

Aircel Group Response to
TRAI Consultation Paper on Integrated Emergency
Communications & Response System

Issues-wise Response

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

Aircel Response: All services which qualify as level-1 Emergency services under Telecom License should be available through this single Emergency number like Police, Fire, Ambulance, Women helpline etc.

The Telecom License mandates to provide Emergency services but, due to lack of infrastructure support provided by the multiple agencies involved, we (telecom operator) have no choice and had to opt for BSNL connectivity in this regard and pay huge sums for the same.

Therefore, the integrated emergency number should provide all emergency services (as prescribed under license) with equal opportunity to all operators to avoid such huge pay-out to other operator as well as avoid a situation of multiple types of complex configurations & routings.

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

Aircel Response: We agree with TRAI contention stated in the Consultation Paper that there is a need to have universal single emergency number so that people need not remember different numbers for different types of emergencies. For this, we recommend usage of '100', it being the most popular & easy to remember number. It is in use for past many decades and majority of the emergency calls are made to this number only.

4.3 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?

Aircel Response: Assignment of multiple access numbers as primary/secondary would be counter-productive as it would again create confusions for public to understand the overlapping functionalities and jurisdictions and may defeat one of the key objectives of having such integrated systems in place. Therefore, we recommend only one primary number be defined for this i.e. '100'.

4.4 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?

4.5 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?

Aircel Response: We recommend that stakeholders should be kept to minimum, for ensuring that objectives of such integration are met and for smooth operations of these public emergency services, the centralized database should be maintained by Government, under support from a body like NIC, etc., with adequate security and data privacy measures. We (telecom operator) can provide the database of MSISDN, subscriber's name and address on a fortnightly basis.

However, as has been already stated, we would need details on the architecture & functioning of the PSAP for analyzing and thereafter, providing our specific inputs.

Furthermore, in case if setting up of a centralized database has to be made open to any agency, then the same should be done through a public tendering process.

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

Aircel Response:

It is not technically possible to provide the real time transfer of location with current technical systems & architecture.

- The current technical systems involve a parallel location management system (LMS) having GMLCs/SMLCs integrating with the BTS etc in the access system and MSCs are not involved in any stage.
- Presently & considering legacy systems, neither the interfaces deployed are capable of transferring this information to MSC nor can MSC transfer this to IECRS.

We recommend that location information from the current systems can be provided on a pull based approach from PSAPs, which can be near real time as well.

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

Aircel Response:

- The kind of accuracies mentioned by the DoT in its license amendment No. 10-15/2011-AS.III/(21) dated 31st May, 2011 is technically not possible. The challenges in meeting them have already been presented by the industry to DoT and TEC.
- We alongwith industry have proposed to provide the accuracies that can be achieved through ECGI methodology. These accuracies are acceptable to various Law Enforcement agencies and we believe that these accuracies would also be helpful for emergency situations.

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

Aircel Response: We would like to recommend that access to the emergency communication system by the mobiles without SIMs or with inactive SIMs, should not be allowed. Such access would lead to various problems such as:-

- Identification of caller
- Prolonged interaction during emergency communication & situation
- Flooding of the IECRS network with Hoax calls disabling access for genuine callers
- Internal security risk
- Location can't be provided

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

4.10 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.

Aircel Response: An access to the Integrated Emergency Communication via the non-voice based access would involve a detailed study of feasibility and capabilities offered by each system in terms of : support for duplex and/or two way communication, real time communication, extending location details, identity verification & extension to IECRS. This can be done once detailed architecture & functionalities are shared.

- In case of SMS, real time two way communication is not possible,
- In Data calls, real time two way communication is possible
- SMS communication also does not support transfer of location information.
- For SMS & data calls, offline pull based location information needs to be followed as in case of voice calls.

4.11 How to build redundancy in operations of Centralized response centers 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?

Aircel Response: Government should put in place adequate measures for security and data privacy. We as telecom operator would be able to provide comments when architecture and functioning of the PSAPs are clearly specified.

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

Aircel Response:

Prioritization of calls to emergency access number is subject to technical feasibility and required outcome that too based on the specific details of architecture and functioning of the IECRS. However, interface to PSAP should be dimensioned to provide no congestion for emergency calls. For Radio Access priority, available solutions do not yield required results in case of overloads and are not recommended.

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

Aircel Response:

Adequate deterrent measures should be put in place by Government to deal with problems of hoax calls to emergency numbers which has the potential to affect emergency services to genuine callers.

4.14 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?

Aircel Response: This cost should be entirely funded by Government. Providing emergency services to citizens is a sovereign state requirement and Government should fund this entirely.

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

Aircel Response: We agree that KPIs should be mandated for PSAPs. However, we can provide specific suggestions once specific details on architecture & functionalities are provided to us.

4.16 Should use of language translation services be mandated for PSAPs?

Aircel Response: With a country of many cultures and languages, language translation services would be definitely required.

4.17 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?

Aircel Response:

We have faced problems of delivery of calls for emergency services due to lack of support from various operating agencies as well as interconnection issues with transiting operator i.e. BSNL and there is a strong need to resolve such issues beforehand & reducing additional legs involved in call deliveries.

- We would strongly urge that it should be made mandatory for these PSAPs to offer separate interconnectivity to each telecom operator since, provision of emergency services is a license condition for each operator and enabling environment has to be created for each operator to meet the condition in a fair, transparent & equivalent manner.
- Option of Direct connectivity would ensure almost NIL issues related to inter-operator billing, charging & settlements and would also reduce problems of inter-operator call congestions. This would also help in delivery of sms & data calls.

While above is strongly recommended, however in case TRAI observes direct connectivity not to be suitable, then below is suggested to be followed with a fair & transparent approach:-

- IUC (including fixed and/or recurring charges) for such calls should be prescribed on minimal cost considering it to be linked with larger consumer interests and
- Detailed public consultation alongwith details of architecture should be floated for arriving at effective interconnection arrangements.

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

Aircel Response: To avoid problems of multiplicity of numbers & confusion for customers and complexity in the architecture, only single emergency number should be followed.

4.19 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.

Aircel Response: We can provide further detailed & specific inputs once clear details of architecture & functioning of these PSAPs and expectation from operators are provided by TRAI, which we request is a 'must to do' activity before finalizing recommendations.

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