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From: Director, CSIR-NPL
Tender No. 14-VIII/DSY(6-GTE)24-PB/T-22   Dated: 02.07.2024

CORRIGENDUM

With reference to NPL's Global Tender ID: **2024_CSIR_758577_1,** Pre-Bid Conference (PBC) was concluded on 11.06.2024 for **"NTP Server".** Consequent upon the outcome of PBC, **some change have been made in the technical specification of captioned tender. Revised specifications are as follows:**

	NTP server Specification	
1	**Server Capability**	
1.1	The server shall realize time as stratum 1	
1.2	The server shall have a capability for NTP peering.	
1.3	Shall be corrected for the leap seconds.	
1.5	The server shall support hardware timestamping on the outputs.	
1.6	The server shall have the provision to configure the reference signal to either internal or external. The server shall hold the saved configuration even after a power reboot.	
2	**Server Performance**	
2.1	Holdover Accuracy: 1 day holdover better than 30 µs.	
2.2	NTP requests handling capability: 3 lakh transactions per second or higher.The capability mentioned is for an NTP server; However, full capability should be realizable on a single network port also.	
2.3	Stratum 1 NTP servers shall have internal offset/accuracy to UTC better than ± 100ns	
2.4	The NTP server shall be having an availability figure of better than 99.95% over the year. The MTBF (mean Time Between Failure) shall not be less than 1,00,000 Hours.The MTBF calculation shall be provided by the OEM to be supplied with the bid.	
3	**Input Reference:** NTP Server shall have preferably OCXO or high-quality oscillator better than OCXO as internal frequency source.	
4	**Server Accessibility**	
4.1	The server shall be configurable locally.	
4.2	The server shall be accessible from remote clients with web interface providing full control of the server.	
4.3	The server shall provide the status of the input, outputs, and major subsystems. The server shall have provision for Firmware up gradation and latest patches of different software component associated with the device and any higher version of NTP available in future	
4.4	The server shall transmit alarms and logs to a remote location via SNMP etc.	
5	**Input Reference Signal:** Minimum five ports, two for 10 MHz, two for 1 PPS and one for IRIG (nonconfigurable). If configurable four ports can be configure as 1pps, 10 MHz and IRIG in any combination.	
5.1	1 PPS	at least two number of BNC(F)/SMA(F)/(suitable adaptor with BNC(F)/SMA(F)) connector port for 1 PPS external input with TTL compatible level (to trigger measurement event)
5.2	10 MHz	5.2.1 at least two number of BNC(F)/SMA(F)/)/(suitable adaptor with BNC(F)/SMA(F)) connector port to feed external reference signal
		5.2.2 shall accept 10 MHz, 50 ohm Impedance, sine wave.
5.3	IRIG Input	5.3.1 shall have the capability to lock to external IRIG-B (Amplitude Modulated) input
		5.3.2 at least one number of BNC(F)/SMA(F))/(suitable adaptor with BNC(F)/SMA(F))connector, Provision to feed external IRIG signal for timing.
6	**Output Signal:** Minimum five ports (10 MHz: 2 ports, 1 PPS: 2 ports, IRIG: 1 ports) (nonconfigurable)If configurable four ports can be configure as 1pps, 10 MHz and IRIG in any combination.	
6.1	1 PPS	6.1.1 at least two number of BNC(F)/SMA(F))/(suitable adaptor with BNC(F)/SMA(F)) connector Port for 1 PPS output

		6.1.2 NTP server shall output the 1 PPS output signal with TTL compatible levels, 50ohm Impedance.
6.2	10 MHz	6.2.1 at least two number of BNC(F)/SMA(F))/(suitable adaptor with BNC(F)/SMA(F)) connector for 10 MHz output
		6.2.2 NTP server shall output the 10 MHz signal 50ohm Impedance, sine wave).
6.3	IRIG Output	NTP server shall have at least one number of BNC(F)/SMA(F))/(suitable adaptor with BNC(F)/SMA(F)) connector Port for IRIG-B (Amplitude Modulated)Outputs.
7	Network Communication	
7.1	The server shall have at least 4 dedicated and isolated 1Gigabit Ethernet ports (02 copper +02 fiber) for supporting NTP requests with NTP version 2, 3 and 4 and SNTP over IPv4/IPv6	
7.2	NTP server shall have the provision to disable unused interfaces and protocols.	
7.3	NTP server shall have SSH for secured communication over network	
7.4	NTP server shall support MD5 encryption, SHA-1, or better encryption techniques	
8	GNSS Antenna System	
8.1	The inbuilt GNSS receiver with or without NavIC in NTP server for given epoc as the priority will be given to UTC(NPLI) 1PPS and 10MHz	
8.2	GNSS antenna, GNSS cable (minimum length 50m), accessories/ mounting kit, Surge arrestors etc shall be provided with the NTP server.	
9	Power Supply	
9.1	The unit shall be capable of operating on 230 volts +/-10% /50 Hz AC	
9.2	20-60 V DC	
9.3	Auto Failover in case of AC/DC Failure	
10	Environmental specifications	
10.1	Server should be 19 inch rack mountable	
10.2	Operating temperature: 0^0C to 50^0C	
10.3	Humidity: 5% to 95%	
11	Warranty: 5 years standard warranty	
12	Qualification criterion: Record of supply (valid purchase order) of same quoted model to NMI and government organization in India in last two years.	

Therefore, following extension in due date of submission & date of opening of the said tender may be read exactly as follows:

Due date & time of tender submission
For   : 02.07.2024 up to 3:00 PM (IST)
Read as: 18.07.2024 up to 3:00 PM (IST)

Date & Time of Tender Opening
For   : 03.07.2024 at 3:00 PM (IST)
Read as: 19.07.2024 at 3:00 PM (IST)

All other terms & conditions of said tender will remain the same.

Sr. Controller of Stores & Purchase