AERONAUTICAL TELECOMMUNICATIONS NETWORK PANEL

ATN Internet Working Group (WG2)

10th Meeting

7th - 15th October 1996

Alexandria, USA

Report of the Guidance Material Drafting Group Meeting

(Presented By Brian Cardwell)

Summary

This paper provides a brief report of the Guidanve Material Drafting Group Meeting held in London 03-04 September 1996.

1 Background.

1.1 A short Drafting Group meeting was held in CAA House from 03 to 04 September to consider what progress could be made on the Guidance Material.

1.2 Attendees:

Akhil Sharma	NATS
Tony Whyman	EUROCONTROL
Forrest Colliver	France
Andreas Herber	DFS
Brian Cardwell	NATS

1.3 The meeting worked from Version 1.3 of the Guidance Material and the papers submitted to the meeting, listed below:

1.4 Comments on Version 1.3 of the ATN Internet SARPs Guidance Material, DED1/ATNIP/STA-ATNP/DCO/67, Tony Whyman

1.5 Proposed Guidance Material on the Use of the ISH PDU during Route Initiation, DED/ATNIP/STA-ATNP/DCO/69, Tony Whyman

1.6 Proposed Guidance Material on Routing Policy, DED1/ATNIP/STA-ATNP/DCO/xx, Akhil Sharma

1.7 Where expected submissions were not received, there was no option but to remove the section headings from the Guidance Material.

1.8 The objective was to produce a structured document from the text available that could be published in an ICAO Blue Cover.

2 Progress.

2.1 A new structure for the Guidance Material was developed, listed below, in order to present a general introduction to the ATN Internet with more detailed information on particular subjects in later chapters. The purpose was to allow a non-technical reader to get an overview of the ATN, its purpose and benefits in a single chapter rather than having to read the introduction of each of the existing chapters. It was mainly a restructuring task, making use of existing material and putting it in more suitable locations.

2.2 With an agreed structure in place, the re-editing was allotted to those present. Tony Whyman agreed to collate the new chapters into a document with a common format.

2.3 Actions.

1.	Chapter 2	Forrest Colliver	By 16/09
2.	Chapters 3 & 8	Andreas Herber	By 16/09
3.	Chapters 4 & 5	Tony Whyman	By 16/09
4.	Chapter 6	Brian Cardwell	By 16/09
5.	Chapter 7	Akhil Sharma	By 16/09
6.	Document Collation and Issue	Tony Whyman	18-19/09

2.4 The document submissions to Tony Whyman must be completed on time to allow the final document to be circulated with two weeks for review before the Washington WG2 Meeting.

4. New Structure.

The low level headings in some of the sections below may indicate section contents rather than sub-sections.

1 Introduction.
2 ATN Concept.
- 2.1 Purpose of the ATN
- 2.2 Technical Benefits
  - 2.2.1 Use of existing Infrastructure
  - 2.2.2 Availability - Dynamic Configuration, No Single Points of Failure
  - 2.2.3 Support for Mobility
  - 2.2.4 End to end Resource Management - Priority, Congestion Management
  - 2.2.5 Scaleability - Adressing, Routing
  - 2.2.6 Policy Routing based on traffic categories
- 2.3 Construction of the ATN Internet
  - 2.3.1 Availability, Use of existing Infrastructure
- 2.4 Users' View of the ATN
  - 2.4.1 The high level architecture
- 2.5 Technical overview of the ATN
  - 2.5.1 Protocol architecture
  - 2.5.2 Confederations
  - 2.5.3 Policy based routing
  - 2.5.4 Mobility
  - 2.5.5 Congestion Management
  - 2.5.6 Addressing

3 ATN Adressing
4 ATN Protocols
- 4.1 Introduction
- 4.2 Transport
- 4.3 CLNP
- 4.4 Routing Protocols
- 4.5 SNDCF
  - 4.5.1 General
  - 4.5.2 Mobile

5 ATN Routing
- 5.1 Introduction
- 5.2 Background to IDRP
- 5.3 Choice of IDRP
- 5.4 IDRP Overview
- 5.5 ATN Security Path Attribute
- 5.6 BIS - BIS protocol
- 5.7 The Route decision process
- 5.8 Relationship to Intra Domain Routing
- 5.9 Route Selection/Aggregation/Information reduction
- 5.10 Use of IDRP for air/ground datalinks
- 5.11 Route Initiation
- 5.12 Support for Mobile Systems
- 5.13 Routing Policy Example

6 Congestion Management

7 Use of Internet Service
8 Use of Sub-networks
- 8.1 General
  - 8.1.1 Priority
  - 8.1.2 Fast Select
  - 8.1.3 Join/Leave
  - 8.1.4 SNDCF
- 8.2 Air/Ground
  - 8.2.1 AMSS
  - 8.2.2 Mode-S
  - 8.2.3 VDL
- 8.3 Ground/Ground

from V1.3 section 8