**TELECOM REGULATORY AUTHORITY OF INDIA** 

Mahanagar Doorsanchar Bhawan, Jawahar Lal Nehru Marg, (Old Minto Road), New Delhi-110002



## **CORRIGENDUM NO.- 01**

Dated 23<sup>rd</sup> August 2023

Tender No.	AU-4/2/6(2)/2023-QoS dated 21.07.2023	
Tender ID	2023_TRAI_763026_1 dated 21.07.2023	
Tender Title	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	

1. With reference to the above mentioned tender enquiry, the following modifications/ clarifications in the clauses/ provisions of the Tender document are hereby issued:

Sno.	Existing Clause	Existing Clause	Revised/ New Clause	Revised/ New Clause
	no.		no.	
1	2 of NIT	All bidders, whose bid is found technically responsive and whose financial bid is opened for further evaluation, will be considered for empanelment for meeting the future requirement for a period of three years from date of empanelment, irrespective of whether bidder is finally considered for award of work or not in present bidding process. For selection of agency for meeting the future requirement of field measurement through drive tests, a limited tender enquiry will be floated specifying the scope of work and inviting financial bids from empanelled agencies only. In such case, empanelled agencies will not be required to submit any technical bid	2 of NIT	All the bidders, whose bid is found technically qualified as per Clause 2.14.6, if intended, will be considered for empanelment for meeting the future requirement of conducting Independent Drive Tests, irrespective of whether they are finally considered for award of work or not in present bidding process. Bidders are also allowed to participate in the bidding process for empanelment only, for meeting the future requirement of TRAI and in such case, they are required to submit the technical bids only. For selection of agency for meeting the future requirement of field measurement through drive tests, a limited tender enquiry will be floated specifying the scope of work and inviting financial bids from empanelled

	1			
				agencies only. In such case,
				empanelled agencies will
				not be required to submit
				any technical bid.
2	3(iii) of	The bidders can submit the bid	3(iii) of NIT	The bidders are allowed
	NIT	for any number of zones (one or		to submit the bid for
		more than one zone), as per his		maximum <u>four</u> number of
		choice. However, a bidder will		zones, as per his choice.
		be considered for award of work		In case a bidder submits
		in maximum three zones		bids for more than four
				zones, then such bids shall
				be rejected summarily.
3	13 of NIT	The bidder shall furnish a	13 of NIT	The bidder shall furnish a
		declaration (as per Annexure- 6)		declaration (as per
		under his <b>digital signature</b> that		Annexure- 6) <b>under his</b>
		no addition/ deletion/		signature that no addition/
		corrections have been made in		deletion/ corrections have
		the downloaded tender		been made in the
		document being submitted and it		downloaded tender
		is identical to the tender		document being submitted
		document appearing on e-		and it is identical to the
		procurement Portal.		tender document appearing
		procedenterie i ortali		on e-procurement Portal.
4	2.8.1.3 of	Further, the following	2.8.1.3 of	Further, the following
	Section 2	documents are required to be	Section 2	documents are required to
		submitted offline (i.e., offline		be submitted offline (i.e.,
		submissions) to Joint Advisor		offline submissions) to
		(QoS-I), Telecom Regulatory		Joint Advisor (QoS-I),
		Authority of India, Room No-		Telecom Regulatory
		709, 7th Floor, Mahanagar Door		Authority of India, Room
		Sanchar Bhawan, Jawahar Lal		No-709, 7th Floor,
		Nehru Marg (Old Minto Road),		Mahanagar Door Sanchar
		New Delhi- 110002 on or before		Bhawan, Jawahar Lal
		the date & time of submission of		Nehru Marg (Old Minto
				Road), New Delhi- 110002
		bids in a sealed envelope. The envelope shall bear 'Bid		on or before the date & time
		envelope shall bear 'Bid Security for Tender for		of submission of bids in a
		Engagement of Agencies for		
				1
		Conducting Independent Drive		envelope shall bear 'Bid Security for Tondor for
		Test (IDT) for Assessment of		Security for Tender for
		Quality of Service of Cellular		Engagement of Agencies
		Mobile Telecom Service and		for Conducting Independent
		Empanelment of Agencies for		Drive Test (IDT) for
		future requirement, for		Assessment of Quality of
		[Please mention name of Zone		Service of Cellular Mobile
		for which bidder is submitting		Telecom Service and
		the bid]' and the phrase: "Do		Empanelment of Agencies
		Not Open Before (due date &		for future requirement, for
		time of opening of tender)".		[Please mention
		(a) Bid security (original		name of Zone for which
		copy).		bidder is submitting the
		(b) Original authority letter		bid]' and the phrase: "Do
		to designate a person to interact		Not Open Before (due date
		with TRAI for all bid related		& time of opening of

## AU-4/2/6(2)/2023-QoS

## I/19886/2023

5		activities, queries, presentations, etc. (c) Standard formats as given at Section-VI of the tender, with all the necessary details filled-in, by the bidders.	2.8.4 of Section-II	tender)".(a)Bidsecurity(original copy).(b)Original authority(b)Original authorityetter to designate a personto interact with TRAI for allbidrelatedbidrelatedactivities,queries, presentations, etc.Bidders are required tosign and stamp on all thepages of the complete biddocumentincluding allthe documentssubmittedas per the requirements ofthis tender. The completebiddocumentswith allsupportingdocumentsshallbeuploadedOCPPPportalunder digital
6	Sl. No (iv) of table under 2.9.2 of Section II	Documentary evidence regarding fulfilment of turnover requirement, including audited balance sheet, duly certified by a Chartered Accountant and income tax returns (ITRs) for	Sl. No (iv) of table under 2.9.2 of Section II	signature. (i) Audited balance sheet and (ii) turnover certificate from Chartered Accountant; for the prescribed financial years.
7	Sl. No (v) of table under 2.9.2 of Section II	the prescribed financial years. Copies of purchase/ work order and experience certificates duly signed by the purchase/ work order issuing authority.	Sl. No (v) of table under 2.9.2 of Section II	Copies of (i) purchase/ work order and (ii) experience/ completion certificates duly signed by the purchase/ work order issuing authority. Duration of the contract and scope/work description should be clearly mentioned on the document(s).
8	2.14.8 of Section II	The bidder can submit the bid for any number of zones (one or more than one zone), as per his choice. However, a bidder will be considered for award for contract in maximum three zones.	2.14.8 of Section II	The bidders are allowed to submit the bid for maximum four number of zones, as per his choice. In case a bidder submits bids for more than four zones, then such bids shall be rejected summarily.
9	2.14.10 of Section II	In order to have smooth evalu- ation of financial bids and award of work thereafter, financial bids shall be opened for each zone separately, in the order as men- tioned in below table: S Zone Order of		This clause is deleted.

## I/19886/2023

		No		opening		
		No		opening of Finan-		
				cial bid		
		1.	RO Kolkata	1		
		1.	Zone			
		2.	RO Bengaluru	2		
			Zone			
		3.	RO Hyderabad	3		
			Zone			
		4.	RO Bhopal Zone	4		
		5.	RO Jaipur Zone	5		
		6.	RO Delhi Zone	6		
			ever, this order			
		of fii	nancial bids doe	s not qual-		
		ify a	ny bidder's choi	ice or rank		
		in ter	rms of suitability	for award		
		of wo	ork.			
10	2.14.15 of		any stage of o	opening of		
	Section II		cial bids, in			
			ioned order of op			
			d that a particu	-		
			offered least to			
			in three zone	-		
		-	considered for			This clause is deleted.
		work	in these three	zones then		
			inancial bids for			
			s (as per above	-		
			of opening of			
			shall not be open			
11	2.14.16 of		rd of work in			
	Section II		s shall be decide	0		
	_		lowest total qu			This clause is deleted.
			ed by the remain	-		
12	3.2.4 of		agency shall		3.2.4 of	The agency shall undertake
	Section III		sment of Quality		Section III	assessment of Quality of
		provi	-			Service provided by all
		-	ders (licensee)			service providers (licensee)
			Licensed Serv			in each of the Licensed
			r the respective			Service areas under the
			dination with			respective Zone, in co-
			onal Office (R	-		ordination with respective
		-	wing manner:	<i>,</i> <u>,</u>		Regional Office (RO) of
						<b>TRAI</b> , in the following
						manner:
13	3.2.4(c)(ii)	ii Th	ne total number o	of handsets	3.2.4(c)(ii)	The total number of
	of Section		/ehicle/ drive te		(a) of	handsets required during
	III		that it should co		Section III	the drive test in a city area
	111		chnology deploy			or highways, shall be such
			ce providers in			that it should be able to
			is mentioned belo			capture/ perform the
		A.	One handset			testing covering at least
			for voice servi			following scenarios:
		138,	TOT VOICE SERVI	ice offered		ionowing scenarios:

		1
on circuit switched technology,		
in Auto selection mode for 2G		a. TSP wise testing of
and 3G.		Voice service offered on
B. One handset for each		circuit switched
TSP for voice service offered on		technology in auto
packet switch technology, in		selection mode.
Auto selection mode for 4G and		b. TSP wise testing of
5G.		Voice service offered on
C. One handset for each		all available technologies
TSP for voice service on Auto		(2G/ 3G/ 4G/ 5G) in auto
mode of all available/offered		selection mode.
technologies (2G/3G/4G/5G).		c. TSP wise testing of Data
D. One handset for each		service offered on all
TSP for data service offered on		available technologies
each type of technology (3G/		(2G/ 3G/ 4G/ 5G) in auto
4G/ 5G, whichever is available)		selection mode.
on dedicated mode. Provided		e. One spare Handset
that, in case a TSP has both 3G		should be readily
and 4G service in the cities or		available in the vehicle in
areas, where drive test is being		case any handsets get
conducted then data test shall be		developed snag.
done only for 4G service.		Additionally, one handset
E. One Handset for each		having drive test
TSP for Data service in Auto		capabilities be kept for the
mode, of all available/offered		TRAI official during the
technologies.		drive.
F. One spare Handset		f. All Handsets being used
should be readily available in		for drive test should be
the vehicle in case any handsets		capable of taking
5		observations for all the
get developed snag.		
Additionally, one handset		spectrum bands used by
having Drive test capabilities be		service providers in India.
kept for the TRAI official	3.2.4(c)(ii)	The total number of
during the drive.	(b) of	handsets required during
G. All Handsets being used	Section III	the drive test in Railway
for drive test should be capable		routes (including metro
of taking observations for all the		rail routes), Coastal area
spectrum bands used by service		and walk test, shall be
providers in India		such that it should be able
providers in maid		
		to capture/ perform the
		testing covering atleast
		following scenarios:
		a. TSP wise testing of
		Voice service offered on
		all available technologies
		(2G/ 3G/ 4G/ 5G) in auto
		selection mode.
		b. TSP wise testing of
		Data service offered on all
		(2G/ 3G/ 4G/ 5G) in auto
		selection mode.
		c. One spare Handset
		should be readily
		available in the vehicle in
 	•	•

143.2.4(e)(ii) of Section IIIThe agency may be asked to demonstrate the post-processing activity to the concreded Regional Office of TRAI, if so desired, on sample basis3.2.4(e)(ii) of Section IIIThe agency may be asked to demonstrate the post- processing activity to TRAI, if so desired, on sample basis.153.2.4(f) (iii) of (iii) of Section III (iii) of of six months after the expiry of the contract and shall produce the same to TRAI as and when required to do so3.2.4(f)(iii) the agency shall preserve the contract and shall produce the same to TRAI as and when required to do so163.2.4(f)(v) of Section IIIAfter completion of the drive submit the report of the independent drive test in such a manner that all the metrics captured for different service providers, are displayed individually and in comparative form using a Graphical User Interface including plotting of all the events like call drop, call block, call handover failure etc. on the map, data visualization dashboards and analytical based tool/software shall be internationally comparison of TSP's at city/ highway/ railway route level, with other TSP's, grid level, service area level.3.6.2of The agency shall submit to section III173.6.2of The agency shall submit to3.6.2of The agency shall submit to					case any handsets get developed snag. Additionally, one handset having drive test capabilities be kept for the TRAI official during the drive. d. All Handsets being used for drive test should be capable of taking observations for all the spectrum bands used by service providers in India.
(iii) of Section IIIcomplete log files for a period of six months after the expiry of the contract and shall produce the same to TRAI as and when required to do soof Section IIIthe complete log files for a period of six months after the expiry of the contract and shall submit the same to TRAI as and when required to do so.163.2.4(f)(v) of Section IIIAfter completion of the drive test, the agency is required to submit the report of the independent drive test in such a manner that all the metrics captured for different services (voice and data) and different service providers, are displayed individually and in comparative form using a Graphical User Interface including plotting of all the events like call drop, call block, call handover failure etc. on the map, data visualization dashboards and analytical based tool/ software shall be internationally compatible and be used to show comparison of TSP's at city/ highway/ railway route level, with other TSP's, grid level, service area level.of S.2.4(f)(v) of S.2.4(f)(v) of 	14	of Section	demonstrate the post-processing activity to the concerned Regional Office of TRAI, if so	of Section	The agency may be asked to demonstrate the post- processing activity to <b>TRAI</b> , if so desired, on
of Section IIItest, the agency is required to submit the report of the independent drive test in such a manner that all the metrics captured for different services (voice and data) and different service providers, are displayed individually and in comparative form using a <b>Graphical User</b> <b>Interface</b> including plotting of all the events like call drop, call block, call handover failure etc. on the map, data visualization <b>dashboards</b> and analytical based tools. The analytical 	15	(iii) of	complete log files for a period of six months after the expiry of the contract and shall produce the same to TRAI as and when	of Section	the complete log files for a period of six months after the expiry of the contract and shall <b>submit</b> the same to TRAI as and when
	16	of Section	test, the agency is required to submit the report of the independent drive test in such a manner that all the metrics captured for different services (voice and data) and different service providers, are displayed individually and in comparative form using a <b>Graphical User</b> <b>Interface</b> including plotting of all the events like call drop, call block, call handover failure etc. on the map, data visualization <b>dashboards</b> and analytical based tools. The analytical based tool/ software shall be internationally compatible and be used to show comparison of TSP performance/ comparison of TSP's at city/ highway/ railway route level, with other TSP's, grid level, service area		drive test, the agency is required to submit the report of the independent drive test in such a manner that all the metrics captured for different services (voice and data) and different service providers, are displayed individually and in comparative form using a <b>Graphical tools</b> including plotting of all the events like call drop, call block, call handover failure etc. on the map <b>for</b> data visualization <b>and analysis</b> . The analytical based tool/ software used shall be internationally compatible and be used to show comparison of TSP performance/ comparison of TSP's at city/ highway/ railway route level, with other TSP's, grid level,
I Notion III I III/I comple decign and comple   Nection III   I III/I comple decign and	17	3.6.2 of Section III	The agency shall submit to TRAI sample design and sample	3.6.2 of Section III	The agency shall submit to TRAI sample design and

		reporting formats within 4 weeks of signing of the agreement. TRAI may suggest modifications to the sample design and sample reporting formats and the agency shall modify the sample design and sample reporting formats, as suggested by TRAI, and final approval shall be taken before taking up the job in hand. The final approved design and reporting format shall be submitted by the agency within time period as specified in the delivery schedule at Clause 4.4 of section-IV, after incorporating modifications/ corrections suggested by TRAI. TRAI's decision in this matter shall be final		reporting formats as specified in the delivery schedule at Clause 4.3 of section-IV. TRAI may suggest modifications to the sample design and reporting formats and the agency shall modify the sample design and reporting formats, as suggested by TRAI, and approval shall be taken before taking up the job in hand. The final approved design and reporting format shall be submitted by the agency within time period as specified in the delivery schedule at Clause 4.3 of section-IV, after incorporating modifications/ corrections suggested by TRAI. TRAI's decision in this matter shall be final
18	3.7.3 of Section III	The report shall contain the results of drive tests with relevant references and comparison of performance of the service providers on various Quality of Service parameters in the city or highway or rail routes or coastal areas, as the case may be. The report shall also contain an Executive Summary and Critical findings along with detailed analysis to share with the service provider to take further follow-up action. Additionally, the report should be useful for the customers. Terminologies used in common parlance be used while describing the quality of the networks for ease of use of customers. Also, the plots of coverage, quality and MOS (mean opinion score) of voice service and download throughput speed for data service be hosted in a <b>zoomable</b> <b>layout</b> which can be used by customers to locate specific spots on the map.	3.7.3 of Section III	be final The report shall contain the results of drive tests with relevant references and comparison of performance of the service providers on various Quality of Service parameters in the city or highway or rail routes or coastal areas, as the case may be. The report shall also contain an Executive Summary and Critical findings along with detailed analysis to share with the service provider to take further follow-up action. Additionally, the report should be useful for the customers. Terminologies used in common parlance be used while describing the quality of the networks for ease of use of customers. Also, the plots of coverage, quality and MOS (mean opinion score) of voice service and download throughput speed for data service shall be <b>presented in such a</b>

				manner that they are useful to the customers to locate specific areas on the map.
19	1 of	The bidders can submit the bid	1 of Section	The bidders are allowed
	Section V	for any number of zones (one or	V	to submit the bid for
		more than one zone), as per his		maximum <u>four</u> number of
		choice. However, a bidder will		zones, as per his choice.
		be considered for award for		In case a bidder submits
		work in maximum three zones		bids for more than four
				zones, then such bids shall
				be rejected summarily.
20	Annexure	to be digitally signed by	Annexure 5	(Signature of Bidder)
	5	bidder		
21	Annexure	to be digitally signed by	Annexure 6	(Signature of Bidder)
	6	bidder		

2. Last date and time of submission of bids (online & offline documents) and Opening of Techno-Commercial bids, as appearing in various clauses of the tender document, are modified as follows:

Bid Timelines	Existing Date & Time	Revised Date & Time
Last Date & Time of Submission of bids online	28/08/2023	11/09/2023
and offline documents	by 15:00 hrs	by 15:00 hrs
Opening of Techno- Commercial Bids	29/08/2023	12/09/2023
Opening of Techno-Commercial Blus	by15:00 hrs	by 15:00 hrs

This is issued with the approval of competent authority.

(Pawan Kumar Aggarwal) Joint Advisor (QoS-I)