AERONAUTICAL TELECOMMUNICATIONS NETWORK PANEL

WG2

ATN INTERNET WORKING GROUP MEETING

South Brisbane 5 - 9 Feb 1996

Section 1 - Sub-Volume V of the CNS/ATM-1 Package Guidance Material

Summary:

This is a proposal of Section 1 - Sub-Volume V of the CNS/ATM-1 Package Guidance Material updating Chapter 1 of WP 172.

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1. Discussion

This document is a proposal of the section 1 - Sub-Volume V CNS/ATM-1 Package Guidance Material as addressed by the action 6/29 of the 6th WG2 meeting.

The updated version has a new paragraph for the document overview and all references to FANS were deleted.

2. Proposal

The editor invites the WG to provide further comments and suggestions on the current version

To achieve the goal of the action 6/28, the editor suggests that all jobs done should be put together in one file to, during the 7th WG2 meeting, produce the new draft version of the Guidance Material.

DOCUMENT CONTROL LOG

SECTION	DATE	REV. NO.	REASON FOR CHANGE OR REFERENCE TO
			CHANGE
	5/02/96	1.0	First issue.

APPENDICE

1. Introduction

1.1. Backgrond

In January 1989, the Air Navigation Commission (ANC) expanded the terms of reference of the Secondary Surveillance Radar Improvements and Collision Avoidance Systems Panel (SICASP) to include the development of ICAO material as necessary to permit, to the maximum extent practicable, systems commonality between ATS data links, including satellite data links.

The studies undertaken by the SICAS Panel resulted in the concept of the Aeronautical Telecommunication Network (ATN) which is intend to support computer-to-computer communications operated by civil aviation authorities and aeronautical operating agencies botth onboard of aircraft and on the ground. At its fourth meeting, the SICAS Panel developed a description of the ATN and recommended it to be published as an ICAO manual. In 1991, the ICAO published the first edition of the ATN Manual,

Following, the ANC transferred the work of developing SARPs and Guidance Material to the newly created ATN Panel (ATNP).

The concept developed by SICAS Panel was of a multi-user multi-vendor internetwork, that integrates much different air-ground and ground-ground networking technologies that are currently in place and being planned. In addition, this internetwork is designed to meet the expected Quality of Service (QoS) requirements of the future aeronautical applications, and to respect the ITU and national regulations that apply to each air-ground data link.

1.2. Scope

This document provides guidance material for ATN Implementors, Service Providers and Users.

1.3. Purpose of Document

In line with normal ICAO practice, this document was developed as a companion document to Sub-volume V of the CNS/ATM-1 Package SARPs. It may be read alongside the SARPs, in order to provide a greater understanding of the specification itself, or it may be read instead of the SARPs by readers that simply want to understand the ATN Concept rather than the detail of the specification.

1.4. Document Overview

This document is divided in 8 sections which are, exclude the introduction:

Section 2 The ATN Concept

An overview of the components, protocol architecture, routing, quality of service, priority and security concept of the ATN internet is given;

Section 3 **Guidance for ATN Administrators**

The areas of responsibility, strategies and planning of the ATN internet are described;

Section 4 **Guidance for System Implementors**

The transport protocol, CLNP, IDRP, ES-IS and mobile SNDCF implementation considerations are described;

Section 5 Guidance for Service Providers

The role of an ATN service provider, the interconnection with others ATN service providers, ground based users and mobile users, the allocation of addresses and the provision of default routes to mobile systems are described;

Section 6 **Guidance for Application Designers**

to be written (TBW);

Section 7 **Guidance for Aircraft Operators**

TBW; and,

Section 8 Guidance to Subnetwork Implementors

TBW.