INVITATION FOR EXPRESSION OF INTEREST (EOI) FOR Supply, Installation and Commissioning of DWDM Network Upgrade Equipment for AP Fiber Grid.

Ref: APSFL/DWDM/EOI/284/2022, Dt: 11.05.2022

Sr.	Clause No.	Page #	Clause	Bidder Query	Clarification
1	2. OTN Capacity Requirements	5	1. For L1 OTN services: Minimum 10 ports with flexibility to support any of the STM-1/4/16/64, 1G/10G	Can propose separate card for STM-1/4/16/1G and STM-64/10G. Kindly Confirm.	Based on OEM solution, the offered services shall be based on OTN structure with separate card for STM-1/4/16/1G and STM-64/10G.
2	2. OTN Capacity Requirements	5	Can propose separate card for STM-1/4/16/1G and STM-64/10G	Can propose separate card for 1G and 10G. Kindly Confirm.	Based on OEM solution, the offered services shall be based on OTN structure with separate card for STM-1/4/16/1G and STM-64/10G.
3	2. OTN Capacity Requirements	5	7. Zonal shared bandwidth will be 200 G, ring bandwidth shall be more than 50 G considering 4 nodes in one zonal ring, and it shall support both the functionality of L1 - OTN and L2 - Ethernet. Zonal to zonal direct link capacity should at least be 100G to be used for restoration of services	L2 Requirement not clear. Kindly share more details.	It is clarified that Zonal shall have 200 G shared bandwidth, traffic matirx shall be placed as per actual requirement during field deployment, Bidder needs to provide port interface as per mentioned in the below.

1. For L1 OTN services : Flexibility to support any of the STM-1/4/16/64; 1G/10G/40G/ 100G
2. For L2 packet services : Based up on the field requirement 10 ports with 10G/40G(flexibility to support any extra card) and Minimum 2 port with 100G client interfaces accessable.
At each zonal node, bidder has to provide client ports for access of L1 and L2 services based on the above. Service level matrix shall be provided during planning phase. OEM/Bidder can provide optimize soluton to full fill given requirement in the EOI. |
| 4 | 3.3 Protection | 7 | 3. The system must support ODUk SNC/N and SNC/I protection. | We understand that EOI is asking for L1 ASON, L0 ASON and L2 features as well. We need more details on service level to understand which solution is required. Kindly Share more details. | The OTN device being proposed should possess all SNC protection capabilities. Service level matrix shall be provided during planning phase. OEM/Bidder can provide optimize soluton to full fill given requirement in the EOI. |
| 5 | 3.3 Protection | 7 | 5. The equipment should support ODUk network restoration | We understand that EOI is asking for L1 ASON, L0 ASON and L2 features as well. We need more details on service level to understand which solution is required. Kindly Share more details. | We Requires protection, restoration on L1ASON ,along with L2 features. It should support restoration on L1 controle plaine i.e, ASON. Service level matrix shall be provided during planning phase. OEM/Bidder can provide optimize soluton to full fill given requirement in the EOI. |

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6	3.4 Ethernet L2 Feature	7	1. The solution shall support LAG (Link Aggregation Group) which can protect port with LACP (Link Aggregation Control Protocol) applied for	We understand that EOI is asking for L1 ASON, L0 ASON and L2 features as well. We need more details on service level to understand which solution is required. Kindly Share more details.	LAG is supported with LACP as protect port/channel on the OTN device being proposed. Service level matrix shall be provided during planning phase. OEM/Bidder can provide optimize soluton to full fill given requirement in the EOI.
7	3.4 Ethernet L2 Feature	7	2. The solution shall support DLAG (Distributed Link Aggregation Group) which can protect inter-board port with LACP (Link Aggregation Control Protocol) applied	We understand that EOI is asking for L1 ASON, L0 ASON and L2 features as well. We need more details on service level to understand which solution is required. Kindly Share more details.	DLAG is supported with LACP as protect port/channel on the OTN device being proposed. Service level matrix shall be provided during planning phase. OEM/Bidder can provide optimize soluton to full fill given requirement in the EOI.
8	3.4 Ethernet L2 Feature	7	7. LSP and PW protection must be provided	We understand that EOI is asking for L1 ASON, L0 ASON and L2 features as well. We need more details on service level to understand which solution is required. Kindly Share more details.	The solution supports both LSP and PW protection capabilities on the OTN device. Service level Matrix shall be provided during planning phase. OEM/Bidder can provide optimize soluton to full fill given requirement in the EOI.
9	3.5 Switching Fabric	8	6. The switching capacity currently available should not be less than 3T in the backbonenetwork.	We understand that EOI is asking for L1 ASON, L0 ASON and L2 features as well. We need more details on service level to understand which solution is required. Kindly Share more details.	The switching capacity requirement expected the on fabric should support greater than 3T in the proposed OTN device, Service level Matrix shall be provided during planning phase. OEM/Bidder can provide optimize soluton to full fill given requirement in the EOI.
10	3.5 Switching Fabric	8	The equipment shall provide an OCh switching fabric	We understand that EOI is asking for L1 ASON, L0 ASON and L2 features as well. We need more details on service level to understand which solution is required. Kindly Share more details.	We would like to have fabric retundancy at required levels.Service level Matrix shall be provided during planning phase. OEM/Bidder can provide optimize soluton to full fill given requirement in the EOI.
11	3.5 Switching Fabric	8	The Och switching should support Directionless and Colour less configuration	We understand that EOI is asking for L1 ASON, L0 ASON and L2 features as well. We need more details on service level to understand which solution is required. Kindly Share more details.	It is specifically applicable to L0 DWDM devices. Service level Matrix shall be provided during planning phase. OEM/Bidder can provide optimize soluton to full fill given requirement in the EOI.

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12	4 WSON/ASON	9	ASON/GMPLS should support the E-NNI	ASON E-NNI is normally required for ASON interworking with third party devices and is not complied. Kindly share more details of the requirement.	ASON/GMPLS should support the E-NNI for different vender networks.