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Shri Akhilesh Kumar Trivedi
Advisor (Networks, Spectrum and Licensing)
Telecom Regulatory Authority of India,
Government of India,
New Delhi

Subject: Comments/inputs on Citizen safety-related mobile satellite services should be classified as a separate service from commercial satellite services and differentiated from Direct-to-Device using terrestrial mobile frequencies

Dear Shri Akhilesh Kumar Trivedi,

Greetings from India Cellular and Electronics Association (**ICEA**)!

We appreciate the opportunity to provide our comments and inputs on the Telecom Regulatory Authority of India's (TRAI) consultation paper titled "Citizen Safety-related Mobile Satellite Services Should be Classified as a Separate Service from Commercial Satellite Services and Differentiated from Direct-to-Device Using Terrestrial Mobile Frequencies."

On behalf of the Indian Cellular and Electronics Association (ICEA), we would like to submit the following points for consideration:

- Q17. Whether there is a need for introducing certain new authorisations or sub-categories of authorisations under the Telecommunications Act, 2023? If yes, -**
- a) For which type of services, new authorisations or sub-categories of authorisations should be introduced?**
 - b) What should be the respective scopes of such authorisations?**
 - c) What should be the respective service areas for such authorizations?**
 - d) What terms and conditions (general, technical, operational, Security, etc.) should be made applicable for such authorizations?**

Our Response:

Yes, a new sub-category of service authorization should be introduced under the main authorization category of Satellite-based Telecommunication services. The sub-category may be named "**Citizen safety-related mobile satellite services.**"



A new type of satellite service (Emergency SoS) is emerging with recently introduced satellite features that provide end users with peace of mind and potentially life-saving communications when there is no mobile or Wi-Fi network available. In dire situations, if a user finds themselves in danger while out of range of a terrestrial (mobile/Wi-Fi) network, their device can initiate emergency communications over satellite. This service can also benefit in scenarios where public networks may go down due to natural disasters, viz., floods, earthquakes, tsunamis, etc., where citizens can communicate using emergency communication services through satellite.

Comparison with Direct-to-Device using terrestrial mobile frequencies:

Safety-related mobile satellite services are inherently different from the emerging Direct-to-Device arrangements between mobile network operators and commercial satellite operators. Both services differ substantially in the use of spectrum, capabilities, and commercial approaches.

- **Spectrum:** Direct-to-Device relies on the use of terrestrial IMT spectrum by satellites to extend mobile network coverage to areas that are uncovered by cellular towers. This new type of spectrum usage, emerging first in the United States under the FCC's new Supplemental Coverage from Space rules, relies on administration-by-administration rule-making because the usage is inconsistent with the ITU's Radio Regulations. Rules meant to govern Direct -to-Device usage of terrestrial Mobile spectrum are currently being developed by the ITU. By contrast, safety-related mobile satellite services rely on globally harmonized ITU allocations for Mobile Satellite Services (MSS) that operate under well-established rules.
 - **Capabilities:** Direct-to-Device services using the terrestrial mobile spectrum are not specific for safety or emergencies and seek to extend the same terrestrial mobile network capabilities, including voice and data, that end users are accustomed to on their mobile network. By contrast, safety-related MSS services are specialized features that provide peace of mind and critical communications for users that are out of range of a terrestrial network, regardless of their choice of mobile network. Safety-related MSS services provide only limited communications as a public service.
 - **Commercial Approach:** Direct-to-Device using terrestrial mobile requires users to be subscribed to a specific mobile network operator that has an agreement with a satellite operator to receive these services. By contrast, safety-related mobile satellite services are not tied to a particular mobile network operator.
- A. The scope of this new sub-category should be **"Public Telephony Service"** and **"Public Internet Service"**.
- B. The service area for citizen safety-related mobile satellite services should be at the national level, covering all of India.
- C. Terms and conditions for the sub-category of Citizen safety-related mobile satellite services may be as follows:
- Satellite spectrum allocations for citizen safety services should be in the L and S bands for the device-to-satellite link.



- Nil or minimal administrative charges
- Direct communication from one device to another through satellite is to be restricted. All communication from a device should be routed to the PSAPs (Public Safety Answering Points) via Ground Stations/Relay Centers. This ensures that communication from the device is integrated with the established public safety network points across the country, facilitating the handling of SOS communications efficiently.

The Indian Cellular and Electronics Association (ICEA) urges the Department of Telecommunications (DoT) and the Telecom Regulatory Authority of India (TRAI) to include safety/emergency satellite services as a separate service in the upcoming satellite spectrum consultation. This will allow for stakeholder views and informed policy decisions with the following considerations:

- 1. Satellite Spectrum Allocations for Citizen Safety Services**
- 2. Nil or Minimal Administrative Charges**
- 3. Encouragement of Technological Innovations for Citizen Safety Services**

These services are crucial for users in potentially life-threatening situations when there is no mobile network coverage. Satellite-enabled emergency and safety features can help citizens connect with appropriate responders who can provide necessary support during exceptional circumstances.

We trust that these inputs will be valuable in refining the regulatory framework for citizen safety-related mobile satellite services. ICEA remains committed to supporting TRAI in its endeavours to enhance the safety and security of citizens through robust and reliable communication services.

We look forward to continued engagement with TRAI on this critical matter.

With my best regards,

A handwritten signature in black ink, appearing to read "Rajesh Sharma", with a long horizontal stroke extending to the right.

Rajesh Sharma
Executive Director & Principal Advisor