



## INTERNATIONAL CIVIL AVIATION ORGANIZATION

### AERONAUTICAL FREQUENCY SPECTRUM WORKSHOP, WRC-15 PREPARATION (AFSWS)

*(Cairo, Egypt, 16-17 February 2015)*

#### SUMMARY OF DISCUSSIONS

##### 1. INTRODUCTION

1.1 The Aeronautical Frequency Spectrum Workshop, WRC-15 Preparation (AFSWS) was successfully held at the ICAO Middle East (MID) Regional Office (Cairo, Egypt, 16-17 February 2015), and back-to-back with 32<sup>nd</sup> Meeting of Working Group F of the Frequency Spectrum Management Panel (FSMP WG-F/32). The Workshop was attended by a total of thirty two (32) participants from twelve (12) States (Bahrain, Canada, Egypt, France, Japan, Kuwait, Philippines, Saudi Arabia, South Africa, Sudan, UK and USA), and Five Organizations (Airbus, Eurocontrol, ITU, GCC and Inmarsat). The list of participants is at **Attachment A**.

1.2 The objective of the Workshop was to provide necessary support to aviation frequency spectrum experts in the MID Region, for their preparation regarding aviation related agenda items of WRC-15. The Workshop raised awareness and understanding of the aviation requirement for frequency spectrum, in order that aviation experts perform the necessary co-ordination and support with their respective national telecommunication regulators and the regional frequency spectrum meetings, in particular the Arab Spectrum Management Group (ASMG) preparation meetings for WRC-15.

1.3 Mr. Mohamed R. M. Khonji, ICAO Regional Director, Middle East Office, welcomed the participants to Cairo and highlighted that the presence of States and Organizations, from other Regions, is a proof that all have the same global objective which is, the availability of interference free frequency spectrum for the safety of civil aviation, as this is considered to be a prerequisite for satisfying the growing needs for aeronautical spectrum to support new CNS/ATM systems. Mr. Khonji also highlighted, that the demand for spectrum from non-aviation users is continuously growing and hence aviation faces increasing competition from this growing number of users for their share in the limited frequency spectrum available. It has become very important for the civil aviation community to defend the frequency spectrum currently in use and acquire additional spectrum to accommodate new technologies where required.

1.4 The Workshop was supported by Mr. Mike Biggs, the Rapporteur of the FSMP WG/F, Mr. Loftur Jonasson, Technical Officer, CNS, ICAO Headquarters and Mr. Raza Gulam, Regional Officer, CNS, ICAO Middle East Office in Cairo.

1.5 The Agenda of the Workshop was as follow:

Agenda Item 1: Introductions

Agenda Item 2: Preparation for WRC-15: Action Plan to be implemented at the National and Regional Levels

Agenda Item 3: The Reality of Frequency Management in the MID Region: Current Practices and New Challenges

Agenda Item 4: Conclusion and Recommendations

Agenda Item 5: Any other Business

## 2. DISCUSSIONS

2.1 The Workshop under Agenda Item 1, received presentations related to ITU/WRC process, the results of WRC-12, the preparation for the future WRCs as well as the outcome of the AN-Conf/12 and 38<sup>th</sup> ICAO Assembly related to aviation spectrum.

2.2 The Workshop reviewed aviation relevant Agenda Items to be addressed by WRC-15. In particular the following Agenda Items of the WRC-15 were addressed in detail:

- WRC-15 Agenda Item 1.1 - Spectrum for mobile and broadband
- WRC- 15 Agenda Item 1.5 - FSS allocations for Unmanned Aircraft Systems (UAS)
- WRC-15 Agenda Item 1.7 - Review the use of the band 5091 – 5150 MHz by the FSS
- WRC- 15 Agenda Item 1.17 - Wireless Avionics Intra- communications WAIC
- WRC-15 Agenda Item 9.1.5 - VSAT

2.3 The Satellite reception of the ADS-B was explained in detail. It was noted that following the disappearance of MH370, ICAO and ITU both hosted meetings to discuss what could be done to improve the location of an aircraft in an abnormal situation, including an emergency, and retrieval of the black box data for which an emergency had been declared. One of the Conclusions of the ICAO Multidisciplinary meeting on Global Flight Tracking (GFT) was that GFT should be pursued as a matter of urgency and to encourage ITU to place this item on the Agenda of WRC-15.

2.4 The Workshop noted that the ICAO High Level Safety Conference (HLSC, 2-5 Feb 2015) reviewed a concept of operations (CONOPS) to support the future development of a Global Aeronautical Distress and Safety System (GADSS), developed by an Ad-Hoc Working Group, as a follow up to the Multidisciplinary meeting on GFT. The report of the Aircraft Tracking Task Force (ATTF), led by IATA to identify near-term capabilities for normal tracking using existing technologies, was also reviewed by the HLSC. In the light of the Recommendations developed by the CONOPS and ATTF reports, the HLSC supported that WC-15 should discuss spectrum allocations to enable global Air Traffic Services (ATS) surveillance. In the ITU an ITU-T Focus Group on aviation applications of Cloud Computing for Flight Data Monitoring (FG AC) has been established. The Workshop supported the allocation and protection for ADS-B satellite frequency spectrum.

2.5 Preliminary views of the Arab Spectrum Management Group on the various WRC-15, was reviewed and it was noted that for many WRC agenda items the ASMG position would be finalized during the ASMG meeting in Doha, Qatar, 19 February 2015.

2.6 The Workshop reviewed the Frequency Management in the MID Region and also received presentation from ITU on the interference issues and requirement for the registration in the ITU Master International Frequency Register (MIFR). The Workshop noted that ICAO performs the coordination of Aviation spectrum. The harmful frequency interference when identified/reported it is solved on consensus basis in coordination with States. The Workshop noted that CPM text and most of the studies on the ITU website require password.

2.7 The Workshop noted the contents of the Handbook on Radio Frequency Spectrum Requirements for Civil Aviation (Doc 97180), where Volume I explain, ICAO spectrum strategy, policy statements and related information. The new Volume II contains Frequency assignment planning criteria for aeronautical radio communication and navigation systems.

2.8 The Workshop developed the following Recommendations :

***Recommendations:***

- States be urged to support the:
  - ICAO Position for WRC-15;
  - Agenda Item 9.1.5, since VSAT is a crucial element of the MID Region communication infrastructure;
  - Conclusions and Recommendations of the HLSC, mainly that the WRC-15 discuss necessary spectrum allocation for space based reception of ADS-B for Global Tracking at WRC -15;
  - removal of their names from all footnotes negatively affecting Aviation Spectrum, under WRC-15 Agenda Item 8; and
  - implementation of Resolution A 38-6, mainly that States' delegations to WRC include experts from their Civil Aviation Authorities.
  
- ICAO be requested to:
  - coordinate with ITU the possibility of sharing the ITU studies relevant to aviation spectrum (CPM text, and other?); and
  - consider the global tracking for general and business aviation aircraft.
  
- FSMP be requested to develop guidance material on interference issues, such as those from windmills; and
  
- States be requested to share any interference characteristics databases, and the information on Radio Act Laws.

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**LIST OF PARTICIPANTS**

NAME	TITLE
<b><u>STATES</u></b>	
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