



International Civil Aviation Organization

**THE SEVENTH MEETING OF AERONAUTICAL
TELECOMMUNICATION NETWORK (ATN)
TRANSITION TASK FORCE OF APANPIRG**

Shanghai, China, 18-22 April 2005.



Agenda Item 1: Review Latest Developments in the Aeronautical Communication Panel

ACP WGN/04 DISCUSSIONS ON DIRECTORY SERVICES

(Prepared by Japan)

SUMMARY

This working paper summarizes discussion on the ATN Directory Service at the ACP WGN/04 Meeting.

1. INTRODUCTION

The fourth meeting of the Aeronautical Communications Panel Working Group N (ACP WGN/4) was held at New Orleans, USA from 10–18 November 2004. This working paper summarises discussions at the meeting relevant to Directory.

2. DISCUSSION

The ATN Directory is defined in sub-volume VII of ICAO Doc 9705-AN/956 Edition 3, and is based on ITU-T X.500. Its initial application for ATN is expected to be supporting address lookup for the AMHS application. As a result, Directory-related discussions were focused on AMHS support.

2.1 WP44 “A contribution to ATN DIR functional groups”

ACP WGN envisages that Directory functions will be included as part of some standardised AMHS Implementation Profiles. However, since not all the Directory functions that could be implemented based on sub-volume VII are required to support AMHS, this working paper attempted to identify those elements related to the ATN DIR schema (object classes and attribute types) that could contribute to AMHS implementation profiles.

This work appears similar to the specification of object classes and attribute types to be used in the Asia/Pacific region carried out by the ATN Transition Task Force in its preparation of the Directory Services technical document.

Recommendation: *The object classes and attributes proposed in ACP WGN4 WP44 should be reviewed and compared against those in the Technical Document, and further action taken as appropriate.*

2.2 **WP30 “Results of an ATN Directory Survey by Eurocontrol”**

The EUR region is currently starting deployment of an AMHS service, and Eurocontrol is currently studying issues related to a Directory service to support the regional AMHS. Eurocontrol is examining various non-X.500 protocols to enable AMHS users to access Directory, including LDAP (Lightweight Directory Access Protocol) and WEB (HTTP-based protocols). These protocols are based on the IP protocol suite instead of ISO and ITU-T protocols, since the EUR region is implementing AMHS based on an IP network instead of ATN/OSI. (The EUR region is considering “dual stack” directory servers to provide inter-regional X.500 DAP access to ATN/OSI users as well as to intra-regional IP users.) However, the selection of the Directory access protocol in the EUR region is not yet clear.

The Eurocontrol survey also reported that the ATN Directory specifies non-standard schema elements that are not directly supported by standard X.500 DAP, LDAP or WEB. Use of these schema elements therefore carries cost implications since supporting them would require modification of commercial off-the-shelf (COTS) products.

The WGN meeting agreed that these ATN-specific directory definitions should be reviewed with a goal of simplification.

Recommendation: *Since this issue has cost implications, it is recommended that the Working Group be tasked to review the impact on the implementation of Directory in the Region, and consider delaying implementation until the review of ATN-specific schema elements has been carried out by WGN.*

3. **ACTIONS BY THE MEETING**

The meeting is invited to review this paper and discuss its recommendations.
