

INTERNATIONAL CIVIL AVIATION ORGANIZATION
ASIA AND PACIFIC OFFICE



**REPORT OF THE
COM CO-ORDINATION MEETING**

(Kunming, China, 6-7 March 2013)

The views expressed in this Report should be taken as those of the COM Coordination Meeting and not of the Organization. Result of the Meeting will also be submitted to the CNS SG/17 Meeting for review and consideration.

Approved by the Meeting
and published by the ICAO Asia and Pacific Office

1. Introduction

1.1 A COM Co-ordination Meeting was held at Kunming Yunan Conference Resort, China from 6-7 March 2013. The meeting was hosted by Air Traffic Management Bureau of CAAC, China.

1.2 The objective of the meeting were to review status of implementation of the required AFTN/ATS direct speech circuits and to develop a coordinated action plan for re-establishment of Beijing/Yangon AFS data circuit and implementing ATN/AMHS connection between Beijing/Kathmandu to satisfy the established operational requirements.

2. Attendance

2.1 The meeting was attended by 13 participants representing China, Myanmar and Nepal. A list of participants is at **Attachment 1**.

3. Officer and Secretariat

3.1 Mr. Li Peng, Regional Officer Communication, Navigation and Surveillance (CNS) of the ICAO Asia and Pacific Office acted as the moderator and secretary of the meeting.

4. Opening of the meeting

4.1 Mr. Bu Enshu, Deputy Director of CNS Division, ATMB Headquarters welcomed the participants. In his opening address, he highlighted the importance of Aeronautical Fixed Service for safety and regularity of air navigation and hoped that the result of the meeting would facilitate the implementation and reactivation of the AFS circuits. On behalf of ICAO Regional Director, Mr. Li Peng highlighted the objective of the meeting and emphasized the need to develop harmonized practical action plans. He also expressed appreciation to ATMB for hosting the meeting. Mr. Lou Yi, Director of CNS, ATMB Southwest regional administration also extended warm welcome to all participants to Kunming.

5. Agenda

Agenda Item 1: Review of AFS communication requirements in the Sub-region of South Asia including those requirements specified in the regional air navigation plan – FASID Tables

Agenda Item 2: Review the current implementation and operational status of AFS communications between States

Agenda Item 3: Develop an Action Plan for restoration of Yangon/Beijing AFS data circuit

Agenda Item 4: Discuss implementation plan of ATN/AMHS between States including agreed target operational date

Agenda Item 5: Letter of agreement for technical and operational trail

Agenda Item 6: Any other business

6. Organization, Working Arrangements and Language

6.1 The meeting was held as a single body throughout the meeting. The working language was English inclusive of all documentation and this report. Chinese was also used with interpretation. A list of Working Papers and Information Papers presented at the meeting is at **Attachment 2**.

Agenda Item 1: Review of AFS communication requirements in the Sub-region of South Asia regional air navigation plan – FASID**1. Review of AFS requirements**

1.1 Under this agenda item the meeting reviewed the requirements of AFTN and ATS direct speech circuit plans as specified in the regional air navigation plan (FASID). The relevant Conclusions in the Communication fields adopted by the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG) were also reviewed by the meeting.

1.2 The meeting reviewed the relevant Aeronautical Fixed Service requirements between States as contained in the FASID Tables CNS 1A, CNS 1B, CNS 1C, 1D and CNS 1E. States were urged to implement the requirements and improve circuits' performance.

1.3 The meeting noted the APANPIRG Conclusion 11/14 – Use of digital circuits and Conclusion 11/15 – Alternative arrangements for VSAT adopted by APANPIRG.

Agenda Item 2: Review the current implementation and operational status of AFS communication between States**2. Current operational status**

2.1 Under this agenda item the meeting reviewed the implementation and current operational status of the concerned AFTN and ATS Direct Speech circuits for the area under the consideration by the meeting.

2.2 The meeting noted that the VSAT link used for ATS direct speech circuit between Yangon and Kunming and the AFTN circuit between Beijing and Yangon has been out of order service due to technical and other problems at Yangon site since July 2008. The reactivation of the ATS direct speech circuit and AFS Data circuit between Beijing and Yangon were also discussed. Currently, the voice speech circuit is tentatively via Aerothai VSAT system which was going to be terminated in June 2013.

2.3 Nepal has purchased new AMHS system. Only AFTN function of the system has been tested and used since November 2012. The AMHS function is subject to the further testing with India and China. Technical Memorandum of Cooperation for technical testing and commissioning the AMHS has been discussed and agreed.

2.4 Although message traffic between China and Nepal over the Beijing/Kathmandu AFTN Circuit is relatively low (less than 200 messages a day). However, the traffic has increased to more 1000 message per day when the AFS data circuit between Kathmandu and Mumbai became out of service since 31 January 2013. The need for early testing and commissioning the AMHS function with China was identified by the meeting.

2.5 The ATS direct speech communication between Kathmandu and Lhasa was conducted via VSAT. The link was considered meeting the requirements however, the voice quality requires improvement as poor readability was occasionally reported from Nepal air traffic controllers.

2.6 Review available means to meet requirements for AFS communications

2.6.1 The meeting discussed various potential means to support AFS communication between States including potential alternate arrangement for leasing landline from telecommunication service provider and new generation of VSAT technology – (PTPVSAT). The meeting concluded that VSAT technology is still an appropriate solution to the last mile (local lead between airport and downtown PTT) problem in the area. In the interest of efficiency and economy, States were encouraged to use the VSAT technology especially for those integrated data and voice requirements where two separate data/voice circuits have been implemented or planned.

2.6.2 As VSAT was identified one of reliable means for AFS communication and RCAG link being employed by three States at the meeting to support AFS communication, it was considered very important to retain necessary spare parts for critical modules and elements, such as redundant channel cards, RF unit, etc. to ensure rapid restoration when breakdown occurs. A reliable power supply system and lightning prevention system was also considered essential. It was recognized that for those VSAT stations providing both ATS direct speech and critical AFTN circuits without the provision of an alternate routing between States, an alternative communication link should be provided in order to ensure required reliability, such as dial up system or separate VSAT system using different satellite. Digital landline circuit from telecommunication service provider was also considered appropriate for States to employ at early stage.

Agenda Items 3 & 4: Develop action plans including implementation plan of ATN/AMHS Between States

3.1 Under this agenda item, the following action plan was agreed by the meeting for implementation within the established time frame.

3.1.1 Time Frame

The definition of time frame indicated in the action plan is as follows:

IMMEDIATE:

Action to be taken immediately after the conclusion of the meeting

MID TERM:

Action to be taken within six months

LONG TERM:

Action to be taken within one year

3.1.2 ACTION AGREED NO. 1 - MID TERM, CHINA, MYANMAR

That, China and Myanmar take actions to reactivate the VSAT link for implementation of the ATS direct speech circuit between Kunming and Yangon by the end of October 2013. Option for the implementation action includes:

- making arrangement for replacing ODU and CUs for existing C-band VSAT – TES system. An early evaluation visit by a VSAT expert from China is required if this option is chosen (by end of April 2013); and
- use of new economical technology (PTPVSAT) to replace the aging VSAT system; (Remark: if this option is confirmed feasible, implementation would be in early 2014).

3.1.3 ACTION AGREED NO. 2 - LONG TERM CHINA, MYANMAR

That, China and Myanmar take all necessary actions for implementation of the AFS data circuit between Beijing and Yangon by the end of June 2014 using leased 2 M-byte (E1) circuit between Yangon and Beijing to support both AFS data circuit (including AMHS connection) and ATS voice communication requirement (multiplexer is expected to be used at both sides) .

3.1.4 ACTION AGREED NO. 3 – IMMEDIATE NEPAL AND CHINA

That, China and Nepal implement ATN/AMHS connection in accordance with TMC discussed and agreed during the COM coordination meeting. The target date for commission the circuit and milestone are specified in the TMC (estimated date for signing TMC in early April and starting test from MID. May 2013).

3.1.5 ACTION AGREED NO. 4 – IMMEDIATE (to Long Term) NEPAL AND CHINA

That, China and Nepal consider following options for supporting the AFS requirements between two States:

- Upgrading existing VSAT (TES) system from Asyn. 19.2 Kbps (300 Baud used) to Synchronous 64 Kbps channel. The required CU boards, spare parts and network configuration is required to be done as early as possible;
- Alternately, conducting AMHS connection trial using TCP/IP protocol over the INTERNET VPN in early April 2013;
- Consider option of leasing landline from Telecom. Service provider to support the AFS communication;

- Consider option of leasing direct 2 -Mbytes landline between Kathmandu and Lhasa when it is available within one year time frame; and
- Use of new economical technology – PTTVSAT to replace the aging VSAT system when feasibility is confirmed.

Agenda Item 5: Letter of agreement for technical/operational trial and implementation

5.1 The meeting reviewed the sample TMC adopted by APANPIRG/23 meeting and developed a TMC for trial and commissioning the ATN/AMHS connection between China and Nepal.

5.2 The meeting also initially discussed an implementation plan for ATN/AMHS connection between Beijing and Yangon. The similar TMC will be negotiated between two States in the near future.

Agenda Item 6: Any Other Business

6.1 Secretariat made a presentation on the outcome of AN Conf/12 on the relevant Conclusions and ASBU concept to the meeting.

6.2 The meeting was informed about one of the Tasks for ADS-B Study and Implementation Task and Force and for action by China and Myanmar adopted by APANPIRG. China and Myanmar were urged to examine existing air-ground communication and surveillance capability in the border area between China and Myanmar and identify the need and possibility for sharing ADS-B data from potential ADS-B ground station near Lashio.

6.3 Representatives from Myanmar and Nepal thanked Air Traffic Management Bureau in particular to the ATMB Yunnan Province Sub-bureau for the warm hospitality and the excellent arrangements made for the meeting.

6.4 The Moderator thanked the participants for their active discussion and valuable inputs and urged Administrations to implement the action plan agreed by the meeting in a timely manner with the spirit of cooperation demonstrated at the meeting.

**COM Co-ordination Meeting
Kunming, China
6 – 7 March 2013**

Attachment 1 to the Report

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International Civil Aviation Organization

COM Co-ordination Meeting

6 – 7 March 2013, Kunming, China



LIST OF WORKING AND INFORMATION PAPERS

WP/IP No.	Agenda	Subject	Presented by
WORKING PAPERS			
1	-	Provisional Agenda	Secretariat
2	1	Relevant APANPIRG Conclusions	Secretariat
3	1	Review of AFS Requirements and Planning Tables	Secretariat
4	3	Review Status of Beijing/Yangon AFS Data Circuit	Secretariat
5	5	Sample Memorandum of Cooperation (TMC)	Secretariat
6	4	Discussion on ATN/AMHS Test and Implementation between China and Nepal	China
INFORMATION PAPERS			
1	-	Meeting Bulletin	Secretariat
2	4	AMHS Nepal Overview	Nepal
3	3	Myanmar's Proposal for Restoration of AFS Data Circuit	Myanmar
4	4	China ATN/AMHS Implementation Status Report	China
