# **Ministry of Communications**

#### **Demand No. 13**

#### **Department of Telecommunications**

#### 1. Human Resource Management Scheme (CS)

FINANCIA L OUTLAY (Rs.in Cr.)	OUTPUTS 2019-20			0	<b>OUTCOMES 2019-20</b>		
2019-20	Output	Indicator (s)	Target 2019-20	Outcome	Indicator (s)	Target 2019-20	
	1. Mid-Career Training of ITS Officers	1.1 No. of training courses organized	27	1. Competence Upgradation of ITS Officers at all levels	1.1 No. of in service ITS Officers trained	675	
	2. Training of ITS and other Govt./PSU officers and other stakeholders	2.1 No of Seminars and trainings organized	36	2. Competence upgradation of Government Officers at all levels	2.1 No. of officers trained	600	
78.86	3. International Training	3.1 No. of Training courses organized for International participants in India and abroad	15	3. Strengthening of International bilateral relations through Capacity building of foreign participants	3.1 No. Of foreign participants trained	300	
	4. Induction training of ITS Group "A" Officers and JTOs recruited through UPSC	4.1 No. of Training courses organized	6	4. Foundation and competence building of probationers for discharging future responsibilities	4.1 No. of probationers trained	105	

FINANCIA L OUTLAY (Rs.in Cr.)		OUTPUTS 2019-20				OUTCOMES 2019-20			
2019-20	Output Indicator (s)			Target 2019-20	Outcome	Indicator (s)	Target 2019-20		
	5.Training of T (Capacity Build departmental su matter experts)	ding of ubject	5.1 No. of cours attended by subj matter experts w India and abroad	ect rithin	42	5. Enhancing proficiency of trainers	5.1 No. of officers trained	42	
	6. Policy Resea Contemporary	rch on	6.1 No. of resear white papers pul	ch/	12	6. Policy input for DoT	6.1 No. of research/ white papers published	12	
	7. Deployment officers for lon trainings (DoPT)	g term	7.1 No. of Cours which officers a deployed		15	7. Skill upgradation of ITS Officers at all levels	7.1 No. of officers trained	75	
	8. Deployment officers for sho trainings (Dom Foreign)	rt term	8.1 No. of Cour which officers a deployed within and abroad	re	30	8. Skill upgradation of ITS Officers at all levels	8.1 No. of officers trained	150	
	b) HRM-Natio	onal Instit	tute of Communic	cation F	inance				
	IP&TA&FS3 batches i.e .2017, 2018AdmirOfficers and otherand 2019 batches of IP&TA&FSPostal, AdvanStakeholdersProbationersfor		ce Excel Tools etc. 3 batches 2018,2019 (of	1. To make the new officers skilled and ready to take assigned tasks and contribute in growth and development of Organisations and nation	1.1 Training to about 58 newly recruited IP&TAFS Officers through civil services examination	3586 man-days induction/probation ary training to 58 IP&TA&FS officer trainees of 2017,2018 and 2019 batches selected through civil services examination			
		training/	till upgradation /Workshop/Semi various subjects		hops/Seminars/traini on different topics	2. To upgrade their skill and to apprise the officers about new emerging	2.1 Training/Worksh op for about 500	775 man-days training/workshop for in-service	

FINANCIA L OUTLAY (Rs.in Cr.)		OUTPUTS 201	9-20	OUTCOMES 2019-20			
2019-20	Output	Indicator (s)	Target 2019-20	Outcome	Indicator (s)	Target 2019-20	
		to in-service officers of IP&TA&FS Cadre posted in DoT and DoP	Spectrum Auction, PFMS,5G,USOF GST and e-filing, GeM, Advance Excel/office automation, CPMS/SAMPANN Pension package, NPS, Vigilance, Licensing in Telecom, RTI etc.,	technologies, new IT tools developed in DoT and DoP and Govt .of India	officers of DoT and DoP	officers of DoT and DoP on varied subjects such as Spectrum Auction, PFMS,5G,USOF,G ST and e-filing, GeM, Advance Excel/office automation, CPMS/SAMPANN Pension package, NPS, Vigilance, Licensing in Telecom, RTI etc.	
		1.3 Mid-career trainings in 3 phases i.e .MCT-I,	3 mid-career training MCT-I, MCT-II and MCT-	3. Skill upgradation of IP&TA&FS Officers to	3.1 100 officers of IP&TAFS	2611 mandays mid- career training to	
		II and III to IP&TA&FS	III for senior officers of	make them ready to to take	working in senior	100 senior officers	
		Officers for 2012-2013,	IP&TAFS cadre	up higher assignments and	positions from	of IP&TA&FS	
		1994-95 and 1992-1993		ensure their exposure to	Director to Addl	including 336	
		batches respectively working in DoT, DoP and on deputation as per		new technologies, procedures and developments taking place	Secretary equivalent are to be trained	mandays foreign training component	
		National Training Policy 2012 and in accordance with DOP&T guidelines		in India and abroad as per DOP&T guidelines			
		1.4 Induction training to newly promoted AAOs	4 batches of induction training of 8 weeks	4. After mandatory induction training as per	4.1 190 officers of P&T Accounts	8100 mandays training to 162	
		)group B gazette officers (and Sr .AOs )Group B (to be promoted to	duration for AAOs and 1 batch of induction training of 2 weeks for Sr AOs	RRs, the officers who will be holding the gazette ranks will be ready to take higher responsibilities.	and Finance Service Group B cadre are to be trained	newly promoted AAOs)group B gazetted officers(	

FINANCIA L OUTLAY (Rs.in Cr.)		OUTPUTS 201	9-20	OUTCOMES 2019-20			
2019-20	Output Indicator (s)		Target 2019-20	Outcome	Indicator (s)	Target 2019-20	
2019-20	2. Setting up of Physical Infrastructure of National Institute of Communicati on Finance (NICF(	ACAOs)JTS Group A ( Cadre  1.5 International training /Focus Group Meeting for officials of telecom regulator, policy maker of about 40 ITU member countries, and other participants relating to IT and Health sector under aegis of ITU in partnership with WHO on Artificial Intelligence for Health  1.6 %completion/construction of NICF building complex	Minimum one Focus Group meeting on AI for Health under ITU in partnership with WHO  80 %of the construction will be completed against 100 %target as mandatory permission from the Forest Department of NCT of Delhi to transplant the trees is still awaited which is essentially required for 100 %completion	5. The officers will be provided exposure to international meetings under International Telecommunication Union and also exposure to how AI in partnership with Telecom can play an important role in dissemination of essential services such as health care.  1. Make centre of excellence for training on telecom subjects (2020-21 onwards) 2. Conducting Foundation Course training (2021-22 onwards) 3. Collaborating with reputed national and international organisations for human resource development and growth (2020-21 onwards) 4. Conducting international	5.1 Meeting involving participants from member countries of ITU and WHO	180 mandays meeting/workshop for about 40-50 foreign officials and about 30 officials from various departments viz .IT, Health, Telecom and industry dealing voluntarily in AI for Health	
				meetings/Seminars/worksh ops (2020-21 onwards)			

# 2. Wireless Planning and Coordination (CS)

FINANCIAL OUTLAYS (Rs. In Cr.)		OUTPUTS 2019-	20	OUTCOMES 2019-20			
2019-20	Output	Indicator(s)	Targets 2019-20	Outcomes	Indicator(s)	Targets 2019- 20	
13.1	1. Procurement for 6 nos. of vehicle mounted V/UHF terminals will be procured in respective WMSs.	1.1 Approval of Bid document, Publishing of bid document on CPP portal, Evaluation of Bids and Award of Contract/ Work.  (i) Receipt of Technical Infrastructure from Contractor.  (ii) Acceptance, Testing and Commissioning of vehicles.  (iii) Total nos. of mobile monitoring vehicles & equipments procured.	Q1: Drafting of Bid document and approval of Bid document from the Competent Authority.  Q2: Approval of Bid document from the Competent Authority, Publishing of Bid document on CPP Portal, Evaluation of Bids and Award of Contract.  Q3: Receipt of Technical Infrastructure from the Contractor.  Q4: Fabrication, Acceptance, Testing and Commissioning of 1st V/UHF vehicle.	(i)Mobile monitoring in V/UHF band will be carried out at respective WMS locations at Bhubaneshwar, Dehradun, Lucknow, Patna, Raipur and Vijayawada.	(i) No. of Occupancy/vacancy assignments of spectrum bandwidth in V/UHF bands and no. of Frequency interference assignments carried out by WMO at the respective locations of the 6 WMSs.	60	
	2. Procurement for 5 nos. of SHF terminals will be procured in five IMSs at Delhi, Mumbai, Chennai, Kolkata and Nagpur.	<ul> <li>2.1 Approval of Bid document, Publishing of bid document on CPP portal, Evaluation of Bids and Award of Contract/ Work.</li> <li>(i) Receipt of Technical Infrastructure from Contractor.</li> <li>(ii) Acceptance, Testing and Commissioning of vehicles.</li> <li>(iii) Total nos. of mobile</li> </ul>	Q1: Drafting of Bid document and approval of Bid document from the Competent Authority.  Q2: Approval of Bid document from the Competent Authority, Publishing of Bid document on CPP Portal, Evaluation of Bids and Award of Contract.  Q3: Receipt of Technical Infrastructure from the	(ii)Mobile monitoring in SHF band will be carried out at respective IMSs of Delhi, Mumbai, Chennai, Kolkata & Nagpur.	(ii) No. of Occupancy/vacancy assignments of		

FINANCIAL OUTLAYS (Rs. In Cr.)		OUTPUTS 2019-	20	OUTCOMES 2019-20		
2019-20	Output	Indicator(s)	Targets 2019-20	Outcomes	Indicator(s)	Targets 2019- 20
		monitoring vehicles & equipment's procured	Contractor. <b>Q4:</b> Fabrication, Acceptance, Testing and Commissioning of 1st SHF vehicle.  1 (equipment procured)		spectrum bandwidth in SHF bands and no. of Frequency interference assignments carried out by WMO at respective locations	60

### 3. Telecom Engineering Centre (CS)

FINANCIAL OUTLAY (RS. IN CR.)	Y OUTPUTS 2019-20			OUTCOMES 2019-20			
2019-20	Output	Indicators	Target 2019-20	Outcome	Indicators	Target 2019-20	
	Establishment     of Security Lab	1.1 Commissioning of Lab	100 %	1. Preparation of Test procedure	1.1 Number of type network elements tested (NE)	4	
	2. Training and skilling of manpower	2.1 Number of man days of training imparted for capacity building	100 %	2. Commencement of testing of telecom products.	2.1 No. of certificates issues for NE tested	4	
20.11					2.2 Number of employees trained	10	
	3. Establishment of Control Lab	3.1 Commissioning of Lab	*	3. Commencement of testing of telecom products	3.1 Number of type network elements tested (NE)	12	
	4. Training and skilling of	4.1 Number of man days of training imparted for	100 %		3.2 No. of certificates issues for NE tested	10	
	manpower	capacity building			3.3 Number of employees	10	

				trained	
5. Establishment of Access Lab	5.1 Commissioning of Lab	*	4. Commencement of testing of telecom products	5.1 Number of types network elements tested (NE)	Nil
				5.2 No. of certificates issues for NE tested	
				5.3 Number of employees trained	
6. Training and skilling of manpower	6.1 Number of man days of training imparted for capacity building	100 %	5. Commencement of testing of telecom products	5.1 Number of types network elements tested (NE)	4
7. Establishment of GP Lab	7.1 Commissioning of Lab	100 %			
8. Training and skilling of manpower	8.1 Number of man days of training imparted for capacity building	100 %		5.2 No. of certificates issues for NE tested	4
	. , ,			5.3 Number of employees trained	5
9. Establishment of CPE Lab	9.1 Commissioning of Lab	*	6. Commencement of testing of telecom products	6.1 Number of types network elements tested (NE)	*
10. Training and skilling of	10.1 Number of man days of training imparted for	**		6.2 No. of certificates issues for NE tested	*
manpower	capacity building			6.3 Number of employees trained	
11. Establishmen of Regional Test Labs at RTEC New Delhi, Mumbai & Bengaluru	t 11.1 Commissioning of Lab	*	7. Commencement of testing of telecom products	7.1 Number of types network elements tested (NE)	*

12. Training and skilling of	12.1 Number of man days of training imparted for capacity building	**	7.2 No. of certificates issues for NE tested	*
manpower	capacity building		7.3 Number of employees trained	*

<sup>\*</sup>Targets for this indicator is not amenable\*\* Indicator is demand driven

### **4.** Technology Development and Investment Promotion (CS)

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20			
2019-20	Output	Indicator (s)	Target 2019-20	Outcome	Indicator (s)	Target 2019-20	
	1. Funding 5G Use case, trials and 5G events	1.1 Funding for 5G Program Office 1.2 Technology trials 1.3 To develop India specific Use case and 1.4 5G education awareness and promotion activities	1.1 Expenses on 5G Program Office 1.2 One trial with Indigenous technology 1.3 Set up 3-4 Use case Labs 1.4 events on 5G and related technology.	1. Implementation of "Making India 5G Ready" report	1.1 Support for 5G initiatives	<ul> <li>i) Set up 5G Program Office (1 in number)</li> <li>ii) Complete one trial with indigenous technology</li> <li>iii) Set up 2 Use Case Labs</li> <li>iv) Minimum 4 5G specific events in India</li> </ul>	
20.20	2. Contribution by TSDSU in global standards	2.1 To fund Membership fee of DoT to TSDSI, 3GPP, oneM2M and grant in aid to TSDSI for organizational partner fee of 3GPP and oneM2M	To participate contribute in Glastandards setting bodies as per targets given below. Organisations Participate 3GPP 300 ITU 50 One M2M 10	Standards with Indian requirements	2.1 Increased participation in global standards  2.2 Creation of global standards with Indian IPRs	To participate and contribute in Global standards setting bodies as per targets given below.  OrganisationsParticipation 3GPP 300 ITU 50 OneM2M 10	

3. TEPC Promotion	3.1Hosting/Participation	Hosting/ Participation	3. Promotion	3.1 Hosting /	Hosting/Participation in
of exports of	in National	international /	for increase in	Participation	international/National
telecom equipment	/International	National events in	export of	in Nation	events in India and Abroad
and services	Exhibitions/ events	India and Abroad	telecom	International	Participation of Indian
(Approx. 14.20 Cr.)	*		equipment and	3.2	Exporters and SMEs in
	of telecom equipment	Participation of	services.	Exhibitions/	above events 400
	and services.	Indian Exporters		events for	
		and SMEs in above		Promotion of	
		events 400		exports of	
				telecom	
				equipment and	
				services.	

## **5. Special Assistance to Swachhta Action Plan (CS)**

FINANCIAL OUTLAY (Rs. In Cr.)		OUTPUTS 2019-20			OUTCOMES 2019-20			
2019-20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20		
	1. Cleanliness Initiatives	1.1 Renovation and maintenance of toilets	*		1.1 No. of toilets renovated / maintained	*		
		1.2 Construction of Bio-toilets/ e-Toilets	*		1.2 No. of Bio-toilets/ e- Toilets constructed	*		
8.00		1.3 Installation of dustbins/ procurement of disposal vehicle or trolley	*	Infrastructure     Development	1.3 No. of dustbins installed / No. of disposal vehicles or trolley purchased	*		
		1.4 Repair/ Maintenance and replacement of water supply lines / tanks / water drains	*		1.4 No. of water supply lines/ tanks/ drains repaired/ replaced	*		

	1.5 Installation / Commissioning and regular maintenance materials / cleaning of sewerage lines, cleaning of drainages / Building roofs (water proofing), roads etc	*		1.5 No. of sewerage lines cleaned/ commissioned 1.6 No. of drains cleaned	*
	1.6 Installation / Renovation of STP plants, oxidation of ponds to maintain hygiene/ cleanliness	*		1.7 No. of STP plants installed / renovated	*
	1.7 Repair of storm water drains in Township and factory area for collection of rain water into natural lake and use of water for gardening and other non-potable purposes	*		1.8 No. of storm water drains repaired	*
	2.1 Rain harvesting	*	2. Increased Water availability	2.1 Area covered under rainwater harvesting	*
	2.2 Installation of vermin/composting plants converting wastes to productive use	*		3.1 No. of vermin/composting plants installed	*
2.Horticulture Activities	2.3 Development of public parks in A&B area of ITI township, Bangalore	*	3. Maintenance of lawns/parks and better soil fertility	3.2 No. of public parks developed in A&B area of ITI township, Bangalore	*
	2.4 Cleaning & Horticulture activities on connected roads to 200 Sanchar Haats in Delhi & Mumbai	*	along with reduction of waste	3.3 No of Cleaning & Horticulture activities organised	*
	2.5 Maintenance of garden in periphery of CGTO complex building	*		3.4 Area of garden maintained in periphery of CGTO complex	*

				building	
	2.6 Repair/Improvement of TCIL Bhawan Lawn (Fountain & Pavement repair, replacement of broken pots etc.)	*		3.5 Area of TCIL Bhawan Lawn repaired, No. of Fountains & pots replaced or repaired	*
	3.1 Awareness camps/ special cleanliness drives	*		4.1 No of Community Mobilization programmes organized in community units, Townships, clubs etc.	*
3. Spreading Awareness	3.2 Cleanliness initiatives undertaken with school collaboration	*	4. heighten awareness among people about Swachhta	4.2 No. of schools involved in educating children on swachhata by organizing competitions etc.	*
	3.3 Media related awareness activities	*		4.3 No. of Publicity- Advertisement	*
	3.4 Employees engagement on hygiene maintenance	*		4.4 No. of Inter-block and intra-block competitions organised	*
	3.5 Women Specific activities	*		4.6 No. of SAP Women Specific activities	*

<sup>\*</sup> Targets in this indicator are not amenable

### 6. Central Equipment's Identity Register (CEIR) (CS)

FINANCIAL OUTLAY	OUTPUTS 2019-20			OUT	ГСОМЕS 2019-20	
(Rs. In Cr.)						
2019-20	Output	Indicator(s)	Target	Outcome	Indicator(s)	Target

			2019-20			2019-20
		1.1 Percentage completion of the setting up the system.	80		1.1 Reporting of lost/stolen mobile handsets	100
		1.2 Number of telecom circles covered	100	Monitoring of lost and stolen handsets.	1.2 Number of lost/stolen mobile devices blacklisted.	100
	1. Establishment of CEIR system.	1.3 Procurement and installation of IT infrastructure, application software and connectivity with telecom operators	90	2. Monitoring of mobile phones with fake and duplicate IMEI.	2.1 Detection of fake and duplicate IMEI from the network.	80
15		1.4 Capability of sending of notifications and SMS	100		2.3 Availability of IMEI verification facility to common public	100
				3. Device pairing facility for customers who use multiple SIMs	3.1 Facility for device pairing with multiple SIMs	100

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

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20
15	1. Setting up Security incident management system for Telecom Network	1.1 Readiness of proof of Concepts (POCs) for performing analytics	100%	1. Development of security solutions developed in	1.1 Finalization of architecture & designing of solutions	25%
		2.1 Number of tools	3	the CDOT labs	1.2 Preparation of DPR for solution	50%

2. Procurement of equipment's	procured for developing proof of concepts			developed	
	2.2 Number of locations setup for gathering actionable intelligence	5		1.3 Number of security solutions indigenously developed	2
3. Setting up of project lab at	3.1 CDOT labs set up (Y/N)	Y	2. Taking proactive action	2.1 Number of security networks monitored	10
CDOT	3.2 No. of training sessions conducted (man-weeks)	40	to prevent security incidents on telecom network	<ul> <li>2.2 No. of officials trained</li> <li>Security Networks: Point of monitoring security incidents which could cover the overall AS number or part of the AS network</li> </ul>	40

## 8. Champion Sectors Scheme

Financial Outlay (in Rs. Cr)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	Output		Target 2019-20	Outcome	Indicators	Target 2019-20
	a. Setting up of Digital Com	munication Innovation Squ	are (DCIS)			
50.07	1. Promote and support translation of innovative ideas and knowledge in engineering derived from fundamental or applied research into pilot scale	1 Number of additional items added in DoT Public Procurement (Preference to Make in India) Notification lated 29.08.2018 over the base of 36 telecom products, works or services already existing.	*	employment generation and		Funding to 18 Star tups and 2 MSMEs.

Financial Outlay (in Rs. Cr)	O	UTPUTS 2019-20	OUTCOMES 2019-20			
2019-20	Output	Indicators	Target 2019-20	Outcome	Indicators	Target 2019-20
	process) within a definite	1.2 Number of educational order supplied by telecom PS JS in a financial year	*	2. Meet demand of Indian telecom sector and provide opportunities from the global markets.	2.1 Number of i *ncubators/ innov ation infrastruct ures/ academic i nstitutions or pr ograms strength ened	
	r g e	1.3 Number of startups, MS MEs provided with educational orders finally culminating in getting full-fledged orders.				
	b. Brand Building of India a	s telecom manufacturing a	nd services dest	ination		
15.4	1. Promotion of exports of telecom equipment and services.	1.1 Participation of India n telecom equipment and service providers in following International events:	*	1. Increase in export of telecom products and services.	1.1 Number of part icipations	10% increase in exports of teleco m equipment and services
		Mobile World Congress, Africa Com, ITU Teleco m World and India Mobil e Congress	**		0.1 Tard P. L.	**
	2. Attract foreign OEM and generic component players to		**	2. Reduction of telecom products imports into the	2.1 Total Reduction of telecom produ	**

Financial Outlay (in Rs. Cr)	OU'	ГРUTS 2019-20	OUTCOMES 2019-20			
2019-20	Output	Indicators	Outcome	Indicators	Target 2019-20	
	et up manufacturing base in ndia.				cts imports into the country.	

<sup>\*</sup>Indicator is demand driven

<sup>\*\*</sup> Targets for this indicator are not amnable

## 9. Indigenous 5G Test Bed (CS)

FINANCIAL OUTLAY (In Rs. Cr.)		OUTPUTS 2019-20		OUTCOMES 2019-20		
2019-20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20
	1. Setting up the Lab	1.1 %age of Lab Tools purchased 1.2 %age of Lab setup	100	Availability of     Equipment and Lab for     use by the Teams	1.1 %age of Equipment and Lab ready for	100%
		2.1 %age completed for Core for Version 1 of the Test Bed (V1)	100	2. 1.2 Tested software ready for integration	usage 2.1 V1 Core Ready	10 Registrations 10 Data Sessions
38.59	2. Software for Version 1 of the Test Bed (V1)	2.2 %age completed for Multi-RAT (Radio Access Technology) for V1	100		2.2 Multi- RAT functional prototype	10 Concurrent Users  2 Wifi Access Points integrated with 5G Core
		2.3 %age completed for L1(Layer 1)/L2 (Layer 2)/L3 (Layer 3) software on Base Station (BS) for V1	100		2.3 L1/L2/L3 software Running on Base Station	1 Base Station connectivity session to UE L2/L3 without RF
		2.4 %age completed for L1/L2/L3 software on UE (User Equipment) for V1	100		2.4 L1/L2/L3 software running on CPE UE	1 UE connectivity sessions to BS L2/L3 without RF

FINANCIAL OUTLAY (In Rs. Cr.)		OUTPUTS 2019-20		OUTCOMES 2019-20		
2019-20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20
		3.1 %age completed for Antenna Hardware for V1 for BS (Base Station)	100	3. Hardware ready for loading software in it.		100%
	3. BS (Base Station) Hardware for V1	3.2 %age completed for RRH (Remote Radio Head)	100		3.1 Functional Base Station	Data Rate – 1Gbps
		Hardware for V1 for BS			Prototype	Support 8 users Support 64
		3.3 %age completed for baseband Hardware for V1 for BS		Antennas		
			100		4.1 User Device	100%
	4. UE (User Equipment) Hardware for	Equipment) UE hardware for V1 Hardware for		4. Hardware ready for loading software in it.	(CPE form factor) connected to Base Station	Data Rate – 200Mbps
	V1	4.2 %age completed for NB(Narrow Band) IoT V1	100%	5. NB IoT Chip Realization	5.1 1 Tape Out	*
			100			*
5. Integrated Test Bed fo V1		5.1 End-to-end data flow		6. Ready for end to end demo of V1	6.1 End-to-end data flow	Q3: 1 no. External User testing their application / module in the system Q4: 2-4 External Users testing their application / module in the system

FINANCIAL OUTLAY (In Rs. Cr.)	OUTPUTS 2019-20				OUTCOMES 2019-20	
2019-20	Output	Indicator(s)	Target 2019-20	Outcome	Indicator(s)	Target 2019-20
6.	6. BS	6.1 %age completed for Antenna Hardware for V2 for BS	50%			
	Hardware for Version 2 of the Test Bed (V2)	6.2 %age completed for RRH Hardware for V2 for BS	50%			
		6.3 %age completed for baseband Hardware for V2 for BS	50%			
		7.1 %age completed for the UE hardware for v2	50%	-		
	Hardware for V2	7.2 %age completed for NB IoT V2	50%			
		8.1 %age completed for Core for V2	100			
		8.2 %age completed for Multi-RAT for V2	100			
	8. Software for V2	8.3 %age completed for L1/L2/L3 software on Base Station for V2	100			
		8.4 %age completed for L1/L2/L3 software on UE for V2	100	-		

<sup>\*</sup>Targets for this indicator are not amenable

### 10. Defence Spectrum - Optical Fibre Cable Based Network for Defence Services (CS)

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20		
2019-20	Output	Indicator(s)	Target 2019- 20	Outcome	Indicator(s)	Target 2019-
4725	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	95%	1. Countrywide secure, Multi service and Multi- Protocol Converged Next Generation Network	1.1 Total % of OFC links commissioned for the entire project	91%
	2. Placement of Purchase orders	2.1 total % of equipment components for which PO placed for the entire project	100 %		1.2 Supply, Installation, Testing and Commissioning (SITC) of various components for the entire project	60

#### ${\bf 11.}\ Compensation\ to\ service\ Providers\ for\ Creation\ and\ Augmentation\ of\ telecom\ infrastructure\ (CS)$

FINANCIAL OUTLAY (Rs. In Cr.)	OUTPUTS 2019-20			OUTCOMES 2019-20			
2019-20	Output	Indicator(s)	Targe t 2019- 20	Outcome	Indicator(s)	Targe t 2019- 20	
8350	1. Coverage of uncovered villages in the North Eastern Areas	1.1 Total number of mobile towers to be commissioned (cumulative)	1,500	Provision of mobile services in uncovered villages	1.1 Total number of villages to be covered with mobile services (cumulative)	1,400	
	2. Gram Panchayats connected with high speed broadband services through optical fibre network	2.1 Number of GPs connected through Optical Fibre/ Radio/Satellite (cumulative)	2. Utilisation of Bharat Net infrastructure	2.1 Bandwidth utilisation (cumulative)	900 GB		
					2.2 Dark Fiber utilisation (cumulative)	30,000 km	
		2.2 Total km of OFC laid (cumulative)	5,00,000		2.3 Wi-Fi providing in GPs (cumulative)	50,000 GPs	
	3. Augmentation of satellite bandwidth from 2 Gbps to 4 Gbps in Andaman & Nicobar	3.1 Total bandwidth enhanced	*	3. Improved telecom connectivity in Andaman & Nicobar	3.1 Total amount of data consumed	*	
					3.2 % uptime	**	
					3.3 Overall increase in utilisation of bandwidth	*	
	4. Augmentation of satellite bandwidth from 318 Mbps to 1.71 Gbps in Lakshadweep	4.1 Total bandwidth enhanced	*	4. Improved telecom connectivity in Lakshadweep	4.1 Total amount of data consumed	*	
					4.2 % uptime	**	
					4.3 Overall increase in utilisation of bandwidth	*	
	5. Provision of	5.1 Commissioning	*	5. Provision of 100 Gbps	5.1 Boost in telecom infrastructure in ANI	*	

	submarine OFC connectivity between Mainland (Chennai) and Andaman & Nicobar Islands	of submarine OFC in June 2020 5.2 Connecting of		bandwidth in Andaman & Nicobar Islands	5.2 Boost in tourism, bank, industry, e- governance etc.	*
		eight Islands in ANI to Mainland			5.3 Increase in the mobile tele density in Andaman & Nicobar Islands	*
	6. Mobile connectivity (2G+4G) in uncovered	6.1 Total number of mobile towers	*	6. Increased mobile penetration in the ANI	6.1 increase in the mobile density in ANI	*
	villages and seamless coverage on NH-223 in ANI	commissioned 6.2 Total No. of villages covered		pendanan in me i n vi	6.2 Total number of villages covered with mobile services	**

<sup>\*</sup> Target for this indicator cannot be fixed since, it is a demand driven scheme

<sup>\*\*</sup> Nature of indicator is not amenable for fixing numeric targets