

The Chairman,  
TRAI  
New Delhi

Sh ST Abbas,  
Advisor NSL,  
TRAI,  
New Delhi

**Dear Sir,**

**Re: TRAI Paper on 700 MHZ for Railways.**

**We compliment TRAI on the esteemed paper on 700 MHZ for “ Allotment of spectrum to Indian Railways for Public Safety and security Purposes” This is need of the hour and TRAI paper is most timely.**

**We have seen with deep interest TRAI paper on above topic as also views submitted by various parties.**

We wish to submit in this behalf as under:

1. Most of comments are from cellular telecom operators and their allied stakeholders, who have vested interest. They deserve all compliments for providing connectivity to masses. And it is their rightful duty and obligation to object forcefully to any proposal/reform on spectrum. The prime reason for that is that they have paid alleged heavy charges for spectrum, hence according to their belief no reform is allowed for spectrum, to safeguard the level playing field. Government is not able to solve that issue and every now and then we hear issue of loss/financial stress with TSPs and demand for some relief, which Govt. has been according from time to time. Yet the problem persists. Even now TSPs are in financial stress due to alleged loan burden of Rs 7,00,000 Crores. So it is natural for them to object giving any spectrum to any user on complimentary basis.
2. The belief of TEMA/CMAI as an association is that spectrum is not the monopoly of only commercial use but is equally important and critical for space, defense, railways, national security, and social needs.
3. It is fact that the railway requirement is for the purpose of Public Safety and security. Railways is only sector, where security of thousands of citizens is at stake at any given time.

4. It is pity that railways have been given only 1.6 MHZ (or 2.5 MHZ) in 900 MHZ band, when service providers ask for 10 MHZ or even upto 100 MHZ at times. This is available only in some places, and so Railways cannot provide seamless WiFi connectivity, as it is not contiguous. This is clear discrimination. It is also imagined that there is no chance of allocation of further spectrum in 900 MHZ band, as this was also commercially auctioned and would have issue of level playing field.
5. **We strongly believe and affirm that Railways should be given free spectrum of 700 MHZ for railways for WIFI and signaling use**, because Railways will use the spectrum for deployment of Mission Critical Voice and Data for the passengers safety . The detailed arguments are following.
  - i) The railways connect each and every human Indian and their safety is utmost for us. If railway has to bear some cost and pay for anything, then the cost is borne by all of us Indian citizens.
  - ii) We cannot allot every dam thing on this earth for commercial use. There are social use also. Railways do not only carry people, goods but also serve social net as railway stations are throughout India and serve as social meeting purposes.
  - iii) Infact railway stations can be made a full utility for villagers and citizens by having access to telecom, net, food, etc.
  - iv) When it comes to cost. Yes the telecom sector needs investment and so is the railway sector. In case of telecom, the service providers invest in network but the most important part the customers equipment ( mobile handset) is purchased by customer. The average cost per line of network may be anything Rs 1,000 to Rs 2,000/- whereas the average cost of smart phone in India is about Rs 4,000 to Rs 5,000. So it is customer who bears most investment burden. In case of railways the entire burden is shared by railways. The customer only pays for its use and that too at highly subsidized rates.
  - v) Yes if 700MHZ is auctioned, the Govt., can fetch some money, but national security, citizen safety is above all commercial aspects.
  - vi) There is always hue and cry for each and every spectrum to be allotted to commercial use by auction. It is in the interest of India that railways also run smoothly, safely and do not bear the heavy burden of auction of spectrum.
  - vii) There have been some comments that railways may be given spectrum in some other band. Why. Why not 700 MHZ, if it is better. We should not place railways at a disadvantageous position.

Now coming to specific views given by some:

- i) Someone (GSMA & IITCOE) has said that giving 700 MHz spectrum to railways will severely constrain the development of wide area mobile broadband in India. We do not agree. Several other bands are available for broadband service and 700 MHz has just recently come up. The moot question is have we utilized other bands fully and delivered what we have promised. No we have not.
- ii) Interference mitigations will be required. That is usual telecom network work and not related to 700 MHz only.
- iii) We are not going into available spectrum in 700 MHz band and its allocation to defence/space/Broadcasters....as that is not relevant for the present purpose.
- iv) Someone (BIF) has said that IFMC (licensed to provide services over air, water and land) may be used for providing services in train. We do not agree with that, as nobody is preventing the IFMC licensees as of now to extend services anywhere. Just because IFMC exist, we should not deny railway to fulfill their social responsibility to provide service.
- v) Someone (BIF) has said that let railways pay license fees and take part in auction. We do not agree, ultimately railways belong to Govt. of India and citizens money, so the Govt. pays to Govt. hardly makes any sense. And the burden will unnecessarily be passed to citizens.
- vi) Someone (BIF) has suggested that railways may not accept the alternative that let TSP build the network with Railways for 700 MHz. We agree with that, it will unnecessary increase the cost burden of including the profits of TSP, which railways may or may not go for.
- vii) There is standard argument that India should wait for WRC 2019. We do not agree. The world goes on making applications, instruments, technologies for spectrum and then lobby.
- viii) Someone has said that there are no live references of deployment of ETCS Level 2 in main line railways using 450 to 470 MHz spectrum. And that ecosystem of devices does not exist in this band. We agree with that and that is why we do not support allotment of this band for railways. We support 700 MHz for railways.
- ix) We agree with views of MTNL that “any spectrum allocation meant for larger public good should be done by Govt. administratively so as to maximize the benefits, therefore if at all it is decided that spectrum in IMT bands which have already been earmarked for mobile services, be assigned to Indian Railways for RSTT in India, **then allotment should be done free of cost and administratively.**
- x) We also agree with BSNL that “(spectrum) **may be given administratively only for specific use as non liberalized**” with reference

- to question No.5 of TRAI Consultation paper asking for methodology for allotment of spectrum to railways, if decided.
- xi) We also thank IITCOE for bringing out the judgments of Supreme Court- **“Auctions may be the best way of maximizing revenues but revenue maximization may not always be the best way to subserve the public good. ‘Common good’ is the sole guiding factor under Article 39(b) for distribution of natural resources”**. This supports legality to allot free spectrum to Railways.
  - xii) We do not agree with one of the submissions that “Railways is a commercial organization”. This is far from truth.

We reaffirm that 10-15 MHZ spectrum in 700 MHZ should be assigned to railways for Railways Radio communication Systems between Train and Trackside- RSTT without any price and without any auction. It should be allotted as is done for space, defence.

Thanking you,

*Prof N K Goyal  
President CMAI Association of India, Chairman Emeritus TEMA  
Member Governing Council Telecom Equipment & Services Export Promotion Council, Govt. of India  
Vice Chairman, ITU APT India, Adviser Gujarat Technological University  
Chairman India Trade Promotion Services, Dubai UAE,  
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