

Department of Telecommunications

**1. Defence Spectrum - Optical Fibre Cable Based Network for Defence Services (CS)**

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOMES 2021-22			
	2021-22	Output	Indicators	Targets 2021- 22	Outcome	Indicators	Targets 2021-22
5,200.00	1.	Laying of OFC	1.1. Total % of OFC laid out of total KM OFC laying work that has been executed for the entire project	100%	1. Countrywide secure, Multi service and Multi-Protocol Converged Next Generation Network	1.1. % of OFC links commissioned for the entire project	100%
	2.	Placement of Purchase Orders for equipments	2.1. Total % of equipment components for which PO placed for the entire project	100%	2. Countrywide secure, Multi service and Multi-Protocol Converged Next Generation Network	2.1. Supply, Installation, Testing & Commissioning (SITC) of various components for the entire project (progress in percentage)	100%

**2. Compensation to Service Providers for Creation and Augmentation of telecom infrastructure (CS)**

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOMES 2021-22		
	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators
9,000.00	<b>a. BharatNet Project</b>					
	1.	Gram Panchayats connected with high-	1.1. Number of GPs connected through	2,20,000	1. Utilization status of BharatNet	1.1. Bandwidth utilization (in Gbps)

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOMES 2021-22			
	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators	Targets 2021-22
	speed broadband	Optical Fibre/Radio/Satellite (cumulative in nos.)			infrastructure		
		1.2. Number of GPs made service ready (cumulative in nos.)	2,20,000			1.2. Dark Fiber utilization (cumulative km)	35,000
		1.3. Total km of OFC laid (cumulative in kms)	6,70,000			1.3. Data Consumption (in TB) (per month)	3,000
		1.4. Number of GPs in which Wi-Fi Access Points installed (cumulative in nos.)	1,20,000				
		1.5. Total number of FTTH connections (cumulative in nos.)	6,50,000				
<b>b. Comprehensive Telecom Development Plan (CTDP) for North-Eastern Region</b>							
	1. Provision of 4G based mobile services in Arunachal Pradesh and 2 districts of Assam	1.1. Number of mobile towers installed (cumulative in nos.) 1500 towers	600	1. Availability of 4G based mobile services in Arunachal Pradesh and 2 districts of Assam	1.1. Number of mobile towers radiating (cumulative in nos.)	400	
	2. Provision of 4G based mobile services in Meghalaya	2.1. Number of mobile towers installed (cumulative in nos.)	600	2. Availability of 4G based mobile services in Meghalaya	2.1. Number of mobile towers radiating (cumulative in nos.)	500	
<b>c. Comprehensive Telecom Development Plan (CTDP) for Islands</b>							
	1. Provision of 4G Mobile connectivity in uncovered villages and seamless cover age on NH-223 in A&N islands	1.1. Number of mobile towers to be commissioned (cumulative in nos.)	124	1. Provision of 4G Mobile connectivity in uncovered villages and seamless cover age on NH-223 in A&N	1.1. Number of uncovered villages with mobile connectivity provisioned (cumulative in nos.)	85	

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	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators	Targets 2021-22
					islands		
	<b>d. Scheme for Mobile Communication Services in LWE Affected Areas (Phase-II)</b>						
	1. Provision of Mobile Services in Left Wing Affected Areas (Phase-II)	1.1. Number of mobile towers installed (cumulative in nos.)	1,000	1. Increase Mobile penetration with upgraded technology in these areas specially to security agencies of MHA etc	1.1. Number of radiating sites (cumulative in nos.)	500	
	<b>e. 354 Uncovered Villages Scheme</b>						
	1. Provision of Mobile Services in 354 uncovered villages of Ladakh & J&K, border and their priority areas	1.1. Number of mobile towers installed (cumulative in nos.)	354	1. Covering uncovered villages with mobile service	1.1. Number of mobile towers radiating (cumulative in nos.)	354	
					1.2. No. of villages covered with access to mobile telephony services (cumulative in nos. of the project target of 354 villages)	354	
	<b>f. Aspirational District Scheme</b>						
	1. Provision of mobile service in Aspirational districts	1.1. Number of mobile towers installed (cumulative in nos.)	350	1. Increase Mobile penetration with upgraded technology in Aspirational districts	1.1. Number of mobile towers radiating (cumulative in nos.)	250	
					1.2. Number of districts covered (cumulative in nos.)	16	

### 3. Wireless Planning and Coordination (CS)

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOMES 2021-22		
	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators
81.5	1. Procurement for 6 nos. of vehicle mounted V/UHF terminals for 6 new Wireless Monitoring Stations (WMSs) established under 11th FYP	1.1. Total nos. of V/UHF mobile monitoring vehicles procured	1	1. Mobile monitoring in V/UHF band will be carried out at respective WMS locations at Bhubaneshwar, Dehradun, Lucknow, Patna, Raipur and Vijaywada	1.1. No. of Occupancy/ vacancy assignments of spectrum bandwidth in V/UHF bands	45
		1.2. Total nos. of vehicles accepted, tested and commissioned	1		1.2. No. of Frequency interference assignments carried out by WMO at the respective locations of the 6 WMSs	45
	2. Procurement for 5 nos. of SHF terminals for five IMSs at Delhi, Mumbai, Chennai, Kolkata and Nagpur	2.1. Total nos. of SHF mobile monitoring vehicles procured	1	2. Mobile monitoring in SHF band will be carried out at respective IMSs of Delhi, Mumbai, Chennai, Kolkata & Nagpur	2.1. No. of Occupancy/ vacancy assignments of spectrum bandwidth in SHF bands	30
		2.2. Total nos. of vehicles accepted, tested and commissioned	1		2.2. No. of Frequency interference assignments carried out by WMO at respective locations	30
	3. Procurement for 5 nos. of Radio Noise measuring equipment for five Radio Noise Survey Units at Delhi,	3.1. Total no. of Radio Noise measuring equipment procured	5	3. Radio Noise measurements in the 9KHz to 6 GHz frequency band	3.1. No. of conducted Electromagnetic Susceptibility (EMS) measurements in the 9KHz to 6 GHz	100
		3.2. Total nos. of equipments	5		3.2. No. of conducted	100

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOMES 2021-22			
	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators	Targets 2021-22
		Mumbai, Chennai, Kolkata and Hyderabad	accepted, tested and commissioned		at Delhi, Mumbai, Chennai, Kolkata and Hyderabad	Electromagnetic Interference (EMI) measurements in the 9KHz to 6 GHz	
	4.	Procurement of 28 Radio receivers alongwith antennas for all the Wireless Monitoring Stations of WMO	4.1. Total no. of radio receivers along with antennas procured	28	4. Monitoring and measurements in the 9KHz to 6 GHz frequency band at all the Wireless Monitoring Stations of WMO	4.1. No. of ITU-compliant measurements (such as modulation index, occupied bandwidth, etc.)	840
			4.2. Total no. of radio receivers along with antennas accepted, tested and commissioned	28		4.2. No. of Occupancy/ vacancy assignments of spectrum bandwidth	420
						4.3. No. of Frequency interference assignments	420
	5.	Procurement of 6 fixed-HF monitoring facility with AMC for 6 new Wireless Monitoring Stations at Dehradun, Lucknow, Patna, Raipur, Bhubhaneshwar, Vijaywada	5.1. Total no. of fixed-HF monitoring facility procured	6	5. Monitoring and measurements in the 10KHz to 30MHz frequency band at all the respective Wireless Monitoring Stations of WMO	5.1. No. of ITU-compliant measurements (such as modulation index, occupied bandwidth, etc.)	180
			5.2. Total nos. of fixed HF monitoring facility accepted, tested and commissioned	6		5.2. No. of Occupancy/ vacancy assignments of spectrum bandwidth	180

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOMES 2021-22			
	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators	Targets 2021-22
	6.	Procurement of 4 Radio Network Analysis Measurement Equipment with AMC for International Monitoring Station at Delhi, Mumbai, Kolkata and Chennai	6.1. Total nos. radio network analysis measurement equipment procured	4	6. Monitoring of network parameters (Cell id, Country Code, Network Code, Basic Station Identification Code, etc) of cellular emissions in the 2G, 3G and 4G bands in the 350 MHz to 3500 MHz	6.1. No. of cellular emissions identified	200
			6.2. Total nos. radio network analysis measurement equipment accepted, tested and commissioned	4		6.2. No. of assignments of assistance to various users (govt. and private)	200
	7.	Establishments of various Wireless Monitoring Stations (WMSs) on its own land	7.1. Procurement of land for WMS Lucknow established under 11th Five Year Plan	Yes	7. Regular radio frequency monitoring assignments and identification of interference related issues	7.1. Number of frequency monitoring assignments carried out	0
			7.2. Procurement of land for WMS Hyderabad	Yes			
			7.3. Procurement of land for WMS Vijaywada	Yes			
			7.4. Procurement of land for WMS Patna	Yes			
	8.	Construction of office	8.1. Percentage completion of construction of office	100%	8. Construction of	8.1. No. of frequency monitoring assignments	150

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOMES 2021-22		
	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators
	buildings for Wireless Monitoring stations (WMSs) established on its own land	building for WMS Raipur		civil infrastructure will help in secure and safe monitoring as well as the safety of wireless installations	carried out	
		8.2. Percentage completion of construction of office building for IMS Nagpur	100%			
		8.3. Percentage completion of construction of office building for WMS Goa	100%			

#### 4. Telecom Engineering Centre (CS)

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOMES 2021-22		
	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators
20.6	1. Establishment of Security Lab	1.1. Commissioning of Lab	30%	1. Commencement of testing of telecom products	1.1. Number of types of network elements tested (NE)	0
		1.2. Number of man days of training imparted for capacity building	10		1.2. No. of certificates issued for NE tested	0
					1.3. Number of employees trained	2
	2. Establishment of Access Lab	2.1. Commissioning of Lab	30%	2. Commencement of testing of telecom	2.1. Number of types of network elements tested (NE)	0
		2.2. Number of man days of	15		2.2. No. of certificates issued	0

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOMES 2021-22				
	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators	Targets 2021-22	
			training imparted for capacity building		products	for NE tested		
						2.3. Number of employees trained	2	
	3.	Establishment of CPE & TL Lab	3.1. Commissioning of Lab	30%	3.	Commencement of testing of telecom products	3.1. Number of types of network elements tested (NE)	0
			3.2. Number of man days of training imparted for capacity building	10			3.2. No. of certificates issued for NE tested	0
							3.3. Number of employees trained	2
	4.	Establishment of EMI/EMC Lab	4.1. Commissioning of Lab	10%	4.	Commencement of testing of telecom products	4.1. Number of types of network elements tested (NE)	0
			4.2. Number of man days of training imparted for capacity building	0			4.2. No. of certificates issued for NE tested	0
							4.3. Number of employees trained	0
	5.	Establishment of Safety Lab	5.1. Commissioning of Lab	10%	5.	Commencement of testing of telecom products	5.1. Number of types of network elements tested (NE)	0
			5.2. Number of man days of training imparted for capacity building	0			5.2. No. of certificates issued for NE tested	0
							5.3. Number of employees trained	0

## 5. Technology Development and Investment Promotion (CS)



FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOME 2021-22		
	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators
23.25	1. Funding 5G trials, Use cases, Education awareness etc.	1.1. No of Technology trials	12	1. Implementation of “Making India 5G Ready” report	1.1.No of Use cases /Applications Tested during Technology trial	20
		1.2. Setting up Labs to develop India specific Use cases	3		1.2.No. of use cases identified /demonstrated in the labs	10
		1.3. No of participants under 5G education awareness	300			
	2. Contribution of TSDSI in global standards setting bodies	2.1. Financial support to TSDSI for payment of Annual Membership fees/ charges of ITU, 3GPP and oneM2M (in crore)	2.25	2. Development of Telecom Standards with Indian requirements	2.1.No. of participants in global standards setting bodies	100
	3. National /International Exhibitions/ events	3.1. National /International Exhibitions/ events to enhance Startup/ SMEs participants	1	3. To increase participation of Startup/ MSMEs to showcase India’s technological prowess	3.1.No. of Start-up /MSME participated in Conference/Exhibitions/e vents in India and abroad	100

## 6. Telecom Testing and Security Certification Centre (CS)

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOMES 2021-22		
	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators
47.77	1. Setting up of 5G Security Test Bed at NCCS, Bengaluru	1.1. Preparation of project estimate (% Progress)	100%	1. Capacity building for security testing of 5G network elements/ functionalities in India	1.1. Training of Staff (in man-days)	15
		1.2. Sanction of project estimate (% Progress)	100%			
		1.3. Physical infrastructure readiness (% Progress)	100%			
		1.4. Procurement of test Equipment (% Progress)	100%			
		1.5. Commissioning of Test Bed (% Progress)	100%			

#### 7. Telecom Computer Emergency Response Team (T-Cert) (CS)

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOME 2021-22		
	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators
230	1. Deployment of C-DOT IPFIX probe at 22 ISP Gateways	1.1. Approval of DPR	100%	1. As a national Infrastructure, this will enable the traffic Collection from ISP gateways as a first requirement of	1.1. No. of ISP gateways out of 22 covered	22
		1.2. Procurement of Hardware	100%		1.2. No of alerts issued	Target not amenable <sup>1</sup>
		1.3. Installation of Hardware, and software for all the locations	100%		1.3. No of advisories issued	Target not amenable <sup>2</sup>

<sup>1</sup> Cannot be predicted in advance

<sup>2</sup> Cannot be predicted in advance

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOME 2021-22		
	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators
		1.4. Procurement of MPLS links to setup T-CERT VPN	100%	security analytics and detection of Cyber threats		
		1.5. Integration and testing with IPFIX application and Internet traffic collected from ISP Gateway	100%			
		1.6. Cost overruns (in percentage)	Target not amenable <sup>3</sup>			
		1.7. Time delays (in months)	Target not amenable <sup>4</sup>			
	2. CERT Data Center Setup - (NoC/SoC)	2.1. Design, specifications and tendering Process for DC Build	100%			
		2.2. DC Design specifications, Tendering, procurement of IT equipment (Servers & Network) and Installation	50%			
		2.3. Cost overruns (in percentage)	Target not amenable <sup>5</sup>			
		2.4. Time delays (in months)	Target not amenable <sup>6</sup>			

<sup>3</sup> With respect to approved project costs

<sup>4</sup> Deviation with respect to schedule given in DPR applicable only after approval of DPR

<sup>5</sup> With respect to approved project costs

### 8. Central Equipment Identity Register System (CEIR) (CS)

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOMES 2021-22		
	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators
80	1. Establishment of CEIR system	1.1. Percentage progress on setting up of system	100%	1. Monitoring of lost and stolen handsets	1.1. % success in blocking of reported lost /stolen mobile handsets	100%
		1.2. Number of new Local Service Areas (LSAs) covered	19		1.2. Facilitate in tracing of such reported lost/stolen mobile phones by providing traceability data to police authorities (% success)	100%
		1.3. Percentage progress on procurement and installation of requisite hardware, software and connecting with all telecom operators	100%	2. Monitoring of mobile phones with fake and duplicate IMEI number	2.1. % success in detection of fake and duplicate IMEIs from the Network	100%
					2.2. Prevention of services to mobile devices with fake and duplicate IMEIs (% success)	100%
					2.3. Availability of IMEI verification facility for public (% time)	100%

### 9. Champion Services Sector Scheme (CS)

<sup>6</sup> Deviation with respect to schedule given in DPR applicable only after approval of DPR

FINANCIAL OUTLAY (Rs in Cr)	OUTPUTS 2021-22			OUTCOME 2021-22			
	2021-22	Output	Indicators	Targets 2021-22	Outcome	Indicators	Targets 2021-22
57.4	<b>a. Setting up of Digital Communication Innovation Square (DCIS)</b>						
	1.	Promote and support ideas into pilot scale operation, field deployment or viable technology development (product or process) within a definite time frame	1.1. Number of startups, MSMEs funded	40	1. Pilots of innovative ideas converted into full scale operations	1.1. Number of innovative ideas validated by Proof of Concept (PoC)	5
			1.2. Number of incubators/ innovation infrastructures/ academic institutions or programs strengthened	6			
	<b>b. Brand Building of India as telecom manufacturing and services destination</b>						
1.	Showcasing India as Telecom Technology provider by participating in iconic technology events	1.1. Number of National/ International events participated by Indian telecom equipment and service providers	Minimum 4	1. Showcase Startups/ SMEs and project India as technology supplier	1.1. Number of Startups/SMEs showcased at National/ International events	Minimum 30	