



International Civil Aviation Organization

**FIFTEENTH MEETING OF THE
COMMUNICATIONS/NAVIGATION/SURVEILLANCE AND
METEOROLOGY SUB-GROUP (CNS/MET SG/15) OF APANPIRG**

Bangkok, Thailand, 25 – 29 July 2011

Agenda Item 4: Aeronautical Mobile Services (AMS)

2) discuss satellite voice communications

DEVELOPMENTS IN SAT COM VOICE

(Presented by Australia)

SUMMARY

This paper presents Australia's position on the implementation on Sat Com Voice

This paper relates to – **Strategic Objectives:**

A: **Safety** – Enhance global civil aviation safety

C: **Environmental Protection and Sustainable Development of Air Transport**

Global Plan Initiatives:

GPI-5 RNAV and RNP (Performance-based navigation)

GPI-22 Communication infrastructure

GPI-23 Aeronautical radio spectrum

1. Introduction

1.1 CNS/MET SG/15-WP/28 provides the history and report of the Inter-Regional SATCOM Voice Task Force (IRSVTF) meeting as well as a copy of the draft Satellite Voice Guidance Material (SVGM) that is being prepared by the TF. The paper includes the group Terms of Reference and guiding principles including the point that consideration of the use of SATCOM Voice technology is 'beyond the target date for the first addition of the Guidance Material.

1.2 Australia is an active participant in the IRSVTF and is planning to attend the next meeting to be held in Seattle in September, 2011. This paper provides some additional material to WP/28 as well as highlights some potential issues in the global adoption of SATCOM Voice (SCV).

2. Discussion

2.1 ICAO in the mid 1990s decided not to develop standards for the use of SCV for ATS purposes for a variety of reasons including the desire to move away from voice focused communications to digital based such as CPDLC. As well as the overcoming human factor issues

(such as language proficiency) with voice communications, the focus on digital communications allows the reduction of separation standards, such as RNP 4 where direct voice communications may not be available.

2.2 Following issues noted with HF, especially on the North Atlantic routes, a trial in that region was undertaken that led to the subsequent legitimization of the normal use of one HF set + plus one SATCOM on some routes in the European region “**if the ground counterparts (i.e. ATS) in the region are equally suited for SATCOM**”. This approval will be published in the Doc 7030. The following points should be noted:

- a) This is not approval for SCV to be a stand-alone Long Range Communication System (LRCS);
- b) At least one HF must continue to be carried and be serviceable;
- c) SCV can only be used in airspace where ATS are capable and authorised to use the capability; and
- d) With most ATS infrastructure arrangements, SCV is operated through ‘third party’ communications protocol that precludes it being suitable for some separation standards.

2.3 The EUR approval implies that the use of SCV is dependent on its acceptability by the underlying State and its ATS rather than availability along an international nominated route.

2.4 Informal discussions have indicated that some States in this region have already experienced flights being planned with only SCV as only available LRCS. Given the European approval, further examples of this could be expected and will need to be managed.

2.5 The next meeting of the IRSVTF will be held in Seattle in the week of 12 September, 2011. Comments on the Manual are requested prior to that meeting.

3. Action by the Meeting

3.1 The meeting is invited to:

- a) note the contents of this paper;
- b) provide comments on the draft SCGM; and
- b) discuss the adoption of SCV in the region.
