

Reply to

Consultation Paper on

Overall Spectrum Management and review of license terms and conditions

issued by TRAI on October 16, 2009

By

Ortel Communications Ltd.

B-7/122A, Safdarjung Enclave, New Delhi - 110029

1. Q5. How and when should spectrum in 700 MHz band be allocated between competitive services?

A5 Cable television systems transmit the same frequencies within their cables as a multitude of licensed over-the-air users. These over-the-air users include TV and radio stations, police and fire safety services and aeronautical radio services, among others. We are aware that cable operators are the secondary users of these frequencies, therefore we must not interfere with the licensed over-the-air users who are the protected (primary) users of these frequencies. While we are ensuring this, we would also request, that no high power transmitters are permitted to operate in this frequencies so that Convergent customers are affected.

With the digital dividend in place there is no reason why one would require high power for transmission. It is high time for the analogue TV transmission to pahse out and new digital transmission should take place where BWA and 3G can be benifitted out of it.

As per NFAP 2008, including 700MHz Cable Operator used frequencies falls between the band 50 MHz to 862 MHz, which is earmarked for Mobile TV, IMT application and BWA application. MSOs in India and all over the world are using frequency between 585 to 806 MHz for their CATV application. Allocating any high power wireless application will get interfered with the Last Mile customer signal using for their host of application. Hence frequencies in the band between 50 MHz to 862 MHz preferably be used for low power applications like BWA and mobile wireless application. Moreover it would be better in case the Field strength at any point be ensured less than 10V/m.

2. Q6 What is the impact of digital dividend on 3G and BWA?

A6 Digital dividend is a must to make spectrum efficient. All over the world TV and Radio broadcasting is switching over to Digital. Analogue transmission is now

being replaced to bring 60% efficiency as well to free spectra for other uses. It is high time for Door Darshan Indian to show commitment to efficiency by driving forward the digital switch-over; they would require to invest in digital radio and television technology and programming, where spectrum is released in the UHF bands. TRAI through this forum has for the first time begun to use the potential of the digital dividend and foster the introduction of new services. These new services will also include enhanced and new broadcasting services (e.g. HDTV and mobile TV) tailored to the evolving needs and legitimate expectations of citizens. These new services will be fostered through 3G and BWA platform and opening new avenue to customers. This not only will give impetus to Mobile world, this will also help fixed wire-line services to overlay mobility in their fixed network.

3. Q7. Should the spectrum be delinked from the UAS Licence? Please provide the reasons for your response.

A7 Currently, the Basic and Cellular licenses are merged and a combined Unified Access Service License (UASL) is issued to Operators. Under this license, the operators are authorized to provide both fixed as well as mobile services. It is observed that most of the license holders are providing only cellular / mobile services and the basic service is neglected by most operators. As a result of this, there is no growth in the wired line network infrastructure development. This is also depriving the consumers of multiple basic service options. Hence it is suggested that, in order to encourage expansion of basic service networks, the Govt of India should allow interested operators to obtain Basic / Fixed Service License at very nominal or free license fee. This will encourage the small / local players to build wired line networks.

Moreover, this has been discussed many time that the spectrum available under licence is not sufficient for their mobile cellular application, and hence spectrum auction is planned separately.

4. Q13 In case it is decided that the spectrum is to be delinked from the license then what should be the entry fee for such a Licence and should there be any roll out condition?

A13 During the year 2000-2001, the government also liberalized the Basic Telecom Services market, which typically provided traditional landline based Plain Old Telephone Service. In the year 2000, BTS operators approached the government with a proposal that they could provide local access loop at much lower cost using the alternative Code Division Multiple Access (CDMA) wireless technology. After a couple of years of litigations between the BTS operators and the GSM mobile operators, the Indian government announced Unified Access Service (UAS) Licenses in November 2003 that allowed migration of basic service license holders to provide full mobility based services with a stipulated fixed entry fee calculated based on the bid price paid by the 4th operator in 2001 (DoT, 2003). The fixed fee based license (as opposed to auction based) theoretically allowed any number of mobile licenses to be provided and implicitly de-linked spectrum allocation from licensing (DoT, 2003). Following the entry of 2-3 CDMA based mobile operators in each LSA, 1-2 new firms also paid the stipulated entry fee and got license to operate GSM services in certain LSAs. Though firms were awarded license after paying the required entry fee, they were given start-up spectrum only as and when available.

Hence, earlier Government always encouraged competition by getting more service provider by decreasing the license fee. On similar alibi License fee should be fixed based on the minimum bidding price of Fixed Line MSO operator who have applied for UAS (without license).

5. Q45. If the initial spectrum is de-linked from the licence, then what should be the method for subsequent assignment?

A 45. As it was done earlier in the year 2000-2001 and 2003, government allowed fixed line operator with mobile license, allocated spectrum for use of mobile operation, similarly fixed line operator should be allocated spectrum for BWA

operation, which is complementary to Mobile operation. Moreover, the LTE will be mature enough to be deployed by Fixed Line Operator.

6. Q51. In your opinion, what should be the method of assigning spectrum in bands other than 800, 900 and 1800 MHz for use other than commercial?

A51 Since, for 3G spectrum a large number of players including foreign MNCs are likely to compete for a very limited amount of spectrum in 2.1 GHz band, the expected price of spectrum of this band is likely to be in billions of dollars as has been experience of many other countries globally. Therefore there appears to be no justification of linking the 3G spectrum auction with BWA frequency spectrum allocation in bands such as 3.3-3.6 GHz, 2.3-2.4 GHz and 2.5 -2.69 GHz bands, where the availability of spectrum is likely to be adequate to meet the demand based on first come first serve basis as explained in following paragraphs. These bands should be allocated for spread of broadband access services in rural and urban areas for the economic upliftment of the community at reasonable prices. Using the existing formula of WPC for the administrative method of frequency allocation.

7. Q57. What in your opinion is the desired structure for efficient management of spectrum?

A57. a) We suggest that for efficient network deployment the minimum quantum of spectrum to be assigned per operator for BWA should be 2x5 MHz. As per ITU Document, the entire spectrum available in 2.3 GHz to 2.4 GHz, has been channelized at a channel space of 5 MHz and equipment have been designed accordingly. The 5MHz is sufficient enough to provide high speed data bandwidth. However, for future use of technologies these 5 MHz channels can be clubbed to form 10 MHz and 20 MHz.

b) The operator can not use the entire spectrum of 20 MHz as there is no equipment available to use the complete block of 20 MHz. When there is a scarce of spectrum there is no reason to give 20 MHz which can not be used

efficiently and will land up with wastage of spectrum as well blocking of spectrum.

- c) Allocation in Blocks of 5 MHz would give chances to more operators in service area and lead to better competition.*
- d) In case of non availability of sufficient spectrum the allocation should be on first cum first serve basis. While allotment the spectrum preferences of the service provider should be given due consideration. Because of the scarce in Spectrum availability, the service providers should start using the same within 30 days from the date of allotment of the band. This will protect the interests of smaller players as the bands can not be blocked by parties who are currently not interested in deployment of BWA.*
- e) The existing pricing formula for BWA deployment needs modification and we suggest the following:*

“The auctioning price be given in Blocks of 5MHz with minimum 2 X 5MHz will amount 5 Crore with reserve price Rs. 0.5 crore.”