



ICAO

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North American, Central American and Caribbean Office

WORKING PAPER

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**Fourteenth Directors of Civil Aviation of the Central Caribbean Meeting (C/CAR/DCA/14)**  
Kingston, Jamaica, 11 to 13 May 2015

**Agenda Item 4: Air Navigation Matters**  
**4.5 Other Air Navigation Matters**

**ICAO POSITION FOR THE INTERNATIONAL TELECOMMUNICATION UNION (ITU)  
WORLD RADIOCOMMUNICATION CONFERENCE (WRC-2015)**

(Presented by the Secretariat)

<b>EXECUTIVE SUMMARY</b>	
This working paper recalls the States support for the ICAO position for WRC-2015, particularly focus for the last remaining CITEL regional Meeting to be held in Ottawa.	
<b>Action:</b>	The suggested actions are detailed in Section 3.
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"><li>• Safety</li><li>• Air Navigation Capacity and Efficiency</li><li>• Environmental Protection</li></ul>
<i>References:</i>	<ul style="list-style-type: none"><li>• Electronic Bulletin Ref: E 3/5. 15-13/57, ICAO Position for the ITU WRC-15, 2 July 2013.</li><li>• First NAM/CAR Air Navigation Implementation Working Group Meeting (ANI/WG/1), Mexico City, Mexico, 29 July to 1 August 2013</li><li>• Fourth North American, Central American and Caribbean Working Group Meeting (NACC/WG/4), Ottawa, Canada, 24 to 28 March 2014</li></ul>

**1. Introduction**

1.1 The radio frequency spectrum is a scarce natural resource with finite capacity limits and for which demand is constantly increasing. The availability of the necessary radio frequency spectrum is a critical aspect for safety of civil aviation and the effective implementation of existing and future Communications, Navigation and Surveillance (CNS) and Air Traffic Management (ATM) systems-

1.2 Radio frequency spectrum congestion imposes on all users the duty of spectrum-efficient operation. The adequate allotment/assignment of frequencies for aeronautical national/international use, based on regional agreements and coordinated between States and ICAO, is an indispensable task for the optimum use of radio frequency spectrum and safety of aviation operations.

1.3 Due to the importance of this matter, States and Territories adopted the ICAO Twelfth Air Navigation Conference Assembly Recommendation 1/12 (*Development of the aeronautical frequency spectrum resource*) and Assembly Resolution A38-6 (*Support of the ICAO policy on radio frequency spectrum matters*), urging Member States, international organizations and other civil aviation stakeholders to firmly support the ICAO frequency spectrum strategy and the ICAO position at WRCs and in regional and other international activities conducted in preparation for WRCs.

1.4 ICAO submitted the ICAO position as approved by the ICAO Council through electronic bulletin, Ref: E 3/5. 15-13/57, dated 2 July 2013.

## 2. Discussion

2.1 Major threats to aviation include the possibility of harmful interference to essential aeronautical radionavigation and radiocommunication systems. This could have a direct and severe impact on the safety, as well as the efficiency of flight operations. To satisfy the future frequency spectrum needs of aviation, long term planning and engagement are required. In order to provide a proactive response to the increasing pressure of other frequency spectrum dependent sectors, active participation by the aviation regulatory authorities and industry is required in the national and international fora leading to and including the WRC-15.

2.2 To this extent, ICAO and the NAM/CAR Regions have expressed their support to this position:

- the NAM/CAR Air Navigation Implementation Working Group (ANI/WG) formulated Conclusion ANI/WG/1/10 - *Active State Support to ICAO Position for WRC-15*; urging States to include ICAO WRC-2015 Position to their ITU related meetings and the inclusion of aviation experts in the national delegations that participate in the ITU and regional preparatory activities for the WRC-15.
- Assembly Resolution A38-6 instructs the Council, the Secretary General and the States to take action as a high priority matter
- The NACC/WG/4 meeting formulated related conclusion 4/5

2.3 ICAO has undertaken several activities for assisting the States for this support, such as:

- a) Regional Preparatory Workshop for the Fifteenth International Telecommunications Union World Radiocommunication Conference (ITU WRC-15) conducted to support States in the appropriate management of the frequency spectrum and preparing ICAO's position at the ITU WRC-15. The workshop noted the importance of protecting the C-band in context with WRC-15 Agenda item 1.1 (the mobile industry is looking for over 1000 MHz of additional spectrum between 300 – 5000 MHz, and a number of aeronautical bands are under scrutiny), and that all interference cases to aeronautical VSAT must be duly recorded and documented for appropriate presentation within the ITU-R and WRC process when discussing future use and access of the Fixed Satellite-based Services (FSS) C-band. The workshop formulated several recommendations and observations included on the summary of discussions of the workshop:  
[http://www.lima.icao.int/MeetProg/mt\\_MeetingDocumentation.asp?wShortTitle=PREPITUWRC15&wLanguage=S&wYear=2013](http://www.lima.icao.int/MeetProg/mt_MeetingDocumentation.asp?wShortTitle=PREPITUWRC15&wLanguage=S&wYear=2013);

- b) inclusion of this topic in all the working group meetings such as the ANI/WG; MEVA and E/CAR/CATG;
- c) Participation in the Interamerican Commission of Telecommunication CITEL meetings like the XXIV Meeting of the Permanent Consultative Commission: Radio communications (XXIV PCC.II) (Merida, Mexico) and the XXV Meeting of the Permanent Consultative Commission II: Radio communications (XXV PCC.II) (Medellin, Colombia);
- d) keeping a States Points of Contact (PoCs) list in support of the ICAO WRC-15 Position for coordination and mutual support; and
- e) keeping the Regional Frequency Assignment List available for States and general public: ICAO Website: <http://www.icao.int/NACC/Pages/frequency.aspx>.

2.4 During the MEVA Meetings, ICAO highlighted the recommendation of the Regional Preparatory Workshop for ITU to ensure protection for these WRC-agenda items for the aeronautical VSAT networks in the NAM/CAR/SAM Regions, providing several studies and other information to ensure protection of the C-band for aeronautical purposes, reaching agreement such as:

**CONCLUSION 26/21**                      **REVIEW AND AGREEMENT ON ACTIONS TO FOLLOW-UP ON AN-CONF/12 RECOMMENDATION 1/14 AND RECOMMENDATIONS FROM THE REGIONAL PREPARATORY WORKSHOP FOR ITU WRC-15**

*That in order to protect the use of the C-band of the MEVA Network, all MEVA Administrations:*

- a) *contact their national radiofrequency spectrum authorities to obtain their support for C-band protection as presented in AN-Conf/12 Recommendation 1/14 - Long-term very small aperture terminal spectrum availability and protection and the Regional Preparatory Workshop for ITU WRC-15 Recommendation: To ensure protection for these WRC-agenda items for the Aeronautical VSAT networks in the CAR/SAM Regions;*
- b) consider the studies for C-band protection; and
- c) report all aeronautical VSAT interference cases to the MEVA TMG, including recording and documenting each case.

2.6 The process of international competition between expanding radio services, which takes place in the ITU, obliges all existing spectrum users, aeronautical and non-aeronautical alike, to continually defend and justify the retention of frequency bands or the addition of new bands to those already allocated to their service. Civil aviation requirements continue to grow, requiring more navigation and communication facilities, thus creating ever-increasing pressure to an already stretched resource, similarly to other, non-aviation users, with whom aviation shares the frequency spectrum resource. Accordingly, civil aviation must develop and present its agreed policies and its quantified and qualified statements of requirement for radio frequency spectrum, so as to ensure continuing availability and access to the frequency spectrum resource and, ultimately, the on-going viability of air navigation services throughout the world.

2.7 For the CAR Region, CITEL is the regional forum for expressing this support. CITEL may receive all the States positions, individually or as a group, e.g., the Caribbean Telecommunication Union (CTU) and COMTELCA for Central America.

2.8 Currently, the States are still providing their decision on the different positions (Interamerican proposals) to present in the WRC-2015 (November 2015). The CITEL meeting in Merida, the XXIV Meeting of the Permanent Consultative commission: Radio communications (XXIV PCC.II) (September 2014) expressed support to ICAO Position; however little CAR support was presented. Similarly the need to register Aeronautical VSAT nodes/network was commented. In this same regard, in the most recent CITEL meeting held in Medellin, Colombia (XXV PCC.II), and although some supports to ICAO position were completed, such as: flight tracking initiative and the Agenda Items 1.7 and 1.17; the participation of the Civil Aviation Authorities from the CAR Region was very low. The next CITEL meeting is scheduled for August 2015 in Ottawa (XXVI PCC.II).

2.9 The ICAO Position as introduced in 2013 will in all likelihood have some updates in time before the WRC-15. None of the updates will however change the position; they will merely be clarifications in light of studies within ICAO and ITU-R. There is one notable exception to this: a position in support of satellite reception of Automatic Dependent Surveillance - Broadcast (ADS-B) transmissions by means of 1090ES that will be included as part of the Global Flight tracking initiative as agreed recently in the ITU Plenipotentiary Meeting in Korea. ICAO had started working on updates to the ICAO position during the last meeting of ACP (FSMP) WG-F (Frequency Working Group), from 6 to 10 October 2014. The WG-F finished drafting any proposed updates by February. After which these updates will be addressed by the Air Navigation Commission (ANC) before eventual approval by Council in the June timeframe (2015).

### **3. Suggested Action**

3.1 The Meeting is invited to:

- a) take note of the efforts of the States/Territories and ICAO to protect and ensure the optimum use of the aeronautical spectrum;
- b) assign aviation experts to attend with the corresponding Spectrum Regulators to the Regional CITEL meeting and vote for the Interamerican proposals related with the ICAO position; including the protection of the C-Band and the Global Flight tracking initiative;
- c) report any progress regarding Conclusion MEVA TMG/26/21, paragraph 2.4; and
- d) take any other action as deemed necessary.