#### **RESPONSES TO BID CLARIFICATION QUERIES**

TENDER NUMBER	NCT/PWT/03/2021
SUBJECT OF PROCUREMENT	SUPPLY AND DELIVERY OF OPTICAL TIME DOMAIN REFLECTOMETER (OTDR) MACHINES.
SUBMISSION DEADLINE	MAY 13, 2021 @1000HRS LOCAL TIME

In reference to the above -mentioned Tender, we wish to respond to below queries received from prospective bidders.

Ref	Question	Response	
1	What's the required Dynamic Ranges for each wavelength? Dynamic Range is major factor which affect OTDR prices and need to mentioned clearly in the tender specs, For example for OTDR 1310/1550/1625nm Does Dynamic Ranges 45/43/43dB is enough? or you need 47dB OTDR? World widest OTDRs Dynamic range, between 30dB OTDRs till 50dB for the 3 wavelengths 1310/1550/1625.	The dynamic range must be 1310/1550/1625 Wavelengths model: dynamic range = 45/45/45 dB  Bidders must complete the revised technical specification and compliance sheet which is attached on pages 3 and 4 of this document.	
2	The required connectors mentioned to be SC/ST/FC, but not mentioned to be PC or APC ?? please clarify	The connectors and adaptors specified in the technical specifications are mandatory but PC & APC connectors may also be included over and above the mandatory connectors/adapter requirement.  The specified OTDR has LAN/WAN (RJ45) interfaces to enable remote access over internet/LAN.	
3	Do you need to add ability to access the OTDR remotely over internet ?		
4	Do you care of testing multi-fiber core cables in much shorter time? VIAVI Cable SLM provides this capability of labeling and automating the OTDR test project of multi-core fiber cable in a tabular view on the OTDR screen. All fiber core test results are aggregated in	More advanced OTDRs loaded with additional features are welcome, the tender only provided minimum specifications which bidders are required to comply.	

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	one summary report, still you can export detailed OTDR reports for each trace.		
5	What is the minimum requirement for the OTDR's "Dynamic Range" and could you also indicate @ the specific wavelengths? Ex. 45dB @ 1310/1550 & 1625nm.?	1310/1550/1625 Wavelengths model dynamic range = 45/45/45 dB	
6	Is both OTDR & IOLM options needed or just the IOLM? (OTDR Disabled)	We need both the OTDR and link mapper (e.g. IOLM or equivalent).	
7	Are all three wavelengths specified if the Technical spec the minimum requirement?	Yes all the 3 wavelengths are required ie (1310/1550/1625)	



#### **REVISED Technical Specification and Compliance Sheet**

Name of Bidder:	
Bidder's Reference Number:	

The Goods and Related Services must comply with following Technical Specifications and Standards:

Bidders must correctly complete the revised Technical specification and compliance sheet by indicating whether they comply or do not comply with the corresponding requirement.

	Item Column (a)	Minimum Specification Column (b)	Compliant/ not compliant Column (c)
1	Equipment Description	Optical Time Domain Reflectometer (OTDR)	
2	Application	Long Haul Network Testing & Metro Network Testing	
5	Condition	Portable and brand new	
6	Modular Hardware Architecture	Separate PC Platform with Slot for OTDR OTDR Software (installed on platform)	
7	Intelligent Optical Link Mapper (iOLM Pro)	OTDR-based application designed to simplify OTDR testing by eliminating the need to configure parameters, and/or analyse and interpret multiple complex OTDR traces	
8	Display	Outdoor-enhanced touch screen, Colour display	
9	Interfaces	At least 2 x USB 2.0 ports, 1 x RJ45 LAN 10/100 Mbit/s, VFL, Power meter	
10	Storage	at least 2 GB internal memory (20 000 OTDR traces)	
11	Batteries	Rechargeable and at least 12 hours autonomy	
12	Power supply	220-240 VAC Input, 50-60 Hz and or 9-16 V DC IN	
13	Wavelength (nm)	1310 ± 20/1550 ± 20/1625 ± 10	
	Dynamic Range	1310/1550/1625 Wavelengths model: dynamic range = 45/45/45 dB	
	Measurement time	User-defined (maximum: 60 minutes) ≤0.5	Whi.
16	Event dead zone (m)	≤0.5	A motor
17	Attenuation dead zone (m)	≤2.5	Toy to

Response to queries for OTDR Tender NCT/PWT/03/2021

18	Distance range (km)	<=0.1 to >=400	
19	Pulse width (ns)	3 to 20 000	
20	Linearity (dB/dB)	±0.03	
21	Loss threshold (dB)	≤0.01	7
22	Loss resolution (dB)	≤0.001	
23	Sampling resolution (m)	0.04 to 10	
24	Sampling points	>=256 000	
25	Distance uncertainty (m)	$\pm$ (0.75 + 0.0025 % x distance + sampling resolution)	
26	Reflectance accuracy (dB)	±2	
27	Typical real-time refresh (Hz)	4	
28	Temperature Operating	-40 °C to 70 °C	
29	Relative Humidity	0% to 95% non-condensing	
30	Output power (dBm)	-11.5 ±2	
31	Built-In Power Meter	Wavelengths (nm) 850, 1300, 1310, 1490, 1550, 1625, 1650	17
		Power range (dBm) 27 to -50	
32	Visual Fault Locator (VFL)	Laser, 650 nm ± 10 nm, Laser safety: Class 2	
33	Warranty Period	At least one year	
34	After sales support	Provide contact details for after sales support (repairs and maintenance)	
35	Accessories	Carrying case	
		ST, FC, and SC adapters	
		DC vehicle battery-charging adaptor (12 V)	
		VFL adapter (2.50 mm to 1.25 mm)	
		AC/DC adapter	
		RJ45 LAN cable	

The detailed technical evaluation will examine the technical specification of the items offered in column c and determine whether this meets the minimum specification in column b. Bidders must complete column c or their tender will be rejected. Bidders are required to include manufacturer datasheets to positively support the details provided in column c.

NB. Bidders must take note that this document becomes part of the Tender documents and will be circulated through our website to all the bidders who are participating in the tender process.

