

Ministry of communication & IT
Department of Telecommunications
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(Access Services Wing)

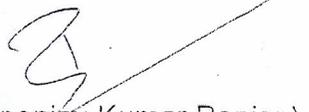
No. 16-04/2015-AS-III/NP/32 / 321

Dated: 25th August 2015

Subject: Recommendation on implementation of 'Single Number Based integrated Emergency Communication and Response System'.

Ref:- D.O. No. 102-5/2014-NSL-II dated 07/04/2015

On the subject mentioned above, reference is invited to TRAI recommendations dated 07.04.2015 for implementation of Single Number based Integrated Emergency Communication and Response System. After the detailed deliberations on the recommendations of TRAI, the undersigned is directed to seek reconsideration/ opinion/views of TRAI on the issues as detailed in Annexure 'A' as per section 11 of TRAI Act 1997.


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To
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ANNEXURE-A

S.N.	TRAI Recommendation	Recommendations of TRAI referred back for reconsideration/modification
1	<p>TRAI Recommendation in Para 4.1: The Authority recommends the establishment of PSAP based Integrated Emergency Communication and Response System (IECRS) in the country which can be accessed through a single emergency number from a landline or mobile phone/device. [Para 3.12]</p>	<p>TRAI recommendation accepted. However existing emergency numbers to be continue to exist for a period of one year.</p>
2	<p>TRAI Recommendation in Para 4.3: The Authority recommends that the existing emergency numbers 100, 101, 102 and 108 to be retained as secondary numbers. The calls made to the secondary numbers should be re-routed to the new single emergency number for termination of calls on the IECRS with an announcement to the caller to call 112 as emergency number in future. Once calls to secondary numbers reduce significantly, these numbers can be withdrawn gradually. The DoT may amend the National Numbering Plan-2003 accordingly. [Para 3.21]</p>	<p>TRAI recommendation accepted. The existing emergency numbers 100, 101, 102 and 108 to be retained as secondary numbers and calls made to secondary numbers should be re-routed to 112. However announcement to caller at this stage is not accepted as it will delay in response to emergency. Calls to secondary numbers may be reduced through public awareness campaign and subsequently closing of 108,102, 101 and 100 in phased manner. The National Numbering Plan 2003 will be amended accordingly.</p>
3	<p>TRAI Recommendation in Para 4.6: The Authority recommends that calls to the single emergency number should be prioritized in the cellular mobile networks. The Government may expedite the acceptance and implementation of the Authority's recommendations dated 26th Nov 2013 on 'Telecom Network Failures during Emergencies /Disasters – Priority routing of calls of persons engaged in response and recovery'. [Para 3.32]</p>	<p>Based upon the recommendations, instructions have been issued to operators for priority routing of calls of persons engaged in response and recovery. This is for information of TRAI.</p>
4	<p>TRAI Recommendation in Para 4.7: The Authority recommends that:</p> <p>a) SMS based access to IECRS should be provided.</p> <p>b) TSPs may be asked to provide location information in case of SMS based access to IECRS also. [Para 3.37]</p>	<p>Recommendation of Committee:</p> <p>(a) TRAI recommendation accepted. However technical implementation will be examined separately.</p> <p>(b) TRAI recommendation accepted. However technical implementation will be examined separately.</p>

5	<p>TRAI Recommendation in Para 4.8: The Authority recommends that PSAP operators should be able to handle calls in Hindi, English and the local language.[Para 3.42]</p>	<p>TRAI recommendation accepted. Its implementation will depend upon State authorities implementing project/call centers.</p>
6	<p>TRAI Recommendation in Para 4.9: The Authority recommends :</p> <p>a) Four regional databases, one each in metro city, containing subscriber details of TSPs should be set up in the country.</p> <p>b) These regional databases will be interconnected. Each of the TSPs and PSAPs should be mandated to connect to the nearby regional database centre.</p> <p>c) TSPs shall update the database with latest subscriber related information on a weekly basis. The database fields should be in a standard format, the fields of which may be decided by the DoT.</p> <p>d) Each regional database will mirror itself with the other once in 24 hours and act as a hot standby to each other.</p> <p>e) Each TSP would mandatorily provide CLI along with each call that is made to the single emergency number and forwarded to PSAP. PSAP would query the database on each call basis to pull the caller identification information in a standard field format.</p> <p>f) Access to the regional databases will be provided free of charge, so that all the TSPs and PSAPs connect their respective systems to these databases.[Para 3.55]</p>	<p>Recommendation of Committee:</p> <p>a) Respective TSPs will set up databases for their own customers. The connectivity network of databases with PSAP and procedures for fetching information from databases to be addressed separately.</p> <p>b) Each PSAP will have to be connected to the databases of all TSPs.</p> <p>c) TRAI recommendation accepted. The format of data base has already been finalized by DoT vide File no. 800-09/20010-VAS dated 09th August 2012.</p> <p>d) TRAI recommendation accepted. Each TSP will keep mirror image of its database in hot standby mode.</p> <p>e) TRAI recommendation accepted. However, in MNP scenario, the PSAP operator will first have to access MNP database to know the TSPs details.</p> <p>f) TRAI recommendation accepted. The access to TSPs databases by PSAP will be provided free of charge.</p>
7	<p>TRAI Recommendation in Para 4.10: The Authority recommends that:</p> <p>a) The DoT may direct BSNL to setup/hire and maintain infrastructure (data centre) wherein the subscriber database provided by all TSPs will be installed, updated and managed by BSNL. BSNL may also ensure confidentiality and</p>	<p>Recommendation of Committee:</p> <p>a) The subscriber database is commercially sensitive information and not shared by TSPs with each other. BSNL being an operator cannot be mandated to have data centre wherein data of all TSPs will be maintained. Further DoT will direct all TSPs to set/hire and</p>

	<p>secrecy of the data.</p> <p>b) All the TSPs may be directed to share their subscriber database with the BSNL. [Para 3.60]</p>	<p>maintain infrastructure (data centre) of their own subscribers database. The updation and management of TSPs data centers will be done by themselves. However, Connectivity of TSPs with PSAPs for routing of call, query/ response for associated data e.g. subscriber information location retrieval etc. and connectivity of PSAPs with first responders/ 3rd Parties involved in emergency call/ event handling will require connectivity network/ cloud which may be owned by specific entity and accordingly mechanism to fund for cost borne on this account is to be finalized. A group including stakeholders will finalize specific details.</p> <p>It is suggested that management of database details by the Public Safety Answering Point (PSAP) can be done in a phase manner, analogous to Direct Benefit Transfers (DBT) handled by the National Payments Corporation of India (NPCI) with respect to bank accounts.</p> <p>[This would ensure confidentiality of customer details for the Telecom Service Providers (TSPs) while ensuring that the PSAP has access to all relevant details required for attending to the emergency call. The same may be studied for implementation.]</p> <p>b) Not applicable in view of (a) above.</p>
8	<p>TRAI Recommendation in Para 4.11: The Authority recommends that:</p> <p>(a) The DoT may instruct all TSPs to connect their location element (i.e. GMLC) to the common GMLC installed and maintained by BSNL at the locations of regional database(s).</p> <p>(b) All PSAPs will be connected to this common GMLC to obtain location information of an emergency caller.</p> <p>(c) TSPs will update their respective GMLC and that of Common GMLC with location information.</p> <p>(d) Standards for connectivity, if any, between GMLCs of TSPs and common GMLCs will be provided by</p>	<p>Recommendation of Committee:</p> <p>(a) The DoT will instruct all TSPs to connect their GMLCs with each PSAP to obtain location information of an emergency caller. However, Privacy and security issues related to location retrieval may require stipulation of specific functional capabilities and procedure flow, which will be finalized by DoT.</p> <p>(b) Not applicable in view of (a) above.</p> <p>(c) The TSPs will update their GMLCs which will be connected to each PSAP.</p> <p>(d) The Connectivity between GMLCs of TSPs and PSAPs will follow the 3GPP/International standards.</p>

	<p>the Telecom Engineering Centre of the DoT.</p> <p>(e) Based on socio-economic conditions of subscribers, the DoT may consider mandating a transition to GPS enabled handsets within a certain time frame so as to obtain more accurate location information of the caller. [Para 3.68]</p>	<p>(e) TRAI recommendation is not accepted as there is large percentage of low cost handsets with subscribers which do not support GPS. It is suggested that the impact of enabling all mobile phone handsets with Global Positioning Systems (GPS) may be studied before finalizing the view on the issue.</p>
9	<p>TRAI Recommendation in Para 4.13: The Authority recommends that once PSAP based IECRS system is put in place, operational KPIs can be finalised. [Para 3.77]</p>	<p>The KPIs will be finalized first which will be refined at subsequent stages.</p>
10	<p>TRAI Recommendation in Para 4.14:</p> <p>(a) A trial version of PSAP based IECRS should be put in place and it should be tested for all types of messages viz. voice, data, video, and other mediums to communicate with PSAPs. Trial version may also be tested for interoperability between data centres and PSAPs. [Para 3.80]</p>	<p>Recommendation of Committee:</p> <p>(a) TRAI recommendation accepted. However, Trial envisages all types of messages including voice, data, video and other mediums to communicate with PSAPs. It will require requisite technical capabilities in PSAPs, transport network connecting TSPs with PSAPs, Gateway functionalities (if required) and procedure flow/ functional capabilities is relevant network elements. Specific requirements will be finalized by a expert group.</p>

3