

NXP India Reply Comments to Bharti Airtel Limited, Reliance Jio Infocomm Limited and Vodafone Idea Limited regarding TRAI Consultation Paper on Assignment of Spectrum in E&V Bands, and Spectrum for Microwave Access (MWA) & Microwave Backbone (MWB)

Date: December 22, 2023

Authors:

Hitesh Garg, Country Manager NXP India, hitesh.garg@nxp.com, +91 80 69128220

Marnix Vlot, Director of Standardization, CTO-Office, marnix.vlot@nxp.com, +31634309034

Introduction.

This document provides reply comments in the context to TRAI Consultation Paper No 22/2023 “Consultation Paper on Assignment of Spectrum in E&V Bands, and Spectrum for Microwave Access (MWA) & Microwave Backbone (MWB)” as issued by the Telecom Regulatory Authority of India, 27.09.2023, from NXP India to inputs from Bharti Airtel Limited (BAL), Reliance Jio Infocomm Limited (RJIL) and Vodafone Idea Limited (VIL), specifically related to answers to question 46 in the consultation paper:

NXP India herewith would like to respectfully bring the following matters to your attention.

Complementarity of unlicensed services to Telecom services

SRDs in the 60GHz band can provide the necessary peripheral functions to a growing IoT deployment based on universal connectivity provided by telecom networks. Without peripheral functions IT and IoT nodes lose their “eyes and ears” and become of limited use. For example, today’s mobile telephones have a range of radio functions based on SRD technology: WiFi, Bluetooth, and NFC. These RF functions complete the total value proposition of a mobile phone and multiply its value to the customer as a telecom device, thus also greatly enhancing the value of telecom services. Therefore it should also be in the interest of telecom companies to provide adequate spectrum for SRDs, in this context in the V-band, where e.g. NXP India is promoting wireless interface technology that can help telephones exchange high speed data with other IT devices, enhancing their integration into the IT cluster. NXP India believes this can be done without impeding any prospective millimetre wave links in the same band.

Interoperability of SRDs with fixed service in V-Band (57-64 GHz)

The contributions of BAL, RJIL and VIL claim that it is not feasible to share the band between MBA FS services and low power SRDs. NXP India herewith contributes that CEPT [ECC report 176](#) which contains a detailed coexistence study between SRDs at 20dBm EIRP in a worst case situation. The conclusion of this report is that for SRDs with a max. EIRP of 20 dBm and a Tx power limit of 10dBm FS links and SRDs can coexist in the band. In case there would be differences in insights on this matter NXP India is willing to engage in a dialogue so as to reach a result in shared confidence.

The ability to reach common agreement on SRD and FS-link coexistence, in line with regulations in other main regions, should be highly preferable for all.

Lacking information on deployment of FS services in V-band

E-band FS deployment in particular as backhaul network is very successful. However, there is little international information on V-band applications. It would be helpful to share more specifics on the foreseen rollout of V-Band mmWave links so as to support any needed India-specific interoperability investigation with realistic deployment statistics and technical parameters and to be able to assess potential interference impact.