

# Alcatel-Lucent Comments on TRAI consultation paper on Overall Spectrum Management and review of license terms and conditions

## Chapter-1

**Q.No 4.** In view of the policy of technology and service neutrality licenses, should any restriction be placed on these bands (800,900 and 1800 MHz) for providing a specific service and secondly, after the expiry of present licenses, how will the spectrum in the 800/900 MHz band be assigned to the operators?

### Alcatel-Lucent Comment:-

Available spectrum with operators should be service neutral so that operators can utilize the same for providing 2G and 3G services as per their choice. Common radio modules will be able to support multiple technologies like 2G, 3G thereby resulting in TCO optimization for the service providers. This will also result in efficient use of scarce spectrum e.g. 900 MHz band can be utilized to provide coverage to the Rural/suburban areas as it provides better coverage.

**Q.No 5.** How and when should spectrum in 700 MHz band be allocated between competitive services?

### Alcatel-Lucent Comment:-

700 Mhz band FDD spectrum shall be allocated as early as it can be vacated to reap the following advantages:-

#### **Advantages of Using FDD**

- Enhanced link budget performance.
- Easier to manage interference between mobiles and base stations.
- Using FDD only can avoid the loss in peak capacity, or loss in processing gain due to additional guard bands required in case of using Mixed (TDD & FDD).
- Interference from TV broadcast is more prominent in case of TDD.

In view of the above propagation characteristics benefits of 700 MHz FDD spectrum, this band is also very useful to provide rural wireless broadband LTE and LTE advanced services.

**Q.No 6.** What is the impact of digital dividend on 3G and BWA?

**Alcatel-Lucent Comment:-**

The digital dividend (700 MHz) can be utilized to deploy further advanced high throughput technologies like LTE/LTE advanced. Since very limited spectrum is available for the 3G/BWA auctions, operators who may not be awarded spectrum for 3G/BWA may plan to start the wireless high throughput services in the 700 MHz band in future.