



International Civil Aviation Organization

**Aeronautical Telecommunication Network/Internet
Protocol Suite Working Group**

Fourth Meeting (ATN/IPS WG/4)
(Cairo, Egypt, 21 - 23 May 2012)

Agenda Item 3: Review and update of MID ATN plans and Implementation issues

IRAN ATN PROJECT PROGRESS OVERVIEW

(Presented by Iran)

SUMMARY

This paper provides information on the latest development of Iran's Aeronautical Telecommunication Network and also contains the progress achieved in AHMS implementation project.

Action by the meeting is at paragraph 4.

1. INTRODUCTION

1.1 Iran ATN network provide Aeronautical Telecommunication for Inter and Intra points to transfer voice and data information based on Internet Protocol as proposed in ICAO 9896 Doc and MID IPS documents. High availability and much more flexibility of IP technology provides a more reliable and lower cost communication path with the internal and external points.

1.2 In accordance with the MID ATN plans and based on the implementation work program, the Working Group is expected to complete and follow-up the agenda and also prepare the action plan.

1.3 Tehran AFTN overview;

1.3.1 Tehran AFTN Centre is responsible for relay on the basis of its AFTN native system and connecting to its neighbouring international centres.

1.3.2 AFTN switching centre is operating on 93 international, domestic and airline channels as follows:

- 6 international channels
- 58 domestic channels
- 25 aircraft operating agencies channels.

2. DISCUSSION

2.1 Latest development and action in Iran's ATN and AHMS plans:

ATN infrastructure developments and action plans

2.1.1 Iran ATN upgraded 20 of its old analogue communication lines to the IP based links and they are operational for integrated voice and data communications.

2.1.2 Also the new IP based international links has been increased from 3 channels in 2011 to 6 channels in 2012. The new revised information about Iran's International links is shown in **Appendix A** to this working paper.

2.1.3 Any required device or software upgrade is in action for using IPv6 and BGP version 3 routing protocol in the Tehran International links. Based on our plans it is anticipated that in the 2nd half 2012 the plan will be completed. Consequently the Iran's ATN border routers will be ready to join the planned inter-domain BGP based network as proposed on ATN/IPS WG/3.

2.2 Iran ATN upgraded 20 of its old analogue communication lines to the IP based links and they are operational for integrated voice and data communications.

2.2.1 This plan is applicable for the Iran AHMS project covering the supply, delivery, installation, commissioning and integration of an automated AHMS system on basis the high technology and operating on dual stack protocols. (IPv4 & IPv6).

- Contract Signature: The contract between IAC and AVITECH AG has been signed in 06 Dec 2010.
- Site Survey: Site survey of this project has been done by manager of project in 17 & 18 June 2011.
- FAT: Factory Acceptance Test of system has been done in 4 – 11 Feb 2012.
- Installation and Infrastructure Planning: It will be started from June 2012.
- System Operating: Up to the end of 2012 Iran AHMS system will be installed and operated

2.3 Iran AHMS implementation plan in brief:

Com Center	Installation date	Operation date	MTA Name	AFTN AHMS GATEWAY	ATS MESSAGE UA	ATS Service Level	Protocol Support	Remarks	Address
IRAN	2012	End of 2012	MTA-OI-1	y	y	Extended	Dual Stack	Support both IPv4 & IPv6	XF, CASS

3. CONCLUSION

3.1 Upgrading and transitioning from old analogue expensive aeronautical telecommunication infrastructure to the new IP based infrastructures provides a lower cost, more reliable and high performance network that can be used both for voice and data simultaneously.

3.2 Transitioning from old AFTN to the new enhanced AHMS applications not only requires replacing old AFTN applications with the new ones both in server and client sides but also requires upgrading the old 9600 bps lines to the new 64Kbps channels.

4. ACTION BY THE MEETING

4.1 The meeting is invited to note the information contained in this working paper and its **Appendix A** and upgrade the necessary circuits when implementing AMHS.

APPENDIX A

IP BASED INTERNATIONAL LINKS

STATUS	Destination	Bandwidth Kbps	L2/L3 protocols	APPLICATIONS	LAST
1	Bahrain	64	PTP/IPv4	AFTN/VOIP	Operational
2	Baghdad	32	VSAT/IPv4	Voice only	not connected any more
3	Karachi	64	PTP/IPv4	AFTN/VOIP	Operational
4	Kuwait	64	PTP/IPv4	AFTN/VOIP	Operational
5	Ankara	64	PTP/IPv4	AFTN/VOIP	Configuration
6	Abu Dhabi	64	PTP/IPv4	—	Line Up phase
7	Muscat	64	PTP/IPv4	—	Line Up phase
8	Kabul	32	VSAT/IPv4	Voice only	not connected any more

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