



Submission of Industry Suggestions on the Consultation Paper on the Framework for Service Authorisations to be Granted Under the Telecommunications Act, 2023

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 authorisations?**
- (d) What terms and conditions (general, technical, operational, Security, etc.) should be made applicable for such authorisations?**

Kindly provide a detailed response with justifications.

Industry Response:

- A. Yes, a new sub-category of service authorization should be introduced under the main authorisation category of Satellite-based Telecommunication Service. 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. The 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 makings 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 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.

B. The scope of this new sub-category should be “Public Telephony Service” and “Public Internet Service”.

C. The Service area of the citizen safety-related mobile satellite service should be A.- National Level -Pan India.

D. Terms & conditions for the sub-category of Citizen safety-related mobile satellite services may be as follows:

- Satellite Spectrum allocations for citizen safety services in the L and S bands for device to satellite leg.
- Nil or minimal administrative charges
- Direct communication from one device to another device through satellite to be restricted. All communication from a device will be to the PSAPs through the Ground Station/Relay Centers ensuring communication from the device flows to and fro to the established public safety network points across the country for handling SOS communication.