ARINC India Private Limited

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Sam Png
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04 January 2023
Attn: **Shri Akhilesh Kumar Trivedi**
Advisor (Networks, Spectrum and Licensing)
TRAI

Re: ARINC's Comments in Response to TRAI's Consultation Paper on Data Communication Services Between Aircraft and Ground Stations Provided by Organizations Other Than Airports Authority of India (Consultation Paper No. 14/2022)

Dear Sir

Please find below ARINC India Private Limited's response to the above-mentioned consultation paper (Chapter IV – Issues for Consultation) released by TRAI on 10th December 2022.

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? Kindly provide a detailed response with justification.
A1. Yes, data communication services for captive use, especially in this area of civil aviation where safety is involved, should be brought under the service licensing regime

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. Kindly provide a detailed response with justification.
A2. A separate service license under unified laws should be applied as the terms, conditions, and criteria of a Unified License (UL) may not be applicable to data communication services between aircraft and ground stations.
For instance, the period of validity of UL is 20 years and this may not be appropriate for services where there is an element of air passenger safety associated with it and requires more regular assessment of compliance, competency, and service levels. Reasonable validity period should be between **1-5 years** as there is reasonable investment involved in setting up a ground station and its related infrastructure.

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, fixed area
(b) validity period of the license, yearly renewal
(c) scope of the license, operate on designated VHF frequency and provide services to Airlines
(d) technical conditions, frequency range and emission range

(e) operating conditions,
(f) security conditions, and – check data security/vulnerability
(g) financial conditions (such as application processing fee, entry fee, license fee, bank guarantees, etc.)?
A3. Broad terms and condition should include:
(a) License granted to fixed areas of operation
(b) Validity period of 12 months with self-service (i.e online/web application) annual renewal process in place
(c) Scope of license to specify designated VHF frequency and provision of services specific to third party users (i.e airlines, ANSPs, etc)
(d) Technical conditions such as frequency and emission range
(e) Security condition such as infrastructure in place to ensure data security
(g) Financial conditions may include one-time application processing fee for new sites, yearly license renewal fee, and bank guarantees.

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? Kindly provide a detailed response with justification.
A4. Spectrum should be assigned through an administrative process with standard levies based on a fixed formula. This method is adopted by most countries mentioned in the Consultation Paper (Chapter III – International Practices). As there are only two global providers for data communication services between aircraft and ground stations, auction may not be a suitable method to price the service. Auction is more suitable for products/services where there are many qualified bidders/suppliers requesting for the same license.

Q5. In case administrative 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? Kindly provide a detailed response with justification.
A5. The charging mechanism for VHF spectrum in the frequency range 117.975-137 MHz for the purpose of data communication services between aircraft and ground should be either a fixed annual fee (consistent with most countries mentioned in the Consultation Paper, Chapter III – International Practices) or calculated based on the current formula:
Annual Royalty Charge per carrier (in Rs.) = M multiplied by W
Where:
(a) M is the 'Basic Royalty' per carrier in a basic link, and
(b) W is the 'bandwidth factor'

Auction determined prices for other frequency bands should not be considered for estimating the value of VHF spectrum in the frequency range 117.975-137 MHz as the purpose and usage may be completely different, and not representative of the requirements and infrastructure required to provide data communication services between aircraft and ground.

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? Kindly justify your suggestions.

A6. Auction methodology should not be followed as there will be uncertainty of the charges, lack of clarity in the cost involved (i.e high risk to service providers who are required to maintain their service for the long term), and potential service disruption in the event of a sudden change in the valuation of VHF spectrum leading to the cessation of service. It is also not ideal for markets with only two service providers whereby each may only require 1 designated frequency - does not fulfil the goal of creating a competitive environment. Auction methodologies are generally more suitable for markets with many potential providers and the need to create a competitive environment.

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? Please provide a detailed response.

A7. Most countries mentioned in the Consultation Paper, Chapter III – International Practices, follow a fixed fee, fixed frequency model.

Q8. Whether the valuation of VHF spectrum assigned to the providers of data communication services between aircraft and ground stations be derived using the methodologies used internationally in this regard? If yes, which of the methodologies can be followed? Please provide a detailed response.

A8. The current methodology used by DoT is sound and can be retained:
Annual Royalty Charge per carrier (in Rs.) = M multiplied by W
Where:

(a) M is the 'Basic Royalty' per carrier in a basic link, and
(b) W is the 'bandwidth factor'

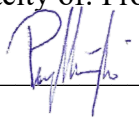
Q9. Apart from the approaches highlighted above, which other valuation approaches should be adopted for valuation of the VHF spectrum in the frequency range 117.975-137 MHz? Kindly support your suggestions with detailed methodologies, related assumptions, and other relevant factors.

A9. Not applicable.

Q10. Whether there are any other issues/ suggestions relevant to the subject? The same may be submitted with proper explanation and justification.

A10. The licensing process should be streamlined and made available online (i.e web portal application). Fair and time-bound responses should be provided to all applications received.

Best Regards
Sam Png
In the capacity of: Program Manager, Aviation Datalink Services

Signed: 

Duly authorized to sign for and on behalf of **ARINC India Private Limited**, **a part of Collins Aerospace**

Written Comments on the Consultation Paper are invited from the stakeholders by 09.01.2023 and counter-comments by 23.01.2023. Comments and counter-comments will be posted on TRAI's website www.trai.gov.in. The comments and counter-comments may be sent, preferably in electronic form, to Shri Akhilesh Kumar Trivedi, Advisor (Networks, Spectrum and Licensing), TRAI on the email ID advmn@trai.gov.in.

For any clarification/information, Shri Akhilesh Kumar Trivedi, Advisor (Networks, Spectrum and Licensing), TRAI, may be contacted at Telephone No. +91-11-23210481