# No. 6-1/2021-IC Government of India Ministry of Communications Department of Telecommunications International Cooperation Division

1416, Sanchar Bhawan, New Delhi Dated 22<sup>nd</sup> March 2023

#### OFFICE MEMORANDUM

Subject: - Constitution of Bharat 6G Mission and Apex Council- reg.

The Department of Telecommunications constituted a Technology Innovation Group on 6G (TIG-6G) on 1st November 2021 with members from various Ministries/Departments, research and development institutions, academia, standardization bodies, Telecom Service Providers and industry to develop Vision, Mission and Goals for the 6G and also develop a roadmap and action plans for 6G in India. The TIG-6G in turn constituted six Task Forces with industry, academia, R&D institutions and Government as members on Multi-Disciplinary Innovative Solutions, Multiplatform Next Generation Networks, Spectrum for Next Generation Requirements, Devices, International Standards Contribution and Funding Research and Development.

The Six Task Forces under TIG-6G deliberated on various aspects of emerging telecom technologies and platforms in the next decade. They focused on innovations that leverage these new technologies to deliver solutions, the device ecosystem that will support these innovations, spectrum management that will enable the ongoing and oncoming explosion in wireless communications, the need to contribute our innovations to global standards and ensure interoperability, and requirement of adequate financing to carry out the Bharat 6G Mission.

2. Based on the reports of the Six Task Forces, a Bharat 6G Vision Document has been prepared by the Technology Innovation Group on 6G (copy enclosed).

### 3. Bharat 6G Vision Statement

The Bharat 6G Vision Statement is as follows:

"Design, develop and deploy 6G network technologies that provide ubiquitous, intelligent and secure connectivity for high quality living experience for the world"

6G Vision is based on principles of Affordability, Sustainability, and Ubiquity. The Vision for 6G is fully aligned with the national Vision of Atmanirbhar Bharat and will seek to empower every Indian to become Atmanirbhar (self-reliant) in their lives. At the same time, it ensures that India takes its rightful place in the world as a leading supplier of advanced telecom technologies and solutions that are affordable and contribute to the global good. The 6G Vision is thus timed just right for India's Aazadi ka Amrit Kaal.

4. Apex Council -Bharat 6G Mission

An Apex Council is constituted as follows to lay down the Phase-wise objectives of the Bharat 6G Mission, consult the Bharat 6G Alliance, suggest the research and innovation pathways to be explored, review the progress from time to time, order external evaluations and suggest course corrections.

Sl No.	Designation/Organisation	Position
1	Hon'ble Minister for Communications	Chair
2	Hon'ble Minister of State for Communications	Vice Chair
3	Prof Arogyaswami J. Paulraj, Stanford University,	Member
4	Mr Vinod Dham, USA	Member
5	Mr. N G Subramaniam, COO TCS	Member
6	Principal Scientific Adviser to PM	Member
7	Secretary, Telecom	Member
8	Secretary, MeitY	Member
9	Secretary, DRDO	Member
10	Secretary, Space	Member
11	Secretary, MIB	Member
12	Additional Secretary, Telecom	Member
13	Signal Officer in Chief, MoD	Member
14	National Cyber Security Coordinator	Member
15	Chairman, TSDSI	Member
16	Chairman, COAI	Member
17	Academic Researcher - of Bharat 6G Alliance	Member
18	R&D Lab rep- of Bharat 6 G Alliance	Member
19	Industry Rep- of Bharat 6 G Alliance	Member
20	Startup Rep- of Bharat 6 G Alliance	Member
21	CEO CDOT	Member
22	Mission Head - Bharat 6G Mission	Member- Secretar

Chairperson may co-opt any other member as deemed necessary.

The Apex Council may constitute Technical Committees to generate calls for proposals or address technical challenges through a resourceful Program Management Unit (PMU). The Apex Council will be agile and continually review its choice of research focus areas to ensure that it pivots where needed towards new rapidly emerging pathways and ensure hands-on collaboration across industry, academia and the Centre of Excellences (CoEs). The Apex Council may ensure sufficient visibility to the nation's Bharat 6G Mission globally through participation in international forums/standards bodies, meetings, and collaborations with similar Missions and activities worldwide.

#### 6. Bharat 6G Mission

The research and start-up ecosystem will be tapped to bring innovations and new ideas to the table. Adequate provisions for financial support will be made available. The Mission will be completed in two phases:

- i. Phase 1 from 2023-2025 (2 years)
- ii. Phase 2 from 2025-2030 (5 years)

#### 6.1 Bharat 6G Mission -Objectives

- Facilitate and finance Research and Development, design and development of 6G technologies by Indian Startups/Companies/Research bodies/Universities;
- Enable India to become a leading global supplier of IP, products and solutions of affordable 6G telecom solutions;
- Deploy 6G technologies to act as a powerful force multiplier for India@2030;
- Enable inclusive and significant enhancement in the quality of living experience of citizens in India and across the world.

#### 6.2 Bharat 6G Mission -Structure

- i. Headed by Mission Head (A Joint Secretary Level officer)
  - a. a lean governance mission-mode structure (during the mission period) to leverage existing organizational capabilities,
  - staffed by professional executives from industry, academia and research institutions.
- ii. Technical Committees, comprising of reputed Experts, Researchers and Industry experts, will be set up to evaluate proposals for funding.
- iii. Administrative sanctions for proposals would be taken from the Competent Authority as per extant administrative procedures and financial delegation.

## 6.3 Bharat 6G Mission - Functions

- i. Extend secretariat support to Apex Council of Bharat 6G Mission.
- ii. Recommend phase-wise objectives aligned with Atmanirbhar Bharat.
- iii. Select and fine-tune the research and innovation pathways:
  - identify priority areas for 6G research based on India's competitive advantages;
  - b. focus on new technologies such as Terahertz communication, radio interfaces, tactile Internet, AI for connected intelligence, new encoding methods & waveforms, chipsets for 6G devices, etc.;
  - focus also on new device types, human interfaces and machine/robot communications;
  - d. utilize India's prowess in software especially in NFV, AI and edge computing;
  - e. Support IP development efforts and registration in India as well as product development efforts.
- iv. Enable and encourage participation in pre-standardisation activities and standardsmaking by all domestic stakeholders including industry, academia, national laboratories, start-ups and service providers in National and Global Standards Development and Standard Setting Bodies.
- v. Lay down rules and recommend budgetary layouts.
- vi. Approve R&D / innovation proposals as per delegation of powers.
- vii. Co-ordinate with sectoral organisations for an all-of-nation approach.
- viii. Ensure global visibility, participation, and collaborations.
- ix. Assess and remove procedural roadblocks and give periodic feedback to Apex Council.
- x. Create a lean governance mission-mode structure (during the mission period)

#### 7. Bharat 6G Alliance - B6GA

The Bharat 6G Alliance shall be an alliance of domestic industry, academia, national research institutions and standards organisations facilitated by the Government. The

B6GA is expected to chart its own course of action based on the Bharat 6G Vision Document and further developments. B6GA will focus on the following:

- i. To help grow 5G Advanced/6G IPs and essential patents from India;
- ii. Design and build Indian 5G Advanced/6G products and solutions;
- iii. Support and energise Indian participation in 3GPP/ITU;
- iv. To help build consortia of Indian Startups and companies;
- v. To facilitate market access for Indian 5G/6G technology products;
- vi. Build coalition with like-minded 6G Global Alliances.
- 8. Based on 6G Vision outlined herein, a Bharat 6G Mission is being launched to realise the Vision.

(Atique Ahmed)

Director (IC)

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To

All the Members of the Apex Council

# Copy for Kind information please

- i. PS to Hon'ble MOC
- ii. PS to Hon'ble MOSC
- iii. PSO to Secretary(T)
- iv. PPS to AS(T)
- v. PPS to Member(F)/ Member(T)/ Member(S)