

BIF Counter Comments to TRAI Consultation Paper on Terms and Conditions for the Assignment of Spectrum for Certain Satellite-Based Commercial Communication Services

BIF has pleasure in offering its Counter Comments to the comments provided by some of the stakeholders and to re-emphasise certain points already made earlier at the stage of filing our comments to the aforesaid Consultation Paper

These Counter Comments are primarily based on Responses to Qs 14 to 20 of the Consultation Paper from certain stakeholders

Fallacy No. 1: 'Level Playing Field between Satellite and Terrestrial Services'

Comment: It is being incorrectly mentioned by some respondents that commercial deployments of satellite networks offering voice and data services, directly compete with terrestrial networks and therefore spectrum assignment rules for satellite based communication networks should be made the same as those for terrestrial services. Consequently, it is being argued that market determined prices via spectrum auction should be used for assigning satellite spectrum or artificially hike the prices, in case formula based administrative method is employed so that the price of spectrum for both the services be kept at par.

Counter-Comments:

- 1. BIF submits that comparison between two differently placed services being offered by different players who have different rights and obligations, cannot be deemed as similar/competing services.**
- 2. BIF is of the view that Satellite Services are clearly distinct from Terrestrial Services for the following reasons:**
 - Satellite Services are delivered using **different technologies**,
 - Satellite Services are **delivered to the end user in different and distinct ways** as compared to terrestrial services,
 - Satellite Services **use CPEs or terminals which are distinct from those used by terrestrial services**
 - The **terms and conditions for Satellite Services are completely different than those of terrestrial services**, besides many others.
- 3. It is pertinent to note that there are vast differences in the market for satellite and terrestrial services.** Terrestrial mobile operators and satellite VSAT operators are on completely different footings – virtually located in different universes. Satellite services operate within a finite number of orbital slots, and thus expecting satellite communication to achieve the same vast consumer base like terrestrial mobile itself is impossible. **The purpose of Satcom at best is to complement**

Terrestrial Services and connect the unconnected, which terrestrial services have failed to do, despite existence of terrestrial services for nearly 3 decades and their best efforts and benefiting from heavy subsidies.

4. Terrestrial and Satcom technologies serve different objectives. While former provides mass connectivity, the objective of the later is to reach unserved and underserved areas which are technologically inaccessible for terrestrial service providers. By virtue of satcom airwaves which are going waste, can be tapped and lead to better utilisation of spectrum.
5. **Moreover, the current annual revenue of Indian mobile operators is about Rs.3.25 lakh crores i.e. Rs.3,25,0000/- whereas that of the Indian satellite VSAT operators is only around Rs. 500/- crores. Satellite services are therefore as miniscule as 1/600th or a mere 0.16% of the mobile operators' revenue.** In light of this, it would be a travesty of justice to equate the two in treatment of mode of allocation of spectrum resource, given its implications on operational cost for provision of satellite services.
6. The concept of a "level playing field" assumes that different communication services, such as satellite and mobile communications are identical and can operate under the same regulatory framework. However, **satellite and mobile communication services differ significantly in terms of infrastructure, technology, business models, and operational needs.** These differences make it impractical to treat them in an identical manner and hence the argument of level playing field between the two services is not tenable in any manner.

Fallacy No. 2: Incorrect Interpretation of Section 4(4), 4 (5) and First Schedule of Telecom Act 2023

Comment: With regard to Sections 4(4) and 4(5) of the Telecommunication Acts, 2023, it is submitted that some stakeholder is now trying to provide a different, though again incorrect, interpretation of the law, as compared to what was provided in its response to comments to TRAI's Consultation Paper on Service Authorisation Framework. We submit that both these interpretations are incorrect and the concerned stakeholder is inconsistent and trying to mislead the Regulator and the Government by giving different interpretations, when the Act itself is very clear.

Counter-Comments:

With regard to the new incorrect interpretation given in the comments by the concerned stakeholder to the present consultation paper, we submit the relevant extract from the Act as follows:

1) Section 4(4) and Section 4(5)(a) & (b) of the Act are reproduced below:

"4 (4) The Central Government shall assign spectrum for telecommunication through auction **except for entries listed in the First Schedule for which assignment shall be done by administrative process.**

Explanation. —For the purposes of this sub-section, —

(a) "administrative process" means assignment of spectrum without holding an auction;

(b) "auction" means a bid process for assignment of spectrum.

(5) (a) The Central Government may, by notification, amend the First Schedule for assignment of spectrum—

(i) in order to serve public interest; or

(ii) in order to perform government function; or

(iii) **in cases where auction of spectrum is not the preferred mode of assignment due to technical or economic reasons.**

(b) The notification referred to in clause (a) shall be laid before each House of Parliament.

2) A simple reading of Section 4(4) of the Act indicates that for the entries listed in the First Schedule the assignment shall be done by administrative process. Hence, items mentioned in First Schedule have been specifically put there since administrative assignment is the only mode of assignment for those entries. For all other cases, spectrum can be assigned through auction.

3) It is incorrect and misleading to state that the Administrative spectrum assignments should only be considered in exceptional cases. The First Schedule is mandating the entries for administrative assignment under the Act and there is no scope of consideration left on this issue for anyone after the enforcement of the Telecommunications Act, 2023.

4) The Act has provided a long pending solution by giving ample clarity by law, as to which services can be assigned spectrum only by administrative assignment. The uncertainty earlier on certain services including Satcom, has been duly addressed by the Act.

5) As regards Section 4(5)(a) of the Act, the comments made seem to be driven by commercial interests to the extent that everything has been misinterpreted in favour of auctioning of spectrum. A simple reading of Section 4(5)(a)(iii), for example, is that the Central Government may, by notification, amend the First Schedule for assignment of spectrum **in cases where auction of spectrum is not the preferred mode of assignment due to technical or economic reasons. This provision will only apply to cases which are outside the ambit of First Schedule to the**

Act, and where, for technical and economic reasons, auction is not the preferred mode. Hence, they will be needed to be added to the First Schedule. This subsection deals with cases other than those listed in First Schedule, where, due to economic and technical reasons, auction may not be preferred mode.

- 6) Similarly, Section 4(5)(a)(ii) provides that the Central Government may, by notification, amend the First Schedule for assignment of spectrum **in order to perform government functions.** In such cases too, the respective entry will be added in the First Schedule, since for government functions, spectrum cannot be auctioned. In other words, it cannot be auctioned by the government to itself and hence, such cases will also be added to the First Schedule.
- 7) **Section 4(5)(a)(i) pertains to situation of 'in order to serve public interest', which again will generally mean moving away from auctions to administrative assignment.** Most of the entries in the First Schedule to the Act are meant to serve public interest.
- 8) Further, Section 4(6) of the Act goes to the extent that the Central Government, if it determines that it is necessary in the public interest so to do, may exempt from the requirement of assignment under sub-section (2), in such manner as may be prescribed.

Hence, we submit that comments relating to the review of First Schedule of the Act in order to provide for auctioning of spectrum are incorrect and misleading and driven only by commercial interests through wrong interpretations.

Fallacy No. 3: Applicability of similar/same spectrum assignment framework for Satellite and Terrestrial Services

Following reasons clearly illustrate as to how satellite and terrestrial spectrum are inherently different:

- (i) **Satellite Spectrum is a shared resource** Unlike terrestrial mobile network operators, satellite operators use the same frequencies across multiple satellites without interfering with each other. They also coordinate with each other in sharing the same frequencies across their services. In case of Shared spectrum-any number of operators are possible. In terrestrial spectrum, the spectrum is sliced and diced and given to only discreet number of operators. Satellite spectrum being a shared resource gets used by multiple operators. As a result, the **satellite spectrum is never exclusively assigned** (as has been incorrectly mentioned by one respondent) **as opposed to the mobile access spectrum and hence is never auctioned.** Spectrum Utilisation which is the dream of any Spectrum Manager is most optimally utilised in case of Satcom than in the case of Terrestrial Spectrum
- (ii) Bidding capability of the two are enormously different. While Terrestrial Operators have annual revenues of Rs. 3,25,000 Crores, the Satellite Players have annual revenues of only around

Rs. 500 Crores. It is 600 times more than Satcom players. Therefore, Bidding powers of the two sides are completely different and out of proportion and cannot be treated at par.

- (iii) **Satellite spectrum and mobile spectrum are unequals by virtue of circumstances in which they are placed:** While the mobile operators have several unique and precious rights like right to interconnection, right to interference-free spectrum, right to unique numbering resources and right of way, Satellite operators have none of these, despite being a licensed entity. As per Art. 14 of the Constitution of India, the two have to be treated differently on a mandatory basis because case law has established that unequals are not permitted to be treated as equals.
- (iv) **Inefficient spectrum usage:** In a conventional auction for terrestrial spectrum, the capacity is created by slicing the total available spectrum into various block sizes and each block is assigned individually to winners for exclusive use. The auction methodology leads to exclusive usage, discreet number of blocks, and would lead to market access being limited to a few deep pocketed players. As a result, competition shall also get limited. In case of satcom, spectrum is shared, facilitates multiple players and thus higher competition. This results in maximum efficiency and no wastage of spectrum. Moreover, in case of satcom, the sharing of frequencies between operators is what results in large capacities being made available over a given geography. Sharing of precious spectrum is the ultimate hallmark/goal of any spectrum usage.
- (v) **Spectrum-Orbit for Satellite is Regulated by ITU:** The spectrum for satellite services is linked to the space orbits being used for different satellite systems, and hence it is referred as combined Orbit-Spectrum resource. The use of Orbits is internationally regulated by ITU (The Orbit-Spectrum resource for Satellite services being an internationally shared resource, paragraph 2 of Article 44 of the ITU Constitution, recognises that radio frequencies and orbits are limited natural resources and must be used "rationally, efficiently, and economically), and has to be coordinated at international level. Hence, national administrations do not have complete control/ ownership of this Orbit-Spectrum resource. Therefore, auction of any resource, on which the administration/ country does not have complete control, does not stand to logic (the only exception can be Plan bands, where each country is allotted a fixed orbit slot and specific amount of spectrum). **Hence, spectrum for satellite services is not amenable to auction practices.**

Given the nature of satellite spectrum for the reasons mentioned above, it would in fact be a national disservice to auction satellite spectrum. We submit that in order to realize the objective of utilising Satcom for enabling access to broadband in remote and unserved areas, the spectrum would be best utilized when it is administratively allocated. This is what would serve public interest. It would therefore be incorrect and unfair to ask for Satcom services to be treated similar to terrestrial services or put them through the same or similar assignment method

and/or by artificially jacking up the spectrum price through the formula based administrative methodology.

Fallacy No. 4: Auctions is the best method for maximising Public Good

Comment: It has been incorrectly cited by some stakeholder, that under the garb of maximizing public good and to be able to serve the greatest number of people, there is no better method than free and fair auctions and that auctioning spectrum is the most transparent method of spectrum assignment and allows service providers to decide on their technology, be it terrestrial, satellite, or any other.

Counter Comments:

As clearly mentioned in response to Fallacy #1, satellite spectrum is a shared resource which is used by multiple satellites across multiple orbits. **Auctioning satellite spectrum would lead to spectrum fragmentation and inefficient utilisation of the spectrum.** There are multiple users of satellite spectrum, viz., VSAT, DTH, broadcasters and teleport. Any plan to auction spectrum only for satellite communications would seriously impact various industry segments which are using Satellite Spectrum as well. Apart from satcom, DTH and broadcasting are powerful vehicles for creating public good and the penetration of these could get adversely impacted if satellite spectrum is auctioned.

Fallacy No. 5: Differentiated Pricing Strategy for Retail/Urban Markets

Comment: A stakeholder has called for a differentiated spectrum pricing strategy. This means different assignment approaches is required to be made for satellite services competing directly with terrestrial networks and a different one for satellite services which are not directly competing with terrestrial services.

Counter-Comments:

1. One simply cannot segregate satellite spectrum for rural and urban markets. There is no sensible way of segregating urban from rural, when it comes to assignment of satellite spectrum. Again, this is a flawed argument as shared spectrum (and not exclusive spectrum) which is used by multiple satellite operators, simply cannot be allocated or assigned in any manner other than through administrative method, in accordance with the law (Item 16 of Schedule 1 read with Section 4(4) of the Telecom Act 2023) and in accordance with extant policy guidelines of DoT/WPC in India and in accordance with international best practices being followed everywhere .
2. Even in urban areas there are several unconnected pockets, where terrestrial networks are not capable of reaching. For example, there are fringe areas in the metros (eg. in areas like Baddi Village and in Lal Dora areas of Delhi), where terrestrial coverage has not reached and Satcom can be used to help plug those coverage gaps. **So, to pre-decide that urban areas would only be served by terrestrial technologies and only rural & remote by satellite is**

denying the consumer the right and choice to choose a service and its provider, which is highly unfair and is against the principles of free and fair competition.

3. BIF submits that administrative allocation would be the most effective and efficient way to prevent inefficient utilisation of spectrum. This would encourage entry of new players in the nascent satcom market and facilitate a competitive environment, which would ultimately improve consumer choice and affordability. In order to ensure that satellite broadband services are affordable, reliable and universally available, we urge the Authority to recommend conditions for satellite players that are enabling, provide regulatory certainty, are predictable, and uniform for all new and incumbent satcom players.
4. BIF also requests that **cost of satellite spectrum should be as low as possible and just sufficient to cover the cost of administering and regulating the spectrum.** Government should not desire to make any profit out of this. **Administrative and regulation costs for Satcom works out to be a fraction (Approx. 0.1%) of the sector Revenues (Justification for the same, which was provided with the Comments to the CP, is again being attached herewith). Hence, the SUC (spectrum usage charge) should be of that order only.** BIF also reiterates that No Minimum Spectrum Usage Charge is required and that Satellite spectrum should be assigned for a period of 20 years. This will help promote growth of the sector.

Fallacy No. 6: Mis-interpretation of Clause 4(4), Schedule 1 of the Telecom Act vide an independent Legal Opinion

Comment: A Respondent as a part of its submission to TRAI, has submitted a legal opinion from a former Supreme Court judge, to stress its misunderstood and mis-interpreted point of view. It states "It appears to be Trai's understanding that as a result of Section 4(4) read with Entry 16 of the First Schedule of the Telecom Act, satellite spectrum can be assigned even to private parties for profit maximising purposes only by the way of administrative process...such an interpretation is neither legally tenable nor acceptable " the opinion said.

Counter Comments:

As explained above, BIF maintains that Section 4(4) read along with Entry 16 of Schedule 1 clearly lays down unambiguously, the methodology of assignment of Satellite Spectrum and that is through administrative method.

Fallacy No. 7: Hon'ble SC judgement in the 2012 2G case only permits spectrum delineation for Commercial Use through Auctions

Comment: It has also been cited incorrectly that the Hon'ble Supreme Court unambiguously declared that the right to use such spectrum can only be transferred through a transparent auction.

Counter Comments:

BIF's detailed comments on this legal matter vide Legal Opinion (from former AG, Shri Mukul Rohatgi) provided to the Authority in response to its earlier Consultation Paper on Assignment of Satellite Spectrum of 2023, are given as here under:

- (i) State actions, whether it relates to the distribution of natural resources or grant of contracts, must be tested against the touchstone of Article 14 of the Constitution, and may not be struck down for being arbitrary without consideration to the actual constitutional infirmities associated with such action.
- (ii) Auction cannot be considered a "constitutional mandate", as it would stand in complete contravention to the scheme of Article 14.
- (iii) Allocation of natural resources to the highest bidder may not necessarily be the only way to subserve the common good and, at times, may run counter to the public good. "Distribution", as envisaged under Article 39(b) has broad contours, and cannot be limited to meaning only a singular method of resource disposal i.e., auction. The overarching and underlying principle governing distribution is the 'furtherance of common good.' As the allocation of resources is primarily intended towards serving public interest and the "common good", it cannot ipso facto be interpreted that auction represents the best method for allocation. (para. 119, Reference (Supra))
- (iv) Lastly, the potential for abuse in other resource allocation methods could not be the basis for considering auctions as a legal/ constitutional mandate, as there was an equal potential for abuse in an auction.
- (v) The 2G Case, was solely examining the issue of allocation in respect of mobile/terrestrial spectrum without deliberating on the allocation of satellite spectrum. Telecom / mobile license holders have access to 'back haul' networks, which were not disturbed/cancelled. This is indicative of the fact that the sole consideration in the 2G matter was the method and manner of grant of licenses for operation of mobile/cellular networks, which is distinct from satellite spectrum.

- (vi) In light of the above decisions, the issue of satellite spectrum allocation, should be guided by the overarching principles of: (a) maximizing the greater good/ furtherance of the common good; and (b) adopting a fair, reasonable and transparent method of allocation which is in consonance with principles of Article 14 of the Constitution.

- (vii) The importance of spectrum as was during the earlier 2G Case and today current where the Court, in Anuradha Bhasin v Union of India, has ruled that expression through the internet and carrying on trade via the internet are an intrinsic part of the fundamental right of free speech under Article 19(1)(a) and freedom of trade and business under Article 19(1)(g). Any consideration of the greater common good has to necessarily, therefore, consider this exposition of the law.

- (viii) Due to the distinctive features of satellite spectrum, the considered opinion is that auctioning satellite spectrum may not be the most appropriate and efficient method of resource allocation. In light of the Hon'ble Supreme Court's decision of auction not being a mandatory process for resource allocation and that the principle underlying the distribution of natural resources should be in furtherance of the common good, administrative allocation of satellite spectrum is a more efficient form of allotment of spectrum.

Following reasons can be ascribed in support of administrative allocation of satellite spectrum:

- a. Satellite spectrum is a shared resource. Therefore, it cannot be auctioned which requires exclusive allocation to one bidder, unlike the terrestrial spectrum. The basic prerequisite of a resource that is to be auctioned, is that it should be available for sale as discrete, unique products. Satellite spectrum does not satisfy this elementary criterion.

- b. Satellite spectrum has no national territorial limits. It is coordinated and managed by ITU. Consequently, satellite spectrum management is subject to the radio regulation of the ITU, and the various filing requirements which are necessary for orbital slots and satellite deployment. Unlike terrestrial spectrum, satellite spectrum is never exclusively assigned to the operator but coordinated internationally and shared among multiple operators for different orbital slots

and all types of satellites. Thus, the terrestrial concept of exclusivity does not apply in the case of satellite spectrum.

- c. While determining the most feasible method of spectrum allocation due consideration ought to be given to global practices. Internationally, satellite spectrums have only been allocated through administrative routes. No nation allocates satellite spectrum through auction. In view of this overwhelming international precedent which supports the allocation of spectrum through a non-auction, administrative route, an administrative mechanism should be chosen for allocating satellite spectrum as opposed to auctioning it.
- d. In the conventional auction of terrestrial spectrum, to enable assignment by auctions, the capacity is sliced into various block sizes and each block is assigned individually to winners for exclusive use. However, auctioning satellite spectrum by dividing it into smaller block sizes would result in inefficient spectrum usage. Auction of satellite spectrum by slicing into blocks would result in a highly inefficient frequency reuse capability, which would restrict the use of the spectrum only to a few operators and significantly reduces its value. Moreover, the sharing of frequencies between operators is what results in large capacities being available over a given geography. If spectrum were to be auctioned by dividing it into portions, the fragmentation would adversely affect the efficiency of the spectrum. Furthermore, carving out a chunk of the spectrum, which ought to be shared for optimum utilisation, would require a complicated set of rules for the coordinated operation of different satellites using the same spectrum band, thereby further causing issues in efficient spectrum management.
- e. Satellite services are almost the only method available for reaching broadband connectivity to the rural and remote regions as also to regions affected by disaster. Satellite services are truly akin to social welfare services and need to be nurtured, protected and fostered in the public interest. Auctioning satellite spectrum would escalate spectrum prices, and thereby increase the cost of service. This will be against the public interest and severely impact socio-economic welfare. Further, if spectrum bands for the satellite to deliver satellite broadband were to be auctioned to service providers, who may use it for either terrestrial purposes or

