AERONAUTICAL TELECOMMUNICATIONS NETWORK PANEL

ATN Internet Working Group (WG2)

Melbourne, Florida - 23rd - 27th January 1995

2nd Meeting

ATN Internet Working Group - Work Plan

(Presented By Akhil Sharma)

Summary

At the first meeting of the WG (October 1994)the WG agreed (based on proposals contained in WG2/WP-40) that in order to ensure that the draft ATN SARPs and Guidance Material are developed in a timely manner that it is essential to have a WG2 agreed work plan. The need for such a plan was documented as deliverable WG2-1 in the WG meeting report. This paper contains the first draft of the plan and is being presented to the WG for review and comment.

ATN Internet Working Group (WG 2) Work Plan

1.   Introduction

At the first meeting of the WG (October 1994)the WG agreed (based on proposals contained in WG2/WP-40) that in order to ensure that the draft ATN SARPs and Guidance Material are developed in a timely manner that it is essential to have a WG2 agreed work plan. The need for such a plan was documented as deliverable WG2-1 in the WG meeting report. This paper contains the first draft of the plan and is being presented to the WG for review and comment.

The Work Plan consists of the following major sections:

- Section 2 reproduces the terms of reference as agreed at the first meeting of the ATN Panel and endorsed by the first meeting of the WG.

- Section 3 defines the 'SARPs Development Process' as endorsed by the first meeting of the WG based on proposals contained in WG2/WP-2.

- Section 4 defines the key deliverables that the WG will produce for presentation to the second meeting of the ATN Panel (ATNP/2) in Q4 1996 based on the process agreed in the previous section.

- Section 5 defines the WG2 meeting schedule up to ATNP/2 based on the schedule agreed by the Working Group of the Whole.

- Section 6 defines the objectives of each of the WG2 meetings proposed in the above referenced schedule.

- Section 7 summarises the preceding sections by presenting a high level project plan.

2.   Definitions

2.1   ICAO ATN Manual 2nd Edition
This term is used to refer to the document that ICAO intends to publish in the near future based on SICASP/5 Recommendation 3/1. It will be the result of ICAO applying the changes agreed at SICASP/5 (SICASP/5-WP/55) to the draft September 1st 1993 version of the Manual text that was presented to SICASP/5 as SICASP/5-WP/7. It is understood that ICAO will make additional changes to these in order to make the material suitable for publication as an ICAO Manual. A draft version of the ICAO ATN Manual (2nd Edition) was presented to ATNP/1 as ATNP/1-WP/4.

2.2   ATN Manual Validation Copy (19 November 1993)
Recognizing that the ICAO machinery would take a considerable amount of time to publish the "ICAO ATN Manual (2nd Edition)" an ad-hoc group of experts created (during the SICASP/5 meeting) what is being termed the "ATN Manual Validation Copy (19th November 1993)". This was created by applying the SICASP/5 agreed changes (SICASP/5-WP/55) to the draft September 1st 1993 version of the Manual text that was presented to SICASP/5 as SICASP/5-WP/7. This validation copy has been the basis of ATN validation activities that are being conducted by various States and Organisations. ATNP/1 noted a number of differences between the 'Validation Copy' and ATNP/1-WP/4 and was informed that the ICAO Secratariat will resolve all differences.

2.3   Version n.m ATN SARPs & Guidance Material

Each version of draft SARPs and Guidance Material shall be explicitly referenced as 'n.m'. This term refers to the currently available version of the ATN SARPs and Guidance Material. Version 0.0 of the draft ATN SARPS and Guidance Material was presented to the first meeting of the WG.
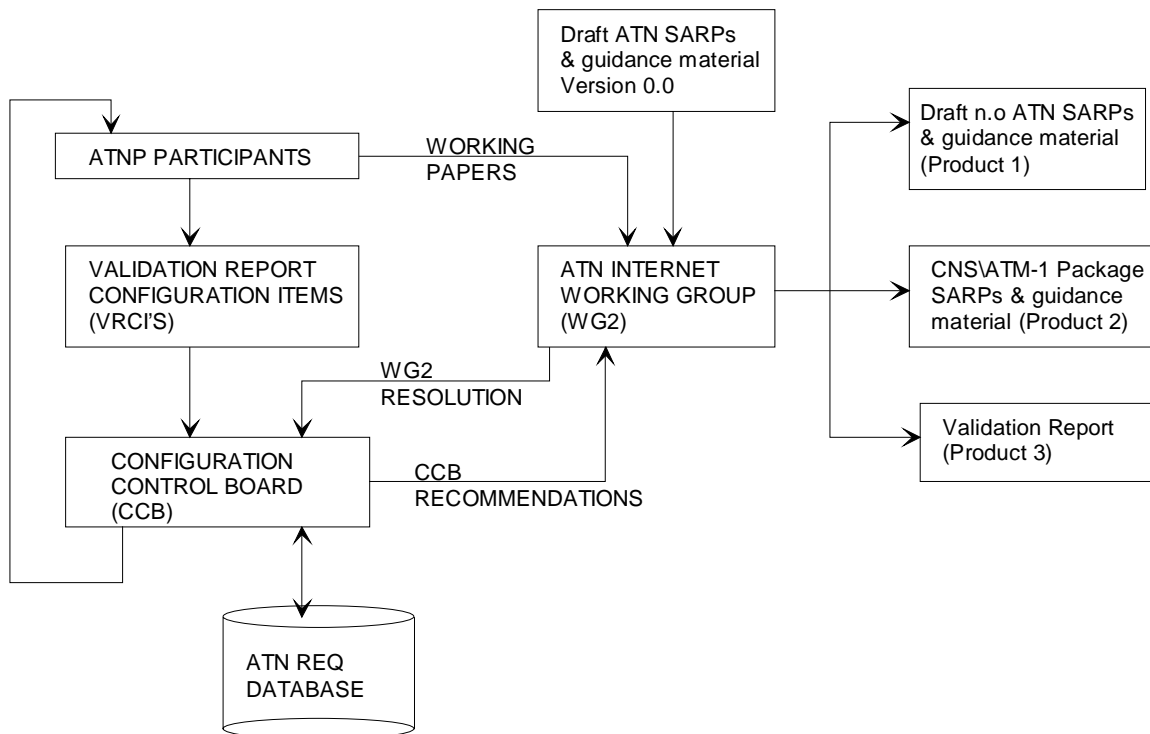
3.   Terms Of Reference

The first meeting of the ATN Panel developed the following terms of reference for WG2. These terems of reference were reviewed and reaffirmed by the first meeting of WG2.

7.3.3   ***ATN Internet Working Group***

7.3.3.1   The ATN Internet Working Group (WG/2) would conduct the following activities, in a manner consistent with the working strategy defined above:

> *a)   development of draft SARPs and guidance material for the ATN Internet (i.e. the network and transport layers of the ATN) to support both fixed and mobile aeronautical data communications;*

> *b)   development of draft SARPs and guidance material for the ATN Internet management features, including the definition of lower layers (up through transport) managed objects (already contained in the ATN Manual), within the framework of the systems management concepts defined by the Working Group 1;*

> *c)   development of draft SARPs and guidance material for the ATN Internet security features within the framework of the security concepts defined by the Working Group 1;*

> *d)   over-all assessment of the on-going activities supporting the validation of the ATN Manual, second edition (i.e. ATN Internet draft SARPs; and*

> *e)   development and validation of draft SARPs for encoding rules and data compression functions, where appropriate.*

4. Development Process for SARPs and Guidance Material

5. WG2 Deliverables to ATNP/2

Based on the proposals contained in WG2/WP2 (Report of the Ad-Hoc Validation Tools and Procedures) the first meeting of Working Group 2 agreed that the WG will develop three 'products' for presentation to ATNP/2, these being:

Deliverable Reference	Deliverable
Product 1	Draft n.0 ATN SARPs & Guidance Material
Product 2	CNS/ATM-1 (internet) SARPs & Guidance Material
Product 3	ATN SARPs & Guidance Validation Report

6. WG2 Meeting Schedule

The second meeting of the ATN Panel is scheduled to take place in the last quarter of 1996. The October '94 Working Group of the Whole meeting agreed that WGs 1,2 & 3 should meet in March 1995, October 1995, February 1996 and June 1996. The first WG2 meeting identified the need to hold an additional meeting in January 1995 and given the amount of time between the March '95 and October '95 meetings it is proposed that an additional WG2 meeting be scheduled for June 1995.

Given the above, and based on the understanding that ATNP/2 is scheduled for 4th Qtr '96 the WG2 meeting schedule is as follows:

First Meeting	October 1994	USA
Second Meetinig	January 1995	USA
Third Meeting	March 1995	France
Fourth Meeting	June 1995	TBD
Fifth Meeting	October 1995	Canada
Sixth Meeting	February 1996	Jamaica
Seventh Meeting	June 1996	Germany

7.   Key Meeting Objectives, Deliverables & Milestones

7.1	**Second Meeting (January 1995)**	
Inputs	- Draft WG2 Work Plan - Proposals for CNS/ATM-1 Internet Architecture & Protocol Requirements - Proposed Outline for CNS/ATM-1 Package SARPs and Guidance Material - Initial proposal for CNS/ATM-1 Systems Management SARPs and Guidance Material - CCB Recommendations - Proposed structure for ATN Operation Concept - Proposed structure for Validation Report	
Objectives	- To review and agree changes to proposed Work Plan where necessary. - To agree on the CNS/ATM-1 Package Internet Requirements - To agree on the structure for the CNS/ATM-1 Package SARPs - To review initial proposals for CNS/ATM-1 Systems Management SARPs and Guidance Material - To review CCB Recommendations - To Agree on the structure of the ATN Network Operating Concept - To initiate identification of network performance/stability issues that require high level definition of Operational Requirements. (Refer to WG1/1 report, ref. para. 6.1) - To review development of ATN Requirements Database - To agree on the structure of the Validation Report - To agree on criteria to declare CNS/ATM-1 Package SARPs validated.	
Outputs	- Agreed changes to Work Plan - Agreed Internet Architecture and Protocol Requirements for CNS/ATM-1 Package - Agreed structure for CNS/ATM-1 Package SARPs - Agreed comments on initial proposals for CNS/ATM-1 Systems Management SARPs and Guidance Material - Resolution of CCB Recommendations - Agreed changes to baseline SARPs & Guidance Material - Agreed structure for ATN Network Operating Concept - Agreed structure for Validation Report	

7.2	Third Meeting (March 1995)	
Inputs	- Revised WG2 Work Plan - Proposals for draft CNS/ATM-1 Package Internet SARPSs & Guidance Material - Proposals for draft CNS/ATM-1 Package Systems Management SARPs & Guidance Material - CCB Recommendations - Initial proposal for ATN Operation Concept (including Reviewed ATN User Requirements) - Comments on VDL Assumptions (ATNP/1-WP/59) - CNS/ATM-1 Package application requirements (from WG3-refer to WG1/1 report, para. 4.6) - Performance/Stability issues/end-end performance req. (Refer to WG1/1 report, ref. para. 6.1) - Systems Management Concept (Package 1) (WG1-07) - QoS/Security Concept (Package 1) (WG1-10) - Initial draft Validation Report	
Objectives	- To review and agree changes to proposed Work Plan where necessary. - To review proposed CNS/ATM-1 Package internet SARPs and Guidance Material. - To review proposals for CNS/ATM-1 Systems Management SARPs and Guidance Material - To review CCB Recommendations - To review proposed Network Operating Concept - To review and agree comments on VDL assumptions (ATNP/1-WP/59) - To review CNS/ATM-1 Package application requirements (from WG3- refer to WG1/1 report, para. 4.6) and initiate VRCIs, where appropriate. - To review Performance/Stability issues/end-end performance req. (Refer to WG1/1 report, ref. para. 6.1) - To review Systems Management Concept (Package 1) (WG1-07) and initiate VRCIs, where appropriate. - To review QoS/Security Concept (Package 1) (WG1-10) and initiate VRCIs, where appropriate. - To review initial draft Validation Report	
Outputs	- Agreed changes to Work Plan - Agreed comments on CNS/ATM-1 Package draft SARPs & Guidance Material - Agreed comments on CNS/ATM-1 Systems Management draft SARPs and Guidance Material - Resolution of CCB Recommendations - Agreed changes to baseline SARPs & Guidance Material - Agreed comments on proposed Network Operating Concept - Agreed comments VDL assumptions (ATNP/1-WP/59) - Initiation of appropriate VRCIs - Agreed changes to initial draft Validation Report	

7.3	Fourth Meeting (June 1995)	
Inputs	• Revised WG2 Work Plan • Final proposals for draft CNS/ATM-1 Package Internet SARPSs & Guidance Material • Final proposals for draft CNS/ATM-1 Package Systems Management SARPs & Guidance Material • CCB Recommendations • Final proposal for ATN Operation Concept (including Reviewed ATN User Requirements) • Draft Validation Report	
Objectives	• To review and agree changes to proposed Work Plan where necessary. • To review final proposals for the CNS/ATM-1 Package internet SARPs and Guidance Material. • To review final proposals for the CNS/ATM-1 Systems Management SARPs and Guidance Material • To review CCB Recommendations • To review final proposed Network Operating Concept • To review draft Validation Report	
Outputs	• Agreed changes to Work Plan • Agreed comments on CNS/ATM-1 Package draft SARPs & Guidance Material • Agreed comments on CNS/ATM-1 Systems Management draft SARPs and Guidance Material • Resolution of CCB Recommendations • Agreed changes to baseline SARPs & Guidance Material • Agreed comments on proposed Network Operating Concept • Initiation of appropriate VRCIs • Agreed comments on draft validation report	

7.4	**Fifth Meeting (October 1995)**	
	Notes: *1. This meeting should result in a mature set of CNS/ATM-1 SARPs and Guidance for the internet and Systems Management. Additionally, the Network Operating Concept should be mature. Consequently these three inputs should be merged into one document, titled "CNS/ATM-1 Package SARPs" (i.e. Product 2).*	
Inputs	• Revised WG2 Work Plan • Final draft CNS/ATM-1 Package Internet SARPSs & Guidance Material • Final draft CNS/ATM-1 Package Systems Management SARPs & Guidance Material • CCB Recommendations • Final draft ATN Operation Concept (including Reviewed ATN User Requirements) • Draft Validation Report • End-to-End Performance Requirements (WG1-12)	
Objectives	• To review and agree changes to proposed Work Plan where necessary. • To review final draft CNS/ATM-1 Package internet SARPs and Guidance Material. • To review final draft CNS/ATM-1 Systems Management SARPs and Guidance Material • To review final draft network operating concept • To review CCB Recommendations • To review draft Validation Report • To review WG1 deliverable WG1-12 and initiate VRCIs, where appropriate.	
Outputs	• Agreed changes to Work Plan • Agreed comments on CNS/ATM-1 Package draft SARPs & Guidance Material • Agreed comments on CNS/ATM-1 Systems Management draft SARPs and Guidance Material • Resolution of CCB Recommendations • Agreed changes to baseline SARPs & Guidance Material • Agreed comments on proposed Network Operating Concept • Initiation of appropriate VRCIs • Agreed changes to draft Validation Report	

7.5	**Sixth Meeting (February 1996)**	
	Notes: *1. This shall be the last meeting at which any major technical changes may be submitted to the WG.* *2. The majority of the results from validation activities should be made available to this meeting.* *3. The results of this meeting i.e. drafts of Products 1, 2 & 3 shall be sent to ICAO in order to prepare for ATNP/2.*	
Inputs	• Revised WG2 Work Plan • Final draft CNS/ATM-1 Package SARPSs & Guidance Material • CCB Recommendations	
Objectives	• To review and agree changes to proposed Work Plan where necessary. • To review final draft CNS/ATM-1 Package internet SARPs and Guidance Material. • To review final draft CNS/ATM-1 Systems Management SARPs and Guidance Material • To review CCB Recommendations • To review final draft Network Operating Concept • To develop WG2 related portion of Agenda for ATNP/2	
Outputs	• Agreed changes to Work Plan • Agreed comments on CNS/ATM-1 Package draft SARPs & Guidance Material • Resolution of CCB Recommendations • Agreed changes to baseline SARPs & Guidance Material • Initiation of appropriate VRCIs	

7.6	**Seventh Meeting (June 1996)** *Notes:* *1. The CCB shall cease to exist after this meeting.* *2.Any validation results to be made available to ATNP/2 must be made available to this meeting.* *3. The results of this meeting i.e. drafts of Products 1, 2 & 3 shall be sent to ICAO in order to prepare for ATNP/2.*	
Inputs	• Final Draft n.0 ATN SARPs & Guidance Material • Final draft CNS/ATM-1 Package SARPSs & Guidance Material • CCB Recommendations • Final draft Validation Report	
Objectives	• To review draft n.0 ATN SARPs & Guidance Material • To review (editorial) final draft CNS/ATM-1 Package SARPs and Guidance Material. • To review CCB (editorial) Recommendations • To review final draft Validation Report	
Outputs	• Agreed draft n.0 ATN SARPs & Guidance Material (Product 1) • Agreed CNS/ATM-1 Package draft SARPs & Guidance Material (Product 2) • Agreed Validation Report (Product 3)	

8.   Project Plan

See Attachment 1

9.   Proposal

The WG is invited to:

a.   Review and comment on the proposed Work Plan;
b.   Endorse its use as the basis for planning future WG2 activities.