

Supply, Installation and Commissioning of DWDM Network Upgrade Equipment for AP Fiber Grid

Clarifications 03 Dt:10.5.2019

SNo	RFP Part No.	Section No.	Page no.	Content of the RFP requiring clarification	Clarification Sought	Clarifications by APSFL
1	Corrigendum 06, 4 Pre-Qualification Criteria S.No. 2	Sno4	19	"The bidder or OEM or consortium member should have at least one OTN ASON based DWDM/OTN Indian network references & Ten Global OTN ASON Based references"	It is requested to change the clause so that APSFL should have OEM with sound credentials as "The bidder or OEM or consortium member should have proven network in three different customer network with OTN & ASON in India and ten global customers network with OTN & ASON, Out of 3 OTN & ASON Indian customer network should have one network with minimum no. of sites equivalent to ask in the APSFL network.	Refer Corrigendum
2	Corrigendum 06, 4 Pre-Qualification Criteria S.No. 2	New	2	OEM or its group company should have presence in India for more than 10 Years. OEM or Indian Group Company must have 24X7 hotline & toll-Free help desk for service support in India with their own technical support in India and Abroad. OEM should have dedicated support center in Andhra Pradesh	It is Requested to change the clause as OEM or its group company should have presence in India for more than 15 Years. OEM through its Indian Group Company must have 24X7 hotline & toll-free help desk for service support with their own technical support centre with a minimum of 100 seats in Andhra Pradesh. OEM has to give an undertaking to setup the same . However if an OEM have a similar kind of facility being setup for any other project for APSFL , the same can be considered for this project also. Accordingly a suitable undertaking should be provided	No change
3	Main Bid Document	4 Pre-Qualification Criteria S.No. 4	19	Bidder / Consortium (all partners) should have positive net worth for the last 2 audited financial years.	We understand that if an OEM is part of consortium , Parent company as well as Indian company both should have positive net worth & in profit for last 2 years . Also we understand some global companies follow Financial year from Jan-Dec , so financial information for the year 2017 & 2018 shall be considered for foreign companies & for Indian companies (2016-17 & 17-18) , please confirm .	Refer Corrigendum
4				Pre-Qualification Criteria (New Clause Addition)	We Strongly feel that the OEM & its Indian company should be a major industrial player with sound financials in last 3 years in order to provide top class support with best quality & resources . So kindly add that the OEM (Parent Company) & its Indian group company should be in Profit in each of last 3 financial years (FY15-16,16-17&17-18)	Refer Corrigendum
5				Pre-Qualification Criteria (New Clause Addition)	We Strongly feel that the OEM & its Indian company should be a major industrial player with sound financials in last 3 years in order to provide top class support with best quality & resources . So kindly add that the OEM(Parent Company) & its Indian group company should have turnover more than INR 4000 cr in each of last 3 financial years .(FY15-16,16-17&17-18)	Refer Corrigendum
6				Pre-Qualification Criteria (New Clause Addition)	OEM or Indian Group Company must have multilevel certification courses & minimum 2 tier 1 training partner in India with training facilities.	Refer Corrigendum

7	Corrigendum 06	3.1 Functional Requirement	3	Bidders can reuse the existing NCS 2006 chassis in the APSFL network. or bidder may propose extra chassis for supporting the requirements or can propose completely different chassis in addition to the existing ones or completely provide a new vendor solution all together meeting all the existing and the new requirements mentioned as part of this RFP	As existing network is not OTN ASON based network, current technology details are differ than existng network so request you to remove the clause that, bidder can reuse the exisitng DWDM Equipments.	Refer Corrigendum
8	Corrigendum 06	2.2.1 General Requirements	5	The NMS of the equipment should be web based and must support OTN, DWDM transmission equipment and the IP/MPLS network infrastructure to enable end to end provisioning and monitoring of the services running across the infrastructure.	We request to ammed the clause as "The NMS of the equipment should be web based/remote login application and must support OTN, DWDM transmission equipment and the IP/MPLS network infrastructure to provisioning and monitoring of the services"., As every OEM have different implementation & standared Practice in industry , Some need download online login application to access NMS from web & for End to end provisioning there is need of OSS/ Unified NMS for the same .	Refer Corrigendum
9	Clarification 02 pdf	SL. No. 7 row#100	1	Zonal shared bandwidth will be 200 G, ring bandwitdh shall be more than 50 G considering 4 nodes in one zonal ring.	As there are few Zonal rings those are having more than 4 nodes, so request to APSFL to remove the clause that ring bandwitdh shall be more than 50 G considering 4 nodes in one zonal ring.	It should be possible to use the available 200G OTN capacity anyway that we want. 50G at each node is only an indicative minimum bandwidth requirement considering the 4 zonal nodes. It should be possible to drop any capacity ranging from 50 to 200 at each of the zonal nodes in the ring.
10	Clarification 02 pdf	SL. No. 14 SL. No. 15 SL. NO. 21	2 2 3	Wherever exact losses are mentioned, take 0.3 db/Km loss along with extra 3db margin	we understand that 0.3 db/Km is to be taken for links where losses are not been provided , but where the actual losses are given need to take actaul losses only, in addition to that extra 3db margin for all links to be added for designing the network, pl confirm the same	Yes. The understanding is correct.
11				Pre-Qualification Criteria (New Clause Addition)	OEM should have experience in deployment of core/aggregation/access IP MPLS & DWDM network in India and should have experience and capability to provision end to end Services across IP MPLS & DWDM network through single NMS.	No change

12	Corrigendum 06	3.1 Functional Requirement.	4	Bidder is responsible to provide equipments for District & Zonal Network along with racks and required accessories such as PDU, Power cables, optical patch chords, fiber cable managers etc.In case of Zonal nodes where it was asked to support 65 degrees, if the equipment doesn't support 65 degrees operating temperature, bidder has to provide racks with required air conditioning to support 65 degrees operating temperature and necessary capacity of UPS and batteries to support the required backup capacity.	We understand the bidder need to provide Air Conditons Racks at Zonal Lcoations to meet the temperature requirement. UPS & Battery back is required for transmission equipments only that is already available at site, so please delete the UPS and Battery backup from this clause also Please confirm that Transmission equipment can be AC or DC power supply.	All equipment supplied as part of the Bid should run with AC power. About the racks, bidder needs to provide the required racks with the airconditioning and airflow mechanism to maintain the required environmental temperature even in case of power failures.
13	Corrigendum 06, Dt:30.04.2019	2.2.1 General Requirements, Clause 29	6	District Headquarter shall have 2 ports of 100 G client available from day one. It shall have capability to upgradable 4 port 100 G client ports.	We understand that the Pluggable(QSFP 100G Plug) for required 2x100G port card has been considered in Annexure II - Price Bid table on Page 12 of Corrigendum 06. Request APSFL to kindly confirm.	The 100G ports asked in both DHQ and Zonal nodes has to be supplied from Day 1 as part of the solution itself. The two 100G pluggables also have to be considered as part of solution from day 1
14	Corrigendum 06, Dt:30.04.2019	2.2.1 General Requirements, Clause 29	6	District Headquarter shall have 2 ports of 100 G client available from day one. It shall have capability to upgradable 4 port 100 G client ports.	Request APSFL to kindly confirm if Bidder need to supply 4x100G Client port card from Day-1 at DHQ nodes.	Yes. The ports should be available from day 1 along with two preloaded the QSFP also and other two ports should be able to put to use with just addition of additional QSFPs.
15	Corrigendum 06, Dt:30.04.2019	2.2.1 General Requirements, Clause 30	6	Zonal Headquarter shall have 2 port of 100 G client available from day one, It shall have capability to upgradable 4 port 100 G client ports.	We understand that the Pluggable(QSFP 100G Plug) for required 2x100G port card has been considered in Annexure II - Price Bid table on Page 12 of Corrigendum 06. . Request APSFL to kindly confirm.	The 100G ports asked in both DHQ and Zonal nodes has to be supplied from Day 1 as part of the solution itself.
16	Corrigendum 06, Dt:30.04.2019	2.2.1 General Requirements, Clause 30	6	Zonal Headquarter shall have 2 port of 100 G client available from day one, It shall have capability to upgradable 4 port 100 G client ports.	Request APSFL to kindly confirm if Bidder need to supply 4x100G Client port card from Day-1 at Zonal nodes.	Clause is clear
17	Corrigendum 06, Dt:30.04.2019	2.2.1 General Requirements, Clause 33.1	6	For L1 OTN services: Minimum 10 ports with flexibility to support any of the STM-1/4/16/64, 1/10G.2. from day 1 and future expansion in same supplied card up to 20 ports by inserting SFP only.	We understand that the pluggable(SFP/XFP) for 10xSTM-1/4/16/64, 1/10G Card has been considered in Annexure II - Price Bid table on Page 12 of Corrigendum 06. Request APSFL to kindly confirm.	Yes... Bidder need to consider the required cards as part of the solution being proposed

18	Corrigendum 06, Dt:30.04.2019	2.2.1 General Requirements, Clause 33.2	6	For L2 packet services: Minimum 10 port with 1/10G accessible from day 1 and future expansion in same supplied card up to 20 ports by inserting SFP only.	We understand that the pluggable(SFP/SFP+/XFP) for 10x1G/10G Card has been considered in Annexure II - Price Bid table on Page 12 of Corrigendum 06. Request APSFL to kindly confirm.	Yes... Bidder need to consider the required cards as part of the solution being proposed
19	Corrigendum 06, Dt:30.04.2019	2.2.1 General Requirements, Clause 36	36	All the supplied DWDM/OTN nodes should support a SDN control plane for future integration with a external controller (or) Service orchestration platform.	As per our understanding, in order to have capability of integration with SDN control plane in future, it is recommended that supplied NMS shall have open APIs and controller capability to integrate with the orchestration layer. The open Rest APIs and the required licenses shall be available on day-1 for seamless integration with orchestration layer as and when required. Request APSFL to kindly consider and confirm this requirement.	Clause is clear. All the nodes should support SDN control plane with the capability to be managed directly from an orchestration platform without an intermediate NMS/EMS system.
20	Clarifications 02, Dt:30.04.2019	S.No.9	2	We have only 13 districts in AP and the topology is showing both district nodes and OLA nodes also. Capacity in State ring is expected in the district nodes. DWDM and OTN nodes should be present in districts and amplifier nodes will be as per the vendor solution	The connectivity details of Vizianagaram and Srikakulam DHQ nodes is still missing in Corrigendum 06. Request APSFL to kindly provide fiber connectivity details and intermediate sites (if any) to connect these two sites in DHQ ring. This is important for link engineering of DHQ rings.	Wherever exact losses are not mentioned, take 0.3 db/Km loss along with extra 3db margin. Wherever exact distance is not mentioned, it is to be taken as 80 Km.
21	Clarifications 02, Dt:30.04.2019	S.No.13	2	VISAKHAPATNAM	The connectivity details of Vizianagaram and Srikakulam DHQ nodes is still missing in Corrigendum 06. Request APSFL to kindly provide fiber connectivity details and intermediate sites (if any) to connect these two sites in DHQ ring. This is important for link engineering of DHQ rings.	Wherever exact losses are not mentioned, take 0.3 db/Km loss along with extra 3db margin. Wherever exact distance is not mentioned, it is to be taken as 80 Km.
22	Clarifications 02, Dt:30.04.2019	S.No. 38	6	Each of the districts in APSFL network has its own zonal ring , these zonal rings have 4 -5 nodes in each zonal ring. Following is an indicative diagram of the zonal ring having 4 nodes and the respective distances	In Corrigendum 06, Annexure II - Price Bid on Page-12, it's mentioned that there are 52 Zonal nodes connected to 13 DHQ nodes. Also, two Zonal nodes in each Zonal ring are connected to Zonal nodes of other neighbouring Zonal rings. Hence there would be 26 Zonal nodes with 2 fiber degrees and 26 Zonal nodes with 3 fiber degrees. Request APSFL to kindly confirm.	All the nodes supplied as part of this bid has to support minimum of four degrees.
23	General	General	-	Separate Electrical and Optical Shelves	In order to achieve maximum redundancy, to fully utilize the OTN switching capacity and as per the global practices followed in the market, it is recommended to keep electrical OTN shelf and optical shelf separate i.e. optical cards shall not consume any slots in OTN shelf. Request APSFL to kindly consider and confirm this requirement.	No change
24	General	General	-	Management System	Request APSFL to kindly confirm whether geographical redundancy is required for Network Management System (NMS). If Yes please provide the location Name for the Main and DR NMS	Yes. Geographical redundancy is required and it has to be colocated in the primary and secondary NOC locations where DWDM is also getting installed.

25	Clarification2	row#122	18	The overall non-blocking capacity (combination of OTN and Lambda Switching) should not be less than 5T at both DHQ and Zonal nodes	Initially 5T was asked in DHQ only but in corrigendum6, 5T OTN capacity has been asked in Zonal pop as well. Please confirm if our understanding is correct.	There is no change here. It is still the same requirement. It has to be same switching capacity available at both district and zonal locations. Since the previous clause hasn't explicitly specified it, requirement was expanded to have better clarity.
26	Clarification2	row#120	18	The bidder solution should have at least 200G of OTN capacity for any zonal to any zonal communication within one zonal ring with at least two alternate paths from each zonal to adjacent zonal rings of other districts.	APSFL has mentioned in clarification - It is for zonal to zonal connectivity between districts also. Initially, APSFL has asked 100G connectivity between different districts of zonal pop and now it has been upgraded to 200G from each zonal to adjacent zonal rings of other districts. Please confirm if our understanding is correct.	There is no change here. It is still the same requirement but to avoid ambiguity, clearly mentioned. 200G within zonal ring and also interconnectivity with zonal in the other district ring.
27	Clarification2	row#4	1	One of the vendor has suggested - kindly add that the turnover for OEM & its Indian group company should be more than INR 5000 cr in last 3 financial years and APSFL response is "YES"	Kindly change the turnover to 800 cr for last 3 financial year.	Refer Corrigendum
28	Corrigendum6	row#5	1	The bidder or OEM or consortium member should have at least one OTN ASON based DWDM/OTN Indian network references & Ten Global OTN ASON Based references	Kindly modify the above clause as below - 2 Domestic OTN/DWDM with relevant management solution in place 3 International OTN/DWDM with relevant management solution in place At least one reference of OTN/ASON based network.	No change
29	Clarification2	row#127	19	The offered equipment shall support other service, such as STM-1/4/16, GE/FE, FC, FICON, ESCON, FDDI, SDI accessed by one tributary card, multiplexed into OTU2 / OTU4. The offered system shall support any-rate services such as STM64/OTU-2/10GbE, STM-1/4/16, GE/FE, FC, FICON, ESCON, FDDI, multiplexed into one OTU 2 / OTU4 channel.	Kindly remove ESCON, FICON as these are propriety technologies. SDI (Serial digital interface) is a standard for digital video transmission over coaxial cable, thus should not be part of DWDM (requires BNC termination). FDDI is very old technology and not used in today's network. Kindly remove the same.	Refer Corrigendum
30	new				PI confirm how many channels are currently running in the network.	Refer Corrigendum
31	new				If new OEM wants to use the existing OEMs infrastructure, then pl provide the specifications of installed amplifiers.	Refer Corrigendum