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Subject : Consultation Paper on Data Communication Services Between Aircraft and Ground Stations Provided by Organizations other than Airports Authority of India – Inmarsat India Comments
Reference : TRAI Consultation Paper No. 14/2022

Dear Shri Akhilesh Kumar Trivedi,

Inmarsat India (“Inmarsat”), at this moment, respectfully submits its comments in the above-referenced proceedings.

In its role of satellite-based aviation safety service provider, Inmarsat recognizes the critical importance of the establishment of national-wide reliable aeronautical radiocommunications services for aviation safety purposes as mandated or recommended by the International Civil Aviation Organization (ICAO). Systems deployed for safety and regularity of traffic in the terrestrial and satellite aeronautical mobile (route) services make use of frequency spectrum internationally allocated by the International Telecommunication Union (ITU) and are implemented and operated based on ICAO Standards and Recommended Practices (SARPs). This aspect is reflected in the DoT NFAP 2022, Note:

IND 12 *The use of the frequency bands 74.8-75.2 MHz, 108-117.975 MHz, 328.6-335.4 MHz, 960-1 215 MHz and 5 000-5 250 MHz by the aeronautical radio navigation service and of the bands 108-117.975 MHz and 117.975-137 MHz by the aeronautical mobile (R) service is subject to the provisions of Annex 10 to the Convention on International Civil Aviation and the Standards and Recommended Practices of the International Civil Aviation Organisation (ICAO).*

We note that band in question, i.e. 117.975–137 MHz, is the main communications band for line-of-sight air-ground voice and data communications and is used at all airports, for en-route, approach and landing phases of flight and for a variety of short-range tasks for general aviation and recreational flying activities (e.g. gliders and balloons). The use of this band is exclusively for air-ground communications relating to the safety and regularity of flight (ATC and AOC).

Inmarsat’s general view is that, given the safety nature of the data communication services provided within spectrum allocated to the aeronautical mobile (route) services, the licensing regime could be included into the Unified License and the frequency assignment should be based on administrative process as spectrum auction would conflict with the internationally regulated regime of the service and its radio frequencies.

Inmarsat’s comments to the Questions contained in the TRAI Consultation Paper No. 14/2022 is contained in the following:

TRAI Consultation Paper No. 14/2022	Inmarsat's Comments
<p>Q1. Whether there is a need to bring data communication services between aircraft and ground stations provided by organizations other than Airport Authority of India under service licensing regime?</p>	<p>Considering that there is a need to avoid harmful interference between service providers, it is proposed that an appropriate licensing regime be applied.</p>
<p>Q2. In case your answer to Q1 is in the affirmative, should the providers of data communication services between aircraft and ground stations be licensed through – (a) an authorization under Unified License; or (b) a separate service license.</p>	<p>The Unified License (UL) regime seems appropriate to this service to be considered as the licensing framework to be applied.</p>
<p>Q3. What should be the broad terms and conditions of the licensing framework for data communication services between aircraft and ground stations, such as – (a) licensed service area, (b) validity period of the license, (c) scope of the license, (d) technical conditions, (e) operating conditions, (f) security conditions, and (g) financial conditions (such as application processing fee, entry fee, license fee, bank guarantees, etc.)?</p>	<p>(a) National level when applied to aviation and specific geographical area of operation when applied for the provision of recreational flying activities (b) 20 years as in section 3.1 of the UL (c) For en-route, approach and landing phases of flight and for a variety of short-range tasks for general aviation and recreational flying activities (e.g. gliders and balloons) (d) and (e) In accordance with Annex 10 to the Convention on International Civil Aviation and the Standards and Recommended Practices of ICAO (f) No specific conditions given that the scope of the services is limited to aviation safety and regularity of flight operations (g) As per Chapter III of UL.</p>
<p>Q4. What should be the methodology for assignment of the spectrum in frequency range 117.975-137 MHz to the providers of data communication services between aircraft and ground stations? Should the spectrum be assigned administratively, or through auction, or through any other method?</p>	<p>DoT-WPC to assign spectrum administratively. The service provider should apply for spectrum authorization for its ground stations and the aircraft operator should apply for the aero mobile license.</p>
<p>Q5. In case administrative</p>	<p>The spectrum fees should be restricted to cover the</p>

<p>assignment is to be followed, what should be the mechanism for charging the VHF spectrum in the frequency range 117.975-137 MHz to be assigned to the providers of data communication services between aircraft and ground? Whether the auction determined prices for other frequency bands can be accounted for estimating the value of VHF spectrum in the frequency range 117.975-137 MHz?</p>	<p>administrative licensing fees given that the use of the frequencies is regulated internationally.</p>
<p>Q6. If auction methodology is to be followed, whether the valuation of VHF spectrum in frequency range 117.975-137 MHz assigned to the providers of data communication services between aircraft and ground stations should be derived by relating it to the valuation of other frequency bands by using technical efficiency factor? If yes, with which frequency band, should these frequencies be related to and what efficiency factor or formula should be used for estimating the value of VHF spectrum in frequency range 117.975-137 MHz?</p>	<p>There is no object in applying auction to those frequencies as they are regulated by international standards and practices reflected in the DoT NFAP 2022. Moreover, the safety aspect of this service limits its deployment to providers having demonstrated a high level of expertise and reliability resulting in a small number of available stakeholders.</p>
<p>Q7. What are the prevalent international practices being followed in other countries for assignment and charging (including other applicable charges and fees) of spectrum in the frequency range 117.975-137 MHz, which is used for providing data communication services between aircraft and ground stations?</p>	<p>Spectrum is assigned by administrative process and charges are proportional to the resulting overhead of processing activities by the regulator given that the the frequencies have a utilization limited to aviation safety and regularity of flight operations.</p>
<p>Q8. Whether the valuation of VHF spectrum assigned to the providers of data communication services</p>	<p>Consideration of administrative costs only (see Q7).</p>

<p>between aircraft and ground stations be derived using the methodologies used internationally in this regard? If yes, which of the methodologies can be followed?</p>	
<p>Q10. Whether there are any other issues/ suggestions relevant to the subject?</p>	<p>No comments.</p>
