# **GOVERNMENT OF INDIA**

## MINISTRY OF COMMUNICATIONS

(DEPARTMENT OF TELECOMMUNICATIONS)

**OUTPUT - OUTCOME MONITORING FRAMEWORK FOR SCHEMES** 

2021-22

#### 1. Scheme-Wireless Monitoring Organisation for Financial Outlay 2021-22.

Financial Outlay* (Rs. in Crores)		OUTPUTS 2021-22	2	OUTCOMES 2021-22				
FY 2021-22	Output	Indicator(s)	Targets for FY 2021-22	Outcomes	Indicator(s)	Targets		
	(i) Procurement for 6 nos. of vehicle mounted V/UHF terminals for 6 new Wireless Monitoring Stations (WMSs) established under 11 <sup>th</sup> FYP.	(i) Total nos. of V/UHF mobile monitoring vehicles procured  (ii) Total nos. of vehicles accepted, tested and commissioned.	Q1: 0 Q2: 0 Q3: 0 Q4: 0  Q1: 0 Q2: 0 Q3: 0 Q4: 0	(i) Mobile monitoring in V/UHF band will be carried out at respective WMS locations at Bhubaneshwar, Dehradun, Lucknow, Patna, Raipur and Vijaywada.	(i) No. of Occupancy/vacancy assignments of spectrum bandwidth in V/UHF bands  (ii) No. of Frequency interference assignments carried out by WMO at the respective locations of the 6 WMSs.	Q1: 0 Q2: 0 Q3: 0 Q4: 0  Q1: 0 Q2: 0 Q3: 0 Q4: 0		

Financial Outlay* (Rs. in Crores)		OUTPUTS 2021-22		OUTCOMES 2021-22			
FY 2021-22	Output	Indicator(s)	Targets for FY 2021-22	Outcomes Indicator(s)		Targets	
-	(ii) Procurement for 5 nos. of SHF terminals for five IMSs at Delhi, Mumbai, Chennai, Kolkata and Nagpur.	(i) Total nos. of SHF mobile monitoring vehicles procured	Q1: 0 Q2: 0 Q3: 0 Q4: 0	(i) Mobile monitoring in SHF band will be carried out at respective IMSs of Delhi, Mumbai, Chennai, Kolkata & Nagpur	(i) No. of Occupancy/ vacancy assignments of spectrum bandwidth in SHF bands	Q1: 0 Q2: 0 Q3: 0 Q4: 0	
		(ii) Total nos. of vehicles accepted, tested and commissioned.	Q1: 0 Q2: 0 Q3: 0 Q4: 0		(ii) No. of Frequency interference assignments carried out by WMO at respective locations.	Q1: 0 Q2: 0 Q3: 0 Q4: 0	

Financial Outlay*		OUTPUTS 2021-22		OUTCOMES 2021-22			
(Rs. in Crores)							
FY 2021-22	Output	Indicator(s)	Targets for FY 2021-22	Outcomes	Indicator(s)	Targets	
-	(iii) Procurement for 5 nos. of Radio Noise measuring equipments for five Radio Noise Survey Units at Delhi, Mumbai, Chennai, Kolkata and Hyderabad.	(i) Total nos. of Radio Noise Measurement Equipments procured.  (ii) Total nos. of equipments accepted, tested and commissioned.	Q1: 0 Q2: 0 Q3: 0 Q4: 0  Q1: 0 Q2: 0 Q3: 0 Q4: 0	(i) Radio Nosie measurements in the 9KHz to 6 GHz frequency band at Delhi, Mumbai, Chennai, Kolkata and Hyderabad.	(i) No. of conducted Electromagnetic Susceptibility (EMS) measurements in the 9KHz to 6 GHz  (ii) No. of conducted Electromagnetic Interference (EMI) measurements in the 9KHz to 6 GHz	Q1: 0 Q2: 0 Q3: 0 Q4: 0  Q1: 0 Q2: 0 Q3: 0 Q4: 0	

Financial Outlay*		OUTPUTS 2021-22	2	OUTCOMES 2021-22				
(Rs. in Crores)								
FY 2021-22	Output	Indicator(s)	Targets for FY 2021-22	Outcomes	Indicator(s)	Targets		
-	(iv) Procurement of 28 Radio receivers alongwith antennas for all the Wireless Monitoring Stations of WMO	(i) Total nos. of Radio Receivers alongwith antennae procured.  (ii) Total nos. of radio receivers alongwith antennae accepted, tested and commissioned.	Q1: 0 Q2: 0 Q3: 0 Q4: 0  Q1: 0 Q2: 0 Q3: 0 Q4: 0	(i) Monitoring and measurements in the 9KHz to 6 GHz frequency band at all the Wireless Monitoring Stations of WMO	(i) No. of ITU-compliant measurements (such as modulation index, occupied bandwidth, etc.)  (ii) No. of Occupancy/vacancy assignments of spectrum bandwidth  (iii) No. of Frequency interference assignments	Q1: 0 Q2: 0 Q3: 0 Q4: 0 Q1: 0 Q2: 0 Q3: 0 Q4: 0 Q1: 0 Q1: 0 Q2: 0 Q3: 0 Q4: 0		

Financial Outlay* (Rs. in Crores)		OUTPUTS 2021-22	2	OUTCOMES 2021-22			
FY 2021-22	Output	Indicator(s)	Targets for FY 2021-22	Outcomes	Indicator(s)	Targets	
	(v) Procurement of 6 fixed-HF monitoring facility with AMC for 6 new Wireless Monitoring Stations at Dehradun, Lucknow, Patna, Raipur, Bhubhaneshwar, Vijaywada	(i) Total nos. of fixed HF monitoring facility procured.  (ii) Total nos. of fixed HF monitoring facility accepted, tested and commissioned.	Q1: 0 Q2: 0 Q3: 0 Q4: 0  Q1: 0 Q2: 0 Q3: 0 Q4: 0	(i) Monitoring and measurements in the 10KHz to 30MHz frequency band at all the respective Wireless Monitoring Stations of WMO	(i) No. of ITU-compliant measurements (such as modulation index, occupied bandwidth, etc.)  (ii) No. of Occupancy/vacancy assignments of spectrum bandwidth	Q1: 0 Q2: 0 Q3: 0 Q4: 0  Q1: 0 Q2: 0 Q3: 0 Q4: 0	

Financial Outlay* (Rs. in Crores)		OUTPUTS 2021-22			OUTCOMES 2021-22			
FY 2021-22	Output	Indicator(s)	Targets for FY 2021-22	Outcomes	Indicator(s)	Targets		
2 crores	(i) Procurement of 4 Radio Network Analysis Measurement Equipment with AMC for International Monitoring Station at Delhi, Mumbai, Kolkata and Chennai	(ii) Total nos. radio network analysis measurement equipment procured.  (iii) Total nos. of radio network analysis measurement equipmentaccepted, tested and commissioned.	Q1: 0 Q2: 0 Q3: 4 Q4: 4  Q1: 0 Q2: 0 Q3: 4 Q4: 4	.(i) 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	(ii) No. of cellular emissions identified  (ii) No. of assignments of assistance to various users (govt and private)	Q1: 0 Q2: 0 Q3: 200 Q4: 200  Q1: 0 Q2: 0 Q3: 200 Q4: 200		

Financial Outlay* (Rs. in Crores)		OUTPUTS 2021-22		OUTCOMES 2021-22				
FY 2021-22	Output	Indicator(s)	Targets for FY 2021-22	Outcomes	Indicator(s)	Targets		
0.55 crores (Token Money)	(ii) Establishments of various Wireless Monitoring Stations (WMSs) on its own land.	(i) Procurement of land for WMS Lucknow established under 11 <sup>th</sup> Five Year Plan.  (ii) Procurement of land for WMS Hyderabad.	Q1: No Q2: No Q3: No Q4: Yes Q1: No Q2: No Q3: Yes	(i) Regular radio frequency monitoring assignments and identification of interference issues related	(i) No. of frequency monitoring assignments carried out.	Q1: 0 Q2: 0 Q3: 0 Q4: 0		
		(iii) Procurement of land for WMS Vijaywada.  (iv) Procurement of land for WMS Patna.	Q4: Yes  Q1: No  Q2: No  Q3: No  Q4: Yes  Q1: No  Q2: No  Q3: No  Q4: Yes					

Financial Outlay* (Rs. in Crores)		OUTPUTS 2021-22	2	OUTCOMES 2021-22			
FY 2021-22	Output	Indicator(s)	Targets for FY 2021-22	Outcomes	Indicator(s)	Targets	
6 crores	(i) Construction of office buildings for Wireless Monitoring stations (WMSs) established on its own land.	(i) Percentage completion of construction of office building for WMS Raipur.  (ii) Percentage completion of construction of office building for IMS Nagpur.	Q1:60% Q2: 90% Q3: 100% Q4: 100% Q1: 90% Q2: 100% Q3: 100%	(i) Construction of civil infrastructure will help in secure and safe monitoring as well as the safety of wireless installations	(i) No. of frequency monitoring assignments carried out.	Q1: 0 Q2: 50 Q3: 100 Q4: 150	
		(iii) Percentage completion of construction of office building for WMS Goa.	Q4: 100% Q1: 50% Q2: 75% Q3: 90% Q4: 100%				

Financial Dutlay (Rs.		OUTPUTS 2021-22			OUTCOMES 2021-22				
In Cr.)	Output	Indicators	Target 2021-22		Outcome	Indicators	Target 2021-22		
			Quarter	Target			Quarter	Targe	
	1.Establishment of Security Lab	1.1 Commissioning of Lab	Q1	0%	1.Commencement of testing of telecom	1.1 Number of types of network elements tested	Q1	0	
			Q2	0%	products	(NE)	Q2	0	
	and the second	the state of the s	Q3	0%			Q3	0	
			Q4	20%			Q4	0	
4.32									
						1.2 No. of certificates	Q1	0	
		1.2 Number of man	Q1	0		issued for NE tested	Q2	0	
		days of training					Q3 Q4	0	
		imparted for capacity building	Q2	0			Q4	0	
			Q3	0		1.3 Number of	Q1	0	
						employees trained	Q2	0	
			Q4	10			Q3	0	
							Q4	2	

Financial Outlay		ОИТР	UTS 2021-22	2	OUTCOMES 2021-22					
(Rs. In Cr.)	Output	Indicators	Target 2021-22		Outcome	Indicators	Target 2021-22			
			Quarter	Target	t		Quarter	Target		
	2. Establishment of Access Lab	2.1 Commissioning of	Q1	0%	2. Commencement of testing of telecom	2.1 Number of types of network elements	Q1	0		
		Lab	Q2	0%	products	tested (NE)	Q2	0		
			Q3	0%			Q3	0		
			Q4	30%			Q4	0		
		2.2 Number of man days of	Q1	0		2.2 No. of certificates issued	Q1	0		
7.21		training imparted for capacity	Q2	0		for NE tested	Q2	0		
		building	Q3	0			Q3	0		
			Q4	15			Q4	0		
						2.3 Number of	Q1	0		
						employees trained	Q2	0		
							Q3	0		
							Q4	3		

Financial		OUTPU	TS 2021-22		OUTCOMES 2021-22				
Outlay (Rs. In Cr.)	Output	Indicators	Target 2021-22		Outcome	Indicators	Target 2021-22		
			Quarter	Target			Quarter	Target	
	3. Establishment of CPE &TL Lab	3.1 Commissioning of Lab	Q1	0%	3. Commencement of testing of telecom	3.1 Number of types of network	Q1	0	
	GI Z GI Z ZGB		Q2	0%	products	elements tested (NE)	Q2	0	
			Q3	10%		()	Q3	0	
			Q4	30%			Q4	0	
		3.2 Number of man days of training imparted for	Q1	0		3.2 No. of certificates issued	Q1	0	
		capacity building	Q2	0		for NE tested	Q2	0	
3.31			Q3	5	No. 12		Q3	0	
			Q4	10		W.	Q4	0	
						3.3 Number of employees trained	Q1	0	
						employees trained	Q2	0	
							Q3	1	
							Q4	2	

Financial		OUTPUTS 2021-22			OUTCOMES 2021-22					
Outlay (Rs. In Cr.)	Output	Indicators	Target 2021-22		Outcome	Indicators	Target 2020-21			
		Quarter Target		Quarter	Target					
	4. Establishment of	4.1 Commissioning of	Q1	0%	4. Commencement of	4.1 Number of types of network elements	Q1	0		
	EMI/EMC Lab	Lab	Q2	0%	testing of telecom products	tested (NE)	Q2	0		
			Q3	0%			Q3	0		
			Q4	10%			Q4	0		
			Q4	10 %						
						4.2 No. of certificates	Q1	0		
		4.2 Number of man days of training	Q1	0		issued for NE tested	Q2	0		
0.00		imparted for capacity building	Q2	0			Q3	0		
			Q3	0			Q4	0		
			Q4	0						
						4.3 Number of	Q1	0		
						employees trained	Q2	0		
							Q3	0		
							Q4	0		

Financial Outlay (Rs.		OUTPUTS 2021-22		OUTCOMES 2021-22				
In Cr.)	Output	Indicators	Target 2021-22		Outcome	Indicators	Target 2021-22	
			Quarter	Target			Quarter	Target
M. Dende	5. Establishment of Safety Lab	5.1 Commissioning of	Q1	0%	% 5. Commencement of testing of telecom products	5.1 Number of types of network elements	Q1	0
		Lab	Q2	0%		tested (NE)	Q2	0
			Q3	0%			Q3	0
			Q4	10%			Q4	0
	100	5.2 Number of man days of	Q1	0		5.2 No. of certificates issued for NE tested	Q1	0
0.00		training imparted for capacity	Q2	0			Q2	0
V		building	Q3	0			Q3	0
			Q4	0			Q4	0
						5.3 Number of	Q1	0
						employees trained	Q2	0
							Q3	0
							Q4	0

## Technology Development and Investment Promotion (CS)(2021-22)

FINANCIAL OUTLAY (Rs in Cr)		OUTPUTS 2021-22		OUTCOMES 2021-22			
<b>2021- 22</b> 9 Cr	Output	Indicators	Targets 2021-22	Outcome	Indicators	Targets 2021-22	
	Funding 5G trials, Use cases,	No of Technology trials	12	Implementation of "Making India 5G	No of Use cases /Applications Tested during Technology trial.	10	
	Education awareness etc.	Setting up Labs to develop India specific Use cases.	02	Ready" report	No. of use cases identified /demonstrated in the labs.	05	
		No of participants under 5G education awareness.	100				
	Contribution of TSDSI in global standards setting bodies	Financial support to TSDSI for payment of Annual Membership fees/ charges of ITU, 3GPP and oneM2M	2.25 Cr	Development of Telecom Standards with Indian requirements	No. of participants in global standards setting bodies.	50	
	National /International Exhibitions/ events	National /International Exhibitions/ events to enhance Startup/ SMEs participants.	01	To increase participation of Startup/ MSMEs to showcase India's technological prowess	No. of Start-up /MSME participated in Conference/Exhibitions/events in India and abroad.	50	

# Telecom Testing and Security Certification (TTSC)

Financial Outlay (Rs in Cr)	OUTPUTS 2021-22		OCTCOMES 2021-22			
2021-22	Output	Indicators	Target 2021-22	Outcome	Indicators	Target 2021-22
15	Setting up of 5G Security Test Bed at NCCS, Bengaluru	Preparation of project estimate (% Progress)	100%	Capacity building for	Training 15 of Staff (in	15
		Sanction of project estimate (% Progress)	100%	security m testing of 5G	man-days)	
		Physical infrastructure readiness (% Progress)	50%	network elements /		
		Procurement of test Equipment (% Progress)	50%	functionalities in India		
		Commissioning of Test Bed (% Progress)	0%			

#### Telecom Computer Emergency Response Team (T-Cert) (CS)-OOMF 2021-22

FINANCIAL OUTLAY (Rs In Cr.)	OUTPUTS 2021-22			OUTCOMES 2021-22			
2021-22	Output	Indicator(s)	Target (2021-22)	Outcome	Indicator(s)	Target (2021-22)	
23 Cr	1. Deployment	1.1. Approval of DPR	100%	As a national     Infrastructure, this will     enable the traffic	1.1. No. of ISP gateways out of 22 covered	22	
		1.2 Procurement of Hardware	100%	Collection from ISP gateways as a first requirement of security analytics and detection of Cyber threats	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>	
A 100	of C-DOT IPFIX probe at 22 ISP	1.3. Procurement of MPLS links to setup T-CERT VPN	100%				
	Gateways.	1.5 Integration and testing with IPFIX application and Internet traffic collected from ISP Gateway.	100%				
		1.6 Cost overruns (in percentage)	Target not <sup>3</sup> amenable				

<sup>&</sup>lt;sup>1</sup>Cannot be predicted in advance <sup>2</sup>Cannot be predicted in advance <sup>3</sup>With respect to approved project costs

•		1.7 Time delays (in months)	Target not <sup>4</sup> amenable	+60	
	2. CERT Data Center Setup - (NoC/SoC)	2.1. Design, specifications and tendering Process for DC Build	0%		
		2.2 DC Design specifications, Tendering, procorement of IT equipment((Servers & Network)) and Installation.	0%		
		2.3 Cost overruns (in	Target not <sup>5</sup>		
		percentage)	amenable		
		2.4 Time delays (in	Target not		
		months)	amenable <sup>6</sup>		

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

		Central Equip	ment Identity R	legister System (CI	LIK)			
Financial Outlay ( Rs in Crore)	OU	JTPUTS 2021-22		OUTCOMES 2021-22				
2021-22	Output	Indicator(s)	Target (2021- 22)	Outcome	Indicator(s)	Target (2021-22)		
			***	Monitoring of	% success in blocking of reported lost /stolen mobile handsets	15%		
13 Crore (BE allocated for 2021- 22)	Establishment of CEIR system	Percentage progress on setting up of system	10%	lost and stolen handsets	Facilitate in tracing of such reported lost/stolen mobile phones by providing traceability data to police authorities (% success)	15%		
		Number of new			% success in detection of fake and duplicate IMEIs from the Network	100%		
		Local Service Areas (LSAs) covered	0%	Monitoring of mobile phones with fake and duplicate IMEI number	Prevention of services to mobile devices with fake and duplicate IMEIs (% success)	0%		
		Percentage progress on procurement and installation of requisite hardware, software and connecting with all telecom operators	0%	number	Availability of IMEI verification facility for public (% time)	100%		

#### **OOMF** framework for Champion Services Sector Scheme

#### Sub:- Scheme 'Setting up of digital Communication Innovation Square (DCIS)' 2021-22.

Financial Outlay	OUTPUTS 2021-22							
2021-22	Output	Indicators	Target 2021-22	Outcome	Indicators	Target 2021-22		
Rs. 4 Crs.	Promote and support ideas into pilot scale operation field deployment or viable technology/product or process) within a definite time frame	(i) Number of Startups MSMEs Funded	7 (Only Startups will be funded)	Pilot of innovative ideas converted into full scale	Number of Innovative ideas validated Proof of Concept	Minimum 1		
		(ii) Number of incubators innovation infrastructures / academic institutions or programs strengthened	0	operations	(PoC)			

#### **OOMF** framework for Champion Services Sector Scheme

Sub:- Scheme 'Brand Building of India as telecom manufacturing and services destination" 2021-22.

Financial Outlay	OUTPUTS 2021-22	OUTCOM	ES 2021-22				
2021-22	Output	Indicators	Target 2021-22	Outcome	Indicators	Target 2021-22	
Rs. 1Crs.	Showcasing India as Telecom Technology provider by participating in iconic technology events.	Number of National / International events participated by Indian telecom equipment and service providers	Minimum 1	Showcase Startups SMEs/ Companies and project India as technology supplier.	Number of Startups SMEs / Companies showcased at National / International events.	Minimum 5	