

RESOLUTION 425 (REV.WRC-19)

Use of the frequency band 1 087.7-1 092.3 MHz by the aeronautical mobile-satellite (R) service (Earth-to-space) to facilitate global flight tracking for civil aviation

The World Radiocommunication Conference (Sharm el-Sheikh, 2019),

considering

- a)* that Resolution 185 (Busan, 2014) of the Plenipotentiary Conference instructed WRC-15, pursuant to No. 119 of the ITU Convention, to include in its agenda, as a matter of urgency, the consideration of global flight tracking, including, if appropriate, and consistent with ITU practices, various aspects of the matter, taking into account ITU Radiocommunication Sector (ITU-R) studies;
- b)* that the frequency band 960-1 164 MHz is allocated to the aeronautical radionavigation service and the aeronautical mobile (R) service;
- c)* that the frequency band 960-1 164 MHz is used by International Civil Aviation Organization (ICAO) standardized and non-ICAO systems, thus creating a complex interference environment;
- d)* that Automatic Dependent Surveillance-Broadcast (ADS-B) is defined by ICAO, and involves aircraft transmission of data such as identification and position;
- e)* that the frequency band 1 087.7-1 092.3 MHz is currently utilized for terrestrial transmission and reception of ADS-B signals in accordance with ICAO standards, involving transmissions from aircraft to terrestrial stations on the ground within line-of-sight;
- f)* that WRC-15 allocated the frequency band 1 087.7-1 092.3 MHz to the aeronautical mobile-satellite (R) service (AMS(R)S) in the Earth-to-space direction, limited to the space station reception of ADS-B emissions from aircraft transmitters that operate in accordance with recognized international aeronautical standards;
- g)* that the allocation of the frequency band 1 087.7-1 092.3 MHz to the AMS(R)S is to extend reception of currently transmitted ADS-B signals beyond terrestrial line-of-sight, to facilitate reporting the position of ADS-B equipped aircraft located anywhere in the world;
- h)* that, taking into account *considering c)*, use of the frequency band 1 087.7-1 092.3 MHz requires some administrations to control all users to ensure proper operation of all terrestrial systems,

recognizing

- a)* that ICAO develops standards and recommended practices (SARPs) for systems enabling position determination and tracking of aircraft;
- b)* that Annex 10 to the Convention on International Civil Aviation contains SARPs for terrestrial ADS-B usage of the frequency band 1 087.7-1 092.3 MHz,

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noting

a) that the development of performance criteria for space station reception of ADS-B operating under the provisions of No. **5.328AA**, including whether such criteria would require modifications to ICAO standard ADS-B equipment, is the responsibility of ICAO;

b) that Report ITU-R M.2396 provides information on use of mobile-satellite systems for flight tracking, including through reception of ADS-B in the frequency band 1 087.7-1 092.3 MHz,

resolves

1 that the use of the frequency band 1 087.7-1 092.3 MHz by AMS(R)S systems shall be in accordance with recognized international aeronautical standards;

2 that AMS(R)S systems (Earth-to-space) in the frequency band 1 087.7-1 092.3 MHz shall be designed so that they can operate in the interference environment as described in *considering c*);

3 that, taking into account *resolves 2*, AMS(R)S use of the frequency band 1 087.7-1 092.3 MHz shall not constrain administrations which have responsibilities as referred to in *considering h*),

instructs the Secretary-General

to bring this Resolution to the attention of ICAO.