Response to queries for Tender No- RailTel/Tender/OT/CO/P/ 2020-21/DWDM & MDWDM/549 Dated: 01.12.2020

.No.	Tender Page No.	Tender Clause No. & Chapter No.	Clause/ content of tender clause requiring clarification	Points of clarification required	RailTel's Response
1	64	12.1 of chapter 4A	The Equipment offered by the tenderer or equipment of the same series/family (an undertaking by the OEM has to be submitted in support in case of immediate predecessor) from the same OEM should have been satisfactorily working in Government/ PSUs / TelecomService Providers network for 100G deployment of DWDM system for minimum length of 500 Kms for at least 12 months as on date of opening of tender, in India or Abroad. The certificates from the actual users will have to be submitted along with bid.	Kindly amend the clause as below- The Equipment offered by the tenderer or equipment of the same series/family (an undertaking by the OEM has to be submitted in support in case of immediate predecessor) from the same OEM should have been satisfactorily working in Government/PSUs/Telecom Service Providers network for 10/100G deployment of DWDM system for minimum length of 500 Kms for at least 12 months as on date of opening of tender, in India or Abroad. The certificates from the actual users will have to be submitted along with bid.	
2	64	12.1 of chapter 4A	The Equipment offered by the tenderer or equipment of the same series/family (an undertaking by the OEM has to be submitted in support in case of immediate predecessor) from the same OEM should have been satisfactorily working in Government/PSUs/Telecom Service Providers network for 100G Alien wavelength deployment in live network over 3rd party DWDM network for minimum length of 500 Kms for at least 12 months as on date of opening of tender, in India or Abroad. The certificates from the actual users will have to be submitted along with bid	Kindly amend the clause as below- The Equipment offered by the tenderer or equipment of the same series/family (an undertaking by the OEM has to be submitted in support in case of immediate predecessor) from the same OEM should have been satisfactorily working in Government/PSUs/Telecom Service Providers network for 10/100G Alien wavelength deployment in live network over 3rd party DWDM network for minimum length of 500 Kms for at least 12 months as on date of opening of tender, in India or Abroad. The certificates from the actual users will have to be submitted along with bid	No change in Tender Clause
3	14		1.4 The lowest Initial Price Offer (L1 offer price) as submitted by the technically qualified bidders during the financial evaluation stage shall constitute the base price for starting the reverse auction. The base price shall be notified to the bidder.	Kindly add the QCBS for the Financial opening. Please add minimum 70% Technical qualification criteria.	No such clause in the tender
4	7	A1 of chapter 2	Supply of DWDM & MDWDM system as per technical requirements & specifications as defined in chapter- 3 of tender.	Please confirm if BOQ for all the sections for Long haul and Metro DWDM needs to be submitted seperately eg Delhi location: Need separate BOQ for Delhi-Kolkata link and separate BOQ for Delhi metro.	Yes firm understanding is correct.
5	7	A1 of chapter 2	Supply of DWDM & MDWDM system as per technical requirements & specifications as defined in chapter- 3 of tender.	Also confirm if chassis for one link can be used by other link	Single chasis may be used at common nodes.
6	7	A2 of chapter 2	Spares @ 8% of supply against item A1 above.	Please confirm if 8% spares need to given seperately for each link or on consolidated BOM eg Delhi- Kolkatta link will have 8% spares and Delhi-Mumbai will have separate 8% spares or all the paths combined will have 8% spares	8% spares need to be given in the combined BOQ only
7	26	1.3.1 of chapter 3A	Jolarpettai- Katapadi - Coloured SFP on Router Karur- Dindigul Salem-Karur	Please elborate more on color SFP on router. Does it mean Optical OEM only need to give optical infrastructure and no traffic card+Protection will be required from Optical OEM.	Tender conditions are clear. Please see the clause 1.3.1-b of Chapter-3A
8	26	1.3 of chapter 3A	The system must be programmable and highly intelligent, with very basic, robust and simple architecture. Proposed solution shall work seamlessly with 100G and 10G channels	In MDWDM , all the links need to have DCMs. Please confirm if our understanding is correct	Tender conditions are clear. Solution shoud be proposed based on requirement either on DCM or non DCM Network.
9	27	1.3.1 (b) of chapter 3A	Router side SFP+ (DWDM coloured SFP) shall be supplied by Bidder as per technical specification given in clause 4.7 of Chapter 8A. Bidder can also propose 10G transponder instead of DWDM 10G SFP+ (Router side) as per specifications given in clause 1.3 of Chapter 8A of DWDM & MDWDM Technical Specifications.	Colored SFPs for Routers are properitery SFPs. Hence, optical OEM colored SFPs are generally not compatible with Router OEMs. Hence, we request Railtel to remove colored SFPs requirement from the scope of the tender and allow OEMs to plan the optical design only in line to the specification of SFP shared in Clause 4.7 of Chapter 8A.	Tender conditions are clear. Please see the clause 1.3.1-b of Chapter-3A



10	27	1.3.1 (b) of chapter 3A	Router side SFP+ (DWDM coloured SFP) shall be supplied by Bidder as per technical specification given in clause 4.7 of Chapter 8A. Bidder can also propose 10G transponder instead of DWDM 10G SFP+ (Router side) as per specifications given in clause 1.3 of Chapter 8A of DWDM & MDWDM Technical Specifications.	In order to ensure seamless operation of DWDM network , we recommend Railtel to specifically ask for 10G transponders/100G muxponder in all its colored SFP Router demand. Please confirm	Tender condtions are clear. Please see the clause 1.3.1-b of Chapter-3A
11	33	26 (SN-4) of chapter 3A	Mux/Demux (Ch. Add/drop) -1 type	For Long Haul, 40ch system are req. and for MDWDM 8ch EOL system is required. So, 2 type of Mux/Demux should be allowed	Please see the corrigendum-II
12	33	26 (SN-5) of chapter 3A	Inner Amplifier	Please elaborate term Inner amplifier,	Inner amplifier is additional single/dual stage amplifier (other than Amplifiers like Booster, Pre- Amp) in DWDM Syetem to bost the signal in high loss section links
13	34	30 (a) of chapter 3A	To support "East-West separation (EWS) i.e. the add/drop channel traversing the east direction shall not share common cards with add/drop channels in west direction	Please confirm if we need to give separate chassis for separate ROADM degree like 4D ROADM needs 4 chassis	Tender conditions are clear.
14	34	30(o) of chapter 3A	Each side of a ROADM is to be split logically and physically, ensuring that there are no single points of failure that would cause both east and west add/drop traffic to be lost. Mux & Demux should be provided in each direction at ROADM sites.	Please explain more about "Each side of a ROADM is to be split logically and physically".	Each side of a ROADM module is to be split logically and physically.
15	34	30(o) of chapter 3A		We understand that in degrees where no channel is being added/dropped,it is not required to give mux/demux for that specific direction. Please confirm.	Clause is clear. Mux/Demux is required for each direction at ROADM sites.
16				In orde to ensure the level playing field across all OEMs, we request Railtel to evaluate the bid based on new equipment along with NMS . Please confirm.	Tender condtions are clear.
17	45	1.3.3 of chapter 3D	The length of DC power/earthing cable shall be assessed and supplied by tenderer for each site as per site requirement. Physical work shall be done by RailTel	Please clarify the avg power cable length and cable guage to be considered for each site so that all OEMs can be evaluated equally.	Tender condtions are clear:
18	45	1.5.1 of chapter 3D	The earthing arrangement shall be provided by RailTel for earthing of optical and digital equipment at the equipment room on a bus bar with value less than one ohm (approx.). The extension of the same to the equipment rack / equipment using earth cable 16 sq mm (min.) copper of ISI make, will be the responsibility of the Tenderer.	Please clarify the avg length to be considerd for earthing per site so that all OEMs can be evaluated equally.	Tender condtions are clear.
19	59	3.4 of chapter 4A			Tenderer can quote AMC cost in SOR as per clause 3.2, Chapter 4A of tender.Cost of AMC includes cost of engineers.
20	62	6.1 of chapter 4A			RailTel Policy for Government Guidelines will be followed in the tender as and when implemented.



21	64	12.1 of chapter 4A	The Equipment offered by the tenderer or equipment of the same series/family (an undertaking by the OEM has to be submitted in support in case of immediate predecessor) from the same OEM should have been satisfactorily working in Government/PSUs/Telecom Service Providers network for 100G deployment of DWDM system for minimum length of 500 Kms for at least 12 months as on date of opening of tender, in India or Abroad. The certificates from the actual users will have to be submitted along with bid.	and recently Order 2017 dated 4-6-2020, UTL being the first Indian Company having indigenously manufactured 10G DWDM Systems in India and deployed	
22	65	12.2 of chapter 4A	The Equipment offered by the tenderer or equipment of the same series/family (an undertaking y the OEM has to be submitted in support in case of immediate predecessor) from the same OEM should have been satisfactorily working in Government/PSUs/Telecom Service Providers network for 100G Alien wavelength deployment in live network over 3rd party DWDM network for minimum length of 500 Kms for at least 12 months as on date of opening of tender, in India or Abroad. The certificates from the actual users will have to be submitted along with bid.	having indigenously manufactured 10G DWDM Systems in India and deployed pan India locations of more than 5300 Systems comprising 61820 Nodes to	No change in Tender Clause
23	66	12.9 of chapter 4A	The Bidder or their promoters having equity stake or operating partnership in bidder, should not be holding valid License for Telecom service provider/ISP/NLD, Services License of Government of India for Telecom Operation.	We request you to kindly delete the present condition with due respect to PMA Notifications of GOI as stated above, since it restrict the Indian Companies who have promoted 10G DWDM Equipments, Manufactured indigenously & deployed on Pan India Network to participate in the Tender and offer their Solution & Product for Railtel Network and support Make in India concept under "Atma Nirbhar Bharat" initiative of the Government. We request you to delete this clause accordingly.	No change in Tender Clause
24	31	1.4 (5) of Chapter-3A	Bidder shall propose two type of WSS module for all the sites i.e. ROADM, OEQ & Regenerator site for operational spare simplicity & in future any OEQ & Regenerator site shall be easily converted into the ROADM site with incremental hardware only.	elaborately.	Tender conditions are clear. Bidder is allowed to quote maximum two type of WSS modules for all the sites for operational spare simplicity.
25	32	1.4 (17) of Chapter- 3A	For the optical connectors used on the equipment side the 'Optical Return Loss' of these connectors shall better than 50 dB	'Optical Return Loss' of the equipment side connectors better than 40 dB should be accepted; kindly confirm.	Tender condtions are clear.
					Box

26	33	26 (SN-2) of Chapter-3A	Amplifiers (Inc. Booster, Pre-Amp and In-line Amplifier)- Max. Four types	Amplifiers (Inc. Booster, Pre-Amp and In-line Amplifier) Max. Two types. This clause is restrictive to offer efficient and optimized amplifier solution; there are 3 type of amplifiers mentioned in the clause as Booster, Pre-Amp and In-line Amplifier, whereas max 2 types are allowed. Further based on the link budget there could be more than one type of amplifier for each variation, particularly In-line Amplifier. We request this clause to be removed to offer more flexible, efficient and optimized solution and be inline with the clause 2.1.7 page-108 "A range of Pluggable EDFA amplifiers shall be available that allows the design of cost-effective solutions."; kindly confirm.	for operational spare simplicity.
27	33	26 (SN-4) of Chapter-3A	Mux/Demux (Ch. Add/drop) Only One type	Separate Mux and Demux one type each should be accepted; kindly confirm.	Please see the corrigendum-II
28	36	40.1.5 of Chapter-3A	For the ILA and OADM Locations RailTel will provide space in Rack up to 4 RU for ILA site and 21 RU for OADM sites on standard 19" Telecom Rack. In case the offered ILA and OADM require more space in that case bidder shall provide the Rack.	Kindly confirm if the Telecom Rack provided by RailTel can also be use to fit 21" ETSI chassis	. Tender condtions are clear.
29	133-134	3.4 of Chapter- 8A	The product shall meet following standards and regulations: 3.4.1 Generic requirements defined in ETS 300 019 (environmental criteria) 3.4.2 NEBS level 3 3.4.3 Telcordia GR-3028-CORE: Thermal Management, Telecommunication Central Office or Environmental Telcordia NEBS GR-63-CORE 3.4.4 Operation: ETS300 019 Class 3.1 or ETS 300 019-2-3 (Operational, Class 3.1E). 3.4.5 Transport: ETS300 019 Class 2.2 or ETS 300 019-2-2 (Transportation, Class 2.3) 3.4.6 Storage: ETS300 019 Class 1.1 3.4.7 EN300386 Telecommunication centers	Equivalent Indian guidelines from TEC should be accepted; kindly confirm.	Indian bidder may produce certificate from standar lab approved/ authorized by Govt. of India that their product are equivalent to these certifications and meet all standard and specification defined in the certificate.
30	134	3.8.2 of Chapter-8A	The equipment shall operate with the input voltage in the range of -40,5VDC to -72VDC.	This clause is in conflict with Page-55 Clause "25. Power Supply: a. Nominal power supply is -48 V DC. The equipment shall work in the range -40 V Dc to -60 V DC."; kindly confirm that the range should be -40 V DC to -60 V DC.	Please see the corrigendum-II
31	136	4.4.6 of Chapter- 8A	Management system shall support SNMPv3/TL-1 interface.	Any management protocol including SNMP v1/2/3, TL1, Netconf, REST, gRPC, etc. should also be allowed.	Please see the corrigendum-II
32	138	13 of Chapter- 8B	Minimum 2 Nos. branded compact 90 CFM fan modules working on 48 V DC properly fitted at top of rack should be provided with each rack.	As the chassis inside the rack uses forced cooling and covered on top, a fan on the top of the rack will serve not purpose, request to remove this clause.	Either type of cooling (in rack or sub rack) will meet the requirement.
33	140	Annexure-I	Bangalore-Mumbai & Bangalore-Chennai	The Madgaon location mentioned as ILA but it is sopposed to be OADM.	Please see the corrigendum-II
34	140	Annexure-I	Bangalore-Mumbai & Bangalore-Chennai	Panvel to Madgaon Link with 17 spans with only ILA's nodes. Panvel to Madgaon may require one REGENRATOR in between the link as Long haul (LH)will support only upto 10 to 12	Bidder can propose Regeneration (3R) on any ILA locations between Panyel to Madagon, if required
35	143	Annexure-I	3. Delhi to Mumbai Gurgaon -OADM Rewari -ILA Gurgaon -OADM Rewari - ILA Narnaul - ILA Narnaul - ILA Nim Ka Thana - ILA Nim Ka Thana - ILA Ringus - ILA Jaipur - OADM Ringus - ILA	The Link should be as follows	Please see the corrigendum-II



	1	E	Phulera -ILA JAIPUR -OADM	JAIPUR - OADM Phulera - ILA	1
			Aimer - ILA Phulera - ILA	Phulera - ILA Aimer - ILA	1
		17	Beawar - ILA Aimer - ILA	Aimer - ILA Beawar - ILA	1
			Marwar - OADM Chandawal - ILA	Beawar - ILA Chandawal - ILA	-
	1		Chandawal - ILA Beawar - ILA	Chandawal - ILA MARWAR - OADM	1
17	140 444	Assessment 1		17 17 17 17 17 17 17 17 17 17 17 17 17 1	Places are the configuration II
37	143 - 144	Annexure-I	3. Delhi to Mumbai	The Link should be as follows	Please see the corrigendum-II
	1		Bhagwanpura -ILA Marwar -OADM	Marwar -OADM Bhagwanpura -ILA	4
	1		Sirohi Raod - ILA Bhagwanpura - ILA	Bhagwanpura - ILA Sirohi Raod - ILA	-
	1		Abu Road - ILA Sirohi Raod - ILA	Sirohi Raod - ILA Abu Road - ILA	
			Palanpur - ILA Abu Road - ILA	Abu Road - ILA Palanpur - ILA	1
			Mehsana - ILA Palanpur - ILA	Palanpur - ILA Mehsana - ILA	
			Ahemdabad - OADM Mehsana - ILA	Mehsana - ILA Ahemdabad - OADM	
8	144	Annexure-I	3. Delhi to Mumbai	The Link should be as follows	Please see the corrigendum-II
			Anand - ILA Ahemdabad - OADM	Ahemdabad - OADM Anand - ILA	
			Pratapnagar - OADM Anand - ILA	Anand - ILA Pratapnagar - OADM	
9	144	Annexure-I	3. Delhi to Mumbai	The Link should be as follows	Please see the corrigendum-II
			Palej - ILA Pratapnagar - OADM	Pratapnagar - OADM Palej - ILA	
			Panoli - ILA Palej- ILA	Palej - ILA Panoli- ILA	
			Surat - OADM Panoli - ILA	Panoli - ILA Surat - OADM	
0	144	Annexure-I	3. Delhi to Mumbai	The Link should be as follows	Please see the corrigendum-II
	252,928		Navsari -ILA Surat -OADM	Surat -OADM Navsari -ILA	-
			Navsari -ILA Valsad - ILA	Navsari -ILA Valsad - ILA	
			Bhilad - ILA Valsad - ILA	Valsad - ILA Bhilad - ILA	
			Boisar - ILA Bhilad - ILA	Bhilad - ILA Boisar - ILA	
			Vasai - OADM Boisar - ILA	Boisar - ILA Vasai - OADM	
1	145	Annexure-I	3. Delhi to Mumbai	The Link should be as follows	Please see the corrigendum-II
	100,000		Gangapur City -ILA Sawai Madhopur -OADM	Sawai Madhopur -OADM Gangapur City -ILA	
			Hindon -ILA Gangapur City -ILA	Gangapur City -ILA Hindon -ILA	
			Bayana - ILA Hindon -ILA	Hindon -ILA Bayana - ILA	
			Bayana - ILA Fatehpur Sikri - ILA	Bayana - ILA Fatehpur Sikri - ILA	
			Fatehpur Sikri - OADM Agra - OADM	Fatehpur Sikri - ILA Agra -OADM	
2	145	Annexure-I	3. Delhi to Mumbai	The Fatehpur Sikri location mentioned as ILA in ROW No 71 (it is sopposed to be OADM or ILA)?	Please see the corrigendum-II
13	145	Annexure-I	3. Delhi to Mumbai	The Fatehpur Sikri location mentioned as OADM in ROW No 72 (it is sopposed to be OADM or ILA)?	Please see the corrigendum-II
14	156	b. ILA &OADM Locations of Annexure- II	Protection Path1: Delhi-Mathura-Agra-Jhansi-Bina-Bhopal-Itarasi-Bhusawal- Nardana-Surat	Row No 5 AGRA as OADM with 2 degree & also the row No 13 AGRA as OADM with 1 degree. As per the link engineering the AGRA loction required is with 4 Degree. Clarification may be given on this location	AGRA location is 4 Degree OADM Site.Please see the corrigendum-II
5	153	b. ILA &OADM Locations of Annexure- II	Main Path 1: Delhi-Tundla-Kanpur		
6	153	b. ILA &OADM Locations of Annexure-II	Main Path 1: Delhi-Tundla-Kanpur	As per the link engineering the NDLS location required 4 degree but given link is with 2 Degree +2 Degree. Clarification may be given on this location	NDLS location is 4 Degree OADM Site Please see the corrigendum-II
7	155	b. ILA &OADM Locations of Annexure-	Main Path : Delhi-Jaipur-Pratap Nagar-Surat-Mahalakshmi		
48	153 -156	b. ILA &OADM Locations list of Annexure-II		Node type for "Fatehpur Sikri" is not provided in the ILA & OADM locations list.	Fatehpur Sikri node is the ILA node in th segment of Sawai Madhopur-Agra

49	26	1.3 Introduction of Metro DWDM (MDWDM) of Chapter- 3A	RailTel desires to create 10 & 100G coexist network by using mix 10G wavelength and 100G coherent wavelength MDWDM system by using new fiber pairs	*	Tender conditions are clear.
50	31	1.4 (2) of Chapter-3A	8 Channel sites mux/demux with express port in OADM Sites for Metro DWDM.	In MDWDM when there are more than Two Directions 8 Channel OADM Sites, how Express ports will be inter connected to carry to the next nodes.	In 3 Degree Locations or more, Channel to Channel patching will be done for third/fourth direction. If Required, Channel to Channel patching is also allowed for 2 Degree locations. Howerver Bidder should propose all Mux/Demux with express ports for MDWDM Network.
51	161	Annexure-IV	1.Pratap Nagar- Nagda- Bhopal- Agra	The Link should be as follows	Please see the corrigendum-II
0,	101	, unioxare it	Vikramgarh -ILA Nagda -OADM	Nagda -OADM Vikramgarh -ILA	THE STORY
			Shamgarh -ILA Vikramgarh -ILA	Vikramgarh -ILA Shamgarh -ILA	1
			Ramgani Mandi - ILA Shamgarh -ILA	Shamgarh -ILA Ramganj Mandi - ILA	
			Kota -OADM Ramganj Mandi - ILA	Ramganj Mandi - ILA Kota -OADM	
52	161	Annexure-IV	2. Manmad—Secunderabad	Row No. 2 Manmad is supposed to be ILA	Please see the corrigendum-II
53	31	1.4 (2) of Chapter-3A	8 Channel sites mux/demux with express port in OADM Sites for Metro DWDM.	8 Channel wavelengths are to be provided	Bidder can propose any wavelengths as per proposed soloution requirement.
54	130	1.3.1.7 of Chapter-8A	10G Muxponders should support fixed DWDM line pluggable and the variants/wavelengths available for fixed line pluggable	Fixed Wavelength (nm) details to be provided	Bidder can propose any wavelength as per proposed soloution requirement.
55	137	4.7 (3) of Chapter- 8A	should support ITU Grid Channels (DWDM) as per DWDM channel matrix requirement. Bidder should supply fixed wavelength SFPs as per channel requirement.	Wavelength (nm) details to be provided	Bidder can propose any wavelength as per proposed soloution requirement.
56	61	5 of Chapter- 4A	Payment terms: payment may be made through LC on the request of the contractor, if submitted along with the bid.	We understand that 100% Equipment payment(with milestones) would be paid to bidder through LC. Kindly Confirm.	Tender clause is clear. 75% payment of supply shall be made through LC.
57	61	5 of Chapter- 4A	Payment terms:	We understand that bidder have to submit the bid in INR only. Bids with foreign currency are NOT allowed in the tender. Kindly Confirm.	Bidder has to submit the bid in INR only.
58	61	5.1 of Chapter- 4A	75% payment of the value of the supply items would be made on receipt of material by the consignee	We request RailTel to modify 'Equipment Payment' as 90% payment on delivery; 5% on PAC 5% on FAC Kindly Confirm.	No change in Tender Clause
59	28	1.3.1-c.1 of Chapter- 3A	Pratapnagar-Nagda-Bhopal-Agra Topology	Godhra, Anand, Nagda have more than 2 directions in MDWDM Network. Since 4 Ch. / 8 Ch. Mux/Demux can have only one express port so only one direction can be bypassed. And 3rd direction will be open / terminal type otherwise needs to have WSS in MDWDM as well which can have optical bypass feature in multi directions Request RailTel to confirm if above understanding is correct.	In 3 Degree Locations or more, Channel to Channel patching will be done for third/fourth direction. If Required, Channel to Channel patching is also allowed for 2 Degree locations. Howerver Bidder should propose all Mux/Demux with express ports for MDWDM Network.



60	30	c. 5 of Chapter- 3A	Chennai- Bangalore Access Network	Request RailTel to confirm if 8 CH. Mux/Demux to be considered on all the MDWDM new sites. Kindly Confirm.	Bidder can also propose 8 CH. Mux/Demux with express port instead of 4 CH. Mux/Demux for MDWDM Network.
61	39	c. 5 of Chapter- 3A	Chennai- Bangalore Access Network	Bangalore - NIC existing ADVA DWDM Link. Pls confirm whether its 40 CH or 80 Ch System share Channel utilization to know Free spectrum to plan appropriate Mux/Demux for SBC - NIC protected 10x10G service which has Path1 as Alien wave and Path2 as Green field. Kindly Confirm.	Bangalore - NIC is existing ADVA DWDM in Path-1 as Alien wave and Path 2 as Green field. Bidder should consider 30 db loss with 20 Nos Channel utilization in Alien path for design consideration.
62	137	4.7 (1) of Chapter- 8A	Should be compatible with OEM equipment's like Cisco, Juniper, D Link, Edge Core, Tejas and Fibcom.	Bidders need to supply Standard MSA compliant Plugs. If any software restriction etc. in devices comes / put by OEM to support 3rd Party MSA Plugs, it would be taken up by RailTel with respective OEMs. Request RailTel to confirm if above understanding is correct. Kindly Confirm.	Tender condtions are clear.
63	140	Annexure-1		Fiber Spans have fiber loss variation is > 2dB between A-B vs B-A on same fiber span & Length. In Few of sections the difference in fiber loss A-B vs B-A is close to 5 db which is not good operationally for 100G/200G DWDM system. 100G/200G DWDM system require better fiber maintenance, For Long-haul DWDM network like RailTel in order to achieve Bi-directional optimum DWDM performance we suggest to keep both sides fiber loss same or variations shall not be more than 2 dB. Since its same fiber with exactly same distance and length so there are lots of scope for Fiber loss improvements which will provider better DWDM Performance & Margin. Request RailTel to allow us to consider lower of both these fiber loss value for Link engineering, same was permitted previously as well. Sector Name ENDA Node Type BRANDIN SER-CHI Roddin OADM Allower LA STO Ves 171, 3cs Fiber Fiber Loss (in Loss (in A-B to B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-A-B-A-	In case of fiber loss variations is more than 2 dB in 1st Fiber Loss and 2nd Fiber Loss of same fiber, bidder is allowed to consider lower of both these fiber loss value for Link engineering.
64	28/29	1.3.1 (c) of chapter 3A	NW Topology MDWDM PRTP-NAGDA-BPL-AGRA MANMAD-SC DELHI ACCESS CHANDIGARH-SHIMLA	There are two types of boxes in the the legend, One says Min 8 Ch OADM and other says Min 4 Ch OADM. But the specs says min 800G line side capacity in MDWDM. Which one should the bidder consider? If the bidder supplies 4Ch OADM, then the max capacity in that span can only be 400G.	OADM sites of MDWDM equipped with minimum 8 or 4 channel Mux/Demux(with express port) with 100GHz channel spacing at each direction as per Tender requirement . 800Gbps in backbone line side capicity of DWDM System at each OADM location.
	30		Bidder/OEM can use proposed and existing DWDM Network	Please clarify. Please clarify if this clause means that bidder can use the DWDM Chassis quoted	Please see the corrigendum-II

66	32	1.4. 24 (d) of chapter 3A	The Optical amplifiers have to work on 80 @ 50GHz or 40 @ 100GHz channels from day one.	As per the trend in last few tenders, we have observed that RaifTel's network is evolving towards flexi grid environment with higher bit rates like 200G/300G being offered by various bidders.	Tender condtions are clear,
				In this tender also, one of the alien section have 200G/300G bit rates. In this tender, RailTel has asked for flext grid WSS, However, the amplifier being asked is Fixed Grid amplifier.	
				Therefore, we request RailTel to amend the clause as per below:	
				The optical amplifiers should support flexi grid network having higher bit rates of 200G/300G/400G from day-1.	
67	41	9.5 of chapter 3B	100G client interface shall be LR4 with dual rate at Delhi and SR4 at other locations	Does the 100G SR4 client at locations other than Delhi should be dual rate or only 100GE? Please clarify.	Tender conditions are clear.
68	137	4.7 (2) of chapter 8A	Should support 80 km optical distance on direct fiber and 150 KM with optical fiber distance (losses 0.5db/km) on MDWDM Network (amplified application).	Does 80 Km (40dB loss) here means unamplified application? If yes, the it is not possible to drive the sigal to 40dB without amplification.	Tender conditions are clear. Poposed DWDM Colored 10G SFP+ should support 150 KM over DWDM Network and 80 km
				B) is 150 Kms amplified solution with 75dB Losses? Again this is not possible even with amplifiers.	optical distance on direct fiber.
				is this 80km/150km reach required in a single span or there will be various ILA's/OADM in between?	
				Please clarify,	
69	137	4.7 (10) of chapter 8A	Should support link budget of 22db (Link budget will be measure on 1550 nm wavelength)	We understand that 22dB link budget is only possible with amplification. The 10G SFP+ can not reach 22dB on its' own.	Tender condtions are clear.
				Please clarify.	
70	26	1.3.1 of chapter 3A	Design of MDWDM Network	In the link type with "Coloured SFP on router", does the bidder need to supply client SFP as well, or only DWDM colored SFP is to be supplied?	Tender conditions are clear .In case of Coloured SFP on router, bidder need not to supply client SFP.
71	26	1.3.1 of chapter 3A	Design of MDWDM Network	Please clarify. In the link type with "Muxponder", we understand that bidder need to supply client SFP as well as as Line SFP?	Tender condtions are clear. In case of Muxponder bidder need to supply client SFP
	:			Please clarify.	as welf as as Line SFP.
72	140	Annexure-1		We have observed that there is significant difference between forward and reverse fiber in the new DWDM segment and the Existing Alien segment as well. For the coherent 200G or higher line rates to work, the difference between the forward and reverse fibers should be ideally be less than 0.25dB.	Tender condtions are clear.
				Moreover, these kind of loss fluctuations can be easily fixed with fiber maintenance.	
				Please allow the bidder to use the lower fiber losses in New DWDM and Alien DWDM segment where loss difference is greater than or equal to 1.0dB	
73				Does the bidder need to provide optical layer including amplifiers, ROADM, Mux-	Bidder need to provide optical layer including
1.3				Demux etc. in the SoR BoQ for the sections in New DWDM links which have no traffic passing through them?	amplifiers, ROADM, Mux-Demux etc. only where no traffic passing through system.
				Please clarify.	
74	16	1.2.1 (b) of Chapter 3A		Interconnection of Delhi-Kolkata, Delhi-Mumbai, Bangalore-Chennai, Bangalore-Mumbai topologies. Does RailTel intends to interconnect the 3 new DWDM topologoies or they will remain as shown in tender (isolated from each other). For Example; NDLS.	Solution should be proposed as per Tender requirement. Common Nodes should be interconnected with other topologies.
				Mumbai, Panvel, Bhusaval etc are some of the common nodes amongst these topologies. Does the bidder need to consider them as separate in every topology since no traffic is going from one topology to another?	
				Please clarify.	ئەد ق
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75	24	5.4 of chapter 3A	RailTel will provide Rack Space, p o w e r (DC) for equipment Installation & Commissioning.	Please clarify, whether the rack provided by RailTel will have PDU power points to terminate equipment power cables or the bidder needs to extend power to the RailTel Rack.	Tender condtions are clear.
76	159, 163	Annexure-II		Many sites are common are common in the NLD and Metro networks. But the classification of sites are different. The sites which are ILA in NLD, are classified as OADM in MDWDM. For ex: Chengalpattu is ILA in NLD while it is a 3 Degree OADM in Metro. In such a case, we suggest that RailTel should specify explicitly that NLD nodes cannot be used for Metro and vice versa, is the bidder allowed to reuse such sites, or these need to be considered sepeprate?	Please see the corrigendum-II
77	24	5.4 of chapter 3A	RailTel will provide Rack Space, p o w e r (DC) for equipment Installation & Commissioning.	Please clarify, whether the rack provided by RailTel will have power & Grounding terminated inside the rack or the bidder needs to terminate the same in RailTel Rack.	Tender condtions are clear.
78	54	1,1 of chapter 3F	Trainings	Please clarify on Batch size and number of Batches for training	4 batches with batch size of 10 people.
79	12	1.1 of chapter 3A	RailTel desires to create 100G/200G network by using mix of Alien wavelength over ADVA's & Ciena make coherent DWDM segment & new DWDM system using new fiber pairs on remaining segment	We understand that Bidder/OEM can leverage existing 10G & 100G DWDM hardware/ Management system of DWDM system deployed in RailTel in proposal. In case if the cards/modules/Licenses in the existing hardware is proposed. Please confirm	Tender condtions are clear.
80	34	1.4-30 (o) of chapter 3A	Each side of a ROADM is to be split logically and physically, ensuring that there are no single points of failure that would cause both east and west add/drop traffic to be lost.	We understand that Mux & Demux module has to propose in each direction at ROADM By- Pass & ROADM add-drop site Please confirm	Mux & Demux module should be proposed in each direction at ROADM By-Pass & ROADM add-drop sites.
81	31	1.4-1 of Chapter 3A	The proposed DWDM transponder shall support transmission of single carrier channel with Software Configurable 100G & 200G line rate as per link budget requirement and Line Port shall be tunable to 100G/200G through software only to run different line rates to cover different application on the same card with no changes to any of the common equipment at the optical or photonic layer provided meeting link budget. Software Configurable 100G & 200G line rate will not be applicable for Muxponder (10X10G Clients) and Muxponder (10X10G Clients) shall support line rate and client rate as per traffic matrix requirement.	We understand that software configurable 100& 200G will not be applicable for 10X10G client traffic and muxponder shall support line & client rate as per 10X10G client traffic. Please confirm We also understand that software configurable 100& 200G will be applicable for 1X100G & 2X100G Client Traffic and Transponder/muxponder shall support line rate 100G&200G for New DWDM & Alien DWDM network. Please confirm	Software configurable 100& 200G will be applicable for 1X100G & 2X100G Client Traffic and Transponder/muxponder shall support line rate 100G&200G for both New DWDM & Alien DWDM network.
82	24	5.5 of Chapter 3A	Vendor must ensure that proposed 100G wavelength in Alien wavelength section must co- exist with existing channel in same fiber pair without any extra ILA.	We understand that line rate 100G & 200G Transponder/Muxponder shall support for Alien wavelength section as well . Please Confirm	Please see the corrigendum-II
83		1.3.1-C-6 (a) of Chapter 3A	OADM sites equipped with minimum 8 channel Mux/Demux(with express port)with 100GHz channel spacing	We undertsand that capacity shall be 800Gbps in backbone line side to use 4 channel Mux/Demux(with express port) in East & West direction(4 Channel through east and 4 channel through west direction). Please confirm.	OADM sites of MDWDM equipped with minimum 8 or 4 channel Mux/Demux(with express port) with 100GHz channel spacing at each direction as per Tender requirement .800Gbps in backbone line side capicity of DWDM System at each OADM
84	24-25	5.8 of Chapter 3A	Bidder shall consider fiber losses with 1 dB additional fiber repair margin per span for Alien Wavelength design & 6 dB fiber repair margin and max fiber loss can be considered upto 33 db per span in New DWDM backbone system (e.g. if current fiber losses is 30 db , fiber repair margin will be 3 db, this will not applicable for those spans where optional ILA sites are available in annexure-II). In case of span fiber loss is equal or more than 33 db in that case 1 dB additional fiber repair margin per span shall be considered. Bidder can also considered max 4 more optional ILA sites apart from optional ILA sites are available in Annexure-II. Bidder is also required to submit full link budget calculation of required channels 40 along with input parameters Vs output of planning tool. Fiber Characteristic – Forward and reverse path for the existing and New DWDM ILA and CADM Locations are placed at Annexure-I.	Even after considering the margin lower than 6 db many spans are still with higher losses , we suggest that Railtel should provide provision to add more than 4 ILA'S in the design.	Tender condtions are clear.



85	31	1.4 (2) of Chapter 3A	Bidder shall propose minimum 4-degree Flex Grid C- band WSS at ROADM sites in Backbone segment depicted in 1.2.1 for DWDM Network.	4D Flex Grid ROADM's or WSS are not very common , 4D ROADM normally comes with non Flex Arichitecture so we recommend to relax Flex Grid C band capability or either allow minimum 9D ROADM .This will allow Railtel to have huge flexibility for future expansions (Addition of more directions)	Tender conditions are clear.
86	65	12.5 of Chapter 4A	The tenderer should have executed Single order of similar work# costing not less than 35% of the tendered value during last preceding 3 financial years (i.e. current year and 3 previous financial years) from the date of opening of tender. Completion of work should fall in the above period. The bidder shall also furnish work completion/ substantial work completion certificate issued by customer/s for the Purchase Orders/ Work Orders. Substantial completion shall be 80% (value wise) or more works completed under the contract. For contracts under which bidder participated as a Joint Venture member or sub-contractor, only the bidder's share, by value, shall be considered to meet this requirement.	1.Instead of single order of 35% value , please change it to Two Orders with 20% value or 3 order with each 15% value. 2. For Substantial work completion , please change 80% value to minimum 60% of total project value.	No change in Tender Clause
87	62	6 of Chapter- 4A	Performance BG (security deposit)	as per ministry of finance circular dtd.12th Nov 2020, PBG amount to be revised to 3%	RailTel Policy for Government Guidelines will be followed in the tender as and when implemented.
88	74	22 of Cahapter- 4A	Earnest Money Deposit (EMD)/ Bid security	as per ministry of finance circular dtd.12th Nov 2020, No provision of bid security is required , only provision for bid security declarartion will suffice the purpose.	RailTel Policy for Government Guidelines will be followed in the tender as and when implemented.
89	137	4.7 (1) of Chapter 8A	Should be compatible with OEM equipment's like Cisco, Juniper, D Link, Edge Core, Tejas and Fibcom.	For 10G Color SFP+ most of the time transport OEMs have software restriction to allow any 3rd Party Plug. We request RailTel to exclude these OEMs and just keep IP OEMs which are open to accept 3rd Party MSA plugs and Bidder needs to Quote standard MSA 10G Plugs. Request RailTel to consider above point	Bidder should considered Juniper and Cisco for DWDM Colored 10G SFP+/XFP . Actual OEM wise requirement of DWDM Colored 10G SFP+/XFP will be worked out in time of delivery of Equipment .
90	140	Annexure-I		Fiber Spans have fiber loss variation is > 2dB between A-B vs B-A on same fiber span & Length. In Few of sections the difference in fiber loss A-B vs B-A is close to 5 dB which is not good operationally for 100G/200G DWDM system. 100G/200G DWDM system require better fiber maintenance, For Long-haul DWDM network like RailTel in order to achieve Bidirectional optimum DWDM performance we suggest to keep both sides fiber loss same or variations shall not be more than 2 db. Since its same fiber with exactly same distance and length so there are lots of scope for Fiber loss improvements which will provider better DWDM Performance & Margin. Request RailTel to allow us to consider lower of both these fiber loss value for Link engineering, same was permitted previously as well.	In case fiber loss variations is more than 2 dB in 1st Fiber Loss and 2nd Fiber Loss of same fiber, bidder is allowed to consider lower of both these fiber loss value for Link engineering.
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91	140	Annexure-I		First Fiber loss means End A - End B (towards B) and Second Fiber means loss End B- End A (towards A). Request RailTel to confirm if this is correct understanding	Firm's understanding is correct
92	143	Annexure-I	2. Delhi to Kolkata	In few Section Fiber type is mentioned as G.653 as well, Looks like its TYPO Request RailTel to kindly confirm about this.	Fiber Type is G.652
93	145	Annexure -I	3. Delhi to Mumbaj	Fatehpur Sikri node type is mentioned as OADM. It looks Typo as its ILA site. Request RailTel to confirm if its ILA site ONLY.	Fatehpur Sikri is ILA Node, Please see the Corrigendum-II
94	156	Annexure -II	b. ILA & OADM Locations	Agra's degree are mentioned as 2D. Its should be 4 Degree ROADM Request RailTel to confirm	AGRA location is 4 Degree OADM Site. Please see the Corrigendum-II

95	161	Annexure- IV	2, Manmad- Secunderabad	Manmad to Chalesgaon, This link is not captured in Topology. Looks extra, Request Rai/Tel to clarify if its extra link	Please see the corrigendum-ii
96	165	Annexure- IV	3. Delhi Access (Noida to Ghaziabed)	Barakhambha Road and Mayur Vihar as FOADM.	FOADM is Fixed OADM (Passive) System . Bidder should propose passive OADM only in Barakhambha Road and Mayur Vihar.
97	163	Annexure- IV	5. Bangalore & Chennai Access	Is anything specific to be taken care for FOADM, Request RailTel to Elaborate	Devenhalli may be read as ILA. Please see
98	161	Annexure- IV	2. Manmad—Secunderabad		the comgendum-II Purna site is OADM. Please see the comgendum-II
99		General	General	DWDM layer is one time cost to RailTel however transponders will keep adding on this network specifically on Backbone network. Therefore to have less TCO and optimized price we request RailTel to do the Backbone evaluation criteria at minimum 1 Tbps capacity on each traffic sector as per Traffic Matrix.	C Reservices

(Suresh Kumar)
Executive Director/Project