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| C:\Program Files\Default Company Name\ICAOMainMenuSetup\Icons\icaologo.jpg | International Civil Aviation Organization  **WORKING PAPER** | |  | | --- | | ACP-WGF30/WP-24  2014-03-16 | |  | |

**AERONAUTICAL COMMUNICATIONS PANEL (ACP)**

**30TH MEETING OF THE WORKING GROUP F**

**Pattaya, Thailand 13 – 19 March 2014**

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| **Agenda Item 10:** | **Any other business** |

earth stations on mobile platforms

(Presented by *John Mettrop*)

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| **SUMMARY** |
| This paper provides information on the progress within the ITU and Europe on mobile earth stations onboard mobile platforms and the regulatory response from the CAA. |
| **ACTION** |
| The ACP WGF is invited to:   * Note the content of the paper * Take action in your own State if needed |

1. INTRODUCTION
   1. Agenda item 1.2 of the 2012 World Radiocommunication Conference addressed the potential convergence of systems and the potential need for changes to definitions in Article **1** of the Radio Regulations. This agenda item was vehemently opposed by the satellite community however they have continued to pursue the idea that satellites co-ordinated under a fixed satellite service allocation and not co-ordinated under a mobile satellite allocation should be able to provide mobile services. These two positions would appear to be in conflict. .
2. discussion
   1. In the Radio Regulations the frequency bands 19.7-20.2 & 29.5-30 GHz are allocated to both the fixed and mobile satellite services although the status of the mobile satellite service varies between regions. Footnote 5.526[[1]](#footnote-1) refers to the use of these frequency bands by earth stations on mobile platforms. Given that the frequency bands are allocated to the fixed and mobile satellite service then it is not surprising that footnote 5.526 refers to use of networks that are in both the fixed and mobile satellite service being able to be used for earth stations on mobile platforms (ESOMPs).
   2. Additionally ITU-R Report S.2261 containing technical and operational requirements for ESOMPs operating in non-GSO FSS systems in the frequency bands from 17.3 to 19.3, 19.7 to 20.2, 27 to 29.1 and from 29.5 to 30.0 GHz. However in this Report it is noted that operation of ESOMPs is not consistent with the definition of fixed satellite service and that where use on mobile vessels, as covered by footnote **5.526,** then such operations are under article **4.4.**
   3. Further work is being undertaken within ITU-R Working Party 4A to further expand the guidance material currently being provided in ITU-R Report S.2261 as well as developing a Recommendation on Technical and operational guidelines for ESOMPs in the frequency bands   
      19.7-20.2 GHz and 29.5-30.0 GHz.
   4. Within Europe ECC Decision ECC/DEC/(13)01 (copy attached) addresses the free circulation and exemption from individual licensing of ESOMPs in the frequency ranges 17.3-20.2 and 27.5-30.0 GHz within Europe. This decision, whilst not specifically mentioning article **4.4** of the Radio Regulations, does acknowledge that such operations need to protect other services operating in those frequency bands.
   5. One issue the CAA has taken up with Ofcom is that under decides 2 g) of the ECC decision there is mention that ESOMPs should be free from individual licensing as this is inconsistent with articles **29** & **31**

**Article 29**   
Documents carried in aircraft Documents Every aircraft of a contracting State, engaged in inter-navigation, shall carry the following documents in conformity with the conditions prescribed in this Convention:

1. Its certificate of registration;
2. Its certificate of airworthiness;
3. The appropriate licenses for each member of the crew;
4. Its journey log book;
5. If it is equipped with radio apparatus, the aircraft radio station license;
6. If it carries passengers, a list of their names and places of embarkation and destination;
7. If it carries cargo, a manifest and detailed of the cargo.

**Article 30**   
Aircraft radio equipment

1. Aircraft of each contracting State may, in or over the territory of other contracting States, carry radio transmitting apparatus only if a license to install and operate such apparatus has been issued by the appropriate authorities of the State in which the aircraft is registered. The use of radio transmitting apparatus in the territory of the contracting State whose territory is flown over shall be in accordance with the regulations prescribed by that State.
2. Radio transmitting apparatus may be used only by members of the flight crew who are provided with a special license for the purpose, issued by the appropriate authorities of the State in which the aircraft is registered.
   1. The other issue that the CAA raised was that aircraft licences assume global applicability and that whilst the CAA did not object to a commercial non-safety service being operated under article **4.4** of the Radio Regulations this needed to be drawn to the attention of the pilot.
   2. As a result UK aircraft radio licences for aircraft using ESOMPs will include ESOMPs on the licence and have a specific paragraph to point out that the use of ESOMPs cannot be assumed to be global and that the captain needs to check where it may be used. This might be achieved automatically by the satellite operator.
3. conclusions
   1. ESOMPs provide a means of supplying commercial non-safety communications to an aircraft.
   2. The equipment needs to be included on the aircraft licence.
   3. That the aircraft licence should also point out the restrictions and basis on which it may be operated.
4. ACTION BY THE MEETING
   1. The ACP WG-F is invited to:

* Note the content of the paper
* Take action in your own State if needed

**Attachment 1**

**ECC Decision ECC/DEC/(13)01**



1. 5.526 In the bands 19.7-20.2 GHz and 29.5-30 GHz in Region 2, and in the bands 20.1-20.2 GHz and 29.9-30 GHz in Regions 1 and 3, networks which are both in the fixed-satellite service and in the mobile-satellite service may include links between earth stations at specified or unspecified points or while in motion, through one or more satellites for point-to-point and point-to-multipoint communications [↑](#footnote-ref-1)