



INTERNATIONAL CIVIL AVIATION ORGANIZATION

WESTERN AND CENTRAL AFRICAN OFFICE

SIXTEENTH MEETING OF AFISNET SATELLITE MANAGEMENT COMMITTEE (SNMC/16)

(Dakar, Senegal, 17-19 December 2007)

Agenda Item 9: Any other business

UPDATE ON ACTIVITIES OF THE AERONAUTICAL COMMUNICATIONS PANEL (ACP)

(Presented by the Secretariat)

SUMMARY

This paper provides a report on the activities of the aeronautical communications panel (ACP) and shows the expected dates for the availability of the ICAO provisions that are being developed by that panel

1. Introduction

1.1 The first meeting of the Aeronautical Communications Panel (ACP/1) was held in Montreal from 10 to 18 May 2007. The ACP working groups I (IPS), F (Frequency) and T (Technology) have had meetings since then. The main issues currently on the agenda of the ACP are the Future Communication Study (FCI), updates to AMS(R)S and ATN SARPs, technical specifications and guidance material.

1.1 Frequency Spectrum related issues, addressed by WG-F (Frequency), and SARPs maintenance issues, addressed by WG-M (Maintenance) are ongoing activities.

2. Future Communications Infrastructure (FCI)

2.1 WG-T which is responsible for this subject, during its meeting of 2 to 5 October 2007, agreed to:

- Develop a new system based on the IEEE 802.16e standard operating in the C-band and supporting the airport surface environment
- Complete investigations (with emphasis in proving the spectrum compatibility with other systems) to finalise the selection of a data link operating in L-band (L-DACS) and supporting the continental airspace environment, aiming at a final decision by 2009, to enable system availability for operational use by 2020.
- Recognising that satellite communications remain the prime candidate to support oceanic and remote environments and that the considered future satellite systems may also be able to support continental environments possibly complementing terrestrial systems, monitor and support developments that will lead to globally available ATS satellite communications.
- Recognising the importance of spectrum for the realisation of FCI, ensure the availability of the required spectrum in the appropriate bands.

2.2 Those recommendations will be finalized at the next ACP WG-W meeting, currently scheduled for March 2008, for review and approval by the Air Navigation Commission. Based on a favourable outcome of the study, it is likely that the ACP will be tasked with developing SARPs for IEEE 802.16e systems (C-band) for airport surface operations, development of performance based AMS(R)S SARPs in support of the FCI, and continued monitoring and support of the L-band technology study.

3 Amendment 82 to Annex 10, Vol III

3.1 The Amendment (applicable in November 2007) includes a replacement of the entire Chapter 4 (containing AMS(R)S SARPs). The old material, which was specific to the Inmarsat and MTSAT classic system, contained over 200 pages of SARPs and 100 pages of Guidance Material (the latter in the form of Green Pages). The new Chapter 4 contains only generic high level and concise AMS(R)S SARPs. An AMS(R)S Manual has also been developed and is being made available in November 2007. The manual consist of three parts:

- Part I – General information on AMS(R)S
- Part II – Iridium Satellite Network
- Part III – Inmarsat (global service) and MTSAT (regional service in Asia/Pacific region)

4. Amendment 83 to Annex 10, Vol III

4.1 The Amendment 9 (to become applicable in November 2008) introduces the use of the off-set carrier (climax) system on 8.33 kHz voice channels in the very high frequency (VHF) frequency band (117.975 – 137 MHz). This is a frequency-efficient technique for using VHF frequencies over large geographical areas.

4.2 Also included in the Amendment is the use of the Internet Protocol Suite (IPS) in the aeronautical telecommunication network (ATN). The current ATN SARPs are being restructured along the principles of Assembly Resolution A35-14. The amendment concentrates on keeping high-level Standards in Annex 10 necessary to secure the global interoperability of the ATN.

4.3 The detailed technical specifications for ATN/IPS, including the air-ground links will be completed by the end of 2008. This will complement these SARPs for the ATN/IPS which are expected to become applicable in November 2008.

4.4 The detailed technical specifications for ATN/OSI are currently contained in Doc 9705 and Doc 9880. Doc 9880, which is currently under development, incorporates changes made by ACP since 2003, and will eventually replace Doc 9705. All volumes of Doc. 9880 approved so far are still pending formal editing and formal publication by ICAO.

5. Action by the Meeting

5.1 The meeting is invited to note the information provided in this paper.

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