

Responses for the TRAI consultation paper on “Integrated Emergency Response System”:

1 *What are the types of emergency services that should be made available through single emergency number?*

Police, Fire, Healthcare, Hazardous Disasters, Natural calamities, war, etc can be made available through this number.

2 *What universal number (e.g. 100,108 etc) should be assigned for the integrated emergency communication and response system in India?*

100 can be assigned, as it is one of the most widely used emergency number in India.

3 *Should there be primary / secondary access numbers defined for the integrated emergency communication and response system in India? If yes, what should these numbers be?*

Yes, 100 can be made the primary number, and other important numbers like 108, 110 etc can be made as service specific secondary numbers.

4 *For implementing single number based Integrated Emergency Communication and Response System in India, should the database with information of telephone users be maintained by the individual service providers or should there be a centralized database?*

A centralized database can be maintained to ensure that ownership lies on one reliable source.

5 *In case of centralized database which agency (one of the designated telecom service provider, a Central Government department or a designated third party) should be responsible for maintaining the database?*

A Central Government Department can maintain the database as a reliable and authorized group. Moreover, Infrastructure facilities like SDCs can be used for maintaining these databases.

6 *What are the technical issues involved in transfer of location of a mobile user in real time?*

Limitation in the devices used towards identifying the locations is the major technical issue involved in transfer of location of a mobile user.

7 *What accuracy should be mandated for the location information to be provided by the mobile service provider?*

The Cell-ID associated with a cell phone, should be accurate in order to track the physical location of the caller through cell site triangulation or GPS.

*8 Should emergency number access be allowed from inactive SIMs or handsets without SIMs? Please justify your answer.*

Yes. There might be critical situations when a caller might rely solely on these SIMs/Handsets without SIMs during emergencies.

*9 Should emergency access be allowed through SMS or email or data based calls? If yes, what will be the challenges in its implementation?*

Yes, other communication medium like email, VoIP etc can prove useful during extreme cases whenever phone options are not available to the victims. Separate e-mail response helpdesk can be setup for these issues. However, tracking the physical location using limited information like IP address, etc might be a potential challenge.

*10 Is it technically possible to get Location information in case of SMS or data based calls on real time basis? If yes, please elaborate the process and technical challenges if any.*

The possibilities of getting the exact location details are technically limited, compared to the telecom standards in practise. Making this technically feasible might involve higher costs and time for implementation.

*11 How to build redundancy in operations of Centralized response centres or PSAPs as they may be vulnerable to attack – both Physical and Application software related (Virus, Malware, denial of service, hacking) or to Network failures or Congestion i.e. Call Overload?*

Proper routing algorithms need to be maintained to avoid call overload. Emergencies can be categorized into different severities and internally routed to the appropriate desk. BCP (Business Continuity Process) can be implemented to make sure that all calls are handled without/with minimal disruption.

*12 Should all the calls made to universal emergency number be prioritized over normal calls? Please justify your answer.*

Yes. Emergency calls need to be prioritized as these are very critical in nature.

*13 What legal/penal provisions should be made to deal with the problem of Hoax or fake calls to emergency numbers?*

There can be penalties imposed similar to the practises in other countries. This will avoid/reduce the problem of Hoax or fake calls. There should also be some stern legal provisions against abusive calls, fake threat calls etc.

14 *How should the funding requirement be met for costs involved in implementation of IECRS? Should the cost be entirely borne by Central/State Governments or are there other possible ways to meet the funding requirements?*

It can be a PPP model involving central and state governments, and telecom service providers as stake holders.

15 *Should Key Performance Indicators (KPIs) related to response time be mandated for PSAPs? If yes, what should be the KPIs? Please justify your suggestions.*

Yes, KPIs need to be imposed to ensure a proper response time. SLAs can be set for each type of call based on criticality.

16 *Should use of language translation services be mandated for PSAPs?*

It is practically not feasible to make language translation services mandatory across all PSAPs. Rather, there can be a central cell capable of addressing queries in all possible languages. In rare cases, where regional language services are unavailable in a particular state, can be diverted to these central cells.

17 *In your opinion, what issues related to interconnectivity and IUC may come up in implementation of IECRS in India? What are the suggested approaches to deal with them?*

Monthly user surcharge can be imposed (or) Government can waive off the emergency call charges.

18 *Should a separate emergency number for differently able persons be mandated in India? How the use of this number be administered?*

SMS, email, etc can be made available for differently able persons to choose according to their challenges.

19 *In your opinion, apart from the issues discussed in this consultation paper, are there any other technical, commercial or regulatory issues that may be involved in implementation of IECRS in India? Please elaborate.*

Emergency push SMS services can be provided to people of a particular region/location at times of natural calamities. These messages could provide frequent updates and information about relief measures and aids to the victims.