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Ref No: RP/ FY 17 – 18/ 062/ 420

Dated: December 4, 2017

**To,**

**Shri S. T. Abbas,**

**Advisor (Networks, Spectrum and Licensing),**

Telecom Regulatory Authority of India,

Mahanagar Door Sanchar Bhawan,

Jawahar Lal Nehru Marg, Old Minto Road,

New Delhi – 110002.

**Subject: Consultation Paper on 'Next Generation Public Protection and Disaster Relief (PPDR) communication networks'.**

Dear Sir,

This is with reference to your above mentioned consultation paper. In this regard, please find enclosed our response for your kind consideration.

Thanking You,

Yours' Sincerely

**For Bharti Airtel Limited**

A handwritten signature in blue ink, appearing to read 'R. Gandhi', is written over a horizontal line.

**Ravi P. Gandhi**  
**Chief Regulatory Officer**

**Encl: a.a.**

**Consultation Paper on 'Next Generation Public Protection and Disaster Relief (PPDR)  
communication networks'**

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We are grateful to the Authority for providing us with the opportunity to give our comments on the consultation paper 'Next Generation Public Protection and Disaster Relief (PPDR) communication networks'.

We understand that communication plays an important role in rescue and relief operations to affected people during emergency or disaster situations. The telecommunication services plays a crucial role in disaster mitigation and in carrying out relief operations specially in a country like India which is prone to natural disasters like floods, earth-quakes, coastal cyclones and also, manmade disasters like accidents, terrorist attacks etc.

Therefore, having robust dedicated telecommunication infrastructure is mission critical for faster response and recovery during disasters/emergencies like situations. In the backdrop of above submission, our detailed issue-wise response is as follows:

**Q.1 Do you consider the existing fragmented model of PPDR communication network in the country adequate to meet the present day challenges? If not, what are the deficiencies in the existing model of PPDR? And**

**Q.2 In the various models described in para 2.11-2.15, in your opinion which of the model (dedicated, commercial, hybrid) will be more suitable for Indian conditions? or Is there any other alternate model which would be more suitable for Indian telecom environment? Please provide rationale for the suggested model.**

**Bharti Airtel's Response:**

In our views, dedicated NGN network using spectrum in globally harmonized band for PPDR is the best solution to provide reliable, independent, high performance and secure connectivity for PPDR services. The Licensor should invite competitive bidding under USOF scheme for setting up of dedicated NGN network for PPDR services. The winner of bid should deploy and maintain PPDR network under the aegis of USO fund.

The PPDR network can be used by multiple agencies, which are involved in public protection and disaster recovery. It can be utilized for all voice, video & data services required now and in future, independent of the commercial network. PPDR network deployed should be able to leverage commercial devices available for use during disaster recovery and public protection.

**Q.3 Should PSUs be earmarked for providing nationwide broadband PPDR communication network? Please justify your answer.**

**Bharti Airtel's Response:**

We recommend that the PPDR for providing nationwide broadband PPDR communication network should be built by most competitive network provider to bring in efficiency. There should not be any exclusivity to PSUs.

As cited above, DoT should float competitive bid under USOF scheme (or equivalent fund allocated by Government for PPDR services) inviting Unified Licensee (Access Services) for deployment and management of PPDR network in the country.

**Q.4 Will it be technically feasible and beneficial to permit PPDR trunking service roaming on public telecom networks? If yes, what challenges do you foresee in implementation of such an arrangement? Please justify your answer.**

**Bharti Airtel's Response:**

In our views, PPDR services can be allowed to roam on the public telecom networks. The challenge is with devices and services deployed in PPDR network, which should be compatible or available in the public network. PPDR network use Push to Talk services, which is not deployed in any of the commercial public networks available in the country. Similarly, security mechanism used in PPDR network may not be compatible with public network. Also, there would be other issues like quality of services, reliability, etc. on public network, which might not be same as on the dedicated PPDR network.

Therefore, the Authority should mandate PPDR trunking service roaming on public telecom networks only after considering above-mentioned challenges.

**Q.5 Can frequency bands be identified exclusively for public protection and disaster relief? What are the candidate bands for PPDR operations in India?**

**Bharti Airtel's Response:**

In our views, PPDR networks should be preferably be allocated lower frequency spectrum band to ensure wider and deeper in-building coverage. The frequency bands which are not used or earmarked for commercial usage would be the best suitable for PPDR operations.

**Q.6 If wideband/broadband PPDR is to be implemented in India, what quantum of spectrum will be needed for such solution for PPDR?**

**Bharti Airtel's Response:**

In our views, 2x5 MHz spectrum should be allocated in lower frequency band for PPDR services. For additional capacity, PPDR network can be allocated 20-40MHz in 5GHz band for exclusive use of PPDR services.

**Q.7 What is the cost and benefits tradeoff envisaged for public protection and disaster relief viz-a-viz commercial value of spectrum? And**

**Q.8 Do you suggest any other workable option that can be adopted?**

**Bharti Airtel's Response:**

In our views, using dedicated network infrastructure through competitive bidding under USOF scheme would help in optimizing the cost of deployment of these PPDR network without compromising on scalability, integrity and reliability of PPDR networks.

**Q.9 Please give your comments on any related matter not covered in this consultation paper.**

**Bharti Airtel's Response:**

Not Applicable.

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