routers, Switches and Firewall.	Mandatory	
A.	DC/DR WAN optimization & Acceleration solution with High Availability specification		
1.	The Solution must be delivered by a physical hardware platform in a DC/DR and should be rack mountable with Dual Power supply	Mandatory	
2.	The Appliance must have throughput of minimum 4Gbps.	Mandatory	
3.	The Appliance for DC/DR should carry the functionality of WAN Optimization, Hybrid WAN, Performance based routing.	Mandatory	
4.	The Appliance should have minimum 4 x1G RJ45 type, 2 X10G Optical SFP based WAN ports.	Mandatory	
5.	The SD-WAN should be capable of HA: Active/Passive and should be capable of auto failover in case active device fails.	Mandatory	
6.	The Solution should be supplied with Console Cable, Power Cable and Rack Mount kit.	Mandatory	
7.	All the WAN ports of should support QoS.	Mandatory	



8.	The device should use both DC-DR links effectively and it should continuously use the links even with 20% error in the link.	Mandatory	
9.	The solution should recover from link failure - alternate link convergence time within milliseconds without session disconnect.	Mandatory	
10.	During hardware failure the solution must fail open with < 1 Sec	Desirable	
B. DIT-Naveen Complex SD-WAN High Availability Solution Specification			
1.	The SD-WAN must be delivered by a physical hardware platform in DIT and should be rack mountable with Dual Power supply	Mandatory	
2.	The SD-WAN must handle the throughput of minimum 400Mbps.	Mandatory	
3.	The DC/DR SD-WAN should have minimum 4x1GE based WAN ports.	Mandatory	
4.	The SD-WAN should be supplied with Console Cable, Power Cable and Rack Mount kit	Mandatory	
5.	All the WAN ports of SD-WAN should support QoS.	Mandatory	
6.	The SD-WAN should be capable of HA: Active/Passive and should be capable of auto failover in case active device fails.	Mandatory	
C. Head Office SD-WAN High Availability Solution Specification			
1.	The SD-WAN must be delivered by a physical hardware platform in HO with 1U/2U form factor with single power supply.	Mandatory	
2.	The SD-WAN must handle the throughput of minimum 200Mbps.	Mandatory	
3.	The DC/DR SD-WAN should have minimum 4x1GE based WAN ports.	Mandatory	
4.	The SD-WAN should be supplied with Console Cable, Power Cable and Rack Mount kit	Mandatory	
5.	All the WAN ports of SD-WAN should support QoS.	Mandatory	
6.	The SD-WAN should be capable of HA: Active/Passive and should be capable of auto failover in case active device fails.	Mandatory	
D. 21 Circle Office SD-WAN Specification			
1.	The SD-WAN must be delivered by a physical hardware platform in CO with 1U/2U form factor with single power supply.	Mandatory	
2.	The SD-WAN must handle the throughput of minimum 100Mbps.	Mandatory	
3.	The CO SD-WAN should have minimum 6x1 GE based WAN ports	Mandatory	
4.	The CO SD-WAN should support 802.1Q	Mandatory	
5.	The CO SD-WAN should be supplied with Console Cable, Power Cable and Rack Mount kit	Mandatory	
6.	All the WAN ports of SD-WAN should support QoS.	Mandatory	
E. General Functionality Requirement and Specification			
1.	Based on N/W analysis of the current setup the solution must select best path based on link Quality, Policy & link Capacity.	Mandatory	
2.	The SD-WAN should be able to load balance across links simultaneously, or leverage the secondary link for spill-over if the bandwidth required for one session exceeds the available bandwidth on the best link. This lets high bandwidth applications have as much bandwidth as they need to perform optimally.	Mandatory	
3.	The SD-WAN should support if the bandwidth of a single session exceeds the availability on any link , the session must be able to use multiple links simultaneously.	Mandatory	
4.	The SD-WAN should have the ability to bind multiple MPLS links and an MPLS link with public internet link.	Mandatory	



5.	The SD-WAN should be able to build connections dynamically between two SD-WAN devices ,leveraging multiple links and apply logic for best path selection, traffic switching ,Qos and dynamic link bonding.	Mandatory	
6.	The SD-WAN should support Link failover due to packet loss, Latency, Jitter, link flap & Etc. - without TCP and UDP session failover	Mandatory	
7.	The SD-WAN device should have capability to forward traffic via specific WAN paths depending on predefined application policies and performance needs.	Mandatory	
8.	The appliance should use both the links effectively.	Mandatory	
9.	The SD-WAN solution should not add any latency for the current traffic path	Mandatory	
10.	The SD-WAN should be capable of sending duplicate data over both links for guaranteed delivery of all applications data and it has to be configurable feature need to be enabled if required.	Desirable	
11.	The SD-WAN should continuously check the link flaps and link quality parameters and traverse the traffic accordingly i.e. if the link is not stable then put the link in monitor state, once the link is stable for particular time then start sending traffic on that link. Link flaps or link up/down must not affect the traffic as long as other link is available.	Mandatory	
12.	The SD-WAN should support one way Latency and Traffic loss monitoring (Eg: DC to DR & Site DR to DC)	Mandatory	
13.	The SD-WAN should continuously assess performance of critical voice, video, or data applications at any given time with the ability	Mandatory	
14.	The SD-WAN must integrate transparently into the existing routing infrastructure. The solution must be completely transparent to existing routing protocols (e.g., OSPF, RIP, BGP (iBGP and eBGP), IPSEC etc.). All routing functions, including "dynamic path selection" or any other network routing decisions.	Mandatory	
15.	The SD-WAN must be able to perform priority queuing in order to prioritize packet flows for each traffic class.	Mandatory	
16.	The SD-WAN Should support hybrid secured connectivity across the WAN i.e Data flowing between DC to DR devices and from DC/DR to HO/CO devices should be encrypted by using industry standard protocol.	Mandatory	
17.	The SD-WAN solution should support encryptions for end-to-end communication. The solution should use standard encryption technology, such as AES 128/256 to provide secure connectivity over any type of WAN link.	Mandatory	
18.	The DC and DR devices should support WAN optimization features:		
a.	TCP flow control	Mandatory	
b.	Data compression	Mandatory	
c.	De-duplication	Desirable	
d.	Protocol optimization	Mandatory	



19.	The DC and DR WAN optimization feature should optimize and reduce minimum 50% our existing bandwidth utilization.	Mandatory	
20.	The DC and DR WAN optimization feature should reduce our existing time taken to carry data replication from DC to DR/DR to DC.	Mandatory	
21.	The SD-WAN solution must be able to apply Qos policies to all the traffic seen in network ,including both optimized and non-optimized traffic flows ,including TCP,UDP and other non-TCP traffic types.	Mandatory	
22.	The SD-WAN solution should include a Qos mechanism that is able to protect delay sensitive flows like Voice, Video, and VDI	Mandatory	
23.	If a failure of one or more network links occur and there isn't enough remaining bandwidth to service all current sessions, current sessions should be adjusted to conform with the QoS policies.	Mandatory	
24.	The SD-WAN should have following Firewall features		
a.	Firewall Services with Access Lists and/or Time based Access lists to provide supervision and control.	Mandatory	
b.	Firewall for statefull blocking	Mandatory	
c.	Web/URL filtering capability to allow or deny access to certain class of web sites according to predefined policies.	Desirable	
d.	The SD-WAN may support DDoS functionality and protect DDoS attack like UDP Flood, Ping of Death.	Desirable	
25.	The SD-WAN must support configuration rollback feature to detect and recover from software and configuration errors by reverting back to previously active software or configuration.	Desirable	
F.	SD-WAN Management		
1.	Appliance Should be able to integrate with central authentication solutions such as		
a.	Active Directory (AD)	Desirable	
b.	TACACS / RADIUS server	Mandatory	
c.	Privileged identity Management(PIM)	Desirable	
2.	Solution should have privilege level of users like L1,L2 and L3 to control and to manage deployed SD-WAN devices.	Mandatory	
3.	The Solution should have simplified orchestration which should be placed in DC and DRC for provisioning ,automation to control and to push configuration for all the devices.	Mandatory	
4.	The solution should come with a web based administration interface and GUI.	Mandatory	
5.	Central Management Console to be provided in DC & DR. Both DC and DR SD-WAN controllers should be in active-standby mode.	Mandatory	
6.	The DC and DR management console should have the capacity to handle up to minimum 250 devices simultaneously.	Mandatory	
7.	The solution should be able to perform time synchronization with NTP server	Mandatory	
8.	The appliance must be able to integrate with NCCM tools like Everest.	Desirable	

9.	The appliance should support SNMP (V1 , V2 and V3)	Desirable	
10.	The appliance should be capable to send Email alerts on meeting/exceeding the user defined thresholds.	Desirable	
11.	The solution must support flexible hierarchical group management, including for group-based configuration changes and software updates. Appliances may be grouped according to a hierarchical structure that affords easy management of hundreds of appliances.	Desirable	
G.	SD-WAN Reporting		
1.	The SD-WAN should support granular Real-Time Monitoring and Historical Reporting like		
a.	Statistic bandwidth usage of available links	Mandatory	
b.	Statistic bandwidth usage of each application and flow of each application.	Desirable	
c.	Network statistics, including continuous performance monitoring of loss, latency, and packet ordering for all network paths and link utilization.	Mandatory	
2.	The SD-WAN should be able to generate report for		
a.	Traffic statistics of all the included path	Mandatory	
b.	Specific application utilization	Desirable	
c.	Path performance	Mandatory	
3.	The SD-WAN should provide automated, real-time event alert mechanism.	Desirable	
4.	The SD-WAN should be able to generate system events/logs for events that have taken place in the system such as a login, changes to configuration and system related errors or warnings.	Mandatory	
5.	The SD-WAN should have GUI (Graphical User Interface) for Report Generation.	Mandatory	
6.	The SD-WAN MUST provide following reports of Individual Link Quality/Virtual Link Quality on daily, weekly, monthly, yearly etc.		
a.	Packet loss in the links	Mandatory	
b.	Jitter on the links	Desirable	
c.	Latency of Links	Mandatory	
7.	The SD-WAN controller should contain single dashboard which includes all other device status like CPU, Link status, event logs etc.	Mandatory	
8.	The solution must be capable of exporting traffic statistics to AppFlow or Netflow collectors.	Desirable	
9.	The solution should provide option for scheduling reports.	Mandatory	
10.	All Reports must be exportable in CSV format / PDF format	Desirable	
H.	LICENSE and SLA		
1.	The devices and software should be supported by the OEM on 24X7X365 basis through a global Technical Assistance Center(TAC).	Mandatory	
2.	For DC and DR replacement for Hardware/Software Failure should include within 4Hours after authorization of replacement .For other locations support should be on NBD(Next Business Day).	Mandatory	

3.	The support should be provided direct from OEM and not through any intermediate.	Mandatory	
4.	All the functionality and feature license should be pre-installed and it should be usable from day one of operation.	Mandatory	
5.	During the tenure , all the software/Patch/OS upgradation should be done by the Bidder/OEM with no Cost to Bank.	Mandatory	
6.	All the license part should be applied to all SD-WAN devices through central controller and not from cloud.	Mandatory	

Notes:

- The Bidder shall be awarded full three (3) marks for a line item if it is fully compliant (FC) i.e. No customization is required, One (1) mark for a line item if it is partially compliant (PC) i.e. Customization is required, and Zero (0) mark for a line item if it is Non compliant (NC) i.e. feature cannot be made available in the product.
- Bidder should ensure that any Mandatory non-compliance against Appendix-K response to Technical & Functional Specification may lead to disqualification.
- Total Score = (Marks Obtained * 100)/Maximum marks. .
- The bidder has to obtain minimum Total Score of 80.
- Bidder has to showcase above specifications / features and provide equivalent document

Declaration:

- We hereby Confirm that we have various certificates/bench mark testing standards for the items quoted to meet the intent of the RFP.
- We hereby Confirm that we have back to back arrangements with third party hardware software for providing continuous and un-interrupted support to meet SLAs obligations as per RFP Terms.

Date

Signature with seal

Name :

Designation :



Amended-Annexure-8

Scope of Work

SUB: RFP for Supply, Installation, Integration and Maintenance of Software Defined -Wide Area Network (SD-WAN) Solution.

Ref: Your RFP 09/2018-19 dated 15/09/2018

Sl. No.	Scope of Work	Bidder's Compliance (Yes/No)
1.	Bidder has to supply and install the Hardware/Appliance along with required licenses at Banks DC, DRC, Head Office, DIT-Naveen Complex and 21 Circle office locations. Bidder has to take back-to-back OEM support for all Hardware/appliance, software, licenses etc.	
2.	Bidder has to own the responsibility of making the solution run as desired by the Bank.	
3.	Bidder has to plan, design, integrate, implement, rollout, manage the solution for the contracted period.	
4.	Bidder has to document the detailed solution architecture, design, traffic flow etc.	
5.	If some components are missed out or not properly sized, onus is on the bidder to supply/replace it without any cost to Bank.	
6.	All necessary entitlements papers of license for both hardware and software should be provided to the Bank.	
7.	Bidder shall ensure that during various phases of implementation, the performance, security, etc. of the existing network setup is not compromised.	
8.	Bidder has to integrate the SD-WAN with AD, NTP Server, TACACS, PIM, Monitoring tool etc.	
9.	Bidder has to mount the devices in the existing network rack.	
10.	For DC and DR, support should include 4 Hrs Advance Replacement (Delivery within 4 Hours after authorization of replacement) .For other locations support should be on NBD(Next Business Day). Back-to-Back OEM TAC support (24*7).	
11.	Bidder has to design, lay and test the solution to cater to the requirements.	
12.	Bidder has to submit escalation matrix and keep Bank informed, if any changes take place in the designed solution.	
13.	Design and Implementation have to be done by the onsite team of experts from OEM along with bidder's skilled team including project manager.	
14.	All products updates, upgrades & patches should be provided by the selected bidder free of cost during warranty & AMC period.	
15.	Bidder should inform Bank about all release/version change of patches/ upgrades/ updates of hardware/software/ OS/ middleware etc. as and when released by the selected bidder/OEM.	
16.	DC and DR SD-WAN should be configured as master controller for all other locations preferably or separate controller can be provided to control other locations devices. Both DC and DR SD-WAN controller should be in active-active mode for all other devices.	
17.	DC,DR,HO and DIT solution should be provided with HA (High Availability).	



18.	Bidder may be required to participate and comply with in various audits, regulatory requirements and certifications conducted by Bank, RBI, other agencies and various legal entities.	
19.	Bidder has to provide training for the Product Based, proposed and designed Solution from OEM directly for 10 Bank Officials at Bangalore/Mumbai as per Bank's decision.	
20.	Bidder should keep the Bank explicitly informed about the end of support dates on related products/ hardware and should ensure support during warranty & AMC period.	
21.	Bidder has to coordinate with Bank System Integrator while implementing the project and during any point of time when ever issue is raised by the Bank.	
22.	Bidder has to prepare and supply the standard configuration/ backup/ compliance/ reporting etc. templates as per Bank's requirement	
23.	Sub-contracting of Bidder for any activity under this project is not permitted. An undertaking to this effect shall be submitted by the bidder.	

Date

Signature with seal

Name :

Designation :



Amended Annexure- 14
Bill of Material

SUB: RFP for Supply, Installation, Integration and Maintenance of Software Defined -Wide Area Network (SD-WAN) Solution.

Ref: Your RFP 09/2018-19 dated 15/09/2018

Notes

1. These details should be on the letter head of Bidder and each & every page should be signed by an Authorised Signatory with Name and Seal of the Company.
2. Please be guided by RFP terms, subsequent amendments and replies to pre-bid queries (if any) while quoting.
3. Do not change the structure of the format nor add any extra items.
4. No counter condition/assumption in response to commercial bid will be accepted. Bank has a right to reject such bid.

Table -A
Price details of Hardware & Software Items

[Amount in Indian Rupees]

Sl. No.	Item Details	Cost Price			AMC/ATS (as per Table-D)*				Unit Price with 3 years Comprehensive onsite warranty and support and 2 Years AMC/ATS (Incl. of tax)	Quantity	Total Cost with 3 years Comprehensive onsite warranty and support and 2 Years AMC/ATS (Incl. of tax)	
		Unit Price with 3 years Comprehensive onsite warranty and support (Excl. of Tax) for Hardware & Software	Tax for Column A		Unit Price with 3 years Comprehensive onsite warranty and support (Incl. of Tax) for Hardware & Software	2 years AMC/ ATS charges per unit after warranty period (Excl. of Tax)	Tax for Column E					2 years AMC/ ATS charges per unit after warranty period (Excl. of Tax)
		A	B % of tax	C= Tax Amt	D= A+C	F	F% of Tax	G= Tax Amt	H=E+G	I=D+H	J	K= (I x J)
1.	SD -WAN with Optimization Solution for DC as per Annexure-7 & Annexure-8										2**	
2.	SD -WAN with Optimization Solution for DR as per Annexure-7 & Annexure-8										2**	
3.	SD -WAN for Head Office as per Annexure-7 & Annexure-8										2	



4.	SD -WAN for DIT Wing, Naveen Complex as per Annexure-7 & Annexure-8										2	
5.	SD -WAN for Circle Office as per Annexure-7 & Annexure-8										21	
6.	Management Console										1(DC)+ 1(DR) ***	
7.	Total cost (total of column k of rows 1 and 2)											

* Year wise breakup of AMC/ATS charges should be furnished in Table-D.

** Two Devices/Sets to build HA for SD-WAN and Optimization Solution in DC and DR. Set is applicable in case the SD-WAN and Optimization Solution is built using Single OEM's Multi-product/Multiple OEM products.

*** 1 device/set in DC and DR. Set is applicable in case the solution is built using Single OEM's Multi-product/Multiple OEM products, and Management console should be made available for all products/solution - HA between DC-DR.

Table-B
Charges for Training for 5 Years

[Amount in Indian Rupees]

Sl. No.	Requirement	Training Charges Per Annum (Excl. of Taxes)	Tax for Column A		Training Charges Per Annum (Incl. of Taxes)	No of Years	Total Training Charges for 5 Years (Incl. of Taxes)
			Tax %	Tax Value			
		a	b	c	d=a+c	e	f=dxe
1.	Training Charges for Clause no. 10 of Section B of the RFP					5	

Charges mentioned in above Table-B should be valid till 5 years from the date of opening of Commercial Bid. One Time training to be provide after implementation. Bank will place the order for next training as and when required during the contract period.

Table-C
Total Cost for 5 Years Contract Period

[Amount in Indian Rupees]

Sl. No.	Details	Total Cost of Ownership [inclusive of tax]
A	Price details of Hardware & Software Items as per Table-A [Total of Column K]	
B	Charges for Training for 5 Years as per Table-B [Column f]	
C	Total Cost of Ownership [Sum of A and B of Table-C]	



Table -D

Post Warranty AMC/ATS Calculation Table for Unit Quantity for Table-A

[Amount in Indian Rupees]

Sl. No.	Description	Post Warranty AMC/ATS Charges year wise****					Total AMC/ATS for 2 Years (incl. of Tax)
		4 th Year	5 th Year	Total AMC/ATS for 2 Years (Excl. of Tax)	Tax %	Tax in Amt.	
		AMC/ATS Charge (Excl. of tax)	AMC/ATS Charge (Excl. of tax)				
a	b	c=a+b	d	e	f=c+e		
1.	SD -WAN with Optimization Solution for DC as per Annexure-7 & Annexure-8						
2.	SD -WAN with Optimization Solution for DR as per Annexure-7 & Annexure-8						
3.	SD -WAN for Head Office as per Annexure-7 & Annexure-8						
4.	SD -WAN for DIT Wing, Naveen Complex as per Annexure-7 & Annexure-8						
5.	SD -WAN for Circle Office as per Annexure-7 & Annexure-8						
6.	Management Console						

****The Charges mentioned in column 'c' of Table-D should tally with the charges mentioned under Column 'F' of Table-A. The Charges mentioned in column 'f' of Table-D should tally with the charges mentioned under Column 'H' of Table-A.

Undertaking

- i. Bill of material is submitted on the letter head and is signed by an Authorised Signatory with Name and Seal of the Company.
- ii. We confirm that we have gone through RFP clauses, subsequent amendments and replies to pre-bid queries (if any) and abide by the same.
- iii. We have not changed the structure of the format nor added any extra items. We note that any such alternation will lead to rejection of Bid.
- iv. We agree that no counter condition/assumption in response to commercial bid will be accepted by the Bank. Bank has a right to reject such bid.
- v. We are agreeable to the payment schedule as per "Payment Terms" of the RFP.

Date

Signature with seal

Name :

Designation :



New Appendix-L

Location Details

List of Circle Office Locations:

Sl. No.	Circle Office Locations	Sl. No.	Circle Office Locations
1.	Ahmedabad	12.	Kolkata
2.	Bengaluru	13.	Lucknow
3.	Bhopal	14.	Madurai
4.	Bhubaneswar	15.	Mangalore
5.	Chandigarh	16.	Mumbai
6.	Chennai	17.	Patna
7.	Delhi	18.	Pune
8.	Guwahati	19.	Ranchi
9.	Hyderabad	20.	Trivandrum
10.	Jaipur	21.	Vijayawada
11.	Karnal		

Note: Address and contact details of the individual Branches/Offices/Wings will be provided to selected Bidder/s along with Order.

