



सत्यमेव जयते

भारतीय दूरसंचार विनियामक प्राधिकरण
TELECOM REGULATORY AUTHORITY OF INDIA
भारत सरकार / Government of India



F. No. AU-4/2/6(2)/2023-QoS

Dated:22-03-2024

Subject: Clarifications against Tender for Engagement of agencies for conducting Independent Drive Test (IDT) for assessment of Quality of Service of Cellular Mobile Telecom Service and Empanelment of agencies for future requirement (Tender ID: 2024_TRAI_798920_1 dated 05.03.2024)- reg.

With reference to the subject matter, clarifications to the queries received by due date i.e., 15.03.2024 through CPP portal and email are hereby issued as given below:

S No	Clause No.	Clause Description	Clarification/query sought by prospective bidders	Clarification issued
1	2.7.1	The bidder shall submit a bid security of Rs. 4,20,000/- (rupees. four lacs and twenty thousand only) for each zone , in the form of Demand Draft/ Banker's cheque drawn in favour of 'TRAI' and payable at New Delhi. Exemption of bid security deposit will be considered for eligible bidders registered as Micro/Small/Start-up with NSIC/MSME/DPIIT etc. Further, the exemption to MSME category is only applicable to those bidders who are registered under the scheduled category (61-Telecommunications) for which services is being obtained and not for all MSME categories.	What does word "Scheduled" mean in scheduled category? In case bidder is registered under category 61-Telecommunication, then bidder can be exempted from bid security?	Bidders registered under category '61-Telecommunication' are eligible for exemption from submission of bid security.
		The bidders are required to sign the complete bid	Financial quote is in excel format and cannot be physically signed. We suggest uploading Financial quote excel	Financial bid in prescribed excel file is to be submitted

2	2.8.4	document as per the requirements of this tender.	without physical sign as entire bid is already digitally signed in CPP portal while submitting. Kindly clarify.	on CPP portal under digital signature.
3	3.2.4 (c) (ii) (a) (e)	All Handsets being used for drive test should be capable of taking observations for all the allocated spectrum bands used by service providers in India.	Operators have not deployed services on 26000 MHz and handsets with 26000 MHz frequency band are not available in market yet. We suggest TRAI to exclude 26000 MHz from testing under this tender.	The clause is self-explanatory.
4	3.2.4 (c) (ii)(a)(d)	d. TSP wise testing of Data service (uplink and downlink both) offered on all available technologies (2G/ 3G/ 4G/ 5G) in auto selection mode. Both the tests may be conducted using same handset, if technically possible.	Parallel Data in DL & UL may impact through performance. So, for Throughput Validation in DL/UL it is preferable to conduct test of DL/UL separately not in Parallel. Please clarify?	The clause is self-explanatory. However, the bidder is free to propose test methodology to meet the prescribed requirement.
5	3.2.4 (c) (ii)(a)(d)	d. TSP wise testing of Data service (uplink and downlink both) offered on all available technologies (2G/ 3G/ 4G/ 5G) in auto selection mode. Both the tests may be conducted using same handset, if technically possible.	Downlink and uplink tests can be performed using same handset in serial mode. However, if we do so, map plots of download throughput and upload throughput will not be presented in parallel along the route in the report, it will be presented in series along the route. Because at one point of time only one (either download or upload) test can be performed. Kindly confirm if this is acceptable during testing and in reports.	The clause is self-explanatory. However, the bidder is free to propose test methodology to meet the prescribed requirement.
6	3.2.4 (c) (ii)(a)(d)	d. TSP wise testing of Data service (uplink and downlink both) offered on all available technologies (2G/ 3G/ 4G/ 5G) in auto	To conduct DL/UL parallel with one handset, we have to keep either UL or DL for FTP download and the other for HTTP.	The clause is self-explanatory. However, the bidder is free to propose test

		selection mode. Both the tests may be conducted using same handset, if technically possible.	Is it permissible to perform one data test on FTP and the other on HTTP?	methodology to meet the prescribed requirement.
7	3.2.4 (c) (iii) (B)	B. Dynamic Data Service (During entire drive test route): d) Jitter	Jitter is only Possible using VOIP calls VoLTE or VoNR. Please clarify, is it required for VOIP calls only? If yes, please remove this from data part.	It is clarified that Jitter is to be measured during voice testing under clause 3.2.4 (c) (iii) (A) in place of testing under dynamic data service.
8	3.2.4 (c) (iii)(C)	C. Static Data Service (Only at Hotspots): a) Data Throughput (Down link and uplink) b) Data transmission Success rate (Download and upload attempts) c) Web page download time d) Video streaming delay e) Latency f) Data Packet loss rate g) Jitter	Jitter & Packet data Loss Rate is only Possible using VOIP calls VoLTE or VoNR. Please clarify, Is it required for VOIP calls only? If yes, please remove this from data part.	No change in the clause.
9	3.2.4 (c) (ii)	(a)(a). TSP wise testing of Voice service offered on circuit switched technology (2G/ 3G) in auto selection mode. (a)(b). TSP wise testing of Voice service offered on all available technologies (2G/ 3G/ 4G/ 5G) in auto selection mode. (b) (a). TSP wise testing of Voice service offered on all available technologies (2G/ 3G/ 4G/ 5G) in auto selection mode.	Required Voice Service Testing mentioned in Clause (a) & (b) is with M2M or Mobile to IVR number is also Permitted. Please clarify.	Voice testing is to be done using test number, which will be provided by the respective telecom service provider.
		c. TSP wise MOS (mean	To test the MOS in the field with a handheld device, we need to make	

10	3.2.4 (c) (ii)(a)	opinion score) testing, based on POLQA V3 or equivalent ITU-T standard, of Voice service offered on packet switched technologies (4G/ 5G) in auto selection mode.	a call from the MO to the MT end so that we can calculate both UL and DL MOS. Is server-based IVR MOS calculation permitted, where the MT handset is not required, and we can calculate only uplink MOS?	MO and MT based MOS score is to be calculated for different scenarios.
11	3.2.4 (f) (iv)	Captured raw data files should be provided to TRAI.	Please clarify the frequency or duration for submitting these files, as last year they were required on a daily basis.	Captured raw data files are to be submitted preferably on daily basis or latest by next day of the actual day of drive test.
12	3.2.4. (c) (i)	The agency shall obtain the details of network deployed along with coverage (with coverage map), details of last drive test conducted and remedial action, if any, taken by TSPs in the area selected for drive test, from all service providers before commencing the drive test.	TRAI regional office should provide the required details to bidder from TSP	The clause is self-explanatory. However, clause 3.8 may also be referred.
13	3.2.4.(e) (ii)	The agency may also extend the access of the post-processing tool to TRAI with at least one user license.	Shall bidder need to provide at least one user license per zone, Please confirm?	The bidder need to provide at least one user license for each unique OEM tool being used by the bidder for post-processing of drive test data. The user license shall be usable at different locations i.e. TRAI HQ or TRAI Regional Offices.
14	Section-II	-	We understand that bidder can bid with Consortium Partner. Please clarify.	Kindly refer to clause 15 of NIT.

15	Section-VI Form-VI : Envelope- 3 (3)	Duly filled Form-I to Form-VI of Section- VI of the tender	Do we need to submit hard copies of supporting documents like work orders, completion certificates & CVs as well in this envelope? Or only filled up forms? Kindly clarify.	No. Only filled Form-I to Form-VI without any enclosures are to be submitted as a part of Envelope-3 (offline). However, complete enclosures are required to be submitted as a part of Technical envelope(online).
16	Section-VI Form-VI : Technical Envelope (8)	Duly filled Form-I to Form-VI of Section- VI of the tender document.	For form 2, we assume here only Forms are required and no supporting documents are required like work order & completion certificate. Because supporting documents are already submitted in point no.7. Kindly clarify.	Any supporting document is to be submitted only once in technical envelope (online). The documents related to experience may be attached after respective Form-II. Further, page number of all documents may be properly referred in Form-VI (Checklist).

This is issued with the approval of the Competent Authority.

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