

TD-SCDMA Forum Response
to the TRAI Consultation
‘Spectrum related issues: Efficient Utilisation, Spectrum
Allocation and Spectrum Pricing’

The TD-SCDMA Forum congratulates Telecom Regulatory Authority of India (TRAI) for the comprehensive and informative consultation document.

The Forum represents a significant group of spectrum users, which are directly interested in the development of public mobile networks, especially, the related spectrum topics. The TD-SCDMA Forum gathers all the kinds of players involved in third generation mobile systems, including equipment manufacturers, operators, administrations, service providers and software developers.

The TD-SCDMA Forum recognizes the need for more spectrum for mobile use in India and congratulates to the enormous mobile subscriber growth especially for mobile voice services. The TD-SCDMA Forum also welcomes this comprehensive public Consultation from TRAI and would like to respond by focussing to the importance of mobile evolution to the worldwide agreed IMT 2000 project from ITU and the worldwide telecom industry. Detailed answers to the questions in the Consultation are avoided:

We fully understand the claims of 2G operators in India for more 2G spectrum. Such request is justified as long as operators want to stay with voice services and low speed data like SMS only. We also understand, that it is time consuming to refarm spectrum which is occupied today by other equipments for military or other use, therefore it lies very close to think about using the IMT 2000 spectrum for fulfilling operator 2G requirements. The Consultation addresses this issue in a way, that the TD-SCDMA Forum feels obliged to respond from its viewpoint emphasizing the important value of a worldwide harmonised band for mobile communications in future:

IMT 2000 spectrum was discussed for many years worldwide, as IMT 2000 was and still is understood as the largest project ITU ever had on its agenda. The IMT 2000 spectrum – especially the so called “Core Band” is the result of a consensus process, which included radio technologies from all over the world that fulfil harmonised service requirements from the ITU. They are listed as the ITU framework standards, the RTTs which form the family of coexistent technologies allowed to be deployed in the IMT 2000 bands.

The worldwide consensus finds its continuation in the IMT 2000 extension bands which are foreseen for the later stage of IMT 2000 developments e.g. including enhancements. The WRC-07 will deal with the details in this harmonisation project.

It would be a huge damage for the world, if the IMT 2000 bands would be changed in some countries towards more specific band arrangements, which would lead to cannibalisation by other technologies or different services, no worldwide roaming, no service interoperability, no economy of scale, instead high priced technologies would enter the markets hindering emerging countries to take up to the levels of developed countries in the world.

The worldwide mobile manufacturers and operators, which joined the TD-SCDMA Forum, have fully accepted the comprehensive harmonisation work on spectrum issues for 3G, especially IMT 2000 and are driving forward the IMT-TC based product developments for the use of unpaired IMT 2000 bands. We therefore recommend strongly to TRAI to stay with the worldwide consensus by assigning the IMT 2000 Core Band in accordance with the spectrum arrangement B1 of the Radio Regulations Table 2 of ITU-R M.1036.

TD-SCDMA is a highly efficient new technology for voice and data and is intended to be deployed in many countries in the world, which have decided for licensed and/or unlicensed unpaired spectrum use according to IMT 2000, being fully inline with the worldwide harmonised band allocations according to the IMT2000 framework standards. TD-SCDMA is part of the Chinese 3G standards, is part of 3GPP standard specifications and therefore fully in line with the GSM evolution from 2G to 3G, called 3GSM. It is a full mobility standard for wide area and hot spot area use. It can also be used for WLL and nomadic applications. The Asian industry led by the Chinese developed TD-SCDMA standard is working actively on products tailored to the Asian market. TD-SCDMA is fully compatible with the worldwide leading 3GSM/UMTS/WCDMA standard, as it is part of the common specifications made by 3GPP.

The TD-SCDMA Forum is deeply concerned about spectrum plan alternatives, which are indicated in Chapter 2.6.2, option a) are jeopardizing the harmonised worldwide IMT 2000 band use with the technically correct uplink-downlink directions and with leaving space for the highly spectral efficient TDD principle, especially if it comes to the voluminous asymmetric Internet type mobile traffic in 3G networks in future. More than 60 operators in the world have already received IMT 2000 mobile spectrum for TDD use.

The TD-SCDMA Forum therefore urges TRAI to recommend to the Indian government to decide for future frequency arrangements in the range from 1710 to 2200 MHz following the B1 arrangement (Table 2 of ITU-R M.1036, chapter 6.1.2 or Chapter 2.3 of TRAI Consultation) or alternatively for B4 arrangement.