



ICAO FRAMEWORK

The background of the slide features a close-up, slightly blurred image of several network cables. A prominent grey Ethernet cable with a clear plastic RJ45 connector is in the foreground, angled towards the bottom left. Behind it, other cables in red and yellow are visible, creating a sense of depth and connectivity. The overall lighting is warm and soft, highlighting the textures of the plastic and the colors of the cables.

ICAO GLOBAL STRATEGY

- **Vision**

- Global ATM Operational Concept (Doc 9854)
- Integrated, harmonized and interoperable ATM up and beyond 2025

- **Strategy**

- Global Air Navigation Plan (Doc 9750)
- Focus on near and medium term activities

- **Activities**

- Asia and Pacific Regions Air Navigation Plan (Doc 9673)
- Regional work programmes with timeschedules



ATN RELATED PROVISIONS

- **ICAO SARPS – ANNEX 10 Volume 3**
 - Amendment 83 (effective 20 November 2008)
- **Manual of Technical Provisions for the Aeronautical Telecommunication Network (Doc 9705)**
 - ATSMHS part is obsolete and is superseded by Doc 9880
- **Comprehensive ATN Manual (Doc 9739)**
 - To be withdrawn

The background of the slide features a close-up photograph of several network cables. A grey Ethernet cable with a clear RJ45 connector is in the foreground, slightly out of focus. Behind it, there are other cables in red and yellow, also with RJ45 connectors. The overall lighting is warm and soft, creating a professional and technical atmosphere.

DOCUMENTS ADDED

- **Manual on Detailed Specifications for ATN/OSI (Doc 9880)**
 - ATSMHS moved to Doc 9880 Part IIB
- **Manual for the ATN using IPS Standards and Protocols (Doc 9896)**
 - Published as 1st Edition 1 June, 2009

The background of the slide features a close-up, slightly blurred image of several network cables. A prominent red cable is at the top, and a yellow cable is on the left. In the foreground, a grey RJ45 network connector is visible, with its internal pins and a clear plastic housing. The overall lighting is warm and soft, creating a professional and technical atmosphere.

DEVELOPMENTS

- Technical and Operational details about ATN OSI and IPS protocols are now being provided in two different manuals
- ICAO has decided to refer external standards where available
- Transition from AFTN to ATN will be performance based to meet high level functional requirements based Standards and Recommended Practices

REGIONAL STRATEGY

- In order to provide guidance to the States on the matters relating to the implementation of Aeronautical Telecommunication Network (ATN) in the region and to ensure uniform and harmonious deployment, APANPIRG adopted a Regional Strategy in its Sixteenth Meeting held in Bangkok from 22 to 26 August, 2005
- APAPIRG/17 held in Bangkok from 21 to 25 August, 2006 revised this Strategy and included the provision of dual stack (OSI and IPS) for the region.
- Subsequently, in 2008 APANPIRG, through its Conclusion C 19/20 urged the States hosting BBIS hubs to complete implementation of their AMHS by 2011
- Strategy is being reviewed periodically to consider the developments that are taking place currently

REGIONAL AMHS ACTIVITIES

- Support and monitor implementation of AMHS in the region
- Identify and resolve transition related issues related to AMHS implementation
- Establish and monitor coordination mechanism in the region for AMHS operational issues
- Coordinate with ICAO Headquarters and other global organizations engaged in the implementation of AMHS
- Monitor status of implementation of AMHS in other regions, particularly in those region with which Asia/Pacific region is required to maintain direct link

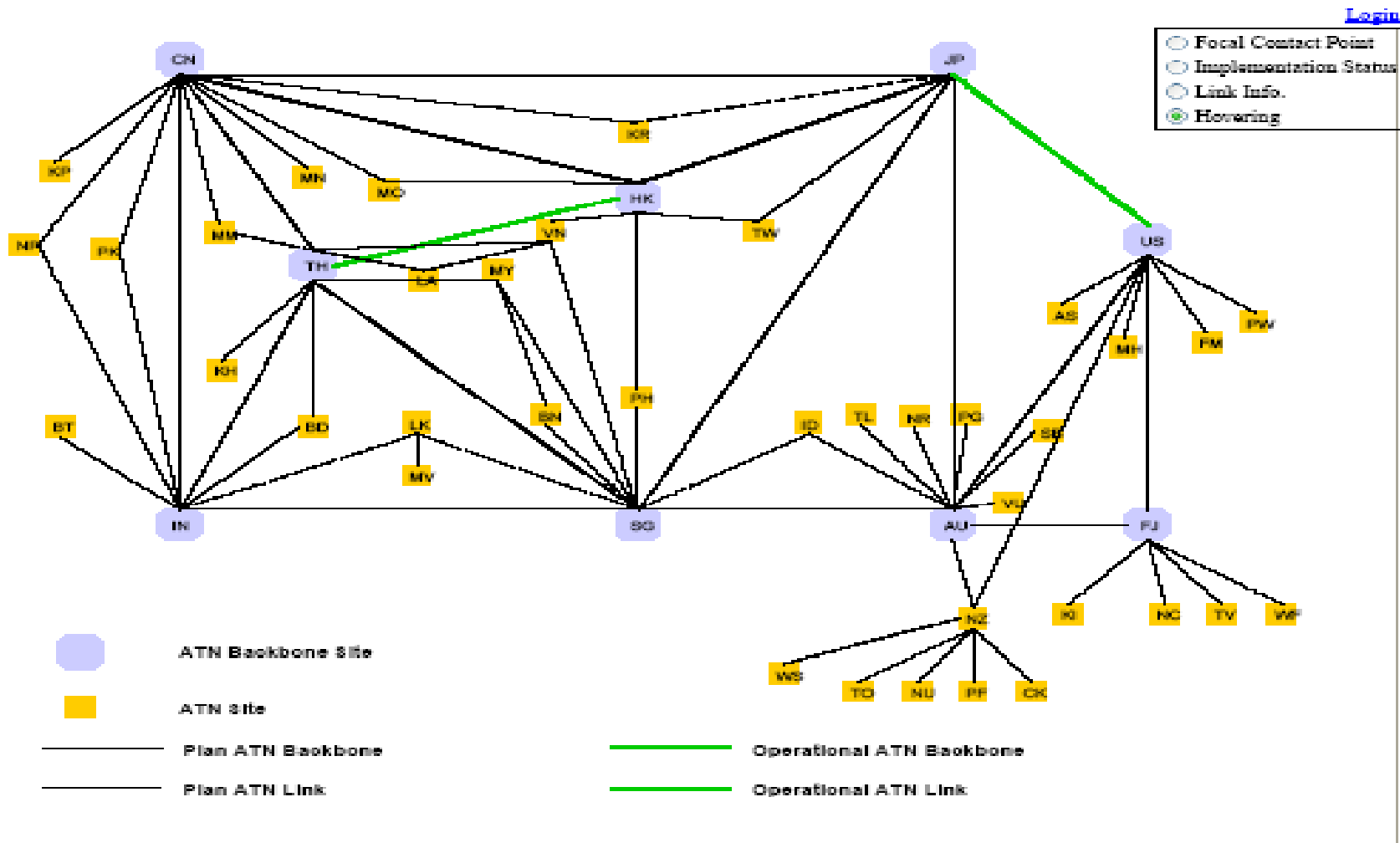
BASIC ANP Doc 9673 Volume I

- ❖ ATN Transition Plan envisages increased Bandwidth and upgraded protocols for trunk circuits
- ❖ ATN development to be in evolutionary and cost effective manner
- ❖ ATN infrastructure expected to be implemented in three phases:
 - ❖ *Phase I:* Upgrade existing AFTN circuits where necessary to support introduction of the ATN Backbone Boundary Intermediate Systems (BBIS)
 - ❖ *Phase II:* Implementation of ATN regional BBIS
 - ❖ *Phase III:* Implementation of supporting ATN BIS
- ❖ States should consider establishing gateways, where required to allow inter-operation between AFTN and ATH MHS

DOCUMENTATION (Contd.)

- Structure of Asia Pacific ATN Network is provided on the ICAO Asia Pacific Website and can be accessed on the website
http://www.icao.or.th/apac_projects/atn/chart/atn_chart.asp
- Backbone of the network contains 9 Backbone Boundary Intermediate System (BBIS) hubs located in Thailand, Japan, China, Australia, USA, Fiji, Singapore, Hong Kong and India.
- Boundary Intermediate Systems (BIS) are connected to one or more BBIS hubs.

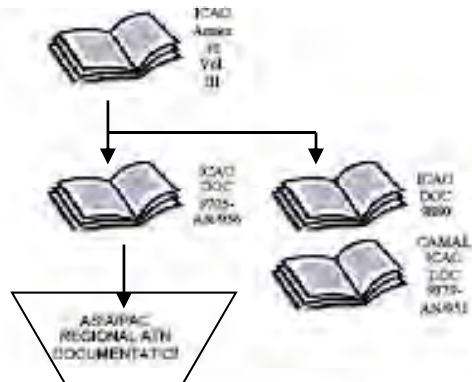
ASIA/PACIFIC ATN NETWORK



GUIDANCE

- A set of 25 ATN related documents has been developed over a decade to provide guidance to the user agencies.
- To facilitate quick access to these documents through ICAO Asia Pacific Website, these documents have been classified into categories Apex Level documents like ICAO Annex 10, Volume III etc, Regional Planning Documents, Policy and Service Definition, Interface Control Documents, Implementation Documents and Reference Documents.
- Third edition of ATN Documentation Tree was finalized by the ATNTTF/7 and adopted by APANPIRG/16 for publication.
- Documents have been periodically updated to keep them current

DOCUMENTATION TREE



Regional Planning Documents	Basic AN/956 ATN Route	ATN-ICD Transition Plan	Implementation Checklist	ICD Document	System Management	Regional ATN Strategy		
Policy & Service Definition	Routing Area	ICD Routing Policy	NSAF Addressing Plan	ICA Routing Policy	AMIS Naming Plan	Directory Service	SM Policy	System Integrity Policy
Interface Control Documents (ICD)	ICD Resource ICD	SN ICD ICD/ICD/ICD	AMIS-ICD					
Implementation Documents	ATN/NSAF Implementation Plan	AMIS Address Registration Plan	AMIS Continuity Testing		SM Operational Procedures	Verification Checklist	Sample Authorizations	
Reference Documents	Route Description	AMIS Description		Guidance Material for ATN Database				



AMHS MANUAL

The background of the slide features a close-up, slightly blurred image of network cables and connectors. A prominent grey Ethernet RJ45 connector is in the foreground, with a red Ethernet cable plugged into it. Other cables in yellow and orange are visible in the background, creating a sense of a networked environment.

- Asia/Pacific the Guidance Document for AMHS Conformance Testing (AMHS Manual) current edition (Version 3.0) was published in September 2009
- AMHS Manual is the baseline document which provides information on the:
 - Introduction to the system
 - Asia and Pacific AMHS Requirements
 - System implementation – guidelines for system
 - Test and Validation of the systems

AMHS MANUAL (Contd.)

- Following Annexes are also included in the document
 - Annex A: Guidelines on Quality of Service (QoS)
 - Annex B: AMHS Conformance Tests
 - Annex C: ATN Router
 - Annex D: AMHS Testing Requirements
 - Annex E: AMHS Inter-Operability Tests
 - Annex F: AMHS Pre-Operational Tests

REGIONAL STRATEGY

- In order to provide directions to the States on the matters relating to the implementation of Aeronautical Telecommunication Network (ATN) in the region and to ensure uniform and harmonious deployment, APANPIRG adopted a Regional Strategy in its Sixteenth Meeting held in Bangkok from 22 to 26 August, 2005.
- APANPIRG/17 held in Bangkok from 21 to 25 August revised this Strategy and included the provision of dual stack (OSI and IPS) ATN for the region.
- Strategy is being reviewed to consider the developments that are taking place currently and latest Strategy is available on the website
http://www.icao.or.th/edocs/cns/strategy_atn_implementation.pdf