Bharti Airtel response to TRAI Consultation Paper on " Telecom network failures during Emergencies/Disasters – Priority routing of calls of persons engaged in ' response and recovery"

5.1 Should there be a direction from regulator on the network dimensioning - both for operating in normal as well as emergency situations?

Bharti Airtel's Response:

There should not be any direction from the regulator on the network dimensioning- both for operating in normal as well as emergency situations. Dimensioning of network should be left to the operators. The operator should be free to design the network while adhering to the Quality of Service parameters.

The telecom networks are already designed to withstand disasters like earthquakes, fire, etc. and comply with stringent QoS norms. While designing/erecting the cellular towers, all necessary/mandated specifications/certifications are taken into consideration viz. load bearing capacity, scalability of towers' heights, proper laying and shielding of cables, structural stability, ability to withstand high wind speeds especially in cyclone prone areas, nature of soil, load bearing capacity of the building in case of a roof top tower, shear strength, pollution, fire etc.

Moreover, telecom service providers also plan redundant networks such as geo HLR, alternate media, etc. and provide toll free access to Emergency & Disaster numbers as mandated by the Licensor.

5.2 In your opinion, which of the three possibilities as discussed in Chapter IV i.e. (a)Solutions based on combination of MTPAS of UK and GETS of US (b) Solution based on MVNO concept (c)Solution based on eMLPP would be best suited for implementation in India and Why? In case there is any other methodology that is suggested, the details of the same may be provided?

AND

5.8 How should the service delivery model for implementing the priority call routing be designed?

Bharti Airtel's Response:

- A combination of both MTPAS of UK and GETS of USA, usage of which can be governed by the extremity and the requirement of the situation, is the best suited solution for India.

- In the MTPAS system, the civilian usage of the network in certain areas (Cell or group of Cell Sites) is   completely prohibited and communication is made available to the entitled users via special SIMs. Since, Mobile has become a primary mode of communication in India, hence this method has to be used with extreme caution.

- The GETS system allows high priority calls to bypass the congested network and receive priority by dialing a universal code say XXXXX+ PIN+ destination number.
- A diagram representation of the solution (MTPAS with GETS priority) is as below:
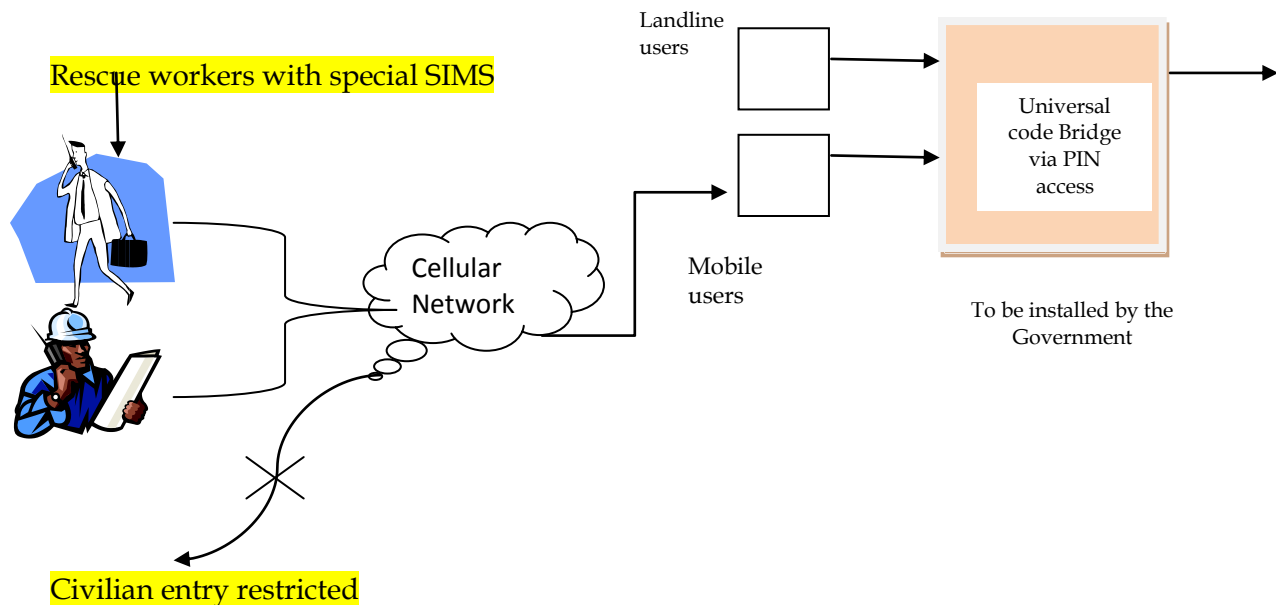
- The priority call routing should be restricted to relief agencies and workers only and should not be made available for any other agency, as breakdown of civil mobile services can create even more chaos. Therefore, this system should be used with extreme care and stringent procedure like in US/UK be laid down for emergency authorization/entitlement.

5.3 Is priority call routing for certain users based on Enhanced Multi-Level Precedence and pre-emption service (eMLPP) possible in intraoperator and inter-operator scenario in your network?

(a) If yes, provide the detail methodology that you will suggest for its implementation in India.

(b) If no, please indicate the time and costs required to upgrade your network and implement the same in your network.

Bharti Airtel's Response:

No, the priority call routing for certain users based on Enhanced Multi-Level Precedence and pre-emption service (eMLPP) is not possible in an inter-operator/intra operator scenario in the network. Hence, this is not suggested for India where there are 8-10 operators in each circle.

5.4 Which organizations and government departments that are involved in 'response and recovery' during emergency situations do you think should be part of this scheme?

5.5 What mechanism should be followed to identify which personnel working in organizations identified in Q5.4 above should get priority routing?

Bharti Airtel's Response:

We believe that the restoration of communication services especially to the agencies involved in the rescue operation is the priority/key concern of the Government. The levels of disasters have already been categorized and disseminated as L0, L1, L2 and L3, based on the ability of various authorities to deal with them by the National Disaster Management Authority (NDMA).

The SIM cards should be provided only to users who belong to a pre-approved group of organizations or entities. The list of organizations and entities should be authorized by the competent authority in the Government. Moreover, there should be an identified Authority to identify and declare a disaster.

Since, the method suggested gives priority to authorized personnels over the normal customers, the number has to be restricted. Based on the four levels of disaster prescribed by NDMA, our suggestion is:

i) **Level L0 -** L0 denotes normal times which are expected to be utilised for close monitoring, documentation, prevention, mitigation and preparatory activities. This is the planning stage where plans at all levels from community to the State shall be put in place. Training on search and rescue, rehearsals, evaluation and inventory updation for response activities will be carried out during this time. **Since this is only planning time, there is no need to give any SIM card in this case.**

ii) **Level L1 -** L1 specifies disasters that can be managed at the district level, however, the state and centre will remain in readiness to provide assistance if needed. **We believe that at this level the number of SIM cards given should be 100, which should be distributed amongst all the 8-10 operators present in that circle.**

iii) **Level L2 -** L2 specifies disaster situations that may require assistance and active participation of the state, and the mobilization of resources at the state level. **We believe that at this level the number of SIM cards given should be 2000, which should be distributed amongst all the 8-10 operators present in that circle.**

iv) **Level L3 -** L3 disaster situations arise from large scale disasters where districts and the state may not have the capacity to respond adequately and require assistance from the central government for reinstating the state and district machinery. **We believe that at this level the number of SIM cards given should be 10,000, which should be distributed amongst all the operators present in the country.**

5.6 In your opinion should there be a separate Unit/Division under DoT / TRAI to monitor the implementation of the scheme. If yes, what should be the structure and role of this unit?

Bharti Airtel's Response:

We do not forsee the requirement of any separate Unit/Division under DoT/TRAI to monitor the implementation of the scheme.

5.7 In your opinion what can be the major bottlenecks in service delivery of priority call routing?

Bharti Airtel's Response:

There will definitely be some bottlenecks in the service delivery of priority call routing. Moreover, it is not possible to enlist the bottlenecks till the details are spelled out. However, it should be ensured that the priority call routing should be restricted to relief agencies and workers only and should not be made available for any other agency, as breakdown of civil mobile services can create even more chaos since there is a denial of service to normal customers. Therefore, it is required to use this system with extreme care and stringent procedures like in US/UK be laid down for emergency authorization/entitlement. The network security considerations should also be appropriately handled.

5.9 What charges, if any, should be levied from the users for availing the facility of priority call routing? Please justify your answer.

Bharti Airtel's Response:

Yes, there should be a charge levied from the users for availing the facility of priority call routing. However, the costing and other modalities can only be indicated once the details of the implementations are finalized. The cost will include the call charges of the person to whom the call is denied while giving priority to an authorized personnel, the cost of software upgrades and maintenance of the systems and invocation and revocation cost.