



International Civil Aviation Organization

**AERONAUTICAL TELECOMMUNICATION
NETWORK IMPLEMENTATION
COORDINATION GROUP – EIGHTH
WORKING GROUP MEETING (ATNICG WG/8)**

AIRWAYS
NEW ZEALAND

Christchurch New Zealand
28 September – 1 October 2010

Agenda item 2: Review of ATNICG/5 Meeting Report and Tasks List

**REPORT ON THE OUTCOME OF THE FIFTH MEETING OF
ATN IMPLEMENTATION COORDINATION GROUP (ATNICG/5)**

(Presented by the Secretariat)

SUMMARY

Fifth meeting of ATN Implementation Coordination Group (ATNICG/5), hosted by Department of Civil Aviation Malaysia was held from 31 May to 4 June in Kuala Lumpur. Recommendations, developed by this meeting were adopted by APANPIRG/21 based on the recommendations made by CNS/MET SG/14. This paper discusses the significant outcomes of the meeting and reviews progress on action items identified in the meeting. This paper also suggests action on some of the items identified as of critical importance to ATN Implementation in the region.

1. Introduction

1.1 Fifth Meeting of Aeronautical Telecommunication Network (ATN) Implementation Coordination Group of APANPIRG (ATICG/5), hosted by Department of Civil Aviation Malaysia was held in Kuala Lumpur from 31 May to 4 June 2010. Meeting was attended by 56 participants from 16 States (Bangladesh, Brunei Darussalam, China, Hong Kong China, Macao China, India, Indonesia, Japan, Malaysia, Nepal, New Zealand, Philippines, Republic of Korea, Singapore, Sri Lanka, Thailand and the USA) and a representative from Industry.

1.2 Meeting developed 16 Decisions/Draft Decisions / Draft Conclusions for the consideration of CNS/MET Sub Group and adoption by the APANPIRG.

1.3 This paper presents the significant outcomes of the ATNICG/5 meeting. Full report of the meeting is available on ICAO APAC Office website and can be accessed on the address <http://www.icao.or.th/meetings/2010/atnicg5/ATNICG5rpt.pdf>

2. Discussion

2.1 Fifth Meeting of ATNICG was held in Kuala Lumpur from 31 May to 4 June 2010. The meeting was reminded that all the draft Conclusions/Decisions developed by ATNICG/4 were adopted by APANPIRG/20 as they were except ATNICG draft Conclusion 4/5, in which the word “Aerothai” was replaced with the word “Thailand” before adoption.

2.2 ATNICG reviewed the process of ATN/IPS SARPs development and was informed about the status of publication of Doc 9896. The document has since been published this year as First Edition. In the ATNICG/5 meeting, recently published edition had been referred to as the Second Edition. The meeting is invited to note this variation.

Action Item 1: Meeting is invited to note that the recently (2010) published Doc 9896 is Edition 1

2.3 Meeting was informed that ACP was considering to include some form of Directory Service in Doc 9896 and was also addressing the issue of acquisition of a unique address block for ICAO. Options like accommodating global requirements in the /32 prefix allocated for European Region were also discussed.

ATNICG invited ICAO to seek clarifications on the following issues

- i) Usage of VOIP should be limited to ground-ground applications
- ii) Procedure to track changes and availability of RFC in the industry
- iii) IPv6 address structure

2.4 ATNICG reviewed the progress achieved on 15 Action Items identified in earlier meetings. The status of progress on these action items is as given below:

- 1) *Action Item 1: Comprehensive report on implementation in a tabular form will be presented to CNS/MET SG/14 and APANPIRG/21 meetings:* Completed. Table developed by Hong Kong China in Excel format has been adopted by APANPIRG/21 for reporting the status of ATN implementation in the region. The action has been completed and may be considered for dropping.
- 2) *Action Item 2: It was decided that a member State, which is actively participating in the ACP activities will track the PDRs raised and arrangements will be made in the reflecting these PDRs through amendment to the guidance documents:* Completed. FAA/USA takes the responsibility on behalf of ATNICG to coordinate and track these changes with ACP WG-M. The action has been completed and may be considered for dropping.
- 3) *Action Item 3: Meeting was of the view that all the issues like justification of ATN Implementation, Security of the network etc. should adequately be reflected in the strategy:* Continuing. Revised Strategy was adopted by APANPIRG. Meeting may like to review if the issues mentioned have been adequately covered in the adopted Strategy.
- 4) *Action Item 4: USA offered to provide initial draft for additional tests recommended for transiting from point-to-point connectivity to logical connectivity by the first quarter of 2010 to Singapore. Singapore will then arrange to incorporate these tests in the AMHS Manual.* Completed. Recommended addition to the Test Procedures has since been incorporated in the document adopted by APANPIRG.
- 5) *Action Item 5: APANPIRG should acquire a regional address prefix of a certain length and incase it does not become possible to acquire the address prefix, then region should self-designate a prefix which is unlikely to be allocated by IANA in near future:* Continuing. Continue to coordinate with ACP WG-I/M for IPv6 addressing plan. Two options currently available were also discussed.

- 6) *Action Item 6: A common paper should be developed to provide more detailed description of each item in the Strategy with examples and the rationale for the item when appropriate.* Complete. Already incorporated in the ATN Implementation Strategy and hence recommended for dropping.
- 7) *Action Item 7: States were requested to provide the implementation schedule to Mr. P.K. Kapoor of India within two months of the meeting, so that the planner could be prepared.* Continuing. The planner was presented by Hong Kong China. It is required to be updated periodically.
- 8) *Action Item 8: Asia/Pacific ATN AMHS will adopt the IPv4 address assignment proposed by the CAR/SAM region if the States want to use IPv4 network.* Completed. IPv4 address plan has been adopted by APANPIRG as an interim measure.
- 9) *Action Item 9: Japan has proposed acquiring an address prefix in IPv6:* Closed. In view of Action Item 5.
- 10) *Action Item 10: USA assured to present a paper on TCP/IP – ATN/OSI interface when it completes the MTA interface with UK in 2010 using RFC 1006 over TCP/IP network.* Continuing. USA – UK AMHS service has been delayed. USA will report in 2011.
- 11) *Action Item 11: It was agreed that inclusion of operational issues in the Terms of Reference will be taken up for consideration in the next Working Group Meeting :* Continuing. It has become important to deliberate some of the operational issues in addition to the implementation issues. ATNICG was assured that this issue will be addressed at the ATNICG WG/8 meeting scheduled to be held in September 2010.
- 12) *Action Item 12: The Task Leads will inform Mr. V. Patel (FAA) about the status of relevant documents, so that the currency of these could be ensured.* Continuing. ATNICG was informed that the Documentation Tree will be further updated at the ATNICG WG/8 to reflect newly recommended implementation documents to support IPS and ICAO Doc 9705 Ed. 3
- 13) *Action Item 13: It was agreed that a comprehensive amendment proposal will be presented to the ATNICG/5 for its review on Asia/Pacific ATN Implementation Strategy.* Completed. Regional ATN Implementation Strategy has been updated.
- 14) *It was decided that concerned States, USA, Hong Kong China, Australia, Fiji etc. should consider Hong Kong China proposal and it should be reviewed in the new ATNICG Meeting.* Continuing. Hong Kong China proposed a change in the regional routing structure. ATNICG was of the view that the issue requires more coordination between impacted States.
- 15) *Action Item 15: A consolidated FASID Table CNS 1B and 1C will be presented to the next ATNICG meeting.* Completed. It was pointed out that Afghanistan should be included in the FASID Tables. Amended FASID Tables 1B and 1C have been published and are available on the ICAO APAC Office website.

2.5 States presented information on the ATN implementation status in their administrations. Issue regarding interoperability between different versions of AMHS implemented in Japan and Korea were also raised.

Action Item: Japan and Korea to confirm interoperability between different versions of AMHS implemented in the two States.

2.6 Meeting was informed about the implementation status of ATN/AMHS in ICAO MID region and Singapore, Pakistan and India were urged to take initiative in transiting to AMHS connectivity with their reciprocal ends following the prescribed procedure. A Conclusion to this effect has subsequently been adopted by APANPIRG

Action Item: Singapore, Pakistan and India to take initiative in transiting to AMHS connectivity with Bahrain, Kuwait, Iran and Oman respectively.

2.7 Strategy for Implementation of Aeronautical Telecommunication Network (ATN) in the Asia/Pacific Region was amended to incorporate the changes which had become necessary in view of the changed implementation environment. Meeting also agreed to the phased implementation approach proposed by Hong Kong China.

2.8 ATNICG observed that the AMC data being provided by the States was often not correct and agreed to circulate a form for collecting the required data. Circular will included a filled up form to provide guidance to the States.

2.9 USA presented the summary of Directory Service concept as specified in ICAO Doc 9705 Edition 3 Sub-Volume II and Asia/Pacific Directory Service guidance document. Information was further supplemented by the paper from Fiji (presented by Comsoft). After review, Thailand, the Task Lead was tasked to progress the implementation. Following Decision to this effect was adopted by the meeting:

Decision 5/7 – Implementation of Directory Service

That, ATNICG analyze and recommend Directory Services that can be implemented for future use, develop procedures for implementation, identify obstacles on its implementation and develop mitigation proposals for these obstacles.

Action Item: ATNICG to analyze and recommend Directory Services for implementation, identify impediments and develop mitigation proposals.

2.10 Japan suggested IPv6 addressing plan for the region, where as USA suggested IPv4 addressing plan, which has been adopted in the CAR/SAM region. After discussing issues related to the adoption of the two plans, it was decided to recommend:

- a) that the proposed IPv6 and IPv4 addressing schemes be submitted to ICAO and ICAO be requested to consider a global IPv6 addressing scheme for ground-ground communication;
- b) the proposed IPv4 address plan placed at Appendix F be adopted to enable the Asia/Pacific ATN ground IPS network implementation to proceed using IPv4 in the interim with minimum delay, and
- c) the Asia/Pacific region transition to IPv6 once the above issues have been resolved.

2.11 Japan stressed on the need to develop a common standard to facilitate uniform and harmonized implementation of ATN over IPS. Requirement to amend the FASID Tables to accommodate this requirement was also identified. An additional task was created to cater to these requirements.

2.12 In addition, amendments to Asia/Pacific ATN Network Service Access Point (NSAP) and Test Procedures for ATN Router Connection Test, Annex C of Asia/Pacific AMHS Manual were recommended for adoption by APANPIRG through CNS/MET SG.

2.13 On Security issues, the amended 'Asia/Pacific ATN Security Guidance Document' was adopted by ATNICG. Japan, stressing on the need to provide adequate security environment for ATN operations, recommended that Asia/Pacific region should create a plan and policy for introducing security in the ATN IPS ground network before implementation of IPS begins. This item was added to the Task List. USA also presented a paper describing considerations related to security when operating in IPS environment.

2.14 A brief report on the outcome of the Second Meeting of Asia/Pacific ICAO Flight Plan and ATS Messages Implementation Task Force and Seminar was presented to the meeting. Various issues like limit on the field size etc. were discussed.

2.15 Meeting reviewed the Performance Frame Form in respect of ATN Implementation in the region, the FASID Tables 1B, 1C and 1E and updated the Asia/Pacific Regional CNS/ATM Implementation Matrix.

2.16 To facilitate those States, which are not attending the ACP meetings regularly in raising Proposed Defect Reports (PDRs), a draft Conclusion was adopted recommending a procedure to facilitate these States to file PDRs. Meeting also adopted the amended Subject/Tasks list.

2.17 After reviewing the progress made in the adoption of table driven codes like Extensive Markup Language (XML) for the exchange of MET information and the handicaps in transmitting this format over AFTN, meeting agreed that usage of AMHS for exchange of MET information over XML to mitigate issues related to AFTN should be promoted. It was decided to create an additional task in the Subject/Tasks list to meet this and other application requirements for AMHS. Meeting was also informed about the progress made in developing standards for the usage of VoIP for operational ground- ground communication.

2.18 Japan presented their proposal to amend the routing directory in respect of their AFTN circuit between Fukuoka and Moscow.

2.19 USA briefed the meeting about International Transport of System Wide Information Management (SWIM) and proposed to utilize the independence of AMHS and Service Oriented Architecture (SOA). Proposed system was briefly described.

2.20 New Zealand offered to host this meeting and Korea offered to host the next ATNICG meeting (ATNICG/6) in Seoul, tentatively scheduled in the week of 23 May 2011. On behalf of the Group, Chairman ATNICG thanked Department of Civil Aviation Malaysia for hosting the meeting and complemented excellent arrangements made for the meeting.

3. Recommended Actions

- i) Meeting is invited to note the outcome of Fifth Meeting of ATNICG; and
- ii) Meeting is invited to review the status of progress on Action Items identified in the previous meetings.