



WORKING PAPER

**SPECIAL AFRICA-INDIAN OCEAN (AFI)
REGIONAL AIR NAVIGATION (RAN) MEETING**

Durban, South Africa, 24 to 29 November 2008

Agenda Item 6: Development of a set of comprehensive work programmes in the air navigation field, aimed at improving efficiency of the air navigation system (Efficiency Committee)

**AERONAUTICAL FREQUENCY SPECTRUM PROTECTION
(OVERVIEW OF WRC-07 AND PREPARATION OF WRC-11)**

(Presented by Benin, Burkina Faso, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Equatorial Guinea, France, Gabon, Guinea-Bissau, Madagascar, Mali, Mauritania, Niger, Senegal, Togo, ASECNA Member States)

SUMMARY

This paper gives a short overview of actions undertaken by ASECNA in the frame of the preparation of ITU WRC 2007, summaries some results of this conference and proposes to setup a regional specialized subgroup aimed to protect aeronautical frequencies spectrum during the coming WRC 2011.

Action by the meeting is in paragraph 4.

1. INTRODUCTION

1.1 The World Radio Communications Conference 2007, hosted in Geneva from 22 October to 16 November 2007 was a very important issue for the air navigation Service Provider, regarding the aeronautical spectrum, more and more coveted but necessary to provide air navigation service.

1.2 In the framework to prepare this important meeting, ASECNA has organized in coordination with French Direction General for Civil Aviation (DGAC), EUROCONTROL, French National Agency for Frequencies Management (ANFR), a seminar on *WRC, 2007 and the stakes for the aeronautical spectrum* which was hosted from 6 to 8 February, 2007 in Dakar (NGOR DIARAMA Hotel). ASECNA neighbours ANSP were invited to this meeting.

1.3 This workshop was attended by ICAO WACAF Office, ITU Regional Office in Dakar, Gambia Civil Aviation Authority (GCAA), Morocco Office National des Aeroports (ONDA), Nigeria Airspace Management Agency (NAMA), Gambia Civil Aviation Authority (GCAA), Senegal National Agency for Telecommunications Regulation (ARTP), one representative from each ASECNA membership countries and ASECNA headquarters experts.

1.4 More than one hundred people attended the workshop.

2. DISCUSSION

2.1 The meeting focussed on the stakes for the aeronautical spectrum in the technical and institutional levels.

2.2 The attention of the attendees was specially addressed on the importance of the collection and the registration of the aeronautical frequencies and the fight against interferences, the national, regional and international coordination actions to be taken to protect the aeronautical spectrum and the preparation of WRC-2007.

2.3 ICAO position was presented, explained by WACAF and discussed.

2.4 The meeting drew five conclusions consisting on the participants own engagement to process some actions and sixteen recommendations towards ASECNA and other ANSP head.

2.5 Some of the conclusions/recommendations of this workshop may be shared in a regional framework under ICAO leadership.

2.5.1 **Conclusions and recommendations proposed to enhance internal frequencies spectrum management and to prepare the WRC-2007**

2.5.1.1 Theses conclusions/recommendations are related to practical actions to be taken by ASECNA centres and Headquarters regarding for example:

- a) frequencies assignment methodology;
- b) frequencies registration;
- c) supporting Civil Aviation Authority in their actions towards National Agencies for Telecommunications Regulation; and
- d) analysis and registration of local occurred interferences.

2.5.1.2 The necessity to modernize the frequency spectrum management tools was raised up: registration forms, frequencies spectrum handling databases, training.

2.5.2 **Conclusions and recommendations proposed to enhance the regional frequencies spectrum management and to prepare the WRC-2007**

2.5.2.1 Theses conclusions/recommendations are related to regional actions to be taken in a cooperative context for example:

- a) regional coordination to prevent or detect and suppress interferences;
- b) experience sharing in frequency spectrum management;
- c) enhancement of the cooperation with the telecommunications organisation ITU, ATU by participating to Radio COM meetings;
- d) enhancement of the cooperation between ICAO, IUT, ATU and Civil Aviation Authorities;
- e) protection of the aeronautical satellite communications frequencies; and
- f) regional preparation of the WRC-2007 by supporting ICAO position.

3. RESULTS

3.1 Because of the importance of the Aeronautical frequencies spectrum-*the main row resource for CNS/ATM therefore for air navigation safety*- it was advisable to organize such a workshop in order to:

- a) put ASECNA technical and operational teams at a same level of investigation and action by hearing various experiences from regulators (Senegal ARTP), Europe (EUROCONTROL, France National Frequencies Management Agency) International UN Organization IUT & ICAO;
- b) share with the others ANSP teams the experience in the aeronautical frequencies management; and
- c) open the doors to set up a regional cooperation regarding the stakes for the aeronautical frequencies spectrum.

3.2 Afterwards the participants coordinated with their Civil Aviation Authorities and their National Regulation Office for Telecommunications to present ICAO position for WRC 2007 and the local problems they were facing when operating Aeronautical frequencies spectrum.

3.3 ASECNA participates to two sessions of ACP-WG-F (Cairo and Nairobi) and attended the WRC07 for Two weeks. During the conference WACAF Administrations/Organizations (Cameroon, Ghana, Nigeria, Mauritania and ASECNA) supported ICAO position by attending the technical specialized meeting dealing with the Aeronautical spectrum protection.

3.4 Two important results were reached by ICAO during WRC 07 especially for AFI region:

- a) the protection (against IMT) of the C-Band (3.4 À 4.2GHZ) used by satellite communication providers to ensure communications in tropical region; and
- b) he RECOMMENDATION [COM4/A] (CMR-07) requesting the use of FSS frequencies by primarily by Civil Aviation of developing countries has been adopted so were the other critical questions of Civil Aviation submitted to WRC 07 by ICAO.

3.5 One may note that AFI Region is suffering with the lack of specialized sub Group aimed to deal with the frequency spectrum use and protection by Civil Aviation. The threat is growing more and more because of the growth of the New Technologies for Information and Communication around airports.

3.6 ICAO WG-F is already working on the position of ICAO for WRC 2011.

3.7 The time has come for AFI Region to prepare this conference with real day to day inputs in frequencies spectrum management for air navigation.

4. ACTION BY THE MEETING

4.1 The meeting is invited to:.

- a) note the information provided above;

- b) discuss, amend and endorse ASECNA proposals regarding the necessity to set up a formalized subgroup specialized to collect data related to the protection of the aeronautical frequencies spectrum and to fight against interferences under ICAO leadership;
- c) support ICAO position for WRC-2011 by working closely to civil aviation authorities and national, telecommunications regulation agencies; and
- d) take a suitable conclusions/decision related to the subject.

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