



International Civil Aviation Organization and the Directorate General of
Air Communication, Indonesia



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

Agenda Item 1, Report on other ICAO Working Group Activities

REPORT ON ACP WGN/02 MEETING SUB-GROUP SGN03

(Presented by the ATNTTF Working Group)

Summary

This working paper summarises the activities of the Aeronautical Communications Panel (ACP) Working Group sub-groups SGN3 meeting held in conjunction with the ACP WGN/02 meeting in November 2003 in Bangkok, Thailand.

1. INTRODUCTION

1.1. The second meeting of the Aeronautical Communications Panel (ACP) Working Group N (WGN) was held in Bangkok, Thailand from 14–21 November 2003. The first meetings of WGN's sub-groups were held in conjunction with ACP WGN/02. This working paper summarises the first meeting of sub-group SGN3 (Ground-to-Ground Applications).

The Ground-to-Ground Applications Subgroup (SG N3) of the ACP/WGN held its first meeting in, on November 12th and 13th, 2003.

There were 11 persons participating in the meeting. Jean-Marc Vacher, Chairman of the subgroup, chaired the meeting.

There were 13 working papers proposed for the meeting, including 3 information papers.

1.1.1. DISCUSSION

1.1.2. BACKGROUND

Even though the ATN technical provisions are complete, further advancement is expected as operational requirements evolve and new requirements materialise. The work of ACP WG-N is to monitor such requirements and develop new standards and/or guidance material as required.

To facilitate the completion of the deliverables of ACP WGN sub-groups were created at the first meeting of the group May 20 through 23, 2003 in Montreal;

SGN1 (Internet Communication Services: ICS),

SGN2 (air/ground applications),

SGN/3 (ground/ground applications),

SGN/4 (security services).

These sub-groups held their first meetings in conjunction with the second meeting of ACP WG-N in Bangkok in November 2003.

2. SUB-GROUP N3 DISCUSSION TOPICS

2.1. Administrative Concerns

Detailed discussions will occur in the subgroup and more "high level" discussions in the larger working group.

Asia/Pacific was following the strict ATN-compliant way in its AMHS implementation plan. Concern was raised with the European decision to implement AMHS over TCP/IP.

2.2. Sub-group N-3 Work Programs

Sub-group members were provided with terms of reference and deliverables and agreed to work within those frames.

2.3. ATS Message Handling Services

2.3.1. Update of CIDIN references in ICAO ATN Documentation

The specification of the CIDIN/AMHS Gateway had been added to the ATSMHS documentation as part of Document 9705 Edition 3, and likewise as part of Document 9739 Edition 2. The meeting agreed with the proposed changes. It was further agreed to submit these for endorsement to WGN and to the CCB meeting with the subgroup's support.

2.3.2. ATSMHS terminology

In the ATNP WGA/2 and WGA/3 meetings, upon a request from the ICAO Secretariat, it had been recognised that there was a need for simplification of the terminology included in the ATSMHS SARPs. Particular attention was given to the redundancy between the terms "ATS Message Handling Services" and "ATS Message Service."

The options analysed in the paper were discussed and the option preferred in the paper was recommended by the meeting. The solution consisted in putting ATSMHS in singular, to read "ATS Message Handling Service" and in replacing the term "ATS Message Service" with "ATS Message Handling Service" (by insertion of the word "Handling"). The term "ATS Message Handling System" (AMHS) would remain unchanged.

2.3.3. PDR M304002 (Single LF in the ATS-Message-Header)

The defect represented by the PDR was related to the difficulty to generate a single (LF) character as an end-of-heading-blank-line, which had been observed in the Microsoft Windows environment. The difficulty was ascertained by Microsoft Outlook-based UAs, and possibly with other Microsoft-based UAs. This PDR had been initially SUBMITTED on the CCB mailing lists by Thales-IS in April 2003

A consensus was made about the principle to accept that either (LF) or (CR)(LF) be accepted upon generation of the end-of-heading-blank-line by an originating UA and that both (LF) and (CR)(LF) be accepted by a receiving UA or gateway. It was agreed that this solution would be reported as a consolidated subgroup's agreement to the CCB meeting to be held after the SGN3 meeting. With this preferred resolution, the PDR would then be passed to PROPOSED.

2.4. Guidance Material on AMHS implementation

Discussion in this area centered on issues and methods to facilitate implementation of AMHS

2.4.1. AMHS implementation profiles

"Minimum Global Implementation Profiles" should be defined. This would represent the minimum that a State should implement when deploying AMHS, in particular to facilitate transition. The Minimum Global Profile recommended was subset 8, i.e. "Basic Service + Directory". The meeting endorsed the recommendation that such a Profile should be the minimum implementation of every State.

2.4.2. Use of Lightweight Directory Access Protocol (LDAP) Directory in support of AMHS

The issue related to the ACP WGN task decided by the ANC, to consider the use of TCP/IP protocols in the provision of aeronautical internetworking. The goal is to make a first general analysis of the potential benefits and constraints of the LDAP in the AMHS context. LDAP is standardised by the Internet Engineering Task Force, is part of the "TCP/IP protocol suite", and supports directory services. The idea is to use LDAP in support of AMHS, in addition or as a substitute for ATN X.500 Directory Services.

LDAP could add complexity through the need for dual stacks, without bringing substantial functional benefits. However, it was thought that LDAP could still be meaningful for regions with a TCP/IP perspective. The meeting considered that the overall subject was worth being progressed and endorsed the recommendation to further study the subject.

2.4.3. Global Co-ordination for AMHS implementation

While defining AMHS design and implementation principles, it was identified that some required principles were not only regional, but also in fact global. The goal was to identify the tasks to be handled at a global level, and to define the implementation principles that were required. This list of tasks would then enable ACP WG-N to progress this work within ICAO. Some of the tasks were already in progress. The tasks included:

- **Establish a plan for global connectivity**
- **Agree on Performance Objectives Allocation Plan:**

- **Agree on provision of Global Common Facilities:**
- **Establish a top level AMHS Implementor's Group (Global AMHS Implementor's Group**
- **Address Registration and Publication Service (APS):**
- **Establish Directory support:**
- **Security Forum:**

The meeting recommended that these tasks should be included in the ACP WG-N work program.

2.4.4. AMHS Address Scheme concerns

This group reviewed the use of the CAAS and XF AMHS addressing schemes, and raised concerns about the impact of scheme selection on global transition from AFTN to AMHS. The discussion emphasised the simplicity of the XF addressing scheme, and its adequacy for States intending to deploy one single MTA. It was recommended to encourage early migration from AFTN to AMHS and to make the transition as simple as possible for users. This would require simple AMHS address resolution, and there would be advantages to the whole AFS community if XF schemes were declared.

The meeting eventually agreed that States should proceed with the Registration and Publication process, in co-ordination with the ICAO Secretariat and with the support of ACP WGN, and that nothing should be intended that could delay this process. The meeting also recommended that the ACP WGN develop maintenance procedures for the Register.

2.5. Inter-Center Communications (ICC) over the ATN

Discussion centered on ATS inter-facility communications past guidance and latest versions of available AIDC documentation. The subject was an issue paper and it was noted by the group to address the impact of the evolution of other documentation on the AMHS.

3. RECOMMENDATION

The meeting is invited to note the contents of this working paper and detailed documents are available upon request. Contact ***Robert.Hallman@faa.gov***.