



To,  
Advisor (Network, Spectrum and Licensing)  
Telecom Regulatory Authority of India  
Mahanagar Door Sanchar Bhawan  
Jawahar Lal Nehru Marg, (Minto Road)  
New Delhi-110002

Kind Attention: Sh. S.T.Abbas, Advisor (NSL)

No: Regln/1-33/2014/

dated: -12-2017

Sir

**Subject: BSNL's Draft comment on the consultation paper on 'Next Generation Public Protection and Disaster Relief (PPDR) communication networks'**

Kindly refer to the TRAI's press release no.84/2017 and Consultation Paper No.15/2017 dated 09-10-2017 on 'Next Generation Public Protection and Disaster Relief (PPDR) communication networks'. In this context, point-wise BSNL's comment on the consultation paper are as follows

**Q1. 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?**

**BSNL's response:**

No, we do not consider present fragmented model of PPDR communication network in the country adequate to meet the present day challenges.

Present PPDR communication systems are designed and run by many independent state law enforcement agencies without interoperability features which is particularly required during Disaster Recovery form communication among first respondents. Currently, PPDR which is mostly using narrowband radios working on spot frequencies. The communication is basically 2-way voice communications. In present Digital Era when we are moving towards 5G the present PPDR system does not support for high-bandwidth transmission requirements such as Data communications, interactive video communication, remote video surveillance of security or disaster sites etc. These features are required for PPDR as data Communication is required for exchange Data on real time basis among various agencies

**Q2. 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.**

**BSNL's response:**

In our opinion Hybrid Model of PPDR system may suite Indian condition. India is a vast country where Public Protection is the responsibility of various State Govts. Even as on date there may be many places where commercial network is available whereas Public Protection systems may not be available adequately in very remote places.

In such case the Infrastructure available for commercial use can be put to use for Public Protection system using LTE using Hybrid Model of deployment.

**Q3. Should PSUs be earmarked for providing nationwide broadband PPDR communication network? Please justify your answer of such an arrangement? Please justify your answer.**

**BSNL's response:**

The PSU BSNL has vast infrastructure and presence across the length and breadth of the nation including very remote places including North East, J&K Left Wing effected areas etc this may help in minimizing time for overall deployment, operation and maintenance cost by

leveraging the existing infrastructure and assets. The optical fibre network of Bharat Net available up to Gram Panchayat level can play also be used in PPDR network.

**Q4. 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?**

**BSNL's response:**

Yes, it will be beneficial to permit PPDR trunking service roaming on public telecom networks. With present state of technology it should be possible to permit PPDR service on public Telecom Network with adequate built in Privacy and security features required by various agencies.

The only challenge which may be Handsets which need to be customised for use of the PPDR agencies.

**Q5. Can frequency bands be identified exclusively for public protection and disaster relief? What are the candidate bands for PPDR operations in India?**

**BSNL's response:**

Yes, 694-894 MHz band is having best coverage in terms of area of operation. The S-Band of Unsold 700 MHz Band can be identified for PPDR purpose.

**Q6. If wideband/broadband PPDR is to be implemented in India, what quantum of spectrum will be needed for such solution for PPDR?**

**BSNL's response:**

We feel 2x10 MHz Band may be sufficient for PPDR

**Q7. What is the cost and benefits trade-off envisaged for public protection and disaster relief viz-a-viz commercial value of spectrum?**

**BSNL's response:**

In case of Hybrid model, the spectrum can be used for both Public as well for PPDR purpose. The rural areas will get benefitted by commercial use of LTE technology and at the same time PPDR agencies will also be able to use system.

**Q8. Do you suggest any other workable option that can be adopted?**

**BSNL's response:**

No we only suggest that the Infrastructure created by the Govt as part of PSUs can be best utilised for PPDR purpose

**Q9. Please give your comments on any related matter not covered in this consultation paper.**

**BSNL's response:**

No comments

Ved Prakash Verma  
AGM (RegIn-II)