INTERNATIONAL CIVIL AVIATION ORGANIZATION
ASIA AND PACIFIC OFFICE

REPORT OF

THE THIRD WORKING GROUP MEETING OF AERONAUTICAL TELECOMMUNICATION NETWORK (ATN) IMPLEMENTATION CO-ORDINATION GROUP OF APANPIRG (ATNICG WG/3)

Chiang Mai, Thailand, 24-25 January 2008

The views expressed in this Report should be taken as those of ATNICG WG/3 Meeting and not of the Organization. This report will be submitted to the Third Meeting of ATNICG for further action.

TABLE OF CONTENTS

1. OPENING OF THE MEETING

1.1 The Third Working Group Meeting of the Aeronautical Telecommunication Network (ATN) Implementation Co-ordination Group (ATNICG WG/3) of APANPIRG was held back to back with AMHS Implementation Workshop at the Imperial Mae Ping Hotel, Chiang Mai, Thailand, from 24 to 25 January 2008. The Meeting was hosted by AEROTHAI.

1.2 Mr. Hoang Tran, Chairman of the ATNICG and Mr. Vic Patel, co-chairman for the Working Group meeting highlighted the tasks to be progressed by the meeting. Mr. Li Peng, Regional Officer CNS emphasized the important issues to be addressed and need for preparation for the Third Meeting of ATNICG to be held in early May 2008 at Nadi, Fiji.

2. ATTENDANCE

2.1 The Meeting was attended by 49 participants from 12 States (Australia, China, Hong Kong China, Fiji, Japan, India, Indonesia, Japan, the Philippines, Republic of Korea, Singapore, Thailand and USA) and two participants from the Industry. The list of participants is provided in Attachment 1 to this Report (WP303).

3. OFFICERS AND SECRETARIAT

3.1 Mr. Vic Patel, Security Engineering Group Manager, Air Traffic Organization, FAA USA chaired the meeting.

3.2 Mr. Li Peng, Regional Officer CNS acted as Secretary for the meeting who was assisted by Dr. Sujan Saraswati, Regional Officer CNS of ICAO Asia and Pacific Regional Office and Mr. Chonlawit Banphawatthanarak, Executive Officer, Systems Engineering, AEROTHAI.

4. ORGANIZATION, WORKING ARRANGEMENT, LANGUAGE AND DOCUMENTATION

4.1 The ATNICG WG/3 met as a single body. The working language for the meeting was English inclusive of all documentation and this Report. Lists of Working Papers and Information Papers are placed in the Attachment 2 to this Report (WP302)**.**

5. AGENDA OF MEETING

5.1 Following agenda was adopted by the meeting:

Agenda 1: Implementation Coordination

- Update on the implementation status of the States
- Discuss implementation coordination issues

Agenda 2: Operation Procedure

- The ASIA/PAC Interim AMHS DB
- The MTA ICD
- The AFTN AIDC over ATN ICS architecture
- AMC coordination with Eurocontrol and ICAO status (US and Thailand)
- AMC establishment in Asia/Pacific (Thailand)
- Development of the APANPIRG Procedure for AMHS Address Management

Agenda 3: Certification and Validation Process

- ANNEXES to the 1st edition of the guidance document of AMHS conformance testing updates
- Update conformance test procedure and checklist
- Testing
- Interoperability

Agenda 4: ATN Documentation

- Routing policy Updates
- Result of a survey of the ATN ground network, as information for planning of the ATN IDRP Routeing Policy Updates

Agenda 5: Performance

- Continue development of the system performance

Agenda 6: Service Enhancements

- Regional Network Protocol Compatibility strategy
- Major hubs Inter-Regional connections Strategy and Status
- AIDC Dual-stack approach
- Use of XML

Agenda 7: Information security

- AMHS Security Implementation Plan
- Checklist for System Integrity Policy
- Updated Security Guidance Document
- Region-wide Incident Response Plan
- Region-wide Contingency/Disaster Recovery Plan

Agenda 8: Other Region's AMHS Implementation status

Agenda 9: Other business

Agenda Item 1: Implementation Coordination

1.1 The meeting reviewed the report of ATNICG WG/2 held in September 2007 and the task list before dealing with the agenda items of the meeting. In response to a query raised by the Secretariat, it was agreed to merge Task Items 6 and 8, for ATN Service Enhancement and put them together against Task Item 6.

Update on the implementation status of the States

1.2 Mr. Ken Morris (Australia) presented (WP311) a summary and update on current activities of AMHS implementation in the Region including the information provided by each participating State. The meeting identified the need for timely update to the information on implementation which would assist States in harmonizing the implementation of ATN/AMHS systems in the Region. The updated implementation status is reflected in a chart which can be accessed at the following web site : http://www.icao.or.th/apac_projects/atn/chart/atn_chart.asp

1.2.1 States were encouraged to provide updates to the information in order to provide the real picture of the implementation status. The meeting also identified the need to update the planning information contained in the Regional Air Navigation Plan FASID Tables CNS-1B (ATN Router Plan) and CNS-1C (AMHS Plan) in a comprehensive manner. States were requested to provide the required information off-line to Mr. Ken Morris for inclusion in a draft paper for Consideration by APANPIRG through ATNICG and CNS/MET Sub-group of APANPIRG.

Discuss implementation coordination issues

1.3 The meeting noted the implementation issues as presented in the WP312 by Mr. Ken Morris (Australia) based on the information received from the focal contact point administrators. The information was considered valuable as experience gained and lessons learnt which should be noted for the success of implementation of AMHS/ATN in the Region. ATN Implementation Coordination Group and States implementing AMHS and ATN links were invited to note these issues and decide the best course of action. A list of the implementation issues identified is provided in the **Appendix A** to this report.

Agenda Item 2: Operation Procedure

2.1 No papers under this agenda item had been received for consideration by the meeting. However, some AMC and AIDC related information was presented to the AMHS Implementation Workshop.

The ASIA/PAC Interim AMHS Data Base

2.2 Mr. Chonlawit Banphawatthanarak (Thailand) informed the meeting that Thailand continued its efforts on the establishment of AMC in the Asia and Pacific Region and the ASIA/PAC Interim AMHS Database in accordance with the Conclusion adopted by APANPIRG.

2.2.1 In response to a query, the Secretariat informed the meeting that a draft MOU for sharing software code of AMC was received from Eurocontrol in the end of 2007. The draft is being reviewed by ICAO Headquarters for further action.

Agenda Item 3: Certification and Validation Process

Update conformance test procedure and checklist

3.1 Mr. Victor Lee (Singapore) presented WP314 on behalf of China, Hong Kong China, Indonesia, Republic of Korea, Singapore and USA addressing inclusion of two additional annexes to the 1st Edition of the Guidance Document on the AMHS Conformance Testing:

Annex E: Inter-operability trials of States'/ANSPs' AMHS systems subsequent to their implementation.

Annex F: Pre-operational testing prior to the operational commencement of their AMHS services.

3.2 The Annexes will be appended to the guidance document with a view to support Inter-operability testing of AMHS systems and pre-operational testing of AMHS systems by States before they commence AMHS service. The draft Annexes E & F had been presented to the 2nd ATN ICG Working Group meeting held in Bangkok in September 2007. No further comments were received from States or ANSPs arising from the presentation of paper on the proposed inclusion of the Annexes to the Guidance Document on AMHS Conformance Testing.

3.3 As no further comments or updates were provided to the draft Annexes, the meeting endorsed the draft and requested Singapore to prepare a paper with the Appendix to WP314 for consideration by the next ATNICG meeting scheduled for May 2008.

Agenda Item 4: ATN Documentation

4.1 No updates had been received and discussed under this agenda item. The outcome of discussions of ATNICG WG/2 for the same agenda item will be presented to the ATNICG/3 meeting.

Agenda Item 5: Performance

Continued development of the system performance

5.1 Dr. Tetsuo Mizoguchi (Japan) presented WP305 analyzing the performance indicators for ATN. In addition to clarifying terms used, the paper observed that OPLINK Panel covered mainly the matters related to air ground communication in RCP and compliance of RCP requirements is only a recommendation and is not a mandatory requirement. The paper introduced the performance indicators such as Response Time, Through-put, Reliability, Availability and Continuity and Internetworking performance.

5.2 The meeting agreed with the view of the Secretariat that similar to the performance parameters of transit time, channel loading etc. for AFTN, some parameters should be developed for measuring the performance of ATN. The meeting also agreed with the view of expert from USA that, in addition to the technical parameters, operational parameters like queue build-up, bandwidth consumed, saturation points and limits should also be included in the list of measurement parameters for the system.

5.3 While an expert from Hong Kong China was of the view that end application to application performance should be used for the measurement, expert from Thailand felt that some applications like AIDC were situation dependent. Like performance of AIDC varied depending on whether it was being used for ACC/ACC or ACC/APP.

5.4 The meeting agreed with a suggestion from the experts from USA and Singapore that the criteria used by Eurocontrol in the relevant AMC manual and Annex A to the Guidance Document on the AMHS Conformance Testing should be taken into consideration as the starting platform. Japan assured to continue with the task. Chairman urged representatives from Republic of Korea and India to support Japan in this Task.

Agenda Item 6: Service Enhancements

Directory Service

6.1 Dr. Tetsuo Mizoguchi (Japan) presented WP306 reviewing the impact of the implementation of Directory Services in the Region. While referring to the guidance provided in ICAO Doc9705 (3rd edition) Sub-Volume 7 and Doc9739, the paper described the expected usage of the directory service. The paper also explained the following issues required to be resolved for the implementation:

- Use/user of the directory to be identified;
- There has to be minimum one Directory Service Agent (DSA) in the region and it has to be decided where this DSA will be installed;
- The service should be implemented in a staged manner, where the States will join one by one; and
- Impact of the directory service would be studied before implementation and after implementation.

6.2 Japan was also of the view that the region should start with an off-line directory service initially and then migrate to on-line service. The meeting agreed that AMC should provide the service initially with directory service since AMC was taking over some of the tasks. It was considered that there was not much added value for the Directory Service at this stage except that the Directory Service would provide a standardized access otherwise the information has to be imported for each application.

6.3 Chairman desired that a working paper detailing the proposed approach to be adopted in the region for the implementation of Directory Service should be presented at ATNICG/3. He also requested the supporting States to collaborate with Fiji in developing this paper.

ATN/IPS Issue

The meeting discussed at length the regional approach for introduction of ATN/IPS to support implementation of ATN/AMHS in the Region.

6.4 The meeting noted the information presented by the Secretariat on the development of ATN/IPS related SARPs and guidance material. The Air Navigation Commission in its 176th Session (13 December 2007) approved the amendment proposal to Annex 10, Volume III, Part I which was circulated through ICAO State Letter dated 22 June 2007. The amendment introduces the

Internet Protocol Suite (IPS) in the aeronautical telecommunication network (ATN), in addition to ATN/OSI. The meeting noted following significant changes which have been included in the amended SARPs:

a) Amended SARPs specify that requirement for implementation of the ATN should be made on the basis of regional air navigation agreements, which should specify the area in which the communication standards for ATN/OSI or the ATN/IPS are applicable. Interoperability responsibility between interconnecting OSI/IPS networks should be agreed prior to implementation.

b) Support to Aeronautical Passenger Communication (APC) has been withdrawn consequent to the amendment of paragraph 3.2 of the SARPs.

c) ATN shall provide communication service in accordance with the prescribed required communication performance (RCP) manual (Doc 9869). Doc 9869 appears to be relevant for air ground communication only; hence performance standards for ground to ground communication are required to be developed.

Discussions on approach for implementation of IPS

6.5 Dr. Tetsuo Mizoguchi (Japan) presented WP307 proposing upgradation of Asia/Pacific ATN Network using IPS. The paper recommended that study should be conducted for upgrading the Asia/Pacific ATN ground network to support both OSI and IPS protocols, allowing ATN/OSI and new IPS applications to share a common infrastructure while protecting investment in ATN/OSI. The paper resulted in two optional recommendations as follows:

RECOMMENDATION 1:

Considering:

- the urgent need to upgrade the Asia/Pacific Aeronautical Fixed Service from AFTN to AMHS;
- the continued supportability of ATN/OSI technologies and the investments made by States that have already transitioned to AMHS; and
- the time it will take to study, plan and deploy a regional IPS network

It is recommended that Asia/Pacific region continue with the current transition plan to implement ATN/*AMHS based on the ICAO Doc 9705 technical manual.*

RECOMMENDATION 2:

Considering:

- the amendment to Annex 10 enabling the use of IPS for ground communication, and the activity by ACP WGI to produce an IPS technical manual;

- the likelihood that ground applications specified to use the IPS will emerge; and

- The fact that other ICAO regions' ground networks are planned to use IPS.

It is recommended that the APANPIRG study a common OSI/IPS network infrastructure that will support AMHS and other ATN/OSI applications while allowing the introduction of new IPS applications, and to develop a transition plan and required documentation for its implementation.

6.6 Mr. P.C. Chan (Hong Kong China) presented WP313 highlighting the need to review the Asia/Pacific Strategy for the implementation of ground elements of ATN and to consider direct implementation of IPS ATN. The meeting was invited to consider the following possible alternative approaches for the APAC ATN implementation strategy.

(a) ***Direct implementation of IPS ATN at all APAC States***
This approach will eliminate the dual-stack requirements of ATN end systems, the subsequent OSI-to-IPS ATN migration and the across-stacks traffic relaying via the ATN end systems at boundary ATN sites.

(b) ***Direct implementation of IPS ATN at all ATN backbone sites***
This approach still requires dual stacks in ATN end systems but will eliminate the need for ATN traffic relaying via end-systems at boundary ATN sites across the ATN backbone. The non-backbone sites can opt for implementing OSI or IPS ATN. OSI ATN routers at backbone sites will be used to connect to non-backbone sites that use OSI ATN.

6.6.1 It was also proposed to conduct a survey on States' existing/planned investment on OSI ATN routers and decide which of the two alternative approaches should be adopted in revising the Asia/Pacific ATN implementation strategy for consideration by ATNICG.

6.7 Mr. Tom McParland (USA) presented a strategy with following two steps for introduction of ATN/IPS in the Asia and Pacific Region.

1) using OSI Router over IP router; and
2) Finally transition to IP v6 connection completely.

6.8 The meeting discussed at length the benefits and disadvantages for each of above recommendations. However, no consensus was reached during the meeting. In order to facilitate development of a proposal by the ATNICG, the meeting agreed to conduct the proposed survey on the States' existing/planned investment on OSI and capability to support IPS. Singapore was requested to take the lead in coordination with members of ATNICG from Australia, China, Hong Kong China, Japan and the USA to prepare a survey document including background information, objective of the survey and a set of questionnaire.

6.8.1 The meeting was of the view that as the first step, the proposed survey should be undertaken by the ATN Implementation Coordination Group and it should encompass those States with designated backbone centres (BBIS) in the Asia and Pacific ATN Implementation Plan.

6.8.2 In order to provide the result of the proposed survey for consideration by the next meeting of ATNICG. Singapore is invited to provide draft wording of survey document to the ICAO Regional Office within two weeks and the Regional Office will issue a letter to States concerned accordingly.

Agenda Item 7: Information security

7.1 Mr. McParland (USA) highlighted issues need to be addressed for information security. In order to progress the tasks as specified in the list of tasks/subject adopted by APANPIRG, the meeting considered it necessary to develop security policy and practical approach. The meeting agreed to establish a sub working group to deal with the task with the following members and Mr. Vidyut Patel as lead member:

- Australia
- FAA/USA
- Hong Kong, China
- Malaysia
- Singapore
- Thailand
- ICAO Asia/Pacific Office

7.2 The group will coordinate closely through electronic means for an initial outcome to be presented to the next meeting of ATNICG.

7.3 In WP310, USA presented to the meeting a structure for Asia/Pacific Aeronautical Telecommunication Network Incident Response Plan, which was based on the information collected from various references like Carnegie Mellon Software Engineering Institute handbook, National Institute of Standards and Technology etc.

Agenda Item 8: Other Region's AMHS Implementation status

8.1 No papers were received and discussed under this agenda item. The meeting noted that AMHS implementation status in the CAR/SAM and European Region were presented to the AMHS Implementation Workshop held in the same week.

Agenda Item 9: Other business

AMC training for the COM Centres in other ICAO Regions

9.1 Mr. Bob Hallman from FAA informed the meeting that he had received an email from Eurocontrol intimating him that an AMC training for the COM centres in the other ICAO Regions has been scheduled on 16-17 April 2008 in Luxembourg. The objective of the training course is to train the COM centre personnel, who intend to access the AMC on its functions and procedures before they officially become AMC users. The outline of the course will soon be made available.

9.1.1 In order to attend the training course, the registration form as provided in the attachment to the email and placed as **Appendix B** to this report needs to be filled and sent before *29 Feb 2008* to EUROCONTROL IANS – Reservation Office (IANS.reservation@eurocontrol.int) with a copy to Mr. Yuksel Eyubogul (yuksel.eyuboglu@eurocontrol.int) who will provide a list of recommended Hotel in Luxembourg. The meeting noted that before the operation of AMC started in Europe (19 January 2007), an AMC course was conducted in November 2006 for the COM centre operators in the EUR/NAT Region. It was strongly recommended that all those who intended to access the AMC attend the AMC training course.

Note of Appreciation

The meeting expressed its appreciation and gratitude to Aerothai for the excellent arrangements made for the meeting including a cultural visit organized during the meeting and for the warm hospitality extended to all the participants.

– – – – – – – – – – – –

APPENDIX A

IMPLEMENTATION COORDINATION ISSUES

(Experience gained and lesson learnt)

Many states are about to embark on their acquisition of AMHS and ATN linking equipment. There are very few states which have completed their project activities. Hence, the level of actual experience on a fully operational system (using AMHS and ATN links) is low.

The issues listed below were provided by Mr. Ken Morris based on the information received from the focal contact point administrators as issues which are providing some concern or should be noted for the success of AMHS/ATN in this region. ATN Implementation Coordination Group and States implementing AMHS and ATN links are invited to note these issues and decide the best course of action.

Reported Issues and Comments

1. The end system interfaces will have to be updated to handle AMHS protocol. Until some AIS, FDP or ANSP end systems start using AMHS the need/requirement to migrate to AMHS will be slow.

2. Current AFTN end users will have to receive some form of AMHS training due to AMHS address structure and the responsibility/onus for message delivery being placed on message originators. Training will have to include all current users of AFTN (Internal users, Towers, AIS, Airlines, and Military etc).

3. Ensuring cross check of internal AMHS addresses is carried out and exchange/cross check of external AMHS addresses is carried out.

4. Ensure documented AMHS procedures and instructions include all adopted AFTN procedures (ICAO Annex 10) and any new required AMHS procedures

5. Must ensure that as each AFTN connection migrates to AMHS a step back strategy remains in place in case of problems. Recommend to have the original AFTN system available for operation for at least 3 to 6 months, before decommission.

6. As each external address/route is migrated to AMHS ensure that a complete AMHS or AFTN or AMHS/AFTN or AFTN/AMHS route exists at all times.

7. Inter Regional connection issues which may cause problems in migration to AMHS. Some existing AFTN circuits have difficulty in maintaining a workable AFTN service to these users due to varied reasons out of the responsibility centre control.

8. Multiple Dissemination/PDAI vs. Distribution Lists in different AFTN switches there are a number of non-standardised functions available for multiple dissemination of messages usually to another than the initially identified addressee indicator, route, COM Centre, etc. These functions usually are known by different not necessarily unique names such as 'parallel delivery', 'copy out', etc. In case the original addressee indicator is removed from the list of addressees, the AFTN mechanism could in general be mapped onto Distribution Lists of the AMHS. The use of Distribution Lists is not applicable in case the original addressee indicator is not removed from or re-inserted to the list of addressees. This could also apply to PDAI in case they are used in a non-standard way as outlined

above. The X.400/AMHS provides no means for actions not related to recipient addresses (e.g. routes). AENA/Spain presented a working paper to AFSG PG/22 (December 2005) which illustrated the situation in Europe in detail.

9. Within the AFTN it is expected that a message is delivered within a predefined time frame. For the AMHS the X.400 defines a mechanism which could be used to ensure either delivery or non-delivery within a predefined period of time. Coordination between the message switches of the AMHS (COM Centres) is required to ensure that every MTA is configured to support the mechanism and the time values, which need to be agreed. (Issue raised in AFSG PG).

10. Actions required on reception of NDRs at the MTCU in case the NDR is not converted and forwarded to the AFTN.

11. Policy for Distribution list and report handling.

12. Japan experienced the following issues transitioning from AFTN to AMHS:

12.1 Frequent initial Non-Delivery Reports due to the greater "strictness" of AMHS compared with AFTN. Causes were, for example:

(a) AFTN messages containing illegal characters (that is, characters not in the IA-5 character set) that were nevertheless passed by the AFTN network but are rejected by AMHS due to strict checking. Australia has also noted this issue.

(b) Messages sent by AFTN terminals located in one State that have an originator address of another State. (For example, an overseas branch office of an airline might send a message with an originator address not of the State in which it is located, but with an address used by the airline in its own State.)

12.2 Differences between AMHS and AFTN for operations staff

(a) Lack of AFTN message numbers in AMHS.

In AFTN, when an error occurs and retransmission is required, an operator can request, say, "please resend message numbers xxx to yyy". However, there are no message numbers in AMHS, so operators have to ask for all messages between two times to be resent.

(b) Two layers of routeing concept.

It is sometimes initially hard for operations staff used to AFTN to grasp that with AMHS/ATN there are two networks, one overlaid on the other: an ATN router network and a network of AMHS MTAs, and that the routeing of these two networks operates independently.

12.3 Period until the initiation of AMHS service between states

In Japan's experience, AMHS/ATN Router connection testing in order to assure interoperability between AMHS systems (including ATN Routers) takes several months. Also, some time is needed to coordinate the necessary documents (AMHS/ATN Router connection test procedures, guidelines for the initiation of

AMHS service etc.) between States. Therefore, it is advisable to allow about a half year from coordination of connection tests until initiation of the AMHS service.

13. The materials that have been developed by ICAO so far are more related with the technical (machine) aspects of the AMHS system but not too much weight on the operation side. Transition issue when migrating to AMHS System (but still using AFTN protocol). Message looping can occur if message delivery to "shared" address circuits is carried out by both AFTN and AMHS . Careful planning is required to ensure this does not happen.

14. End Systems - Difficulty in finding software X.400 APIs/libraries that can be used to update existing systems such as AIS, FDP or ANSP. The only one that I am aware of is ISODE (http://www.isode.com). Difficulty with external uses (Airlines, Military etc) updating their system to AMHS

15. Technical staff has difficulty grasping the concepts of AMHS addressing, routing and directory services compared to the relative simplicity of AFTN. The use of ATN routers further complicates this as most comms techs are now skilled mainly in TCP/IP networks and routing. It is ridiculous to have to maintain two sets of network interfaces TCP/IP and ATN.

16. Maintaining the directory services (DS). Who, how, when? How are the DS's going to communicate with each other?

17. I would like to see a process setup that verifies (certifies) every AMHS/ATN vendor's system is interoperable with each others.

18. Extended services – need to have accepted file types and acceptable file sizes (the sending system should be prohibited from sending files greater than a predetermined size and should only be able to send certain types of files)

19. Training - Training of operators and technical staff in the operation and maintenance of the system is critical for a successful implementation of AMHS. Level of training required?

20. Security Issues - Management of security for national and international connection/network. Do we require a standard security system to be implemented in the region? What are the recommended security systems to implement?

21. Interoperability - Look at coordination and planning issues. What are the requirements to meet for state to state connection? Is system certification a requirement? If so, who will be the issuing authority?

22. ATN IPS - Issues related to migration from ATN OSI to ATN IPS (like current investment of ATN router, cost, etc)

23. Lack of clarity in the SARPS : An urgent (SS priority) AMHS message with either (a) ATS-Message-Text element exceeds 1800 characters or (b) the number of recipients exceeds 21, will be split into several AFTN messages when it is converted from AMHS to AFTN. In return, the MTCU will receive multiple AFTN acknowledgment messages addressed to the same originator. It is not mentioned in the SARPS what the MTCU should do to handle this situation (sending multiple RNs or one RN).

24. Bandwidth of the link: The current bandwidth of the backbone link recommended by ICAO is only 64Kbytes and that for non-backbone link is even lower at 9.6Kbytes. This is good enough for basic service but not for extended service because the size of the messages with attachments will be much larger. The insufficient bandwidth will induce substantial delays in message switching. In EUR region, MTA shall support at the minimum a P1 message at 2Mbytes and UA body part text length of at least 64Kbytes. Similar or even higher standards should be adopted in the Asia/Pacific region to ensure that the bandwidth of the links is adequate to cope with the extended service.

25. Multiple bindings between MTAs: Apart from enhancing the bandwidth of the links, multiple bindings (logical connections) between MTA pair should be employed to minimize the relay time of messages. With multiple bindings, high priority message received can be sent immediately via new MTA connections. However, coordination between MTAs on the number of simultaneous connections allowed is required.

26. Handling capacity of AMHS: The handling capacity and resilience of the AMHS systems should also be enhanced to cope with the higher throughput resulted from the higher bandwidth and multiple bindings between MTAs.

27. Operational issues: Transition coordination: An AMC similar to the one in Europe will be established in Asia/Pacific Region. The scope and roles of the AMC need to be defined in order to ensure a smooth coordination with other regions as well as within Asia/Pacific region in particular on the routing issues during the transition.

28. AMHS Conformance Tests: To ensure a smooth implementation and transition to AMHS, the following tests should be carried out:

28.1 Interoperability tests (mandatory): Before putting the new AMHS into operation, mandatory conformance test on its interoperability with adjacent AMHS shall be conducted. This is crucial to the smooth implementation of new systems.

28.2 Functional tests (recommended): For testing of new AMHS, it is recommended to follow the conformance test procedures adopted by the Asia/Pacific region to ensure that the new system is in conformance with the SARPs.

– – – – – – – – – – –

APPENDIX B

A selection of Hotels with special EUROCONTROL rates (Year 2008)

As EUROCONTROL has special arrangements with the hotels, we inform you that the special EUROCONTROL rates will only be applicable if the hotel booking is done, by our Course Reservation Office. Fax : ++ (352) 42 20 71 or e-mail IANS.reservation@eurocontrol.int

Hotel + Address	Telephone, Fax + email	Price (in EURO) (per night, incl. breakfast)	Observations
ALVISSE PARC 120, route d'Echternach LU - 1453 LUXEMBOURG	++ 352 43 56 43 ++ 352 43 69 03 info@parc-hotel.lu www.parc-hotel.lu	€80 for a single room €93 for a double room	10 min by car from the Institute. Parking available (fee of charge). Internal & external swimming pool.
CAMPANILE 22, route de Trèves Findel Airport Area LU - 2633 LUXEMBOURG	++ 352 34 95 95 ++ 352 34 94 95 luxembourg@campanile.lu	€80 for a single room €93 for a double room	Hotel located close to the Airport, which is located 9 km from the Institute. Bus n° 16 direct from Airport to the Institute. Parking available (free of charge) .
CARLTON 7-9, rue de Strasbourg LU - 2561 LUXEMBOURG	++ 352 29 96 60 ++ 352 29 96 64 carlton@pt.lu www.carlton.lu	€85 for a single room €105 for a double room	Close to the railway and bus station.
CASANOVA 10, place Guillaume LU - 1648 LUXEMBOURG	++ 352 22 04 93 ++ 352 22 04 96 info@hotelcasanova.lu www.hotelcasanova.lu	€95 for a single room €114 for a double room	In the heart of the city, next to the shops and old part of the city. WiFi internet facilities (free of charge)
CITY 1, rue de Strasbourg LU - 1021 LUXEMBOURG	++ 352 29 11 22 ++ 352 29 11 33 mail@cityhotel.lu www.cityhotel.lu	€90 for a single room €124 for a double room	Close to the railway and bus station.

DES VIGNES 29, route de Mondorf Remich LU - 5552 LUXEMBOURG	++ 352 23 69 9149 ++ 352 23 69 84 63 www.hotel-vignes.lu	€78 for a single room €98 for a double room	Located outside the city at +/- 25 km from the Institute. Magnificient vue over the Moselle river and vallee.
ETAP route de Trèves Findel Airport Area LU - 2632 LUXEMBOURG	++ 352 42 26 13 10 ++ 352 42 26 13 20 H3579@accor.com	€67 for a single room €70 for a double room	In front of the Airport which is located 9 km from the Institute. Bus n° 16 direct from Airport to Institute. Parking available (free of charge)
HILTON 12, rue Jean Engling LU - 1013 LUXEMBOURG	++ 352 43 78 80 48 ++ 352 43 78 80 73 HiltonReservation.luxembourg@hilton.com www.hilton.com	€111 for a single room €111 for a double room	10 min by car from the Institute. Parking available (free of charge) Shuttle available (free of charge) from/to Hotel/Institute. Upon arrival please book the shuttle as needed. Internal swimming pool.
IBIS route de Trèves Findel Airport Area LU - 2632 LUXEMBOURG	++ 352 43 88 01 ++ 352 43 88 02 H0974@accor.com www.ibishotel.com	€84 for a single room €96 for a double room	In front of the Airport, which is located 9 km from the Institute. Bus n° 16 direct from Airport to the Institute. Parking available (free of charge)
KEY INN APPART 42, rue Albert 1er LU - 1117 LUXEMBOURG	+ 352 27 61 61 1 + 352 26 38 95 43 info@key-inn.com www.key-inn.com	€140 for a single room €170 for a double room	+/- 5 minutes walking distance to the city centre. Bus facilities to the Institute. Parking available : 16,- EUR/per day. Breakfast only available : Monday to Friday

LE CHATELET 2, bd de la Pétrusse LU - 2320 LUXEMBOURG	++ 352 40 21 01 ++ 352 40 36 66 contact@chatelet.lu www.chatelet.lu	€98 for a single room €115 for a double room	Located in the vicinity of the Pétrusse valley park, the city centre and the train station, the hotel Le Châtelet is well suited for both business and private stays. It offers 40 rooms and 8 studios. A private parking area allows for hassle free parking (10,-EUR per day). A sauna is available for use.
MERCURE-ALFA avenue de la Gare LU - 1930 LUXEMBOURG	++ 352 49 00 11 4020 ++ 352 49 00 09 H2058@accor.com	€143 for a single room €179 for a double room	In front of the railway station.
MERCURE-LUXEMBOURG 30, rue Joseph Junck LU - 1839 LUXEMBOURG	++ 352 49 24 96 ++ 352 49 21 09 H1458@accor.com www.mercure.com	€82 for a single room €92 for a double room	Close to the train and bus station. Parking available : 12,-EUR/per day.
NH LUXEMBOURG route de Trèves Findel Airport Area LU - 1019 LUXEMBOURG	++ 352 340 571 ++ 352 340 217 nhluxembourg@nh-hotels.com www.nh-hotels.com	€115 for a single room €137 for a double room	Located in the Airport Area. Bus n° 16 available from Hotel to the Institute (8 minutes). Parking available (free of charge)
NOBILIS 47, avenue de la Gare LU - 1611 LUXEMBOURG	++ 352 49 49 71 ++ 352 40 31 01 info@hotel-nobilis.com www.hotel-nobilis.com	€85 for a single room €95 for a double room	Close to the railway and bus station.
NOVOTEL CITY-CENTRE LUXEMBOURG 35, rue du Laboratoire LU - 1911 LUXEMBOURG	++ 352 24 87 81 ++ 352 26 48 02 24 H5556@accor.com www.novotel.com	€160 for a single room €180 for a double room	Located in the City Center. 15 min. from Airport. 3 min. from Luxembourg train station. Shuttle from Hotel to Kirchberg. Parking available (free of charge)

NOVOTEL KIRCHBERG 6, rue Fort Niedergrünewald Kirchberg LU - 2015 LUXEMBOURG	++ 352 4298 - 481 ++ 352 43 91 95 H1930@accor.com	€123 for a single room €141 for a double room	Within walking distance from the Institute. Parking available (free of charge)
PARC BELLE-VUE 5, avenue Marie-Thérèse LU - 2132 LUXEMBOURG	++ 352 44 23 23 23 23 ++ 352 45 61 41 220 reservation@goeres-group.com www.hpb.lu	€95 for a single room €112 for a double room	Located in the heart of the city and surrounded by greenery and calm. Situated next to the shops and old part of the city. Parking available : 15,-EUR/per day.
PARC PLAZA HOTEL 5, avenue Marie-Thérèse LU - 2132 LUXEMBOURG	++ 352 44 23 23 23 23 ++ 352 45 61 41 220 reservation@goeres-group.com www.hpb.lu	€143 for a single room €160 for a double room	Located within 10 minutes walking distance from the city centre. Parking available : 15,-EUR/per day.
PRESIDENT 32, place de la Gare LU - 1024 LUXEMBOURG	++ 352 48 61 61 ++ 352 48 61 80 president@pt.lu www.president.lu	€135 for a single room €150 for a double room	In front of the railway station. Parking available : 12,-EUR/per day.
SOFITEL 6, rue Fort Niedergrünewald LU - 2015 LUXEMBOURG	++ 352 43 77 61 ++ 352 43 91 95 H1314@accor.com	€170 for a single room €195 for a double room	Within walking distance from the Institute. Parking (free of charge)
YASHA 27, rue Joseph Junck LU - 1839 LUXEMBOURG	++ 352 49 30 70 ++ 352 49 30 70 333	€65 for a single room €80 for a double room	Hotel located close to the railway and bus station.

REGISTRATION

Name of the event / workshop

AMC Training

Date :

16-17 Apr. 2008

Please register until ***: 29 Feb 2008***

_____

Send or e-mail to :

EUROCONTROL IANS – Reservation Office

12, Rue Antoine de Saint-Exupéry

L-1432 Luxembourg

Fax : ++ 352 42 20 71

E-mail : IANS.reservation@eurocontrol.int

Title (Mr, Ms, Dr, etc) _____ First Name: _____ Family name: _____

Job function/title: _____

Organisation/Company: _____

Street: _____ Nr: _____ City: _____

Postal Code: _____ Country: _____

E-mail: _____

Tel : ++_____ Fax : ++_____

Accommodation Request :

We inform you that the special EUROCONTROL rate (see hotel list attached) will ONLY be confirmed if the hotel booking is done by our EUROCONTROL Reservation Office.

I request the Institute to book my hotel room as follow :

Arrival Date: _____/04/2008 Departure Date: _____/04/2008 = _____ night(s)

Type of room (single/double) _____

Credit Card Name :_____Credit Card Number :_____

Expiry Date: ____/_____/_____Your Signature: _____

Very important : Please note that hotel bookings are ONLY guaranteed until 18H00. If your arrival is foreseen after that time and if you want to guarantee your room for a late arrival, your credit card details should be mentioned on this registration form !!

The Third Working Group Meeting of ATN Implementation Coordination Group
Of APANPIRG (ATNICG WG/3)
Chiang Mai, Thailand
24-25 January 2008

LIST OF PARTICIPANTS

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESSS	TELEPHONE/FAX/E-MAIL
AUSTRALIA (1)		
Mr. Ken W. Morris	Business Engagement Manager, System Operations Airservices Australia P.O. Box 747 Eagle Farm, Queensland 4009 **AUSTRALIA**	Tel: +61 (7) 3866 3441 Fax: +61 (7) 38663 269 E-mail: ken.morris@airservicesaustralia.com
CHINA (3)		
Ms. Guo Jing	Senior Engineer CNS Department of Air Traffic Management Bureau Civil Aviation Administration of China No. 12, Dongsanhuan, Middle Road Chaoyang District **PEOPLE'S REPUBLIC OF CHINA**	Tel: +86 (10) 8778 6967 Fax: +86 (10) 8778 6910 E-mail: jingg@vip.163.com
Mr. Xin Quan	Chief Engineer Aero-Info Technologies Co, Ltd. Air Traffic Management Bureau Civil Aviation Administration of China 802 Tower B, Technology Fortune Center No. 8, Xue Qing Road Haidian District **PEOPLE'S REPUBLIC OF CHINA**	Tel: +86 (10) 8273 1161 Fax: +86 (10) 8273 1181 E-mail: xq@ait.cn
Mr. Hou Jun	Engineer Aerotelenet Co., Ltd. Air Traffic Management Bureau Civil Aviation Administration of China 12th Floor, Tower B, Technology Fortune Center No. 8, Xue Qing Road Haidian District **PEOPLE'S REPUBLIC OF CHINA**	Tel: +86 (10) 5872 9766 Fax: +86 (10) 5872 9999 E-mail: houjun@atnc.com.cn
Hong Kong, China (4)		
Mr. Chan Wai Ming	Senior Aeronautical Communications Supervisor Civil Aviation Department 212, Air Traffic Control Complex Hong Kong International Airport Chek Lap Kok **HONG KONG, CHINA**	Tel: +852 2910 6210 Fax: +852 2910 1160 E-mail: wmchan@cad.gov.hk
Mr. Lau Kam Hing	Aeronautical Communications Supervisor Civil Aviation Department 212, Air Traffic Control Complex Hong Kong International Airport Chek Lap Kok **HONG KONG, CHINA**	Tel: +852 2910 6211 Fax: +852 2910 1160 E-mail: khlau@cad.gov.hk

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESSS	TELEPHONE/FAX/E-MAIL
Mr. Lau Lai Sang	Aeronautical Communications Supervisor Civil Aviation Department 212, Air Traffic Control Complex Hong Kong International Airport Chek Lap Kok **HONG KONG, CHINA**	Tel: +852 2910 6262 Fax: +852 2910 1160 E-mail: lslau@cad.gov.hk
Mr. P.C. Chan	Senior Electronics Engineers Civil Aviation Department 10/F, Commercial Building Airport Freight Forwarding Centre 2 Chun Wan Road Hong Kong International Airport **HONG KONG, CHINA**	Tel: +852 2591 5002 Fax: +852 2845 7160 E-mail: pcchan@cad.gov.hk
FIJI (1)		
Mr. David McDonald	Radio Engineering Inspector Civil Aviation Authority of the Fiji Islands Private Mail Bag NAP0354, Nadi Airport **FIJI ISLANDS**	Tel: +679 672 1555 Fax: +679 672 1500 E-mail: rei@caaf.org.fj
INDIA (2)		
Mr. P.K. Kapoor	General Manager (COMMN) Airports Authority of India Rajiv Gandhi Bhawan Safdarjung Airport New Delhi 110003 **INDIA**	Tel: +91 (11) 2462 0287 Fax: +91 (11) 2462 0287 E-mail: pkkapoor@aai.aero
Mr. A.K. Dutta	General Manager (ATM) Airports Authority of India Rajiv Gandhi Bhawan Safdarjung Airport New Delhi 110003 **INDIA**	Tel: +91 (11) 2462 9015 Fax: +91 (11) 2465 4969 E-mail: akdutta@aai.aero
INDONESIA (4)		
Mr. Ahmad N. Aulia	Directorate General of Civil Aviation Gedung Karya Lt. 23 Jl. Merdeka Barat No. 8 Jakarta 10110 **INDONESIA**	Tel: +62 (21) 350 5006 Fax: +62 (21) 3483 2663 E-mail: auliahmad@telkom.net
Mr. Sigit Djumatno	Directorate General of Civil Aviation Surveillance and Communication Section Karya Building 23th Floor Jl. Merdeka Barat No. 8 Jakarta 10110 **INDONESIA**	Tel: +62 (21) 350 7569 Fax: +62 (21) 350 7569 E-mail: sigitdj@telkpm.net
Mr. Mohamad Hasan Bashory	Directorate General of Civil Aviation Karya Building 23th Floor Jl. Merdeka Barat No. 8 Jakarta 10110 **INDONESIA**	Tel: +62 (21) 350 6451 Fax: +62 (21) 350 7569 E-mail: bazz@telkom.net

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESSS	TELEPHONE/FAX/E-MAIL
Mr. Trisna Metria	Directorate General of Civil Aviation Gedung Karya Lt. 23 Jl. Merdeka Barat No. 8 Jakarta 10110 **INDONESIA**	Tel: +62 (21) 350 5006 Fax: +62 (21) 3483 2663 E-mail: trisnametria@yahoo.com
JAPAN (1)		
Dr. Tetsuo Mizoguchi	Professor, Department of Computer Science Hosei University 3-7-2 Kajino, Koganei Tokyo 184 8584 **JAPAN**	Tel: +81 (42) 387 4358 Fax: +81 (42) 387 6028 E-mail: mizo@hosei.ac.jp
PHILIPPINES (1)		
Mr. Jose J. Luna	Chief, Airways Communicator Air Traffic Services Philippines Air Transportation Office MIA Road, Pasay City 1301 Metro Manila **PHILIPPINES**	Tel: +63 (2) 879 9191 Fax: +63 (2) 879 9191 Email: jet_luna@hotmail.com
REPUBLIC OF KOREA (4)		
Mr. Kyun Do Huh	Deputy Director of Air Navigation Policy Division Civil Aviation Safety Authority 274, Gwahae-dong, Gangseo-gu Seoul 157-711 **REPUBLIC OF KOREA**	Tel: +82 (2) 2669 6414 Fax: +82 (2) 6342 7299 E-mail: kdhuh@moct.go.kr
Mr. Jae Man Ryu	Assistant Director of Air Navigation Policy Division Civil Aviation Safety Authority 274, Gwahae-dong, Gangseo-gu Seoul 157-711 **REPUBLIC OF KOREA**	Tel: +82 (2) 2669 6412 Fax: +82 (2) 6342 7299 E-mail: yjm71@moct.go.kr
Mr. Jiseok Kang	Manager Korea Airports Corporation 274, Gwahae-dong, Gangseo-gu Seoul 157-711 **REPUBLIC OF KOREA**	Tel: +82 (2) 2660 2865 Fax: +82 (2) 2660 2320 E-mail: thin@airport.co.kr
Ms. Bora Kwon	Officer Korea Airports Corporation 150, Gonghang-Dong Gangseo-Gu Seoul 157-711 **REPUBIC OF KOREA**	Tel: +82 (2) 2660 4804 Fax: +82 (2) 2660 4800 E-mail: kbr171@airport.co.kr
SINGAPORE (7)		
Mr. Goh Soo Kiat	Head (Air Traffic Control Planning) Singapore Changi Airport P.O. Box 1 **SINGAPORE 918141**	Tel: +65 6545 2454 Fax: +65 6545 6516 E-mail:Goh_Soo_Kiat@caas.gov.sg
Mr. Lee Hoong Kwan	Engineer (Communications/Navaids) Singapore Changi Airport P.O. Box 1 **SINGAPORE 918141**	Tel: +65 6541 2409 Fax: +65 6542 2447 E-mail: Victor_Lee@caas.gov.sg

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESSS	TELEPHONE/FAX/E-MAIL
Ms. Lee Shi Min	Engineer (Air Traffic Management) Singapore Changi Airport P.O. Box 1 **SINGAPORE 918141**	Tel: +65 6541 2443 Fax: +65 6542 2447 E-mail: Lee_Shi_Min@caas.gov.sg
Ms. Sng Sin Hie	Engineer (Communications/Navaids) Singapore Changi Airport P.O. Box 1 **SINGAPORE 918141**	Tel: +65 6541 2408 Fax: +65 6542 2447 E-mail: SNG_Sin_Hie@caas.gov.sg
Mr. Ng Sya Kee	AMHS Centre Manager NCS PTE Ltd. Singapore Air Traffic Control Centre 60 Biggin Hill Road **SINGAPORE** 509950	Tel: +65 6541 1875 Fax: +65 6542 3195 E-mail: skng@ncs.com.sg
Mr. Kua Kiat Huat	Engineer (Communications) NCS PTE Ltd. Singapore Air Traffic Control Centre 60 Biggin Hill Road **SINGAPORE** 509950	Tel: +65 6541 1806 Fax: +65 6542 3195 E-mail: kkht@ncs.com.sg
Mr. Dan Hanlon	ATO Senior Representative US Federal Aviation Administration American Embassy Singapore 27 Napier Road **SINGAPORE**	Tel: +011 (65) 6543 1466 Fax: - E-mail: dan.hanlon@faa.gov
THAILAND (11)		
Mr. Somnuk Rongthong	Executive Vice President (Engineering) Aeronautical Radio of Thailand Ltd. 102 Soi Ngamduplee, Thungmahamek Sathorn, Bangkok 10120 **THAILAND**	Tel: +66 (2) 285 9904 Fax: +66 (2) 287 8166 E-mail: somnuk@aerothai.co.th
Mr. Nuttawat Supanundha	Vice President, Air Traffic Services Engineering and Development Bureau Aeronautical Radio of Thailand Ltd. 102 Soi Ngamduplee, Thungmahamek Sathorn, Bangkok 10120 **THAILAND**	Tel: +66 (2) 287 8707 Fax: +66 (2) 287 8166 E-mail: nuttawatsu@aerothai.co.th
Mr. Pongpinit Damroungsongporn	Technician Department of Civil Aviation 71 Soi Ngamduplee, Rama IV Road Thungmahamek, Sathorn Bangkok 10120 **THAILAND**	Tel: +66 (2) 286 1013 Fax: +66 (2) 286 1013 E-mail: pongpinit_d@aviation.go.th
Capt. Suebboon Nannar RTN	Director of Aeronautical Network Management Center Aeronautical Radio of Thailand Ltd. 102 Soi Ngamduplee, Thungmahamek Sathorn, Bangkok 10120 **THAILAND**	Tel: +66 81 829 5267 Fax: - E-mail: suebboon@aerothai.co.th

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESSS	TELEPHONE/FAX/E-MAIL
Mr. Paisan Praneetpongrang	Director, Air Traffic Services Engineering Research and Development Department Aeronautical Radio of Thailand Ltd. 102 Soi Ngamduplee, Thungmahamek Sathorn, Bangkok 10120 **THAILAND**	Tel: +66 (2) 285 9246 Fax: +66 (2) 287 8620 E-mail: paisan@aerothai.co.th
Mr. Pongnarin Anantasirichinda	Director, Data Network Engineering Department Aeronautical Radio of Thailand Ltd. 102 Soi Ngamduplee, Thungmahamek Sathorn, Bangkok 10120 **THAILAND**	Tel: +66 (2) 285 9101 Fax: +66 (2) 285 9175 E-mail: pongnarin.an@aerothai.co.th
Mr. Kanapas Siriram	Engineering Manager Aeronautical Radio of Thailand Ltd. 102 Soi Ngamduplee, Thungmahamek Sathorn, Bangkok 10120 **THAILAND**	Tel: +66 (2) 285 9078 Fax: +66 (2) 287 8620 E-mail: kanapas.si@aerothai.co.th
Mr. Pramuk Rungrojaree	Executive Officer, Systems Engineering Aeronautical Radio of Thailand Ltd. 102 Soi Ngamduplee, Thungmahamek Sathorn, Bangkok 10120 **THAILAND**	Tel: +66 (2) 285 9578 Fax: +66 (2) 287 8620 E-mail: pramuk.ru@aerothai.co.th
Mr. Chonlawit Banphawatthanaruk	Executive Officer, Systems Engineering Aeronautical Radio of Thailand Ltd. 102 Soi Ngamduplee, Thungmahamek Sathorn, Bangkok 10120 **THAILAND**	Tel: +66 (2) 285 9578 Fax: +66 (2) 287 8620 E-mail: chonlawit.ba@aerothai.co.th
Ms. Sujin Promduang	General Administrative Manager Aeronautical Radio of Thailand Ltd. 102 Soi Ngamduplee, Thungmahamek Sathorn, Bangkok 10120 **THAILAND**	Tel: +66 (2) 285 9083 Fax: +66 (2) 287 3131 E-mail: sujin@aerothail.co.th
Ms. Jittima Asawachaiporn	General Administrative Manager Aeronautical Radio of Thailand Limited 102 Ngamduplee, Tungmahamek Satorn, Bangkok 10120 **THAILAND**	Tel: +66 (2) 285 9082 Fax: +66 (2) 287 8538 E-mail : jittima.as@aerothai.co.th
USA (4)		
Mr. Vidyut Patel	Manager, Information Security Team (Lead Delegate) US Federal Aviation Administration William J. Hughes Technical Center Atlantic City, NJ 08405 **USA**	Tel: +1 (609) 485 5046 Fax: - E-mail: vidyut.patel@faa.gov
Mr. Hoang Tran	AMHS Programme Manager US Federal Aviation Administration ATO Technical Operations/AJW-531 800 Independence Ave., SW Washington, D.C. 25091 **USA**	Tel: +1 (202) 493 5995 Fax: - E-mail: hoang.tran@faa.gov

STATE/INTERNATIONAL ORGANIZATION/NAME	DESIGNATION/ADDRESSS	TELEPHONE/FAX/E-MAIL
Mr. Robert Hallman	Facility Manager, Service Area Office for Technical Operations - NNCC US Federal Aviation Administration 2150 W. 700 N, Salt Lake City 84116, Utah **USA**	Tel: +1 (801) 320 2165 Fax: +1 (801) 320 2117 E-mail: robert.hallman@faa.gov
Mr. Tom McParland	Vice President BCI Inc. 304 Harper Drive Moorestown, NJ 08058 **USA**	Tel: +1 (856) 778 1660 +1 (609) 425 4410 Fax: +1 (856) 778 1982 E-mail: tmcparland@bcisse.com
	INDUSTRY (OBSERVERS)	
COMSOFT (1)		
Mr. Hans-Jörg Merkle	System Engineer Comsoft GmbH Wachhausstr. 5a D-76227 Karlsruhe **GERMANY**	Tel: +49 721 9497 245 Fax: +49 721 9497 129 E-mail: hans-joerg.merkle@comsoft.de
GWDI (1)		
Mr. Dave Sigward	Systems Engineer GWDI 201-B Calle Del Oaks Monterey, CA 93940 **USA**	Tel: +1 (831) 3920430 Ext. 16 Fax: +1 (831) 392 0429 E-mail: dsigward@gwdi.com
ICAO (4)		
Mr. Loftur Jonasson	Technical Officer, CNS Air Navigation Bureau ICAO Headquarters 999 University Street Montreal, Quebec, H3C 5H7 **CANADA**	Tel: +1 (514) 954 8219 Ext. 7130 Fax: +1 (514) 954 6759 E-mail: ljonasson@icao.int
Mr. Andy Colon	Technical Expert Air Navigation Bureau ICAO Headquarters 999 University Street Montreal, Quebec, H3C 5H7 **CANADA**	Tel: +1 (609) 485 4348 Fax: - E-mail: andy.colon@faa.gov
Mr. Li Peng	Regional Officer CNS International Civil Aviation Organization 252/1, Vibhavadee Rangsit Road Chatuchak, Ladyao Bangkok 10900 **THAILAND**	Tel: +62 (2) 537 8189 Ext. 158 Fax: +62 (2) 537 8199 E-mail: pli@bangkok.icao.int
Mr. Sujan K. Saraswati	Regional Officer CNS International Civil Aviation Organization 252/1, Vibhavadee Rangsit Road Chatuchak, Ladyao Bangkok 10900 **THAILAND**	Tel: +62 (2) 537 8189 Ext. 155 Fax: +62 (2) 537 8199 E-mail:ssaraswati@bangkok.icao.int

ATTACHMENT 2
ATNICG WG/3-**WP302**

International Civil Aviation Organization

THE THIRD WORKING GROUP MEETING OF ATN IMPLEMENTATION COORDINATION GROUP OF APANPIRG (ATNICG WG/3)

Chiang Mai, Thailand, 24-25 January 2008

LIST OF WORKING AND INFORMATION PAPERS

WP/IP No.	Subject Paper	Agenda Item	Title and Presented
301	Agenda		
302	List of Papers		
303	List of Participants		
304	Review status of ATNICG Tasks – Appendix E – Subject/Tasks List	1	FAA/USA
305	Task (1) develop/establish/adapt/monitor/identify/analyze performance indicators	5	Japan
306	Task (1) Review the impact of the implementation of Directory Services in the Region	6	Japan
307	Upgrading the Asia/Pacific ATN Network to Support IPS	6	Japan
308	Proposed Strategy for an ASIA/PAC Regional Transition to IPv6	6	FAA/USA
309	Background Information and Proposed Outline for an ASIA/PAC Incident Response Plan	7	FAA/USA
310	ASIA/PAC Aeronautical Telecommunication Network Incident Response Plan	7	FAA/USA
311	Asia/Pacific Regional activities and Status	1	Australia
312	Implementation Issues	1	Australia
313	The need to review the Asia/Pac strategy for direct implementation of IPS ATN	6	Hong Kong
314	Proposed addition of Annexes to the 1st Edition of the Guidance Document of AMHS Conformance Testing	3	Singapore
	INFORMATION PAPERS		
301	Meeting Bulletin		
302	Status of SARPs and Technical Provisions for ATN/IPS	6	ICAO, Asia/Pacific
303	Security Task Working Group	7	FAA/USA