BIF Counter Comments to TRAI Consultation Paper on Assignment of Spectrum in E&V Bands, and Spectrum for Microwave Access (MWA) & Microwave Backbone (MWB)

(A) Alignment with the Telecommunications Act 2023

1. At the outset, we submit that the Recommendations of TRAI should be aligned to the new Telecommunications Act 2023 that has provided for backhaul spectrum to be assigned through administrative route.

2. In view of Schedule 1 (which covers cases of 'Assignment of Spectrum through Administrative Process') of the Telecommunications Act 2023 the method of assignment /allocation of spectrum for telecom backhaul shall only be through administrative method. It is evident under the Act that the Government has visualized scenarios in which the administrative approach would be taken i.e.
   (a) in order to serve public interest or
   (b) to perform government function or
   (c) in cases where auction of spectrum is not the preferred mode of assignment due to technical or economic reasons.

3. **Hence BIF wishes to request the Authority to kindly assign/allocate all backhaul spectrum (for MWA/MWB and E band) aligned to the provisions of the Act.**

4. While reading through the response of various stakeholders, we note that there is a near overwhelming majority of the respondents who support administrative assignment for both MWA/MWB carriers as well as for E band.

5. **V band (lower V band: 57-66GHz) cannot be auctioned and should be opened up on a license exempt approach simply because its unique propagation characteristics only permits coverage of few tens of meters and hence is more suitable to other applications viz. Wi-Fi, SRDs, Research & innovation, instead of telecom backhaul**.

6. **Thus, we humbly suggest that the existing method of administrative assignment of the spectrum must continue for MWA/MWB carriers and E band, while lower V band (57-66Ghz) must be made license exempt.**

Additionally, BIF would like to submit the following counter-comments as below:

(B) Issue of Spectrum cap:

One of the stakeholders has suggested an overall cap of 40% of total spectrum available for MWA & MWB, as well as an overall cap of 40% of total carriers available for E & V bands. Another stakeholder has proposed an additional ceiling of 35% for each of the spectrum bands, i.e., separate for 6/7 GHz, 13 GHz, 15 GHz, 18 GHz as well as 21 GHz, besides the existing overall ceiling.

We submit our counter comments as follows:

(a) MWA/MWB carriers for TSPs:

1. The **ceilings as per the extant guidelines (8 MWA carriers in each of the metros and Category A LSAs, and 6 carriers in each of the Category B and C LSAs, per TSP with Access Service Authorisation) are sufficient to meet the industry demand, both at present and in the near future. Further, MWB carriers should also be assigned on an exclusive basis for the entire LSA and a ceiling of 2 MWB carriers per LSA, in all categories of LSAs, should be deemed sufficient**.

2. In any case, the ceilings have been revised as recently as 2022. There is no need to review the same again after such a short duration. Even the percentage-based (40%) ceiling suggested by one of the stakeholders seems to be irrelevant in the context. It is important to note that an overall ceiling of 40% for MWA carriers would mean that any TSP would be able to acquire at least 38 carriers from the total available 95 carriers in the combined MWA spectrum band. This would eventually mean that a single TSP could try to hoard the complete bandwidth in 13 GHz and 15 GHz band (which has a total of 23 carriers) and disrupt the network for existing TSPs. The same TSP has also written that spectrum assignment should be as per the ranking process basis (the ranking here means the TSP paying the highest amount during spectrum auctions) along with the safeguarding of existing network operations (which would eventually mean that the existing TSPs would never be able to make MWA/MWB spectrum contiguous and it would be at the disposal of other TSPs).

3. Moreover, this stakeholder has not demonstrated any need for such quantum (40%) of spectrum. Thus, such a high ceiling could lead to not only hoarding of spectrum, but also risk smaller players at the mercy of large players (for spectrum leasing as per the proposal of the stakeholder).

4. No need for individual band-wise ceiling: The existing networks have evolved over the last two decades within the extant framework where there is no distinct band-wise limitation. Furthermore, TSPs have been assigned frequencies in specific bands over time based on the availability of backhaul spectrum in a particular band at a particular point in time.

5. For instance, a TSP was assigned 2 carriers in the 13 GHz band in a metro in 2016, followed by an additional 2 carriers in the same 13 GHz band in 2018. Now, if an individual band-wise 35% ceiling is introduced as suggested by one of the stakeholders, the maximum number of 13 GHz carriers per TSP would be restricted to 3; and the TSP in question would be required to surrender one of its carriers and instead acquire carriers in other bands. However, since legacy backhaul networks are incompatible with frequency changes, the introduction of individual band-wise ceiling would effectively entail a complete disruption of services.

6. Further, in the event of individual band-wise ceiling of 35%, knowing that existing holding of an individual TSP currently exceeds this number, i.e., ~3 carriers in 13GHz, ~5 carriers in 15GHz, etc. This would eventually lead to network disruption and lakhs of MW Radios becoming defunct or becoming unusable. The basic principle of no or least disruption of existing backhaul networks is very essential and all recommendations on policy should ensure that. Any change towards spectrum cap based on percentage of spots as suggested by two operators would lead to a major disruption of the network and go against the principle of least disruption.

7. The existing overall ceiling has proven effective in preventing any hoarding for the last two decades. Hence the same may be continued with.

8. **MWA carriers should continue to be assigned to TSPs with Access Service Authorisation on an exclusive basis for the entire LSA. Further, the same approach should be adopted in the case of MWB carriers as well. In the same vein, the E band spectrum should also be assigned on an exclusive basis for the entire LSA to TSPs with Access Service Authorisation.**

(b) <u>TSPs with other than Access Service Authorisation:</u>

9. TSPs holding other than Access Service Authorisation may also require MWA/MWB carriers. However, these entities do not have wide densified networks and, hence, P2P link-based assignment (as is the current practice) may be adequate to meet their requirements. Thus, **the existing P2P link-based assignment policy should continue in the case of MWA/MWB carriers for TSPs with other than Access Service Authorisation.**

(C) <u>Scope of use of E band:</u>

One of the stakeholders has advocated for the use of E band spectrum for Integrated Access and Backhaul (IAB).

We submit our counter-comments as follows:

1. In our view it is important to reiterate that the scope of services/usages for E band should be restricted to backhaul only as it is critical for 5G rollouts.

2. It should be noted that India's 5G rollouts which have been among fastest globally, were because of path-breaking TRAI recommendations for auction of access spectrum and the decision of the DoT to assign E-band for backhaul coupled with the access spectrum. It is a known fact that the rollout of 5G services is intrinsically linked to the availability of robust backhaul through fiber and, in its absence, E-band is essential. In other words, it was by making E-band available to operators that DoT ensured the rapid rollout of 5G services.

3. **Competitive issues are likely to arise if scope of E band usage is expanded beyond backhaul.** The level of fiberisation in the country is extremely limited currently and the situation is not about to change materially in the near future. Most TSPs are largely dependent on backhaul spectrum as they expand their fiber networks. In such a scenario, any proposal to expand the usage of E bands and to use them for IMT access services would disrupt the telecom ecosystem and establish a near monopoly in the 5G space of the only TSP with a vast fiber footprint. Had the Government subscribed to such a viewpoint earlier, India would not have witnessed one of the fastest rollouts of 5G services in the world.

4. Over the last decade, the overall mobile data consumption and, consequently, the backhaul requirement per site, has grown manifold. Conventional microwave spectrum can barely keep up with the current bandwidth requirements for 4G, let alone 5G. Simply put, the amount of traffic surge that the access network is expected to witness will necessitate a multifold capacity augmentation at the backhaul level.

5. Therefore, although all TSPs are making every effort to fiberise their networks as rapidly as possible, using E band for backhaul remains the only practical choice for TSPs given the fast pace of network rollout.

6. Having said that, it is also true that the clubbing of E bands for backhaul with access will deny backhaul rollout, creating a monopoly in 5G – the very reason that E-band was given exclusively for backhaul purposes. Even internationally, as many as 86 countries have identified E-band for providing only backhaul services to cater to the increase in data demands for 5G.

7. In summary, there is currently no case for the use of E band for purposes other than backhaul, and there is not likely to be any need for such usage in the near future as well. **Therefore, E band should be used only for backhaul purposes.**

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