

Counter Comments on TRAI Consultation Paper – “Assignment of Satellite Spectrum for Space based communication services.”

Hughes Communications India, would like to thank TRAI for this excellent consultation paper on “**Assignment of Spectrum for Space-based communication services**”. Further, we would like to provide our counter comments on the responses provided by a few of the respondents as mentioned below:

- Satellite spectrum is a shared resource and so, fundamentally, it cannot be auctioned as it cannot be exclusively assigned. The basic prerequisite for a resource to be auctioned, is that it should be available for sale as discrete, unique products. Satellite spectrum does not satisfy this elementary criterion.
- The auction of satellite spectrum will be unable to protect against monopolies as one of the bidders can arbitrarily increase the price for a small quantum of spectrum and others will have to buy at the same price and the same might not be attractive to newer players entering the market. As a result, auctioning of satellite spectrum can lead to cartelization among satellite users.
- World over, satellite spectrum is authorized for 'right-to-use' by all administrations and is allocated only by administrative process. Unlike terrestrial spectrum, satellite spectrum is never exclusively assigned to the operator but coordinated internationally and shared among multiple operators for different orbital slots for all types of satellites. Thus, the terrestrial concept of exclusivity does not apply in case of satellite spectrum and therefore auctioning is not applicable. Moreover, any commodity to be auctioned must be free from encumbrances. Satellite spectrum has international encumbrances.
- Satellite services can efficiently share the frequency bands with one another using reasonable technical parameters and the ITU coordination process. For Geostationary orbit satellites, orbital separation is necessary for enabling sharing. In case of NGSO systems there are clear rules available in the ITU Radio Regulations that enables the shared use of the spectrum resource either with specific operational limits such as the Article 22 limits or under satellite coordination in accordance with Article 9.11A in co-primary frequency bands.
- Satellite use cases cannot be segregated LSA wise as different LSAs will have different revenue potential. Satellite spectrum has different use cases - feeder links, backhaul, retail, broadcast, VSAT, DTH, DSNG etc. It is very difficult to arrive at a reserve price as the revenue potential for each of these use cases are different. Any segmentation of the satellite spectrum will reduce the usability/efficiency of the spectrum by the operators and thus further reduce its value.

- It is important to note that (27.5 to 29.5 GHz) is part of Ka band spectrum and is critical for satellite based broadband services in India. Globally many countries have taken pro-active measures of not sharing the (27.5Ghz to 29.5 GHz) spectrum between IMT & Satellite services. This strategic approach is based on the understanding that 5G already has access to multiple substitute spectrum bands. Hence, entire (27.5Ghz to 29.5 GHz) satellite spectrum should be earmarked and preserved only for satellite services.
- The criticism of 'first-come-first-served' basis of administrative allocation, invoking the Supreme Court's stance, overlooks the unique nature of satellite spectrum. As pointed out by the court, an auction is not the only valid method for resource allocation. Unlike terrestrial services, which require exclusive use of spectrum. Satellite spectrum is efficiently shared among the multiple operators. In such an environment, the 'first-come-first-served' basis provides a fair, non-discriminatory approach to resource allocation, promoting competition and innovation while upholding public welfare.
- Satellite spectrum along with orbital resources are used for cross-border services. Any attempt to auction this spectrum will result in reciprocation from other countries where Indian service providers will provide coverage as per the New Space Policy-2023 and such reciprocation will hurt Indian interests.

As a result of the above points, many countries have resorted to administrative assignment of spectrum, yet setting a price for the spectrum using an open consultation process for deciding the right price instead of an auction. Considering the above factors it is clear that auction of Satellite Spectrum is not an feasible option.