No. 18-3/2023-O&M Government of India Ministry of Communications Department of Telecommunications

Sanchar Bhavan, 20, Ashoka Road, New Delhi-110001

Dated: 10.2023

Subject: Monthly Summary for the Cabinet on important events of the Department of Telecommunications for the month of September, 2023.

The undersigned is directed to circulate herewith a copy of the unclassified portion of the Monthly Summary for the Cabinet on the important events of the Department of Telecommunications for the month of September, 2023 for information.

2. This issues with the approval of Secretary (T).

Hindi version will follow.

Encl:- As above

(Anoop Kumar) Under Secretary to the Government of India Tele. No. 23036213

To

PS to All Members of the Council of Ministers.

Copy to:

- 1. Secretary to the President ("Rashtrapati-Ke-Sachiv").
- 2. Secretary to the Vice-President ("Up-Rashtrapati-Ke-Sachiv").
- 3. CEO, NITI Aayog, New Delhi.
- 4. All Members of NITI Aayog, New Delhi.
- 5. Chairman, U.P.S.C., New Delhi.
- 6. Joint Secretary, Cabinet Secretariat, Rashtrapati Bhawan, New Delhi.

7. Copy also to :-

- i. Secretary, Department of Education
- ii. Secretary, Department of Legislative.
- iii. Secretary, Department of Statistics.
- iv. Secretary, Department of Scientific & Industrial Research.
- v. Secretary, Department of Defence Production.
- vi. Secretary, Ministry of New and Renewable Energy Sources.
- vii. Secretary, Ministry of Urban Development.
- viii. Secretary, Department of Science & Technology.
 - ix. Secretary, Railway Board.
 - x. Secretary, Department of Atomic Energy.
 - xi. Secretary, Department of Space.
- xii. Secretary, Department of Electronics.
- xiii. Secretary, Department of Posts.

8. Copy to:-

- i. P.S. to Hon'ble Minister for Communications/P.S. to Hon'ble MoSC
- PSO to Chairman, Digital Communications Commission & Secretary, DoT
- Sr. PPS/PPS to Member (Finance)/ Member (Services)/ Member (Technology)/ DG (Telecom) HQ/ Administrator (USOF)/ Eco. Adv./ WA, WPC
- 9. Additional Director General, PIB, Shastri Bhavan, New Delhi-110001.
- 10. Director General (Media & Communications), Ministry of Information & Broadcasting, Shastri Bhawan, New Delhi.
- 11. Policy-I Section w.r.t. their letter No. 6/6/2008-Policy-I dated 14.11.2008

(Anoop Kumar) Under Secretary to the Government of India Tele. No. 23036213

MONTHLY SUMMARY FOR THE CABINET ON IMPORTANT EVENTS OF THE DEPARTMENT OF TELECOMMUNICATIONS FOR THE MONTH OF SEPTEMBER, 2023

A. Important events in DoT HQ for the Month of September, 2023:

1. 5G use cases meeting with DPIIT:

A Meeting was organized on 19.09.2023 with DPIIT about the possibilities of deployment of 5G use cases in logistics sector. A brief presentation was made on the advantages of 5G and possible use cases that can be piloted further. Further, a presentation from Startups was facilitated to learn in detail about solutions. DPIIT team is expected to shortlist 3-4 Startups for further pilot/field deployment opportunities.

2. Review the status of 5G Use cases in Mining Sector:

A Meeting was held on 25.09.2023 under the chairmanship of Secretary (Mines) to review the status of 5G use cases in mining sector. The session was also attended by Mining companies (IBM civil lines, HCL, HZL, Tata Steel) and Telecom Service Providers. During the meeting, the companies presented about the mining specific solutions/use cases and TSPs discussed about the potential of CNPNs. Going forward, a workshop will be organized by TCIL for Indian Bureau of Mines (an identified CoE by Ministry of Mines) with participation from Mining Industries and startups to discuss opportunities with respect to Field pilots and deployments of 5G Use cases.

3. Status of implementation of 100 5G Use Case Labs:

In line with the Budget 2023 announcement, DoT is setting up 100 5G Labs for Higher educational institutions across India. TCIL has been nominated as Implementation Agency for the project and has floated Technical Expression of Interest (EoI) and Financial Request for Proposal (RFP) for selecting the vendors. 100 Institutions spanning 28 states already been shortlisted by the institution selection committee where 5G labs will be installed. 15 vendors have been shortlisted for Proof of Concept (PoC) by Technical Evaluation committee and Vendors are expected to be finalized soon.

4. Meeting with BPR&D (Bureau of Police Research & Development), MHA on organizing 5G Hackathons:

A meeting was held on 26.09.2023 under chairmanship of Director General (BPR&D) regarding organization of 5G hackathons, with participation from officers from DoT and Telecom Centres of Excellence (TCoE) India team etc. During the meeting, the identified problem statements for hackathon were discussed. TCoE India has agreed to organize a 5G hackathon in collaboration with BPR&D team for police -related 5G use cases.

5. International Relations & Events:

- i. Meeting between USIDFC and DoT: A meeting between United States International Development Finance Corporation (DFC) and DoT (Department of Telecommunications) delegation was held on 29th Sept, 2023. During the meeting discussions were held regarding opportunities in the region to finance network expansion through ORAN, 4G, and 5G telecommunications equipment and services.
- ii. Mobile World Congress Las Vegas: A DoT delegation participated in Mobile World Congress, Las Vegas from 26th Sept- 29th Sept, 2023. During the visit, DoT delegation also participated in various bilateral meetings with US State Organization like National Science Foundation (NSF), National Institute of Standards and Technology (NIST) etc. and industry associations like U.S.-India Business Council (USISBC), US-India Strategic Partnership Forum (USISPF) etc.
- 6. Telecommunication Engineering Centre (TEC) undertook following initiatives:

Continuing its pioneering work in developing standards for the Indian telecom sector, the initiatives undertaken by TEC during the month are highlighted at *Annexure-A*.

7. Important policy decisions and achievements on Artificial Intelligence (AI) & Security:

A list of important policy decisions and achievements on AI and Security is given at *Annexure-B*.

- 8. Important initiatives/achievements pertaining to the Department facilitating conduct of G-20 Summit in New Delhi are listed at <u>Annexure-C.</u>
- 9. PLI Scheme:

The summary of the cumulative investment, sales and employment as on 31.08.2023 is as follows:

- Cumulative Investment: Rs. 2419 Cr.
- Total Sales: Rs. 34516 Cr.
- Total Exports: Rs. 7890 Cr.
- Total Employment: 17753 (in No.)
- Status of PM WANI Scheme:

PM WANI Hotspots as on 30.09.2023 - 150472

11. Progress on NBM targets of Fiberization:

OFC laid	37,26,577 as on 31.03.2023	38,06,865 as on 30.06.2023
% of BTS fiberized	39.52% on 30-05-2023	40.53% on 31-07-2023
No. of mobile towers	7,69,373 as on 31-08-2023	7,74,900 as on 29-09-2023

12. Call Before u Dig:

- a. Asset owners 2596 users created, increased from 46,131 in July 2023 to 48,727 in Sep-2023.
- b. Excavators 656 registered in Sep 2023 taking cumulative to 14,533.
- c. 995 enquiries were raised during the month of Sep 2023.
- d. A total of 14069 SMS were sent to the Registered Excavators advising them to use CBuD prior to any type of excavation.
- e. A total of 26,846 SMSs sent to the JCB Owners in Maharashtra State advising them to use CBuD prior to any type of excavation.

13. Preparations for India Mobile Congress (IMC) 2023:

Coordination with States/UTs for the participation of Startups in IMC scheduled from 27 to 29 October 2023 is underway. Received nomination of 103 start-ups from 13 States/UTs till month end.

14. Social media activities undertaken during September, 2023 are at *Annexure-* **D.**

15. Swachhata Hi Seva Campaign(SHS):

DoT actively participated in the SHS Campaign for "Garbage Free India" held under the aegis of DDWS & MoHUA from 15th September, 2023 to 2nd October, 2023. The Department and its field establishments across India actively participated in the massive cleanliness Drive "Ek Tareekh, Ek Ghanta, Ek Saath' through *Shramdaan* on 1st October, 2023 at 10 AM. Further, the campaign on Swachhata was colorfully celebrated through a drawing and painting competition for employees' children on the theme Swachhata in daily life' on Gandhi Jayanti i.e. 2nd October, 2023.

16. Hindi Pakhwada:

Several competitions were organised to celebrate Hindi Pakhwada in the Department from September 14th to September 29th in which employees enthusiastically participated.

B. PERFORMANCE OF PSUs OF DOT

1. BHARAT SANCHAR NIGAM LTD. (BSNL)

- a. Gross SIM sale for the month: 12,23,967.
- b. Gross Bharat Fiber (FTTH) Achievement: 1,13,529 Nos. in the month of September, 2023
- c. A total of 4,35,597 Rural FTTH connection has been provided on BharatNet infra under special project through BharatNet Udyami as on 30.09.2023.
- d. Gross new leased Circuits: 2554 and upgradation: 3793. Total provisioning including upgradation is 6347 in September-2023.
- e. Gross Bharat Air Fiber Achievement (Data): 985
- f. Gross Landline Achievement: 5519 connections

- g. Gross ADSL Broadband Achievement: 823 connections.
- h. 70 Gbps of Caching links have been added (cumulatively 1270 Gbps links in current FY 2023-24) making the cumulative capacity of 4820 Gbps Caching and 3434.05 Gbps Peering link capacity.
- i. MNP Ratio (Po/Pi): 5.52 {Port In = 98,931, Port out = 5,46,477}
- j. The data traffic from wire line broadband has increased from 118.2 PB (April-2019), 155 PB (April-2020) and 278.6 PB (April-2021) and 392.5 PB (April-2022) and 556 PB (April-2023) to 618 PB in the month of September, 2023
- k. Number of online transactions on portal has increased from 27,82,427 (April-2019), 36,53,078 (April-2020), 38,71,899 (April-2021), 37,45,974 (April-2022) and 38,62,674 (April-2023) to 40,08.642 in the month of September, 2023.
- In order to promote and popularize FTTH services, introduced Half Yearly Bharat Fibre Broadband Plan "Fibre 999" for individual category of customers in rural area of all the Circles.

2. TELECOMMUNICATIONS CONSULTANTS INDIA LIMITED (TCIL)

- Provisional Operating Turnover upto August, 2023 for the Financial Year 2023-24 is Rs. 896.74 Crores against Rs. 721.9 Crores for Financial Year 2022-23 in the comparative period.
- TCIL have secured orders for a total of approximately Rs. 183.83 Crores from foreign & inland clients in the month of September, 2023.

3. INDIAN TELEPHONE INDUSTRY (ITI):

The performance of the Company in the month of September 2023 is Rs. 188.66 Crore (provisional). The turnover is mainly constituted from supply of Laptops, Mini PC, HDPE, OFC, Smart Cards, Solar street lights, Contract manufacturing, Water Pipes, banking products, telephones, Execution of ASCON, GUJNET, MAHANET & NFS Projects, AMC for Defence, NGN, GSM-SZ, GPoN Equipment, Business from Data Centre, Services from Test labs, Reliability lab, VSSC Business, SaaS, ITI E-Seva, Skill development, Third party Audit services and business generated by Corporate MSPs etc.

C. BharatNet:

a. Gram Panchayats: BharatNet project is being implemented in a phased manner to provide broadband connectivity to all the Gram Panchayats (approx. 2,50,000) in the country. The cumulative status of the BharatNet project, as on 02.10.2023 is as follows:

Optical Fiber Cable laid : 6,61,984 KMs
GPs connected by Optical Fibre Cable (OFC) : 1,97,822 (GPs)
Total GPs Service Ready (OFC + Satellite) : 2,02,646 (GPs)

b. Extension of BharatNet connectivity upto villages: The scope of Bharat Net has been extended upto all 6 lakh inhabited villages including GPs. On 30.06.2021, Union Cabinet accorded a proposal for revised strategy for implementation of Bharat Net through public-Private Partnership (PPP) model in 16 states. For implementation of PPP model in 16 states, request for proposal (RFP) was floated on 20.07.2021 by Bharat Broadband Network Limited (BBNL) through global bidding for selection of Private Sector Partners. However no bid was received for PPP Model on the last date of bid i.e. 27.01.2022. Revised RFP and timelines are being worked out with alternative models. The appraisal of the amended BharatNet program has been done by the Expenditure Finance Committee. The Cabinet approved the Amended BharatNet Program on 04.08.2023 so as to expand the scope with focus on utilization of the services, using professional agencies for construction, upgradation and maintaining the BharatNet network.

Salient features of Amended BharatNet Program are as follows:

- BSNL has been made the overall Project Management Agency (PMA).
- The network from Blocks to Gram Panchayats (around 2.64 lakh) will be maintained by Professional Agencies selected through bidding process. The contract Period will be for 10 years (including 3 years for construction)
- Remaining 3.8 Lakh villages are to be constructed on demand basis.
- There is a target to provide 1.5 crores home fibre connections across rural households/ institutions/ enterprises over a period of five (5) year through BharatNet Udyami model.

The survey, preparation of RFP work has started. As per Cabinet approval, the RFP is to be finalized within five months of Cabinet approval, signing of Master Service Agreement (MSA) within one month of award of work and completion of construction work of project within 36 months from signing of MSA.

D. TELECOM SECTOR KPIs:

The details regarding number of telephones and tele-density in the country at the end of August, 2023 are as under-

Total no. of Wireline Connections	29.86 Million
Total no. of Wireless Connections	1148.40 Million
Total no. of Connections	1178.27 Million
Tele-density	84.62 %

- TEC has initiated the standardisation work in IEEE SA. Following two PAR document (draft) have been prepared and submitted to IEEE for further process;
 - a. Standard for Fairness Assessment and Rating of Artificial Intelligence Systems
 - b. Standard for Robustness Assessment and Rating of Artificial Intelligence Systems for Telecom Networks

PAR stands for Project Authorization Request. It is the means by which standards projects are started within the IEEE SA. PARs define the scope, purpose, and contact points for the new project.

- ii. TEC is working on publishing a technical report on "Television Broadcasting to Mobile Handheld Devices Direct to Mobile (D2M) Broadcasting" bringing out the features, deployment status, technology maturity, etc., of different technologies. The aim is to create general awareness amongst the stakeholders/ policymakers on this emerging technology landscape. In this regard, TEC released the draft report and sought the comments/suggestions from stakeholders by 08.09.2023 which has been further extended up to 25.09.2023.
- iii. TEC has taken the advanced level Corporate Membership of IEEE SA for participation and contribution in the IEEE standardization activities. In this regard, Standardization Division, TEC has organised a Session on Participation in Standardization Activities at IEEE on 21 September, 2023 in TEC New Delhi. The session was chaired by Sr. DDC TEC. Experts from IEEE made a presentation to TEC officials on the process for participation and contribution in the IEEE standardization activities.
- iv. An Addendum to 'TEC Test Procedure for Measurement of Electromagnetic Field from Base Station Antenna (TEC 13019:2021)' was issued for the measurement of EMF Exposure from 5G Base Stations. The document prescribes Broadband and Frequency Selective Methods for EMF exposure assessment from 5G Base Stations. It covers all the frequencies/frequency bands such as sub-6 GHz frequencies and mm Wave frequencies (e.g. 26 GHz). This Standard will enable measurement of EMF exposure from 5G Base Stations across all kinds of deployments and aid in ensuring safe EMF exposure levels to the general public.
- v. India's contribution to 6G Vision Framework, which was earlier accepted by ITU-R's WP5D during the meetings held in June, 2023, has now also been adopted by ITU-R's Study Group-5. During the meetings held on 25-26 September, 2023 in Geneva, the contributions which were led by TEC, resulted in adoption of India's proposals in the ITU's 6G Framework which includes- Ubiquitous Connectivity as dedicated usage scenario and Coverage, Sustainability and Interoperability as 6G capabilities. This achievement in global 6G standardization will enable high speed broadband internet for both urban and rural populations for mitigating the digital divide and creating equal opportunities for all through mobile technologies.

vi. ITU-T SG-20 meeting on IoT and Smart Cities & Communities was held on 13-22 Sept 2023 in Arusha, Tanzania in hybrid mode. Total nine contributions (as outcome of SG-20 Regional Group for Asia Pacific meeting, chaired by TEC virtually, 25-26 July 2023) submitted by TEC were presented and discussed in this meeting. The officers of TEC and few industry members supported Indian delegation remotely in presenting as well as discussing these contributions and participated in other activities. These contributions are on e-learning in remote classrooms, IoT platform enabled by zero trust technology, Smart Agriculture use cases, smart aquaculture use cases, IoT-based power grid communication network, framework for smart public health emergency management, Digital twin for intelligent transport system and new work item on Smart Cities Reference Architecture etc.

Important policy decisions and achievements on Artificial Intelligence (AI) & Security:

- a. The citizen centric Sanchar Saathi portal https://sancharsaathi.gov.in has been visited by 2.66 Crore citizens till date. 8.55 lakhs mobile connections have been disconnected which were not taken by the citizens and reported on the Sanchar Saathi portal. Till date 8,75,105 mobiles handsets have been reported and blocked out of which 3,30,825 mobile handsets have been traced. Further, 37,158 mobile handsets have been recovered by the States / UTs police.
- b. AI based facial recognition analysis has been carried out on 114 crore mobile connections to detect mobile connections obtained on fake / forged documents. Till August 2023, 66.44 lakh such mobile connections have been detected out of which 53.81 lakh suspected connections have been disconnected failing re-verification. 68,411 Point of Sale (PoS), selling SIMs on fake/forged documents have been blacklisted and 316 FIRs have been registered across the country.
- c. 46,465 mobile handsets used with disconnected mobile connections obtained on fake / forged documents have been blocked across all the TSPs.
- d. 2.01 lakh social media profiles like WhatsApp have been disengaged and 7.82 lakh bank/wallets accounts have been frozen which were linked to disconnected mobile connections obtained on fake / forged documents.
- e. Online Digital Intelligence Platform (DIP) of DoT is now ready for online sharing telecom related intelligence (mainly the disconnected mobile numbers failed in re-verification, reported by LEAs and requested by the customers) with LEAs, banks, financial institutions, social media intermediaries, Govt. agencies like UIDAI, GSTN etc.
- f. C-DOT received the first prize in the Excellence in Innovation for its citizen centric technology initiative, CEIR and first prize in the R&D category for its cutting-edge indigenous endeavors in the area of Quantum Secure Encryption solution at the 48th Elcina awards on 29th Sept, 2023.
- g. C-DOT received the IETE-Corporate Award for performance in computer and telecommunication system in Pune on 16th Sept, 2023.
- C-DOT participated as an exhibitor in the Mobile World congress held at Las Vegas, USA from 26th to 28th Sept, 2023.
- i. C-DOT and its startup partners showcased innovative solutions spanning health, education, remote connectivity, street lighting & water management at the "Sankalp Saptah" held at Bharat Mandapam, Pragati Maidan, New Delhi on 30th Sept, 2023. Hon'ble Prime Minister visited C-DOT booth and interacted with C-DOT engineers

Important actions taken during G-20 Summit in New Delhi:

- A control centre has been setup for round the clock monitoring of cyber incidences in G20 from 8th September'2023 to 10th September'2023.
- ii. The Govt. websites of DoT and its units/organizations have been kept on monitoring for any unusual behaviour.
- iii. The URLs/IPs as instructed by other security entities have been kept on monitoring in TSOC to check for effective blocking.
- iv. IP addresses of ISP network deployed in Bharat Mandapam in G20 have been kept for monitoring in TSOC.
- v. During three days hourly reports generated regarding attackers from Indonesia, China, Bangladesh, Russia, Bulgaria and Pakistan were generated periodically using a country-wise monitoring feature of TSOC.
- vi. List of 865 malicious IPs of China were identified as attacking IPs on different Govt. websites in Delhi, subsequently these IPs were blocked.
- vii. TSOC system was also used to continuously monitor 350 Malicious domains shared by different agencies for effective blocking.
- viii. TSOC system was continuously monitoring for Distributed Denial-of-Service (DDoS) attack on important government websites e.g. Delhi Police, Mumbai Police, MPSLDC and DERC, NIB, PGCIL, Delhi.gov.in etc.

Social Media Activities Undertaken during September, 2023

Twitter:

Total No. of Tweets: 2030

Total Replies: 133

Earned- Re-tweets & Likes: 32637 & 927

• Earned Impressions: 117.1 K

People Visits: 3600New Followers: 937

Total Followers: 192.3 K

Facebook:

Total No. of Posts: 15

Earned Shares: 33

Page Likes (New): 191

Reach: 117.9 K

Post Engagements: 2280

Video Views: 1392

New Followers: 1345

Total Followers: 55 K

YouTube:

Total No. of Video Posts: 07

Video Views: 6165

Watch Time (Hrs): 109.8 Hours

New Subscribers: 190

Total Subscribers: 7040
