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| **World Radiocommunication Conference (WRC-15)Geneva, 2–27 November 2015** |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** |  |
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| PLENARY MEETING | **Addendum 35 toDocument 85-E** |
|  | **16 October 2015** |
|  | **Original: English** |
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| Burundi (Republic of)/Kenya (Republic of)/Uganda (Republic of)/ Rwanda (Republic of)/Tanzania (United Republic of) |
| Proposals for the work of the conference |
|  |
| Agenda item GFT(PP-14) |

Resolution 185 (Busan, 2014) Global flight tracking for civil aviation - The Plenipotentiary Conference of the International Telecommunication Union (Busan, 2014), resolves to instruct 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-R studies,

Introduction

Recent events spurred worldwide discussions on global flight tracking and the need for ITU and other relevant organizations to coordinate action within the scope of their respective mandates. In response, the ITU Plenipotentiary Conference 2014 approved Resolution 185 (Busan, 2014) “Global flight tracking for civil aviation”. The Resolution resolves to instruct 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‑R studies. In addition, Resolution 185 (Busan, 2014) instructs the Director of the Radiocommunication Bureauto prepare a specific report on the matter for consideration by WRC‑15. As instructed, the report has been prepared and is provided below.

Global flight tracking for civil aviation is understood to have the ability to provide or obtain the position and identification of an aircraft anywhere in the world, i.e. over the ocean, poles, dense landmass, and remote areas where civil aircraft may operate. Flight tracking is provided in many locations today by various terrestrial and satellite technologies.

EACO member countries (BDI/KEN/UGA/RRW/TZA) support the option 3 proposed in Director’s Report on GFT.

Proposal

The proposal of BDI/KEN/UGA/RRW/TZA (EACO member countries) on GFT issue is as shown below.

ARTICLE 5

Frequency allocations

Section IV – Table of Frequency Allocations
(See No. 2.1)

MOD BDI/KEN/UGA/RRW/TZA/85A35/1

890-1 300 MHz

|  |
| --- |
| Allocation to services |
| Region 1 | Region 2 | Region 3 |
| 960-1 164 AERONAUTICAL MOBILE (R) 5.327A  AERONAUTICAL RADIONAVIGATION 5.328 ADD 5.AGFT |

**Reasons:** Add a primary allocation to the aeronautical mobile-satellite (R) service in the frequency band 1 087.7-1 092.3 MHz to enable satellite reception of automatic dependent surveillance-broadcast (ADS-B) messages transmitted in the aeronautical mobile (R) service in accordance with ICAO standards.

ADD BDI/KEN/UGA/RRW/TZA/85A35/2

5.AGFT The frequency band 1 087.7-1 092.3 MHz is also allocated to the aeronautical mobile-satellite (R) service (Earth‑to‑space) on a primary basis, limited to space station reception of automatic dependant surveillance-broadcast (ADS‑B) transmissions from aircraft in accordance with recognised international aeronautical standards. Resolution **[85A35-AGFT-ADS-B]** **(WRC‑15)** shall apply.    (WRC-15)

**Reasons:** To facilitate reception of the ADS-B signal by satellites satisfying both ITU and ICAO requirements in relation with communication of aircraft air navigation related position information on a global basis. Expanded ADS-B coverage by satellites contributes to ensuring the efficient management of air traffic in oceanic, polar and remote airspace by air traffic management. A new resolution is required to provide information on AMS(R)S operations in this frequency band. Furthermore, with this provision there is no need to modify Resolution 417 (WRC-12).

ADD BDI/KEN/UGA/RRW/TZA/85A35/3

Draft New Resolution [85A35-Agft-ADS-B]

Use of the frequency band 1 087.7- 1 092.3 MHz by the aeronautical
mobile-satellite (R) service (Earth to space)

The World Radiocommunication Conference (Geneva, 2015),

considering

*a)* that the frequency band 960-1 164 MHz is currently allocated to the aeronautical radionavigation service (ARNS) and the aeronautical mobile (R) service (AM(R)S);

*b)* that the frequency band 1 087.7-1 092.3 MHz is currently utilized for terrestrial transmission and reception of automatic dependent surveillance-broadcast signals in accordance with ICAO standards, involving transmissions from aircraft to terrestrial stations on the ground within line-of-sight and consequently do not provide flight tracking and surveillance in polar, oceanic and remote areas;

*c)* that automatic dependent surveillance-broadcast (ADS-B) is defined by the International Civil Aviation Organization (ICAO) as “a means by which aircraft, aerodrome vehicles and other objects can automatically transmit and/or receive data such as identification, position and additional data, as appropriate, in a broadcast mode via a data link”[[1]](#footnote-1);

*d)* that WRC-15 adopted **No. 5.AGFT**, allocating the frequency band 1 087.7-
1 092.3 MHz to the aeronautical mobile-satellite (R) service AMS(R)S, limited to reception of ADS-B signals transmitted in accordance with recognized international aeronautical standards;

*e)* that the allocation of the frequency band 1 087.7-1 092.3 MHz to AMS(R)S is to extend reception of currently-transmitted ADS-B signals beyond terrestrial line-of-sight, to facilitate reporting position of commercial aircraft located anywhere in the world to air traffic control centers, accomplishing an important element of aviation safety and security;

*f)* that International Civil Aviation Organization (ICAO) develops Standards and Recommended Practices (SARPs) for systems enabling position determination and tracking of aircraft for air traffic control and management;

*g)* that the frequency band 1 087.7-1 092.3 MHz is also used by non-ICAO aircraft identification systems that have historically operated in this frequency band on a national coordination basis and should be taken into account;

*h)* that some administrations coordinate and control all users to ensure proper operation of all terrestrial systems, because of their complex interference environment in the frequency
band 1 087.7-1 092.3 MHz,

recognizing

*a)* the need for systems operating under the provisions of **No. 5.AGFT** to be designed in a manner that will not change aircraft equipment currently operating in accordance with recognized international aeronautical standards, including their associated transmission characteristics;

*b)* that Annex 10 to the Convention on International Civil Aviation contains SARPs for terrestrial ADS-B usage;

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

noting

that the development of performance criteria for satellite reception of ADS-B is the responsibility of ICAO,

resolves

1 that AMS(R)S use of the frequency band 1 087.7-1 092.3 MHz shall be in accordance with SARPs requirements published in Annex 10 to the Convention on International Civil Aviation;

2 that, taking into account *recognizing c)*, AMS(R)S use of the frequency band 1 087.7-
1 092.3 MHz shall not constrain administrations in their responsibilities as described in *considering h)*,andAMS(R)S systems shall not claim protection from systems operating in the aeronautical radionavigation service,

instructs the Secretary-General

to bring this Resolution to the attention of ICAO.

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1. Annex 10, Volume III, Section 6. [↑](#footnote-ref-1)