Government of India Ministry of Communications Department of Telecommunications (Access Services Wing) Sanchar Bhawan, 20, Ashoka road, New Delhi-110001

File No. 1-1/2022-AS-IV

Date: 28.04.2023

OFFICE MEMORANDUM

Subject: Test Schedule & Test Procedure for Roll out Obligation testing in 3300 MHz and 26 GHz Spectrum Bands.

Kindly find enclosed herewith the TSTP for Roll out Obligation testing in for LTE / LTE-A / 5G (TDD/ FDD) in 3300 MHz and 26 GHz Spectrum Bands.

 The rollout obligations testing of the 10% sampled Sites in 3300 MHz and 26 GHz bands may be carried out by LSA concurrently with the annual EMF testing of up to 5% of the total BTS Sites.

3. This is issued with the approval of competent authority.

(Trilok Chandra) Director (AS-IV) Tele No. 011-23372063

То

- 1. All Access Service Providers
- 2. DG(T), DoT

Copy to:

1. Director (IT) for uploading on the DoT website

Test Schedule & Test Procedure for Roll out Obligation testing in

3300 MHz and 26 GHz Spectrum Bands

Instructions to Service Providers & LSAs:

Section A - Application for the verification to LSA

- Service Provider shall submit application for the verification of site(s)¹ as per the prescribed format (Form-A), along with the self-test results, for rollout obligation compliance of respective phase.
- Multiple Base Stations of a service provider operating on the same spectrum band at one site (i.e. same Lat' Long) shall be treated as single site for rollout obligation compliance.
- Sites to be offered by the service provider to the LSA for verification should be offered from the commissioned sites on the respective spectrum band in the EMF portal in the format as per Form-A.

Section B - Pre-application activities by TSP

- Before offering the site to the LSA for verification, the service provider shall
 - (a) conduct self-testing to ensure that usable signal is available in the vicinity of the Base Station (site) i.e., within the claimed coverage area of the Base Station (site).
 - (b) submit the results of self-test as per Annexure-I of Form-A including snapshot of OSS2.
 - (c) publish network deployment map³ on its website to indicate commercial launch of service and provide details of URL.

^{*} Site(s) would mean Macro/ Micro/ Pico Cells as defined in TEC/ Global Standards and includes small cells and In-building solutions.

² The snapshot of OSS should include number of subscribers latched in the site for the band offered.

³ This requirement is applicable for Phase-I Roll out obligation compliance. For subsequent phases, this requirement shall be treated as complied, if the same has been done during Phase-I before offering for subsequent phases(s).

Section C - Verification-test by LSA

- LSA shall examine the documentation along with the self-test results. The LSA shall also verify the site details in the EMF, SACFA acceptance in "Saral Sanchar" portal.
- 6. For Phase-I roll out obligation compliance, LSA shall check whether network deployment map on TSP's website have been provided for customers information. For subsequent phases, LSA shall check fulfilment of this requirement during Phase-I compliance. In case of failure to comply this requirement till offering for subsequent phase(s), this requirement shall also be checked during verification of subsequent phases.
- The verification of signal availability shall be done by the LSA at minimum 1 (one) spot within the claimed coverage area of the Base Station (site) in consultation with TSP.
- 8. For Phase-I, LSA shall carry out verification of minimum one site in the city/ town/ other area, where the services have been commercially launched besides checking that network deployment map has been published for customer information to indicate commercial launch of services. For subsequent Phases, LSA shall carry out verification of 10% of sites on sample basis. Sample selection for site verification shall be as decided by the LSA, as per prevailing practice. The date of such verification shall be decided mutually between the TSP and the LSA.
- 9. During verification, LSA shall check that the user terminal latches with the Base Station using the specified frequency bands at 1 (one) spot in the vicinity of each site i.e., within the coverage area of the site and measure signal level and download throughput and record the same. The methodology for measurement of signal level and download throughput shall be as specified in Section-E below.
- Date of offering of the case by the TSP to the LSA is to be treated as date of meeting
 roll-out obligation, in case the verification results are found in order by the LSA.

Section D - Results of verification and Issuance of Certificate

11. After the necessary verification, the result shall be checked by LSA against success criteria and upon fulfilment of the requirements, the compliance certificate for rollout obligation of the respective phase shall be issued with the approval of DDG (C) with copy to AS Cell, DoT HQ and O/o DGT HQ.

Section E - Measurement methodology

- Signal measurement: Reference Signal Received Power (RSRP) measurement shall be carried out as follows:
 - (a) RSRP values shall be measured for one minute (approximately) on each selected test location.
 - (b) Samples of RSRP value in dBm shall be measured and recorded.
- 13. Throughput measurement: File download tests shall be carried out as follows:
 - (a) File of 100 Mbyte (approximately) size is to be downloaded on each selected test location for file download test. File download test should be done from the file server located in TSP Network to avoid any constraints due to external network.
 - (b) In case, time required for downloading is taking more than 5 minutes, throughput shall be calculated based upon observation of 5 minutes.
 - (c) Average throughput of each sample for file download of 100 Mbyte file shall be recorded. Throughput shall be calculated as ratio of size of file in bits and time taken in seconds to download.

Form-A

Application of rollout obligation verification

- 1. Name of the LSA:
- 2. Name of the TSP:
- 3. License Agreement Number:
- 4. Address of licensee (as mentioned in licensee agreement):
- 5. Address of licensee (correspondence address in LSA):
- 6. Frequency band for which compliance requested:
- Letter number of DoT frequency allotment letter: (Please attach a copy of the letter)
- 8. Phase of rollout obligation: Phase-I / Phase-II/
 - (a) In case of Phase-I: Whether network deployment map published? : Yes/ No ' If yes, the details of URL:
 - (b) In case of subsequent phases: Please mention Date of fulfilment of Phase-I compliance with respect to network deployment map publication:
- 9. Due date of rollout obligation for the phase:
- 10. Rollout obligation status before registration
 - (a) No. of towns covered:
 - (b) No. of sites offered:
 - (c) No. of sites certified:
- 11. Rollout obligation offered in registration
 - (a) No. of new town offered, if any:
 - (b) No. of sites offered:
 - (Details as per Annexure-I)

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I, (name of signatory), (designation), hereby certify that the above stated information is correct complete and true.

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(Signature of Authorized Signatory)

(Signature of receiving Officer)

14-34-9C

Date :

E ERE

Contact no. :

(For office use)

Acknowledgement no. :

Name :

Designation :

(Office Stamp)

Date :

Annexure-I

		_								 		
OSS	snapshot	enclosed?	(Ves/NO)									
Whether	the user	terminal/	engineering (Yes/NO)	handset	latched	with the	Base	Station?	(Ves/ No)			
Date of	self-test											
WPC	acceptance	date	(for	SACFA)								
SACFA ID	latitude / (as per Saral	Sanchar	portal)									
Site	latitude /	longitude										
Complete	address										-	
Town name												
Date of	commissioning		,									
BTSID	(as per	EMF	portal)									
Sr.	No.											

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Department of Telecommunications

Activity Report of Rollout Obligation Verification

1. Unique Registration No.:

2. Test Schedule No.:

3. Name of TSP:

4. License Agreement Number:

5. Frequency band assigned:

6. Letter number of DoT frequency allotment letter verified: (Y/N)

7. No. of sites offered:

8. Date of offering:

9. Documentation verification:

Sr.	BTS ID in	Verified details	SACFA acceptance	Self-certificate for
No.	EMF portal	in EMF portal	verification in Saral	network deployment
		(Y/N)	Sanchar portal (Y/N)	map, for Phase-I
1				(Y/N)
				L

10. Site verification:

NOTE: For roll out obligation compliance, test check shall be carried out for 10% of total offered site, subject to minimum 1 (one) site.

Sr.	BTS ID	Date of	Test check result at a spot in the vicinity of the site					
No.	in EMF	verification	(i.e. within the coverage area of the site)					
	portal		Whether the user terminal/	Measured	Measured			
			engineering handset latched	signal	download			
			with the Base Station?	strength	throughput			
			(Yes/ No)	(dBm)	(Mbps)			

(Countersigned by controlling officer) Name : (Signature of testing officer) Name :

Designation :

Date :

Designation :

Date :

Department of Telecommunications LSA

Compliance Certificate

(for Rollout Obligation in 3300 MHz and 26 GHz bands)

No. :

Date :

- 1. Unique Registration No.:
- 2. Test Schedule No .:
- 3. Name of TSP:
- 4. License Agreement No.:
- 5. Frequency Band;
- 6. Date of offering:
- 7. Phase of rollout obligation:
- 8. Rollout obligation verified in registration:
 - (a) No. of new town verified, if any:
 - (b) No. of sites verified:

(Details as per annexure)

9. Cumulative rollout obligation verification status:

- (a) No. of towns verified:
- (b) No. of sites verified:

Based on the sample site verification, it is certified that the TSP is meeting the rollout obligation criteria for Phase ____.

Director, _____ LSA

То

(Name & address of service provider, as given in form-A)

Cc:

- 1. DDG (AS), DoT HQ
- 2. DDG (LC), DGT HQ DoT

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Annexure to compliance certificate for rollout obligation No. _____ dated _____

Sr.	Town .	BTS ID as	Site address	Site latitude /	SACFA ID
No.	,	per EMF		longitude	
1. 		portal			