

Date: 2<sup>nd</sup> March 2021  
Our Ref: IAFI-DOT/3-21

Shri Anshu Prakash, IAS  
Secretary DoT and Chairman Digital Communications Commission  
Sanchar Bhawan  
Ashoka Road, New Delhi 110 001

**Sub: E and V band Spectrum**

Dear Sir,

We congratulate and acknowledge excellent actions from the Department of Telecommunications in realizing the policy goals of working from Home, liberalized OSP norms, PM-WANI initiative, inter alia. Spectrum plays an important role in realizing these objectives as a resource for taking Digital India to the nook and corners of the country.

In the above context, we understand from the industry sources that Telecom Commission is considering the modalities of allowing the E and V band use by the companies and citizens in India. We have made several submissions earlier too and would like to reiterate the same with some additional information. We also request for some time to make a presentation to the Commission on this issue.

While we laud and appreciate DOT's efforts towards implementation of the 'Digital India' dream, a majority of rural India still do not have access to the internet. Broadband penetration in rural India is limited to a mere 29.2 per cent, as on 31 March 2020, as mentioned by Hon'ble Shri Sanjay Dhotre, Minister of State for Communications, Education, and Electronics & Information Technology in a reply to a question in Rajya Sabha. We are fully aware of the challenges faced in the rollout of broadband networks in rural areas due to a comparatively lower level of infrastructure, low population density, and the consequent lack of a viable business case for commercial operators. However, a fully delicensed V band and a hybrid E band (part delicensed and part light licensed) could help create the necessary innovation by our young engineers and scientists in these rural and remote area to overcome these challenges provided DOT helps in delicensing the needed spectrum.

Prime Minister's Wi-Fi Access Network Interface (PM-WANI) is a critical initiative by the government to elevate wireless internet connectivity in the country which will completely revolutionise the innovation and will also substantially improve the wireless connectivity of the country as well as boost the "ease of doing" business and also "ease of living". "The scheme would enable our small shopkeepers to provide Wi-Fi service. This will boost incomes as well as ensure our youth gets seamless internet connectivity. It will also strengthen our Digital India mission," said the Prime Minister in a tweet recently. Delicensing of E and V bands is a critical input to meet

this aspiration of small shopkeepers in rural and suburban areas and a CRITICAL REQUIREMENT OF PM-WANI.

It is important to recall the announcement of Prime Minister that in next 1000 days all villages would be covered. Further, fixed broadband penetration in the households is a big challenge in India. We have a penetration of 1.4% when compared to the developed world figures of 40-50%. We have a policy objective to reach 50% households with fixed broadband by 2022. A freely available V, E bands only would make these visions possible.

The E- and V-bands, offer a wireless solution that can speedily help meet the aspirations of PM-WANI as these bands can be deployed as an alternative solution to backhaul the large traffic in urban, suburban and rural environments while considerably reducing right-of-way hurdles. The V-band (60 GHz) is considered as the ideal solution in providing high-capacity wireless links needed for PM-WANI. This band has short link lengths due to oxygen absorption characteristics of these frequencies that make it almost interference free and ideal for deploying large number of short links. Considering its utility, many countries such as Australia, Brazil, Canada, China, Japan, New Zealand, South Africa, Sweden, the United Kingdom, and the United States have already delicensed the 60 GHz band. TRAI had already recommended that both the V- and E-bands should be opened up for acceleration of broadband penetration.

We strongly recommend that DoT should immediately delicense the V band and implement hybrid regulation of E Band (part delicensed and part light licensed) in line with other developing and developed countries of the world to support innovation by our own engineers in line with the global ecosystem for low-cost outdoor WI-FI and fixed wireless networks based on global IEEE standards (such as WiGig or "Wireless Fiber" or others) for providing high capacity links to meet the needs of Hon'ble Prime Minister Shri Modi vision of connecting all the villages with high speed broadband. V band delicensing offers such an important opportunity to meet the dream of our beloved Prime minister.

Accordingly, and in line with what is happening in most other countries, we recommend that the lower V band (57-66 GHz) should be immediately delicensed without specifying any channel bandwidth in line with relevant IEEE standards. We further recommend that a part of the E Band to be delicensed without specifying any channel bandwidth and rest of the E Band with a simple on-line registration scheme without any further delay.



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