### F.No. 5-2/2024-TC/TEC

## Government of India Department of Telecommunications Telecommunications Engineering Centre Khursid Lal Bhawan, Janpath, New Delhi-110001 (Telecom Certification Division)

Dated: 01.07.2024

#### Amendment Notification

# Subject: Extension of mandatory certification date for 05 products (ERs) notified under Phase-III, IV & V of MTCTE-reg.

In partial modification to this office Notification No. 5-2/2021-TC/TEC/192 dated 01.04.2024, 5-2/2021-TC/TEC/165 dated 23.06.2023 and 5-2/2021-TC/TEC dated 24.04.2024 w.r.t. Testing and Certification of telecom & networking equipment notified under Phase-III, IV & V of MTCTE regime, the following amendments are hereby notified with immediate effect:

a) Date of mandatory certification of following 05 products (ERs) notified under MTCTE Phase-III, IV & V has been extended as mentioned below:

S.No.	Product (ER)	Notified Phase	Mandatory date of Certification
1.	Smart Electricity Meter	Phase III	
2.	Satellite Communication Equipment	Phase IV	
3.	Base Station for Cellular Network for 5G	Phase V	01.10.2024
4.	Hypervisor	Phase V	1
5.	IP Terminal	Phase V	

b) The last date for acceptance of test reports issued by labs accredited by International Laboratory Accreditation Cooperation (ILAC) signatories from non-border sharing countries has been extended by two months for the technical parameters of following 05 products notified under Phase-III, IV & V:

S.No.	Product (ER)	Notified Phase	Last date of ILAC report acceptance
1.	Base Station for Cellular Network (up to 4G)	Phase-III	
2.	SIM	Phase-IV	30.09.2024*
3.	VHF UHF Radio Equipment System	Phase-IV	50.03.2024
4.	Base Station for Cellular Network for 5G	Phase-V	
5.	E-band Fixed Radio Relay Systems	Phase-V	

\* The test reports issued by ILAC signatories (other than border sharing countries) should not be older than two years on the date of submission on MTCTE Portal.

2. The complete list of products notified under MTCTE with their effective mandatory date is placed at Annexure-I.

This issues with the approval of the Competent Authority.

(Divya Sharma) Director (TC-I) dirta.tec@gov.in

Encl: As above.

Copy to (through email):

- 1. PS to Hon'ble MoC/Hon'ble MoSC, DoT, New Delhi
- 2. PPS to Secretary(T), DoT, New Delhi
- 3. PPS to Member(S)/Member(T)/Member(F)/DG(Telecom), DoT, New Delhi
- 4. Sr. DDG, TEC/ Sr.DDG, NCCS/ Heads of LSAs/ CEO, C-DOT
- 5. JS(Customs), CBIC/ JS (Distribution), Ministry of Power
- DDG(AS)/DDG(CS)/DDG(DS), DoT HQ- for information & circulation to TSPs/ISPs
- 7. All OEMs/ Stakeholders through TEC/MTCTE website
- 8. AD(IT)/AD(TC), TEC- for uploading on TEC/MTCTE website
- 9. Office copy.

Annexure-I

# <u>List of Telecom products notified under MTCTE along with their effective mandatory</u> <u>certification date</u>

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S.N.	Product Name/ER	Product Variant Name	MTCTE Phase	Mandatory date of certification of product under MTCTE
1.	2- Wire Telephone Equipment	2-Line Feature Phone	Phase-1	1st October, 2019
2.	2- Wire Telephone Equipment	CLIP (Calling Line Identification Presentation) Phone	Phase-1	1st October, 2019
3.	2- Wire Telephone Equipment	Coin Box Telephone	Phase-1	1st October, 2019
4.	2- Wire Telephone Equipment	Coin Box Telephone - Table Top Interface	Phase-1	1st October, 2019
5.	2- Wire Telephone Equipment	Electronic Telephone Instrument	Phase-1	1st October, 2019
6.	2- Wire Telephone Equipment	Executive Telephone Systems	Phase-1	1st October, 2019
7.	2- Wire Telephone Equipment	Key Telephone Systems	Phase-1	1st October, 2019
8.	2- Wire Telephone Equipment	Key Telephone Systems with proprietary interface	Phase-1	1st October, 2019
9.	2- Wire Telephone Equipment	NSD (National Subscriber Dialing) or ISD (International Subscriber Dialing) Payphone	Phase-1	1st October, 2019
10.	2- Wire Telephone Equipment	Terminals for connecting to PSTN (Public Switched Telephone Network)	Phase-1	1st October, 2019
11.	G3 Fax Machine	FAX machine with handset	Phase-1	1st October, 2019
12.	G3 Fax Machine	FAX machine without handset	Phase-1	1st October, 2019
13.	Modem	V.90 or V.92 or V.21 to V.34 Modem	Phase-1	1st October, 2019
14.	Cordless Telephone	Cordless Telephone	Phase-1	1st October, 2019
15.	ISDN (Integrated Services Digital Network) Customer Premises Equipment	ISDN Gateway	Phase-1	1st October, 2019
16.	ISDN (Integrated Services Digital Network) Customer Premises Equipment	ISDN NT-1 Network Termination	Phase-1	1st October, 2019
17.	ISDN (Integrated Services Digital Network) Customer Premises Equipment	ISDN Terminal	Phase-1	1st October, 2019
18.	ISDN (Integrated Services Digital Network) Customer Premises Equipment	ISDN Terminal Adapter	Phase-1	1st October, 2019
19.	ISDN (Integrated Services Digital Network) Customer Premises Equipment	Multipoint Conferencing Server	Phase-1	1st October, 2019
20.	ISDN (Integrated Services Digital Network) Customer Premises Equipment	PC card based ISDN Terminal	Phase-1	1st October, 2019
21.	Private Automatic Branch Exchange	Private Automatic Branch Exchange	Phase-1	1st October, 2019
22.	PON (Passive Optical Network) Family of Broadband Equipment	PON OLT (Optical Line Terminal)	Phase-2	1st October, 2020
23.	PON (Passive Optical Network) Family of Broadband Equipment	PON ONT (Optical Network Terminal)	Phase-2	1st October, 2020

24.	PON (Passive Optical Network) Family of Broadband Equipment	PON ONU (Optical Network Unit)	Phase-2	1st October, 2020
25.	Feedback Device	Feedback Device	Phase-2	1st October, 2020
26.	Transmission Terminal Equipment-1	Multiplexing Equipment	Phase-2	1st October, 2020
27.	Transmission Terminal Equipment-1	SDH (Synchronous Digital Hierarchy) Equipment	Phase-2	1st October, 2020
28.	Equipments Operating in 2.4 GHz and 5 GHz Band	PTP PMP Wireless Access Equipment 2.4 or 5 GHz	Phase-3	1st January, 2024
29.	Equipments Operating in 2.4 GHz and 5 GHz Band	Wifi Access Points and CPE (Customer Premises Equipment)	Phase-3	1st January, 2024
30.	Equipments Operating in 2.4 GHz and 5 GHz Band	WLAN Controller Equipment	Phase-3	1st January, 2024
31.	End Point Device for Environmental Monitoring	End Point Device for Environmental Monitoring	Phase-3	1st January, 2024
32.	Repeater for Cellular Network	GSM and WCDMA Repeater	Phase-3	1st April, 2024
33.	Repeater for Cellular Network	GSM Repeater	Phase-3	1st April, 2024
34.	Repeater for Cellular Network	GSM WCDMA and LTE Repeater	Phase-3	1st April, 2024
35.	Repeater for Cellular Network	LTE (Long Term Evolution) Repeater	Phase-3	1st April, 2024
36.	Repeater for Cellular Network	WCDMA (Wideband Code Division Multiple Access) and LTE Repeater	Phase-3	1st April, 2024
37.	Repeater for Cellular Network	WCDMA (Wideband Code Division Multiple Access) Repeater	Phase-3	1st April, 2024
38.	Base Station for Cellular Network	BTS (Base Transceiver Station ) for GSM (Global System for Mobile Communication)	Phase-3	1 <sup>st</sup> August, 2024
39.	Base Station for Cellular Network	BTS with AAS (Advanced Antenna Systems)	Phase-3	1 <sup>st</sup> August, 2024
40.	Base Station for Cellular Network	BTS with MSR (Multi-Standard Radio) up to 4G	Phase-3	1 <sup>st</sup> August, 2024
41.	Base Station for Cellular Network	eNodeB for LTE (Long Term Evolution)	Phase-3	1 <sup>st</sup> August, 2024
42.	Base Station for Cellular Network	NodeB for WCDMA	Phase-3	1 <sup>st</sup> August, 2024
43.	Compact Cellular Network	BTS CCN	Phase-3	1st January, 2024
44.	Compact Cellular Network	eNodeB CCN	Phase-3	1st January, 2024
45.	Compact Cellular Network	NodeB CCN	Phase-3	1st January, 2024
46.	IoT (Internet of Things) Gateway	IoT Gateway	Phase-3	1st January, 2024
47.	Tracking Device	Asset Tracking Device	Phase-3	1st January, 2024
48.	Tracking Device	Human Tracking Device	Phase-3	1st January, 2024
49.	Tracking Device	Pet Tracking Device	Phase-3	1st January, 2024
50.	Tracking Device	Standalone tracking device for Vehicle	Phase-3	1st January, 2024
51.	Smart Electricity Meter	Smart Electricity Meter	Phase-3	1st October, 2024
52.	Mobile Radio Trunking System	MRTS Base Station - Baseband plus Radio	Phase-4	1 <sup>st</sup> August, 2024

52			DI 4	1 <sup>st</sup> August, 2024
53.	Mobile Radio Trunking System	MRTS Base Station - Radio Only	Phase-4	1 August, 2024
54.	Mobile Radio Trunking System	MRTS Baseband Equipment without Radio	Phase-4	1 <sup>st</sup> August, 2024
55.	Mobile Radio Trunking System	MRTS Fixed Station	Phase-4	1 <sup>st</sup> August, 2024
56.	Mobile Radio Trunking System	MRTS Handheld Portable Station	Phase-4	1 <sup>st</sup> August, 2024
57.	Mobile Radio Trunking System	MRTS Mobile Station	Phase-4	1 <sup>st</sup> August, 2024
58.	Conferencing Equipment	Audio Conference Facility Device	Phase-4	1st January, 2024
59.	Conferencing Equipment	Multi Line Telephone System	Phase-4	1st January, 2024
60.	HF (High Frequency) Radio	HF Base Station - Baseband plus Radio	Phase-4	1st April, 2024
61.	HF (High Frequency) Radio	HF Base Station - Radio Only	Phase-4	1st April, 2024
62.	HF (High Frequency) Radio	HF Baseband Equipment without Radio	Phase-4	1st April, 2024
63.	HF (High Frequency) Radio	HF Fixed Station	Phase-4	1st April, 2024
64.	HF (High Frequency) Radio	HF Handheld Portable Stations	Phase-4	1st April, 2024
65.	HF (High Frequency) Radio	HF Mobile Stations	Phase-4	1st April, 2024
66.	VHF( Very High Frequency) UHF (Ultra High Frequency) Radio System Equipment	VHF UHF Base Station - Baseband plus Radio	Phase-4	1 <sup>st</sup> August, 2024
67.	VHF( Very High Frequency) UHF (Ultra High Frequency) Radio System Equipment	VHF UHF Base Station - Radio Only	Phase-4	1 <sup>st</sup> August, 2024
68.	VHF( Very High Frequency) UHF (Ultra High Frequency) Radio System Equipment	VHF UHF Baseband Equipment without Radio	Phase-4	1 <sup>st</sup> August, 2024
69.	VHF( Very High Frequency) UHF (Ultra High Frequency) Radio System Equipment	VHF UHF Fixed Station	Phase-4	1 <sup>st</sup> August, 2024
70.	VHF( Very High Frequency) UHF (Ultra High Frequency) Radio System Equipment	VHF UHF Handheld Portable Stations	Phase-4	1 <sup>st</sup> August, 2024
71.	VHF( Very High Frequency) UHF (Ultra High Frequency) Radio System Equipment	VHF UHF Mobile Stations	Phase-4	1 <sup>st</sup> August, 2024
72.	PTP (Point to Point) PMP (Point to Multi Point) Microwave Fixed Radio Systems	PTP or PMP Full Outdoor Microwave Systems	Phase-4	1 <sup>st</sup> August, 2024
73.	PTP (Point to Point) PMP (Point to Multi Point) Microwave Fixed Radio Systems	PTP or PMP Split MW Indoor Unit	Phase-4	1 <sup>st</sup> August, 2024
74.	PTP (Point to Point) PMP (Point to Multi Point) Microwave Fixed Radio Systems	PTP or PMP Split MW Outdoor Unit	Phase-4	1 <sup>st</sup> August, 2024
75.	PTP (Point to Point) PMP (Point to Multi Point) Microwave Fixed Radio Systems	PTP/PMP Split M W System	Phase-4	1 <sup>st</sup> August, 2024
76.	Media Gateway	Line Media Gateway	Phase-4	1st January, 2024

77.	Media Gateway	Media Gateway	Phase-4	1st January, 2024
78.	Media Gateway	Media Gateway for CPE	Phase-4	1st January, 2024
79.	Signalling Gateway	Signalling Gateway	Phase-4	1st January, 2024
80.	Session Border Controller	Session Border Controller	Phase-4	1st January, 2024
81.	Softswitch	Softswitch	Phase-4	1st January, 2024
82.	DSL(Digital Subscriber Line)	DSLAM	Phase-4	1st January, 2024
	Equipments DSL(Digital Subscriber Line)	DSL Modem		
83.	Equipments Satellite Communication	DSL Modem	Phase-4	1st January, 2024
84.	Equipment	Satellite Amplifier	Phase-4	1st October, 2024
95	Satellite Communication	Satellite Baseband Mod or	Dhasa 4	1st Ostahan 2024
85.	Equipment Satellite Communication	Demod or Controller	Phase-4	1st October, 2024
86.	Equipment	Satellite Baseband Modem	Phase-4	1st October, 2024
87.	Satellite Communication	Satellite Baseband Modem	Phase-4	1st October, 2024
07.	Equipment Satellite Communication	Controller	Phase-4	Tst October, 2024
88.	Equipment	Satellite BUC (Block Up Converter)	Phase-4	1st October, 2024
89.	Satellite Communication	Satellite IF Transreceiver	Phase-4	1st October, 2024
09.	Equipment Satellite Communication	Satellite II' Transfeeerver	1 11450-4	150 0000001, 2024
90.	Equipment	Satellite LNA (Low Noise Amplifier)	Phase-4	1st October, 2024
91.	Satellite Communication	Satellite LNB(Low Noise Block	Phase-4	1st Ostshar 2024
91.	Equipment	downconverter)	Phase-4	1st October, 2024
92.	Satellite Communication Equipment	Satellite Optimisation Equipment	Phase-4	1st October, 2024
02	Satellite Communication	Satellite Radio Frequency		1 . 0 . 1 . 0004
93.	Equipment	Transceiver	Phase-4	1st October, 2024
94.	Satellite Communication Equipment	VSAT (Very Small Aperture Terminal) Terminals	Phase-4	1st October, 2024
05	LAN (Local Area Network) Switch	L2 LAN Switch	Phase-4	1 <sup>st</sup> August, 2024
95.	· · · · · ·	L3 LAN Switch	Phase-4	1 <sup>st</sup> August, 2024
96.	LAN (Local Area Network) Switch	MPLS (Multiprotocol Label	Phase-4	
97.	LAN (Local Area Network) Switch	Switching) TP (Transport Profile) CEN (Carrier Ethernet Network )Switch	Phase-4	1 <sup>st</sup> August, 2024
98.	LAN (Local Area Network) Switch	L2 Unmanaged Switch	Phase-4	1 <sup>st</sup> August, 2024
99.	Router	BNG (Broadband Network Gateway) or BRAS (Broadband Remote Access Server) Router	Phase-4	1 <sup>st</sup> August, 2024
100.	Router	Cloud Control Capable Router	Phase-4	1 <sup>st</sup> August, 2024
101.	Router	IPV4 (Internet Protocol v4) Router	Phase-4	1 <sup>st</sup> August, 2024
102.	Router	IPV6 (Internet Protocol v6) Router	Phase-4	1 <sup>st</sup> August, 2024
103.	Router	MPLS (Multiprotocol Label Switching) Router	Phase-4	1 <sup>st</sup> August, 2024
104.	Transmission Terminal Equipment-2	DWDM (Dense wavelength-division multiplexing) Equipment	Phase-4	1st January, 2024
105.	Transmission Terminal Equipment-2	Digital Cross Connect	Phase-4	1st January, 2024
106.	IP (Internet Protocol) Security Equipment	Firewall Equipment	Phase-4	1 <sup>st</sup> August, 2024
107.	IP (Internet Protocol) Security Equipment	Intrusion Detection System Equipment	Phase-4	1 <sup>st</sup> August, 2024

108.	IP (Internet Protocol) Security Equipment	Intrusion Prevention System Equipment	Phase-4	1 <sup>st</sup> August, 2024
109.	IP (Internet Protocol) Security Equipment	Unified Threat Management Equipment	Phase-4	1 <sup>st</sup> August, 2024
110.	Precision Timing Protocol Grand Master Equipment	Precision Timing Protocol Grand Master Equipment	Phase-4	1st January, 2024
111.	Mobile Management Entity	MME with connectivity to MSC SGSN	Phase-4	1st January, 2024
112.	Mobile Management Entity	MME for LTE	Phase-4	1st January, 2024
113.	Cell Broadcast Centre	CBC for GSM	Phase-4	1st January, 2024
114.	Cell Broadcast Centre	CBC for LTE or LTE-A	Phase-4	1st January, 2024
115.	Cell Broadcast Centre	CBC For UMTS	Phase-4	1st January, 2024
116.	IP Multimedia Conferencing Equipment	IP Multimedia Conferencing Equipment	Phase-4	1st January, 2024
117.	BSC (Base Station Control) RNC (Radio Network Controller)	BSC for GSM	Phase-4	1st January, 2024
118.	BSC (Base Station Control) RNC (Radio Network Controller)	RNC for WCDMA	Phase-4	1st January, 2024
119.	SMLC (Serving Mobile Location Center)or eSMLC (Evolved Serving Mobile Location Center )	eSMLC for LTE	Phase-4	1st January, 2024
120.	SMLC (Serving Mobile Location Center)or eSMLC (Evolved Serving Mobile Location Center )	SMLC for GSM	Phase-4	1st January, 2024
121.	SMLC (Serving Mobile Location Center)or eSMLC (Evolved Serving Mobile Location Center )	SMLC for WCDMA	Phase-4	1st January, 2024
122.	SGSN (Serving GPRS Support Node) or GGSN (Gateway GPRS Support Node)	GGSN	Phase-4	1st January, 2024
123.	SGSN (Serving GPRS Support Node) or GGSN (Gateway GPRS Support Node)	SGSN For GSM	Phase-4	1st January, 2024
124.	SGSN (Serving GPRS Support Node) or GGSN (Gateway GPRS Support Node)	SGSN For LTE	Phase-4	1st January, 2024
125.	SGSN (Serving GPRS Support Node) or GGSN (Gateway GPRS Support Node)	SGSN For WCDMA	Phase-4	1st January, 2024
126.	HLR (Home Location Register) AUC (Authentication Cente) HSS (Home Subscriber Server)	HLR or AUC	Phase-4	1st January, 2024
127.	HLR (Home Location Register) AUC (Authentication Cente) HSS (Home Subscriber Server)	HSS	Phase-4	1st January, 2024
128.	MSC or MSC-S or GMSC or GMSC-S including VLR	MSC-S or GMSC-S	Phase-4	1st January, 2024
129.	MSC or MSC-S or GMSC or GMSC-S including VLR	MSC or GMSC including VLR for GSM	Phase-4	1st January, 2024
130.	MSC or MSC-S or GMSC or GMSC-S including VLR	MSC or GMSC including VLR for WCDMA	Phase-4	1st January, 2024
131.	Infiniband Switch	Infiniband Switch	Phase-4	1st January, 2024
132.	OTA (Over-The-Air) and DM (Device Manager) or FOTA (Firmware Over-The-Air)	DM or FOTA	Phase-4	1st January, 2024
133.	OTA (Over-The-Air) and DM (Device Manager) or FOTA (Firmware Over-The-Air)	ΟΤΑ	Phase-4	1st January, 2024
134.	SCP (Service Control Point)	SCP	Phase-4	1st January, 2024
135.	OMC(Operations and Maintenance Center) or EMS (Element Management Systems) or NMS (Network Management Systems) or	NMS	Phase-4	1st January, 2024

	OSS (Operations Support System)			
136.	OMC(Operations and Maintenance Center) or EMS (Element Management Systems) or NMS (Network Management Systems) or OSS (Operations Support System)	OMC or EMS	Phase-4	1st January, 2024
137.	S-GW (Serving Gateway) or P-GW (Packet Data Network Gateway)	P-Gateway	Phase-4	1st January, 2024
138.	S-GW (Serving Gateway) or P-GW (Packet Data Network Gateway)	S-Gateway	Phase-4	1st January, 2024
139.	SMSC (Short Message Service Center)	SMSC	Phase-4	1st January, 2024
140.	GMLC (Gateway Mobile Location Centre)	GMLC for GSM or WCDMA	Phase-4	1st January, 2024
141.	GMLC (Gateway Mobile Location Centre)	GMLC for LTE or LTE-A	Phase-4	1st January, 2024
142.	EIR (Equipment Identity Register)	EIR for GSM or WCDMA	Phase-4	1st January, 2024
143.	EIR (Equipment Identity Register)	EIR for LTE	Phase-4	1st January, 2024
144.	Optical Fibre Cable	Hybrid Cable - Optical and Metallic	Phase-4	1st January, 2024
145.	Optical Fibre Cable	Optical Fibre Cable - ADSS on Aerial alignment	Phase-4	1st January, 2024
146.	Optical Fibre Cable	Optical Fibre Cable - ADSS along Power line	Phase-4	1st January, 2024
147.	Optical Fibre Cable	Optical Fibre Cable - Direct Buried	Phase-4	1st January, 2024
148.	Optical Fibre Cable	Optical Fibre Cable - DSA	Phase-4	1st January, 2024
149.	Optical Fibre Cable	Optical Fibre Cable - Duct	Phase-4	1st January, 2024
150.	Optical Fibre Cable	Optical Fibre Cable - In home	Phase-4	1st January, 2024
151.	Optical Fibre Cable	Optical Fibre Cable - Indoor	Phase-4	1st January, 2024
152.	Optical Fibre Cable	Optical Fibre Cable – Indoor/ Outdoor	Phase-4	1st January, 2024
153.	Optical Fibre Cable	Optical Fibre Cable - Micro-Duct	Phase-4	1st January, 2024
154.	Optical Fibre Cable	Optical Fibre Cable – Access Outdoor	Phase-4	1st January, 2024
155.	Optical Fibre Cable	Optical Ground Wire -OPGW	Phase-4	1st January, 2024
156.	SIM (Subscriber Identity Module)	CSIM (CDMA SIM)	Phase-4	1 <sup>st</sup> August, 2024
157.	SIM (Subscriber Identity Module)	eSIM (Embedded SIM)	Phase-4	1 <sup>st</sup> August, 2024
158.	SIM (Subscriber Identity Module)	eUICC (Embedded Universal Integrated Circuit Card)	Phase-4	1 <sup>st</sup> August, 2024
159.	SIM (Subscriber Identity Module)	RUIM (Removable User Identity Module)	Phase-4	1 <sup>st</sup> August, 2024
160.	SIM (Subscriber Identity Module)	SIM	Phase-4	1 <sup>st</sup> August, 2024
161.	SIM (Subscriber Identity Module)	UICC (Universal Integrated Circuit Card) based ISIM	Phase-4	1 <sup>st</sup> August, 2024
162.	SIM (Subscriber Identity Module)	USIM (Universal Subscriber Identity Module)	Phase-4	1 <sup>st</sup> August, 2024
163.	Radio Broadcast Receiver RBR	All Motor vehicle RBRs requiring external power	Phase-4	1st January, 2024
164.	Radio Broadcast Receiver RBR	All RBRs driven with inbuilt power source	Phase-4	1st January, 2024
165.	Radio Broadcast Receiver RBR	Other devices having RBR interface	Phase-4	1st January, 2024

166.	Optical Fibre - Single Mode	Optical Fibre - G.652.D	Phase-4	1st January, 2024
167.	Optical Fibre - Single Mode	Optical Fibre - G.655	Phase-4	1st January, 2024
168.	Optical Fibre - Single Mode	Optical Fibre - G.656	Phase-4	1st January, 2024
169.	Optical Fibre - Single Mode	Optical Fibre - G.657. A1	Phase-4	1st January, 2024
170.	Optical Fibre - Single Mode	Optical Fibre - G.657. A2	Phase-4	1st January, 2024
171.	Optical Fibre - Single Mode	Optical Fibre - G.657. B3	Phase-4	1st January, 2024
172.	Optical Fibre - Single Mode	Optical Fibre -G.654.D	Phase-4	1st January, 2024
173.	Optical Fibre - Single Mode	Optical Fibre -G.654.E	Phase-4	1st January, 2024
174.	Base station for cellular network for 5G	BTS with Multi Standard Radio	Phase-5	1st October, 2024
175.	Base station for cellular network for 5G	Active Antenna System-OTA	Phase-5	1st October, 2024
176.	Base station for cellular network for 5G	Base Station 5G NR Type 1C	Phase-5	1st October, 2024
177.	Base station for cellular network for 5G	Base Station 5G NR Type 1H	Phase-5	1st October, 2024
178.	Base station for cellular network for 5G	Base Station 5G NR Type 10	Phase-5	1st October, 2024
179.	Base station for cellular network for 5G	Base Station 5G NR Type 20	Phase-5	1st October, 2024
180.	Base station for cellular network for 5G	Hybrid Active Antenna System	Phase-5	1st October, 2024
181.	5G Core	AMF (Access and Mobility Management Function)	Phase-5	1st July, 2024
182.	5G Core	AuSF (The Authentication Server Function)	Phase-5	1st July, 2024
183.	5G Core	BSF (Binding Support Function)	Phase-5	1st July, 2024
184.	5G Core	CHF (Charging Function)	Phase-5	1st July, 2024
185.	5G Core	NEF (Network Exposure Function)	Phase-5	1st July, 2024
186.	5G Core	NSSF (Network Slice Selection Function)	Phase-5	1st July, 2024
187.	5G Core	PCF (Policy Control Function)	Phase-5	1st July, 2024
188.	5G Core	SMF (Session Management Function)	Phase-5	1st July, 2024
189.	5G Core	SMSF (Short Message Service Function)	Phase-5	1st July, 2024
190.	5G Core	UDM (Unified Data Management)	Phase-5	1st July, 2024
191.	5G Core	UDR (Unified Data Repository)	Phase-5	1st July, 2024
192.	5G Core	UPF (User Plane Function)	Phase-5	1st July, 2024
193.	Hypervisor	Hypervisor	Phase-5	1st October, 2024
195.		E-Band MW Full Outdoor		1.4 J. 1. 2024
195. 194.	E-band Fixed Radio Relay System	E-Band WW Full Outdoor System	Phase-5	1st July, 2024
	System E-band Fixed Radio Relay System		Phase-5 Phase-5	1st July, 2024
194.	System E-band Fixed Radio Relay	System E-Band MW Outdoor System		•