

To

February 24, 2022

Shri Ashwini Vaishnaw,
Hon'ble Minister of Communications and IT
Sanchar Bhawan
New Delhi-110001

Dear Sir,

We welcome your recent announcement regarding a second set of reforms for the telecom sector to promote robust economic development of the country and growth of Telecom sector.

In the above context, we would like to draw your kind attention to the following 7 key telecom reforms that could help and support in the faster growth of the economy and promote innovations, R&D and exports:

- 1. Delicensing of 6 GHz band for Wi-Fi 6e to promote innovation and exports**
- 2. Opening of E band for Mobile operators for backhaul to support 5G rollout.**
- 3. Delicensing of V band for Wi-Fi (Wi-GIG) to promote industrial connectivity.**
- 4. Introduction of single Wireless operating License for Metro Rail, Airports, state/ central Police, Industries, and enterprises by merging of DOT CMRTS license and WPC Wireless License to reduce the overall DOT licensing process time by 1-2 years**
- 5. Administrative allotment of spectrum for police, fire and other captive users**
- 6. Difficulties being faced by holders of WPC dealer possession license (DPL) in importing different type of two- way radios**
- 7. Early Finalization of NFAP-2022**

Details of each of these proposals is given below. Kindly include these reforms in your reform agenda. We will be happy to make a further detailed presentation on these issues at your convivence.

Warm Regards,



Bharat B Bhatia,
President, ITU-APT Foundation of India (IAFI)
Vice Chairman, Asia Pacific, World Wireless Research Forum(WWRF)

1. Delicensing of 6GHz band for Wi-Fi 6e to promote innovation and exports

Internet has become a life-line for connecting people when social distancing/physical isolation has become imperative due to global pandemic caused by the COVID19 menace. Wi-Fi already carries more than half of the Internet's traffic and offloading mobile data traffic to Wi-Fi was critical support for our mobile cellular networks from being overwhelmed during the COVID-19 pandemic. Wi-Fi networks in India are getting choked due to limited unlicensed spectrum, particularly because of the high population density and overwhelming dependence on Wi-Fi

Therefore, the Government needs to make more unlicensed spectrum available for Wi-Fi. Countries including the US, Canada, Brazil, Chile, South Korea, Mexico and Saudi Arabia have already delicensed the new 6GHz Wi-Fi. In addition, several countries in the EU have also delicensed the lower part of 6 GHz band for Wi-Fi in 5.925-6.425 GHz. The delicensing of the 6 GHz band is continuing.

Delicensing of spectrum is the most transparent and equitable way of spectrum allocations and is fully in alignment with the Hon'ble Supreme court judgement in the 2G case.

Delicensing of 6GHz will open new opportunities for innovators and manufacturers to develop products and technologies and also increase opportunities for smart home and industrial products being manufactured in India for export markets.

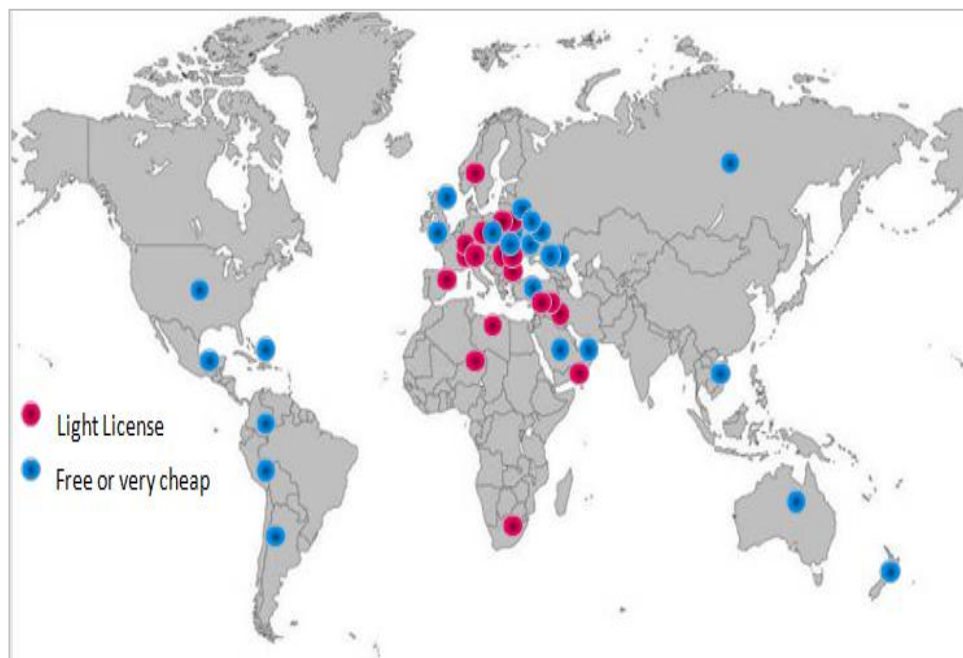
6GHz band is currently extensively used by satellites for up linking of broadcasting channels as well as by VSAT for providing data connectivity. Therefore it will not be possible to use this band for licensed mobile operators. However, as various studies have shown, this band could be shared by indoor-only low-power Wi-fi routers on an opportunistic basis. Since the band cannot be auctioned, delicensing it for Low Power use will not cause and revenue loss to the Government. On the other hand, this move will add huge economic benefit to the economy and help increase the GDP. In addition, this move will also support, Atamnirbhar India as most of the Wi-Fi routers are fully made in the country.

We therefore recommend urgent delicensing of 6GHz band for Wi-Fi

2. Opening of E band for all DOT licensed operators for backhaul to support 5G and broadband rollout using automated online registration only.

The E-band spectrum (70/80 GHz) is increasingly being used for 5G backhaul worldwide. Wireless backhaul plays a vital role as fibre is not accessible or affordable at all sites. Terrestrial wireless backhaul is – and will continue to be for the foreseeable future – the most common backhaul method worldwide.

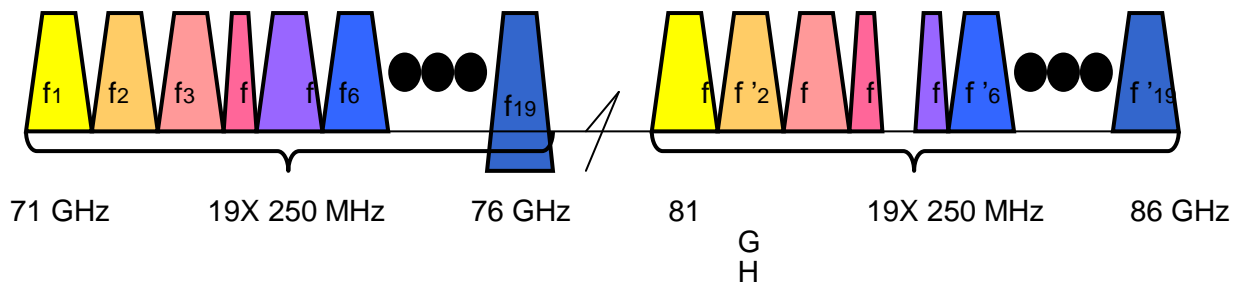
E band (70/80 GHz) support the fastest 5G speeds by supporting denser small cell networks in urban areas. It also supports significantly more data on a given amount of bandwidth. Opening of E band for terrestrial backhaul is vital for 5G, Many countries around the world have already opened the E band for 5G backhaul as seen from the map below:



Automated online licensing for V band for DOT licensed operators is important for expediting the 5G rollout by the mobile operators. E band offers more than 10 GHz contiguous spectrum and can be sub-channelled in

- 19 (paired) channels of 250 MHz width each
- 9 (paired) channels of 500 MHz width each
- 5 (paired) channels of 1GHz width each
- 1 (paired) channel of 5GHz width

This is shown below:



Based on recommendation from ITU-R F.2006, the proposal of channel arrangements for Channel Spacing of 250MHz and 500MHz is basically same

The above principle of using the 2×19 basic channels from within the bands 71-76 GHz and 81-86 GHz jointly in a single duplex FDD arrangement with 10 GHz duplex separation is described in the above figure maintain 125 MHz guard-band at each four band edges.

We therefore recommend urgent opening of E band for backhaul on an automatic basis only for licensed operators.

3. Delicensing of V band for Wi-Fi (Wi-GIG) to promote innovation and exports

Almost 80 countries, including Australia, Japan and the 27 members of the EU, have delicensed the V band. the long outstanding issue of which is pending a decision by the Government since 2015. TRAI has been recommending delicensing of V band since 2015. Various economists have [pointed](#) out that de-licensing of V band could unleash an unprecedented economic growth and increased GDP. The estimated Economic Value of Wi-Fi in the unlicensed spectrum bands (including V band) in India is expected to be about 12.7 lakh Crores (for GDP at current prices) in 2025.

This is further supported by the fact that, V-band offers a wireless solution that can speedily, help meet the aspirations of Prime Minister's Wi-Fi Access Network Interface (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 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.

We therefore recommend urgent opening of E band for backhaul on an automatic basis only for licensed operators.

4. Single Wireless operating License for airports, metros and police agencies and industries by merging of DOT CMRTS license and WPC Wireless License to reduce the license process time by 1-2 years

Captive users of Wireless communications such as;

- State and central police organizations
- Metro rail projects
- Airports and sea ports
- Logistics hubs
- Industrial and petrochemical complexes, etc.

are facing several hinderances and delays in setting up captive communication network due to complex and extensive process for acquiring unnecessary CMRTS (Captive Mobile Radio Trunking) License. The process of obtaining the DoT CMRTS License for captive industrial users typically takes between six months to two years as compared to less than a month in most developed countries, and this has become a major bottleneck in the Industrial development of the country.

Streamlining the process of Licensing of Private and Captive Wireless Network to support Industry 4.0 and economic development of the country. Captive local wireless network aids in ensuring that sensitive production of data is not shared with any third parties (such as a mobile operators) when enormous quantities of data is required for various test scenarios. Private and captive wireless LTE and 5G networks will be a lifeline for sustenance of the country's economic development, public safety and well as industrial development which are critical to support Atmanirbhar Bharat.

A Private 5G network can deliver an ultra-low latency accompanying incredibly high bandwidth connections supporting artificial intelligence-driven applications serving an exploding number of sensors and endpoints. Such implementation would need access to a dedicated spectrum band.

We therefore recommend that, the Captive License should be merged with the WPC spectrum license and there should be a simplified process where the users directly apply for spectrum to WPC, instead of first going through an elaborate Captive Licensing process with DoT and then applying for spectrum to WPC. This will reduce the processing time to a signification 3-month period.

5. Administrative allotment of spectrum for police, fire, paramilitary, and utility and industrial users such as airport, metro and other relevant authorities, all known as Captive Mobile Radio Trunking Services (CMRTS) in India

While dealing with the 2G cellular spectrum case, the Supreme Court of India in 2012 had ruled that auctions are the preferred means for allocating natural resources such as spectrum. But based on a subsequent petition by the central government, the Court allowed for policy guidelines for administrative allocation of natural resources, to be issued by the government on case-by-case basis in public's interest. Since 2012, the Department of Telecommunications of India has been working on a new policy for administrative allocation of radio spectrum for captive users such as: 1) public safety first responders such as police, paramilitary, defense, fire, and disaster management; 2) other government services including forestry and natural resource departments, municipal corporations and public utilities; 3) critical infrastructure services projects such as railways, metros, airports, sea ports, refineries, mines, highways, and industrial complexes. While the policy is being formulated, the WPC has been allocating spectrum in a series of 3/6 month interim windows. Typically, after each 3-month window, the authority lapses for several months before a new interim authority is granted and the window is opened. It is critically important that radio spectrum for all captive users that share the primary mission to protect lives and property and help the country to prosper is made available under a permanent administrative allocation process. Spectrum authorizations should be based on relatively simple application policies that require only nominal administrative fees from the agencies and organization that require use of the spectrum for "private", non-commercial communications networks. Consistent with the administrative policies of countries around the world, the authorization process for private networks should be distinguished from the competitive bidding "spectrum auctions" that are commonly used to authorized commercial wireless networks that provide telecommunications services to the public on a for-profit basis.

What this means in plainest terms: Presently, Police, Fire, Ambulance and other first responders have no means to secure new spectrum to operate mission critical communications systems upon which they depend.

We seek your help to resolve - once-and-for-all - and establish permanent authority and procedures for the administrative issuance of such licenses; and in the interim, that interim authority be granted now to carry us over until such a time that a permanent fix is put in place.

6. Difficulties being faced by holders of WPC dealer possession license (DPL) in importing different type of two- way radios

Current procedure of issuing Import License by WPC Wing for walkie-talkies being used for secure operational communications by various Industries, police organizations, utilities and other captive users is very cumbersome with multiple layers of document requirements. This cumbersome process is completely against the government import export policy laid down by the Ministry of Commerce where the walkie-talkies are placed under free category in EXIM policy of DGFT.

In order to **ease import of various kind of wireless equipment** which are very much essential and integral part of manufacturing, infra-structure, defense, oil & petroleum, railways, highway, health, etc. sectors, it is essential that the process of import by authorized DPL holders needs to be simplified in line with the EXIM policy of DGFT. The timely import and delivery of wireless equipment is very much required for completing the project within stipulated time resulting into a boost to National Economy as well as also to fulfil the policy requirements under NDCP-18

The acquisition, possession and/or sale of wireless equipment is governed by Indian Wireless Telegraphy (Possession) Rules, 1965 and their operation is governed by section 4 of Indian Telegraph Act, 1885. The Rule 4 of possession Rules, 1965 allows time up to thirty days from the date of clearance of the apparatus by the Customs Authorities for getting a “valid license” which includes a DPL under sub rule (2) of Rule 3. “Licensing Requirements” of these possession Rules. Accordingly, the importer is required under the current rules to obtain either of following valid license i.e., a license issued under Possession Rules, 1965 (DPL), or a license issued under Indian Telegraph Act, 1885 i.e., AIP or wireless operating license.

It is evident from above that holders of DPL are allowed to import and hold wireless equipment. The DPL holder are required to sell the wireless equipment only to the authorized persons having valid licenses and also required to maintain a stock Register in the prescribed format as per the Possession Rules, 1965.

In view of above and for ease of doing business, it is proposed that a suitable clarification for import of different type of two-way radios (handheld / vehicle/ fixed), which are primarily being used for voice communication, may be issued in line with current regulations mentioned above.

7. Urgent publication of the National Frequency allocation Plan 2022.

This issue is self-evident as the update of the last NFAP, published in 2018 is long overdue.