

Annual Action Plan - TEC (2021-22)				
	Item	Division	Proposed Target	Remarks
<b>A</b>	<b>PROJECT</b>			
<b>(a)</b>	<b>Lab Projects</b>			
<b>1</b>	<b>Establishment of Security Lab</b> i. Approval of Tender Document ii. Floating of Tender iii. Tender Opening & Techno-commercial Evaluation iv. Financial Evaluation, Approval of report v. Issuance of Purchase Order vi. Spplly & Installation vii. Aceptance Testing & Commissioning	TS	Q2 Q2 Q3 Q3 Q4 Q4 Q4 (20%)	
<b>2</b>	<b>Establishment of Access Lab</b> i. Finalization of Draft tender document ii. Approval of Tender Document & Floating of tender iii. Tender Opening & Techno-Commercial Evaluation iv. Financial Evaluation, Approval of Report and Issuance of Purchase Power	AL	Q1 Q2 Q3 Q4 (30%)	
<b>3</b>	<b>Establishment of CPE &amp; TL Lab</b> i. Finalisation of Tender Document for CPE&TL Labs; ii. Approval of Tender document for CPE & TL Labs iii. Floating of tender for CPE & TL Labs (including PBC, Modifications and approvals); iv. Opening, evaluation, approval of TEC reports and finalisation of tender v. Issuance of Advance Purchase Order signing of agreements and other tender formalities vi. Placing of P.O. for CPE&TL lab equipments vii. Supply, installation & validation of test equipments viii. Commissioning of CPE & TL Labs	CPE & TL	Q1 Q1 Q2 Q3 Q3 Q4 Q4 (30%)	
<b>4</b>	<b>Establishment of EMI/EMC Lab</b> i. Finalisation of space ii. Finalization of Project estimate iii. Approval of project estimate iv. Approval of draft Tender Document v. Floating of tender	GP	Q1 Q1 Q2 Q3 Q4 (10%)	
<b>5</b>	<b>Setting up of safety Lab</b> i. Preparation of Tender document and its approval for safety Lab ( subject to approval of Project Estimate by DOT-HQ ) ii. Infrastructure work ( electrical & civil work ) at the space allotted for lab ( 1st Floor, TEC Building) ( Provision of fund in BE/RE required after approval of PE ) iii. Floating of tender for phase-1 of Safety lab, conduction of pre-bid meeting & approval of pre bid meeting iv. Technical & Financial bid evaluation v. Issuance of APO & PO by MM unit (for phase-1)	SL	Q1-Q2  Q3  Q3  Q4 (10%)	
	<b>Total Projects</b>		<b>5</b>	
<b>(b)</b>	<b>Other Projects</b>			
<b>1</b>	<b>Online EMF Monitoring Program</b> i. Finalization of Project Estimate ii. Preparation & Finalization of Tender document	R	Q3-Q4	
<b>2</b>	TEC E-Office Instance implementation in NIC cloud	IT	Q1-Q4	
<b>3</b>	LAN Upgradation of TEC Network	IT	Q1-Q4	
	<b>Total other Projects</b>		<b>3</b>	
<b>B</b>	<b>MTCTE</b>			
<b>1</b>	<b>MTCE Portal</b> i. Validation of MTCTE portal for Phase-II ii. Completion of MTCTE portal for Phase III (Cert Certification) iii. Re-mapping of Cloud Architecture-Load Balancer and SAN iv. Acceptance of applications for voluntary testing and certification through MTCTE portal v. Local Help Centres for Manufacturers and Solution providers	TC	Q1 Q2 Q3 Q3 Q4	
<b>2</b>	Management of TBT Enquiry Point - Responding to STCs and other enquiries from DoC & other obligations of enquiry point.	TC	Continuous activity	
<b>3</b>	Activities related to Technical Regulations (TRs) - Compliance to DoC for Technical Regulations (TRs) to fill regulatory gaps.	TC	Continuous activity	
<b>4</b>	Indentification of remaining and emerging products for preparation of ERS	TC	Continuous activity	List of ERS for products identified in the FY 2020-21 (pending) and FY 2021-22 attached as per Annexure-I and Annexure-II respectively
	<b>Total</b>		<b>4</b>	

<b>C TECHNOLOGY APPROVAL</b>				
1	Technology approval of NGPON2 offered by CDoT	FA	Q1-Q4	(Subject to availability of required Hardware)
2	Technology Approval of IP-EPABX of Punjab University	NGS	Q1	
3	Technology Approval for DWDM system of C-DoT	Tx	Q2	
<b>Total Technology Approvals</b>			<b>3</b>	
<b>D STANDARDS (as ERs/GRs/IRs/SRs/ SDs)</b>				
<b>(a) New Standards</b>				
1	Energy Consumption Rating (ECR) release 2.0 (SD)	FA	Q1	It will cover Telecom Infrastructure used in data centres and telecom centres and IoT Gateway.
2	10G EPON (GR)	FA	Q2	
3	25G/50G EPON (GR)	FA	Q3	
4	10G EPON (ERs)	FA	Q4	
5	25G/50G EPON (ER)	FA	Q4	
6	Drones (UAV) (ER)	R	Q1	
7	PTP, PMP links in V band (GR)	R	Q4	
8	Networking Function Virtualization Infrastructure (NFVI)/ Hypervisor (ER)	IT	Q1	
9	CoTS/Cloud based products - Servers (ER)	IT	Q2	
10	CoTS/Cloud based products - Cloud Operating System (COS) (ER)	IT	Q3	
11	Hybrid Set-up Boxes for streaming purposes (Streaming devices like Chromecast, Fire Stick etc) (ER)	IT	Q3	
12	Server (ER)	IT	Q4	
13	Data Centre (SD)	IT	Q4	
14	Smart Bicycle/Yulu (ER)	SN	Q3	
15	Metal Free Optical Fibre Cable with Double HDPE Sheath (GR)	Tx	Q3	
16	Metal Free Optical Fibre Cable with Double HDPE Sheath (Ribbon Type) (GR)	Tx	Q3	
<b>17</b>	<b>ERs of M2M/IoT Devices:</b> i. ER of Smart Camera is being updated as per the requirements of CCTV. Expected to be finalised by March/ April 2021. ii. ERs for more IoT devices will be prepared based on Industry requirement and request from Ministry of Commerce/ concerned user ministries. Example: Personal attendance devices, connected temperature monitoring device etc. iii. M2M/ IoT Subsystem	<b>IoT</b>	<b>Continuous Activity</b>  Q1  Q1-Q4	<b>(PPP-MII Requirement)</b>
18	L2/L3 Encryptors (GR)	TS	Q1	(PPP-MII Requirement)
19	Security and Surveillance communication system (video and sensor based) including perimeter security systems (GR or ER)	TS		(PPP-MII Requirement)
<b>Total New Standards (GRs/IRs/ERs/SRs)</b>			<b>19</b>	
<b>(b) Revision of Standards</b>				
1	Lithium Ion Battery for Telecom Applications TEC/GR/TX/LIB-001/01 MAR 2016 (GR)	FA	Q4	
2	Structured LAN Cabling (2005) (GR)	IT	Q2	
3	Firewall System (2014) (GR)	IT	Q2	
4	Intrusion Detection System (2018) (GR)	IT	Q2	
5	Intrusion Prevention System (2018) (GR)	IT	Q3	
6	LAN Switch (2014) (GR)	IT	Q3	
7	eMS for NGN (2016) (GR)	IT	Q3	
8	Cloud Infrastructure (2012) (GR)	IT	Q3	
9	MPLS SDN Router (2016) (GR)	IT	Q4	
10	Network Function Virtualization Infrastructure (NFVI) and Virtual Infrastructure Manager (VIM) (2018) (GR)	IT	Q4	
11	Standard on Electromagnetic Compatibility Standard for Telecommunication Equipment (No.: TEC/SD/DD/EMC-221/05/OCT-16) (SD)	R	Q4	
12	PACKET MICROWAVE RADIO (GR)	R	Q2	
13	EQUIPMENT (15, 18 and 23GHz) (No.: TEC/GR/TX/PMR-001/01.MAR-13) (GR)	R	Q2	
14	HYBRID MICROWAVE RADIO (GR)	R	Q3	
15	New Standard on Radio Devices in unlicensed band 2.4 GHZ (SD/RAD-01/01.SEP 2005 (SD)	R		need revision as referred in many other standards of TEC including Cordless Telephone as requirement came from FN div

16	Diameter signalling controller (TEC/GR/SW/DSC-001/01/Mar13) (GR)	NGS	Q2	
17	Policy and charging rule function (TEC/GR/SW/PCF-001/01 MAR-14) (GR)	NGS	Q3	
18	Base Station (ER)	MT	Q1	
19	Mobile User Equipment (ER)	MT	Q1	
20	gNB (GR/ Standard)	MT	Q4	
21	5G Core Network (NG Core) Elements (GR/Standard)	MT	Q4	
22	Raw material for manufacturing of Optical fibre cable (TEC/GR/TX/ORM-001/05/DEC-17) (GR)	Tx	Q1	
23	Fibre termination and Distribution Box (For FTTH application) (TEC/GR/TX/FTB-02/02/APR-2010) (GR)	Tx	Q2	
24	Multi-Service Optical Transport Network (OTN) platform with DWDM bearer transport system for Core metro Network application (TEC/GR/TX/OTN-001/02/DEC-17) (GR)	Tx	Q3	
25	Optical Dispersion Analyser (GR/ODA-01/01.MAR.2007) (GR)	Tx	Q1	
26	Optical Spectrum Analyser (GR/OSA-01/02.AUG.2007) (GR)	Tx	Q2	
27	Digital Distribution Frame (TEC/GR/TX/DDF-001/05/SEP-12) (GR)	Tx	Q3	
28	Amendments in the GRs for Optical fibre cable (GR)	Tx		
29	Incorporation of parameters namely <b>Energy Consumption Rating (ECR)</b> and <b>Energy Passport (EP)</b> as per FA div new Standard on "Energy Consumption Rating and Energy Passport for Telecommunication Products, Equipment and Network/ Service (No- TEC 74046:2020)"	All	Continuous activity	In compliance to FA Division Letter no TEC/FA/STD/ECR_EP/2020-21 dated 15.03.2021
<b>Total Revision of Standards (GRs/IRs/SD/ERs)</b>			<b>29</b>	
<b>(c)</b>	<b>Withdrawal of Standards</b>			
1	Precision Manometer for use in Cable Pressurization of P&T Cables G/CPS-04/ 01.OCT 83	FA	Q1	Total 11 GR/ Guideline
2	Joining Kits for Pressurised Cables (ALSS & WRST) with Errata Dated 25.11.93(Part 1 & 3) G/CJM-21/01. AUG 93	FA	Q1	
3	Joining Kits for Press Cables (TSP) with Errata Dated 25.11.93(Part 2) G/CJM-22/ 01.AUG 93	FA	Q1	
4	Low Power Halide Leak Detector G/CPS-01/ 01.FEB 93	FA	Q1	
5	Microprocessor Based Gas Pressure Alarm Panel G/CPS-02/ 01.FEB 93	FA	Q1	
6	Modified Blow Lamp for Thermoshrinking Operation G/CJM-25/ 02.NOV 94	FA	Q1	
7	Air Flow Meters to be used for Cable Pressurization G/CPS-03/ 02.MAR 95	FA	Q1	
8	Protector Box (Outdoor type) to mount G.D.tubes G/CTN-16/02 APR 95	FA	Q1	
9	Positive Temperature coefficient (PTC) Thermistor G/PTN-05/ 01.OCT 97 (Re-affirmed in march 2004)	FA	Q1	
10	Guidelines on Measurement Metrics and Measurement Methodology for Router and Switches for Green Passport TEC/GL/TX/ GT-001/01/MAR-15	FA	Q1	
11	Guidelines on Measurement Metrics and Measurement Methodology for GSM BS In Static Mode for Green Passport TEC/GL/TX/ GT-002/01/MAR-16	FA	Q1	
12	40/80 Chanel DWDM Equipment with channel Bit-rates upto 40Gbps for Core Network Applications (TEC/GR/TX/WDM-007/01/ APR-2010)	Tx		
13	Integrated Fibre Termination and Distribution System (GR/FTD-01/01.SEP.2003)	Tx		
14	Multi Wavelength Meter (GR/MWM-01/01.DEC.2002)	Tx		
15	High Count Armoured Optical Fibre Cable (Ribbon Type for Access Network) (GR/OFC-06/01.JAN.2001)	Tx		
16	Metal Free Optical Fibre Cable (GR/OFC-01/04.SEP.2003)	Tx		
17	Armoured Optical Fibre Cable for Direct Burial (Underground) (GR/OFC-02/03.SEP.2003)	Tx		
18	Non Zero Dispersion Shifted Single Mode Armoured Opticl Fibre Cable (GR/OFC-08/01.AUG.2001)	Tx		
19	Ethernet Traffic Analyzer for Ethernet Transport Service Testing - Table-top model (GR/ETA-05/01.DEC.2007)	Tx		
20	10G Ethernet Traffic Analyzer for Ethernet Transport Service Testing (GR/ETA-06/01.SEP.2008)	Tx		
21	Optical Fibre Cable for Concrete surfaces (GR/OFC-09/01.MAY.2004)	Tx		
22	GR on High Speed Data Circuit Tester (2005)	IT	Q2	
23	GR for 64 kbps Line drivers (2006)	IT	Q2	
<b>Total Withdrawl of Standards (GRs/IRs/SDs/Ers)</b>			<b>23</b>	
<b>(d)</b>	<b>New Test Guides (TSTP)</b>			
1	TSTP of GR for 10G EPON	FA	Q2	
2	TSTP of GR for 25G /50G EPON	FA	Q3	
3	TSTP of GR for Lithium Ion Battery for Telecom Applications TEC/GR/TX/LIB-001/01 MAR 2016	FA	Q4	
4	Standard Operating Procedure for EMF Measuring Instrument used in EMF exposure Assessment	R	Q3	
5	TSTP of GR on ISDN Protocol Tester	NGS	Q1	
6	TSTP of GR on ISDN Handheld Tester	NGS	Q1	
<b>Total New Test Guides (TSTPs)</b>			<b>6</b>	
<b>(e)</b>	<b>Revision of Test Guides (TSTP)</b>			
1	TSTP of GR on ISDN Network Termination (GR/NT1-01/03.MAY 2005)	NGS	Q1	
2	TSTP of GR on Diameter signalling controller(No. TEC/GR/SW/DSC-001/01/MAR-13)	NGS	Q2	

3	TSTP of GR on Policy and charging rule function(No.TEC/GR/SW/PCF-001/001/MAR-14 )	NGS	Q3	
<b>Total revision of Test Guides (TSTPs)</b>			<b>3</b>	
<b>(f)</b>	<b>Adoption of Standards</b>			
1	Adoption of OneM2M Rel 3 standards transposed by TSDSI	IOT STD	Q1-Q4	recommendations of CC report on adoption of oneM2M Rel2 as a National standard. b. oneM2M Rel3 transposed documents received from TSDSI for adoption. Action initiated. c. Study for "Testing and Certification of oneM2M standards based products" to create framework.
2	Adoption activity of Cloud Interoperability & Portability (CIP) Standard Reference report prepared by TSDSI.	TS STD	Q1-Q2	
3	Adoption of 5G Standards transposed by TSDSI	MT STD	Q3-Q4	
4	Adoption of CPRI Standard of TSDSI	Tx STD		
<b>Total Adoption of Standards</b>			<b>4</b>	
<b>E</b>	<b>STUDY PAPERS/ WHITE PAPERS/ TECHNICAL REPORTS</b>			
1	Strategies and policies for the collection, pre-treatment, dismantling, valorization and final disposal of WEEE (Waste electrical and electronic equipment)	FA	Q4	
2	Ethical AI	FN	Q1	
3	Impacts of AI and Blockchain on Future Networks	FN	Q3	
4	Regulatory Aspects of Artificial Intelligence	FN	Q4	
5	5G NR & EMF: Impact of EMF limits and other factors on 5G deployment with varying bandwidths and antenna configuration	R	Q2	
6	Human Exposure to EMF from 5G devices used in close proximity to human body (SAR as well as power density measurement considerations)	R	Q4	
7	Study paper-I	IoT		
8	Study paper-II	IoT		
9	TR on Future Communication Technologies & Use cases in IoT domain	IoT	Q1	Draft Technical Report has been prepared and is under discussion for finalisation. Work is expected to be completed by Q1
10	TR on Smart Grid	IoT	Q4	Work started after creation of WG. Expected to be completed by Q4
11	Introduction to Quantum Computing	IT	Q1	
12	Issues and Challenges in Cloud Infrastructure	IT	Q3	
13	Open RAN	MT	Q2	
14	Trust Registry for Devices and Applications	MT	Q4	
15	Study Paper 1-	SN	Q2	
16	Study Paper 2-	SN	Q4	
17	Report on 5G in e-Health	SN	Q4	
18	Report on WG 5G in Automotives	SN	Q3	
19	Report on WG 5G in Smart Water & Sanitation	SN	Q2	
20	Report on WG PR 11- NTIPRIT	SN	Q1	
21	Study paper on Quantum Key Distribution	TS	Q3	
22	Study paper on Telecom Forensic and its use cases	TS	Q2	
23	Concept paper on Capacity(Test) assessment and Enhancing Test capabilities in the country for Telecommunication Sector	MRA	Q3	
24	Achieving Telecom Connectivity for all- Challenges & a way forward	AL	Q1	
25	Disposal of electronics memory devices to prevent abuse of information contained therein	AL	Q2	
26	Green Telecom	GP	Q4	
<b>Total Study Papers</b>			<b>26</b>	
<b>F</b>	<b>TECHNICAL WEBINARS/ CONFERENCES/ WORKSHOPS</b>			
1	Description Technology for Threat Detection and Cyber Security	IT	Q1	
2	Zero Trust Networks	IT	Q2	
3	Software Defined Networks	IT	Q3	
4	Data Anonymization	IT	Q4	
5	Open RAN Ecosystem	MT	Q1	
6	Dynamic Spectrum Sharing: 3GPP Perspective and its deployment in India	MT	Q2	
7	DA2GC and its application to Mission Critical Use Cases	MT	Q3	
8	Industry 4.0	MT	Q4	
9	Autonomous Vehicles	SN	Q1	
10	Smart water & Sewage	SN	Q2	
11	Robotic Surgery	SN	Q3	

12	Smart Governance/Environment and Pollution	SN	Q4	
13	5G Security	TS	Q1	
14	Malware Detection Mechanisms	TS	Q2	
15	Digital forensics	TS	Q3	
16	Personalisation of Embedded SIM	TS	Q4	
17	WiFi 6	R/IoT	Q1	
18	5G Specific Absorption Rate (SAR)	R	Q2	
19	5G EMF	R	Q3	
20	New Trends in Satellite Communications	R	Q4	
21	Digital Twin	IoT	Q2	
22	Future Communication Technology in IoT Domain	IoT	Q3	
23	Artificial Intelligence and its importance for Telecom Sector	FN	Q1	
24	AI and Big Data Analytics	FN	Q2	
25	Emerging Telecom Technology Trends	FN	Q3	
26	Conformance testing of various clauses of RFC	NGS	Q2	
27	5G Transport	NGS	Q4	
28	Fiberisation	Tx	Q1	
29	Green ICT	FA	Q2	
30	Holding Zonal workshops to create awareness about MTCTE (policy and implementation through portal)/ CAB designation/	RTECs	Continuous activity	
<b>Total Webinars/conferences/ workshops</b>			<b>30</b>	
<b>G National Working Groups (NWGs) for ITU-T SGs</b>				
1	NWG-05 (ITU-T SG5: Environment& Circular Economy.	R	continuous activities	
2	NWG-11 (ITU-T SG11: Signalling requirements, protocols, test specifications and combating counterfeit products)	NGS	Continuous activities	
3	NWG-12 (ITU-T SG12: Performance, QoS and QoE)	FN	Continuous activities	
4	NWG-13 (ITU-T Sg 13: Future networks, with focus on IMT-2020, cloud computing and trusted network infrastructures)	MT	Continuous activities	
5	NWG-15 (ITU-T SG15: Transport, Access and Home 1. ITU Contribution on "L.FONT- Fibre Optical Network Terminal Box "	TX/ FA FA	Continuous activities Q1	
6	NWG-16 (ITU-T SG16: Multimedia)	FN	Continuous activities	
7	NWG-17 (ITU-T SG16: Security)	TS	Continuous activities	
8	NWG-20 (ITU-T SG20: Internet of things (IoT) and smart cities and communities (SC&C) 1. Contribution related to Smart services in rural areas were submitted and presented in ITU-T SG-20 virtual meetings, July, Nov 2020 and RGM in Feb 2021 as the work item Y.SRC "Requirements for deployment of smart services in rural communities". This document is expected to be completed in 2021-22.	IOT	Continuous activities	
9	NSG-5 (ITU-R: Terrestrial Services) and NSG-4 (ITU-R : Satellite Services)	R	Continuous activities	
	<b>At least two meetings in a quarter by each NWG</b>	All	Target	Focus should be on (i) Contributions to ITU (ii) Conducting regular meeting of NWGs
<b>H CAB ACTIVITIES</b>				
1	Designation of Indian Labs as CABS/CBs	MRA	Q1-Q4	(Target 12, • Subject to receipt of Application) Q1 - 3 no.s Q2 - 3 no.s Q3 - 3 no.s Q4 - 3 no.s
2	Renewal of TEC Designated CABS	MRA	Q1-Q4	(Target 24) Q1 - 6 no.s Q2 - 9 no.s Q3 - 5 no.s Q4 - 4 no.s
3	Recognition of Indian/ Singapore CABS under MRA Scheme	MRA	Q2	Target-1
4	Revision of Domestic CAB Designation scheme /Procedure for CAB designation	MRA	Q2	Target-1
5	Development of online portal for CAB designation	MRA	Q3	
6	Site Visits and assessment of testing facilities of labs for CAB designation	All	Continuous activity	
<b>I OTHER ACTIVITIES</b>				
1	Devising Framework for <b>IoT Trust Centre</b>	IoT	Q1-Q2	Work in progress in coordination with NSCS. Expected to be completed by

2	Framework for Security by design principle for <b>M2M device</b> manufacturer	IOT	Q1-Q4	a. Draft guidelines for 'Consumer IoT Security' have been prepared, comments received and under discussion. Expected to be completed by Q1. b. Draft report on Security by Design guidelines has been prepared and under discussion in WG. Expected to be
3	IOT Standards for <b>Smart City</b>	IoT	Q1	Draft report of the committee is under finalisation. Expected to be released by March 2021/ April 2021.
4	Machine KYC	IoT	Continuous Activity	Concept to be studied. Work group to be formed.
5	IoT Experience Centre	IoT	Continuous Activity	Work under progress to add more use-cases and convert it into IoT innovation centre
6	Technical/policy inputs to DoT and participation in meeting on M2M/ IoT/ 5G related issues	IoT	Continuous activity	
7	Technical/policy inputs to DoT on M2M/ IoT/ 5G related issues	IoT	Continuous Activity	
8	meetings/Conferences on M2M/ IoT in India	IoT	Continuous Activity	
9	5G Working Groups	MT	Continuous activity	
10	Standardization in Artificial Intelligence technologies - development of <b>Indian Artificial Intelligence (AI) Stack</b>	STD	Q1-Q4	Continuous activity
11	Setting up of National Accreditation Board of Telecom (NABT)(Coordination for approval of committee report and follow up process)	STD	Continuous Activity	
12	Coordination for cross-sectoral standardization and other standardization activities	STD	Continuous Activity	
13	Signing of adoption agreement between TEC and IEEE	STD	Continuous activity	
14	Signing of General MOU Cooperation between IEEE & TEC	STD	Continuous activity	
15	Subscription of IEEE Xplore Digital Library for TEC.	STD	Continuous Activity	
16	Coordination of Conversion of GR/IR into Standards by all divisions	STD	Q1-Q4	
17	Membership of National and International Standardization bodies like ETSI /IEC /IEEE /One M2M / TMF Forum/ LoRA Alliance/ IETF etc. (Subject to approval by DoT)	STD	Continuous Activity	
18	Coordination of all National working Groups (NWGs) in TEC and participation in the NWG meetings	STD	Continuous Activity	
19	Coordination of various activities related to PMI/PMA policy in Telecom sector and implementation thereof	STD	Continuous Activity	
20	Inviting Stakeholder requirement, compilation and approval of Annual Action Plan of TEC	STD	Continuous Activity	
21	Conversion of GR/IR into Standards	All	Target/ Continuous activity	FA Div - 33 GRs MT Div- 30 GRs/IRs FN Div- 35 GRs/IRs
22	Participation in specification development meetings with ITU, 3GPP, IEEE and other international bodies	All	Continuous activity	
23	Technical Assessment of Test Reports for certification under MTCTE Scheme and Voluntary Testing	All	Continuous activity	
24	Preparatory work for WTSA 2020 to be held in Hyderabad in March 2022.	All	Continuous activity	
25	Testing of Devices in IPV6 ready logo lab and Examination of IPV6 Ready logo test results	TS	Q1-Q4	
26	Review of IPV6 Ready logo examination Report received from other international labs	TS	Q1-Q4	
27	Implementation of MoU with CSIR- CEERI	FN	Continuous activity	
28	Implementation of MoU/Coordination with TCIL	FN	Continuous activity	
29	National Digital Communications Policy (NDCP) - 2018 Implementation & Coordination	FN	Q1 to Q4	
30	Quarterly Rolling Plans (QRPs) for foreign visits	FN	Q1 to Q4	
31	Provide technical inputs on international related things like Indo-US, Indo-Japan, Indo-EU etc.	FN	Continuous activity	
32	Providing technical inputs to safe city project of Delhi Police	FN	Q1-Q4	
33	Coordination and providing TEC's Technical inputs for "Technology DoTs" newsletter published by DoT	FN	Q1-Q4	
34	COA for FSOC	Tx		
35	Preparation of pending TSTPs	Tx		
36	Hindi Rajbhasha related varoius activities	NGS	Q1-Q4	
37	Hindi Pakhwad Aayojan in Sep.'2021	NGS	Q2	
38	Hindi Karyashala	NGS	Min. Two in the year	
39	TEC Hindi Magazine (Sancharika) yearly	NGS	Q4	
40	Hindi Progressive reports to DOT,Rajbhasha vibhag (Quaterly,halfyearly,Annually )	NGS	Q1-Q4	
41	TEC News Letter in each quarter - 4	NGS	Q1-Q4	

42	Processing of Technology Approval Case of CDOT	R	Continuous activity	
43	Participation in TAG and APEX committee on Satellite Communications.	R	Continuous activity	
44	CMRTS/PMRTS Licence/ CUG-VSAT License/Test Cases	R	Continuous activity	
45	Activities related to SAR testing and SAR lab of TEC	R	Continuous activity	
46	SCOMET related activities	TC	Continuous activity	
47	TEC website maintenance	IT	Q1-Q4	
48	Intranet maintenance	IT	Q1-Q4	
49	Wi-Fi Maintainance & Services	IT	Q1-Q4	
50	Maintenance of LAN and Internet Connectivity	IT	Q1-Q4	
51	Registration of applications for TAC/IAC/ CoA, scrutiny and evaluation of documents	RTECs	Continuous activity	
52	Testing of products as per TEC GR/IR or Applicant's own specifications, evaluation of test reports, submission of ARDC for issue of Type Approval (TA) Certificate , Interface Approval (IA) Certificate & Certificate of Approval (CoA).	RTECs	Continuous activity	
53	Testing of products and evaluation of test reports for MTCTE	RTECs	Continuous activity	
54	Coordination with FA division in Preparation of GR for Modular DC-DC UPS to power low power devices like routers, ONT's, DVR etc	RTECs		
55	Revision of Voluntary Certification Procedure(CP) document (Nov-2015) for TA, IA, CoA and Tech Approval Certification	RC	Q1	
56	Validation of Online process for Voluntary certification from time to time ( subject to development of Module by CDOT under AMC )	RC	Q1-Q2	
57	ISO 9001:2015 Certification related matter 1. Internal auditing of TEC Divisions in June 2021 & conduction of MRM for ISO prior to external Surveillance Audit 2. Conduction of External Surveillance Audit in July-Aug 2021 by External Certification agency 3. Internal auditing in Dec-2021	RC	Q1 Q2 Q3	
58	Coordination with RTECs regarding status for pending Voluntary Certification cases, related matter and appraisal to Sr. DDG, TEC ( monthly basis )	RC	Continous Activity	
59	Issuance of Voluntary Certificates by RC Division	RC	Continous Activity	
60	Compilation, verification and updation of documents on TEC website ( Standard documents, Information sheet, TSTP etc.) in coordination with Core & IT Division	RC	Continous Activity	
61	Coordination with FA division for Developing/ Finalization of ECR document delineating the test procedures and measurement methodologies utilized	GP	Continuous activity	
62	Approach towards Sustainable Telecommunications	GP	Continuous activity	
63	Testing of DUT offered for testing	CL	Continuous activity	
64	Training of officers at OEM Location	CL	Q2 &03	
<b>Total (other activities)</b>			<b>64</b>	
<b>J</b>				
<b>Activities under SPARK Mission</b>				
1	Study paper on methodology for spectrum sharing and co-existence of wireless communication services (SPARK Mission)	R	NA	
2	Concept paper on Centre for new technology incubation/ experimentation (SPARK Mission)	MT	NA	
3	Cocept paper on R&D Centre for Mobile Handsets/ CPEs (SPARK Mission)	MT	NA	
4	1. Design of brochure, folders, mementoes/insignia of TEC 2. Infra improvement & renovation of reception area (SPARK Mission)	Admn	NA	
5	Financial delegation for capacity building and hiring the professional services (SPARK Mission)	Admn	NA	
6	Task Force for emerging Technologies (SPARK Mission)	FN	NA	
7	1. Indian SSC ICT standards 2. Ranking framework 3. Collaboration with other ministries etc (SPARK Mission)	IOT	NA	
8	Smart City related capacity building, consultancy, design, PMU, validation, audit. (SPARK Mission)	IoT	NA	
9	Training subject experts/ assessors for various testing domains. (SPARK Mission)	MRA	NA	
10	Training in ISO 170XX series of 24 candidates (SPARK Mission)	P&T	NA	
11	Workshop for mobile/ Wi-Fi coverage testing, EMF exposure assessment, security auditing (SPARK Mission)	R	NA	
12	Modern ICT tools for RF designing, evaluation, coverage testing set up, optimization, validation (SPARK Mission)	R	NA	
13	Public Purchase Preference to Make in India (PPP-MII) - Institutional framework, Compalint resolution mechanism, Audit methodology and empanelment of auditor for local content examination (SPARK Mission)	STD	NA	
14	Standard framework for collaboration with C-DoT (SPARK Mission)	STD	NA	
15	Workshop for mobile/ Wi-Fi coverage testing, EMF exposure assessment, security auditing (SPARK Mission)	TS	NA	
<b>Total</b>			<b>15</b>	

**Annexure-I**

**ER of products Identified for FY 2020-21(Pending)**

<b>S.No.</b>	<b>Name of ER</b>	<b>Concerned Division</b>
1	Serving/Gateway GPRS Support Node (SGSN/GGSN)	MT
2	Mobile Switching Centre (MSC)/MSC-S	MT
3	Radio Broadcast Receiver( To be converted to portal generated ER by division)	Radio
4	Optical Fibre Cable	Tx
5	HLR/AuC/HSS	MT
6	Subscriber Identity Module (SIM)	MT
7	OMC/EMS/NMS/OSS	MT
8	OTA Platform and Device Manager Platform/FOTA	MT
9	4G S-Gateway	MT
10	4G P-Gateway	MT
11	Short Message Service Centre (MSC)	MT
12	GMLC	MT
13	Service Control Point (SCP)	MT
14	SFP/XFP	Tx
15	Infiniband Switch	IT
16	Drones	Radio
17	IoT and M2M devices	IoT
18	Video Conferencing Equipment	IT
19	Service Mobile Location Center SMLC	MT
20	Cell Broadcast Center (CBC)	MT

13/04



**Annexure-II**

**ER as products Identified for FY 2021-22**

S.No.	Name of ER	Concerned Division	
1.	Commercial off the Shelf (CoTS) / Cloud based Telecom Products*	Physical Servers	IT
		Virtualization function	IT
		Application Services	Respective Core Division
2	CCTV Camera (either modification to Smart Camera ER or preparation of new ER)*	IoT	
3	E-Band Microwave product	Radio	
4	V-Band Microwave product	Radio	
5	ER/TSTP for 5G-NR	MT	
6	Antennas*	Radio	
7	IoT sensors	IoT	
8.	Smart Home Appliances like AC, Fridge, Lighting, TV	IoT	
9.	Radio Navigational equipment	Radio	
10.	Wireless charging equipment	Radio	
11	Digital Assistants (Alexa, Google Home, Mi, Apple Home Pod)	Radio	
12	Projectors (WiFi, Ethernet), Smart Digital Boards	FN	
13.	Hybrid Set up Boxes for streaming purposes, Streaming devices like Chromecast, Fire Stick etc)	IT	
14.	Laptops with Wifi /Cellular connectivity	MT	
15.	Optical Network Extender	FA	
16.	Photonic Service Interconnect	FA	
17.	Photonic service demarcation	FA	

\*Note – Already notified the products mentioned at S. No. 1-3 to concerned division vide office ID No. 6-11/2021-TC/TEC dated 20.01.2021

6/4/4