**Radio Interface Specification (RIS) implementation of ECC/DEC/(19)04 on the harmonised use of spectrum, free circulation and use of earth stations on-board aircraft operating with GSO FSS networks and NGSO FSS systems in the frequency bands 12.75-13.25 GHz (Earth-to-space) and 10.7-12.75 GHz (space-to-Earth)**

Foreword

The ECC has decided that RIS implementations of ECC deliverables should be uploaded to the ECO website in order to help administrations fill out the EFIS database.

This RIS implementation is limited to the harmonised use of spectrum, free circulation and use of earth stations on-board aircraft operating with GSO FSS networks and NGSO FSS systems in the frequency bands 12.75-13.25 GHz (Earth-to-space) and 10.7-12.75 GHz (space-to-Earth)

**RIS Template for earth stations on-board aircraft operating with GSO FSS networks and NGSO FSS systems in the frequency bands 12.75-13.25 GHz (Earth-to-space) and 10.7-12.75 GHz (space-to-Earth)**

**Radio Interface Notification by an administration**

|  | **No** | **Parameter** | **Description** | **Comments** |
| --- | --- | --- | --- | --- |
| **Normative part** | **1** | **Radiocommunication Service** | Fixed-Satellite |  |
| **2** | **Application** | FSS Earth stations | Applies to earth stations on-board aircraft operating with GSO FSS networks and NGSO FSS systems with a network control facility (NCF). |
| **3** | **Frequency bands** | To be specified by the administration, within the frequency bands 12.75-13.25 GHz (Earth-to-space) and 10.7-12.75 GHz (space-to-Earth) | See ECC/DEC/(19)04 Decides 2a |
| **4** | **Channelling** | Not applicable | Defined by the satellite network operator. |
| **5** | **Modulation /  Occupied bandwidth** | Not applicable | Defined by the satellite network operator. |
| **6** | **Direction /  Separation** | 12.75-13.25 GHz (Earth-to-space)  10.7-12.75 GHz (space-to-Earth) |  |
| **7** | **Transmit power / Power density** | Maximum e.i.r.p. to be specified by the administration, with an upper limit of 50 dBW  The earth stations on-board aircraft shall meet the PFD values on Earth given below:  –123.5 dB(W/(m2 • MHz)) for θ ≤ 5°  –128.5 + θ dB(W/(m2 • MHz)) for 5 < θ ≤ 40°  – 88.5 dB(W/(m2 • MHz)) for 40 < θ ≤ 90°  where θ is the angle of arrival above the horizontal plane at the fixed service station location. | The maximum e.i.r.p. of the earth stations on-board aircraft is limited to 50 dBW as specified in Annex 1 of ECC/DEC/(19)04. |
| **8** | **Channel access and occupation rules** | Not applicable | Defined by the satellite network operator. |
| **9** | **Authorisation regime** | Licenced or exempted from individual licensing | Individual terminal may be exempted from individual licensing.  Satellite networks may need an authorisation |
| **10** | **Additional essential requirements according to Art. 3.3 of RE Directive** | None |  |
| **11** | **Frequency planning assumptions** |  | Additional technical and operational requirements are described in ECC Decision (19)04 for earth stations on-board aircraft for the protection of other authorised users in the operating frequency band. |
| **Informative part** | **12** | **Planned changes** | --- |  |
| **13** | **Reference** | ECC Decision (19)04  ETSI EN 302 186 (GSO FSS)  ETSI EN 303 984 (NGSO FSS) |  |
| **14** | **Notification number** | --- |  |
| **15** | **Remarks** | *Definitions* |  |
| *Abbreviations*  *e.i.r.p.* e*quivalent isotropically radiated power* |  |