## Government of India Ministry of Communications Department of Telecommunications (Satellite Division) 20, Ashoka Road, New Delhi – 110001

File No. 60-1/IMC/GMPCS/2024-SAT

Dated 05/05/2025

## Office Memorandum

To,

All Unified Licensees with GMPCS service authorisation

Subject: Instructions related to Security aspects in Chapter XII of the UL Agreement for the provision of GMPCS service

As per condition 39 of Chapter-VI of the Unified License (UL) Agreement, the Licensor reserves the right to issue instructions/directions from time to time in the interest of national security. In pursuance of this condition, the following additional security instructions, other than the existing security conditions included in Chapter XII of the UL Agreement for the provision of GMPCS service, are hereby issued:

- 1. The Licensee shall require security clearance for specific gateway/ hub locations in India and compliance to monitoring/ interception facilities/ equipment requirements. The Monitoring and Lawful Interception shall be provided as per the licensing condition(s) at the Gateway/Point of Presence (PoP)/Network Control and Monitoring Center (NCMC) /any equivalent facility. The LIS/LIM system shall be integrated with Centralised Monitoring System (CMS)/ Integrated Monitoring System (IMS). The Licensee shall demonstrate the system capabilities with respect to security aspects including monitoring to the Licensor or its authorized representative prior to starting of operations in India.
- 2. Essential functionalities like Lawful Interception facility, monitoring/ control facility of user terminals, user data traffic routing, control of equipment in Gateway routing data traffic etc., of the Network Control and Monitoring Centre (or equivalent facility) shall be located in India.
- 3. The licensee shall be able to implement service restriction/ denial to any individual, group of subscribers or certain geographical areas during hostilities or otherwise as informed by the Designated LEAs/ Security Agencies /Licensor. Further, the licensees shall ensure the accuracy of geo-fencing in case of debarred areas and also reshape footprint pattern near borders areas to avoid spillovers.
- 4. Licensee to provide services, as per survey of India maps and in border/sensitive areas, with selective provision/ denial facility thereto to provide services on best effort basis to only authorized UTs/whitelisted UTs as informed by Designated LEAs/ Security Agencies/Licensor.

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- 5. Special Monitoring Zones (50 kms within International Border) along the territorial borders and along coastal borders covering EEZ (200 Nautical Miles) shall be demarcated for monitoring of user activities by Designated LEAs/ Security Agencies.
- 6. Following additional details may also be included in CDR/IPDR details:
  - a) User Terminal location along with exact Latitude/Longitude
  - b) Device ID, IMEI, MSISDN.
  - c) Public IP address allotted to a particular session as well as private IP address.
  - d) For the directly connected end user devices with the licensee's UT, all requisite details like IP address, MAC address or any other unique identifier, shall be provided in the IPDR along with the IP address allocated to the UT. For subsequently connected end user devices to such devices, the licensee may provide the details on best effort basis.

However, the location of its user terminals or any other sensitive information pertaining to the user (SDR/CDR/IPDR etc.) shall not be visible or accessible at any location abroad.

- 7. The licensee shall ensure that websites blocked in India are also blocked through GMPCS services.
- 8. The licensee shall facilitate meta-data collection by Telecom Security Operation Centre (TSOC) under DoT.
- 9. The sharing of user terminals' information (i.e. name, address etc., as per Condition No. 39.17 in the Part-I of the UL) with unique IDs with Designated LEAs/ Security Agencies shall be at specified periodicity, as and when required. Further, the Licensee shall share the aforesaid details of the relocated/shifted user terminals quarterly with the Licensor and Designated LEAs/ Security Agencies.
- 10. No User Terminal (UT) shall be able to access the network from outside the geo-fenced coverage area and/or through gateway situated outside India. UTs registered in India are not allowed to latch on to any other gateway located out of Indian Territory.
- 11. The Fixed Satellite Subscriber/User Terminals (which have not subscribed to any portability/mobility facility) shall suitably be bound to geo location where subscribed services are granted by the licensee. Any attempt at the subscriber level for relocation and transportation of the terminal to other locations should not be allowed. Requests for relocation or shifting be addressed to licensee and should only be granted with proper authorization.

Further, the Licensee shall keep adequate provision to immediately block any user terminal identified as rogue for its malicious activities by agencies. In addition, the network shall have facilities available at its Gateway/PoP/NCMC/Equivalent facility for real time monitoring of frequency allotted to each

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user terminal/Gateway link and they are able to stop transmission of frequencies which are causing interference.

- 12. Registration, Authentication and Tracking of User Terminals: All user terminals operating within Indian Territory shall be registered in India and regular verification through authentication mechanism should be included in the design. Unregistered devices or any foreign device shall only be allowed to use services within Geo-fenced area of Indian Territory after due authentication and registration process. Further, real time information of such foreign /unregistered UTs hooking on to the network from within Indian Territory shall be provided to Designated LEAs/ Security Agencies. Also, the service providers shall provide real time location data/tracking of user terminals (Fixed and Mobile) anywhere within Indian Territory as and when required by Designated LEAs/Security Agencies. This includes sharing of Latitude-Longitude details of user terminals as and when required on real time basis.
- 13. The Licensee shall also ensure that no location spoofing device (hardware or software) be incorporated with these user terminals to hide actual location of the UTs.
- 14. The Licensee may ensure provisioning of NavIC based positioning system in their User Terminals on best effort basis, along with a transition plan to implement NavIC in a time-bound manner by 2029.
- 15. In case the Licensee requires remote access from outside the country (Indian territory) for operation of Gateways/PoPs, the Licensee shall ensure that provisioning of remote access from abroad complies with extant rules and adhere to technical compliance to Remote Access guideline issued by Licensor, as modified from time to time.
- 16. The Licensee shall submit an undertaking that it shall not copy and decrypt the Indian Telecom data outside India.
- 17. The licensee shall provide real time monitoring to ensure that no user traffic originating from, or destined for India is being routed through any gateway/ PoPs outside Indian Territory.
- 18. The Indian user traffic shall not be routed through any Gateway/PoP located abroad or any space system, which is not part of satellite/constellation used for providing service.
- 19. The licensees shall clarify on Inter Satellite Communication Links (ISCL) capability and ensure that no routing of traffic via outside gateways takes place through ISCL during Indian gateway' failure or as part of optimization. Further, the Indian user traffic shall not be mirrored to any system/server located abroad through Inter Satellite Communication Link (ISCL) or through any other means.

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- 20. The licensees shall take prior approval in case of any change in network architecture including number of satellites, orbits or any other configuration related to ground and space segments.
- 21. The Licensee shall share/furnish following additional information, as and when required by licensor:
  - a) The list of security standards being complied for the network(s).
  - b) The details about nature of payloads on satellites proposed to be used (i.e. communication, imaging, resource mapping etc.). The Licensee shall submit a confirmation that no surveillance activity can be carried out with the satellite constellation.
  - c) The Licensee shall furnish an undertaking to ensure interference free operation of its constellation with existing GSO satellites of Department of Space (DoS).
  - d) Interference mitigation techniques to resolve both present and future interference between existing/planned satellites (including strategic satellites) services and the existing/proposed satellite constellation of the Licensee.
  - e) Co-existence and coordination studies to ensure that there is no interference to various networks due to the proposed service.
  - f) List of equipment being used/planned to be used in the network. Link budget calculation of its existing /future satellite constellation (in totality) for necessary analysis from security and interference angles.
- 22. The Licensee shall coordinate with Department of Space, Government of India with respect to non-interference with GSO satellites including strategic satellites and strictly follow Article 22 of ITU Radio Regulation (RR) regarding power flux density limits. Further, mitigation/ resolution methodology needs to be predefined in case of any conflicts arising with existing and planned satellite operations of DoS. Further, it shall be ensured that no interference to operation of any communication system in space/land/sea and shall immediately shut off its transmission in that frequency range which causes interference, if found out later.
- 23. The user traffic shall not by-pass the Indian Gateway and shall be routed through them, and in no case, direct communication between user terminals through one or more satellite(s) shall be permitted.
- 24. The licensee shall ensure that the Data Centre/POP (exclusively/ non-exclusively provisioned for Satellite service) is based within Geographical boundary of India and shall make provision to provide Domain Name System (DNS) resolution within the geographical boundary of India.
- 25. The licensee shall seek separate clearance (from security angle) for Voice service and Data service.
- 26. The licensee shall seek separate clearance (from security angle) for fixed location service (no mobility/ limited mobility) and mobility (full) based service.
- 27. The licensee, in the format prescribed, will submit to the licensor a year-wise phased manufacturing program aiming at indigenisation to a level of at least

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20% of their ground segment of the satellite network that is established at the end of 5 years post the date of launch of commercial operations.

28. The licensee shall comply with clauses 5.4, 8.1-8.3 of the TEC IR 42032:2024 for NGSO satellite networks.

## 29. Security instructions specific to Land-Mobility Terminals

- 29.1 Land mobility terminals shall report location every 2.6 km moved or 1-minute duration, whichever is less, as claimed by the Licensee. Licensee may be asked to demonstrate the capability for real time location tracking of user terminals as per the existing licensing terms and conditions.
- 29.2 The network should have ability to stop service when user terminal moves from authorized area to barred area (while in idle mode and while ongoing data transfer/voice call).
- 29.3 The licensee shall comply with clause 8.4 [Additional Mandatory Requirements applicable to Earth Stations in Motion (ESIM) and Transportable Earth Stations (TES)] of the TEC IR 42032:2024 for NGSO satellite networks, and the same shall be demonstrated prior to starting of operations in India.

In case of conflict between UL conditions and the conditions in this O.M., the latter shall prevail. These conditions are liable to change depending on the national security requirements.

(Arun Agarwal)

Dy. Director General (Satellite)

## Copy to:

- DG(T), DoT
- Sr. DDG (TEC)/ Wireless Advisor
- DDG (LFP)/ DDG (WPF)/ DDG (SA)/ DDG (SPPI)/DDG(AI&DIU), DoT.
- DDG (CS)/ DDG (DS)/ DDG (AS)/DDG(SMC)/DDG(LP), DoT.
- Director (IT) may kindly arrange to upload this letter on the website of DoT.