AERONAUTICAL TELECOMMUNICATION NETWORK PANEL

Working Group 2

Brisbane 5-9 February 1996

WG 2 Configuration Control Board Activity in Support of CNS-ATM-1 Internet SARPS

edited by the WG2 CCB Chair

Presented by: Ron Cossa

SUMMARY

This document contains a description of recent CCB activities is support of issuance of the CNS/ATM-1 Package SARPs version 3.1 of Sub-Volume 5 - Internet Communications Service. A review of Defect Report and Change Proposal acceptance, outstanding items and additional review to be accomplished is included.

REVISION HISTORY

Section	Date	Issue	Reason for Change
	18 January 1995	Issue 1.0	Document Creation

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Report of Working Group Configuration Control Board Activity In Support of Issuance of CNS-ATM-1 Internet SARPs

1.   Scope and Purpose of this Paper

This document presents the results of the collaborative evaluation efforts of the WG2 Configuration Control Board in the resolution of outstanding Defect Reports and Change Proposals. Based upon the accomplishments of the CCB outlined herein, Version 3.1 of the Internet SARPs was issued on schedule for review by WG2 members.

This document also proposes resolution of those DRs and CPs currently in the SUBMITTED status.

2.   CCB Activity

2.1   DEFECT REPORT CURRENT STATUS

2.1.1   ACCEPTED DRs

Based on majority decisions of CCB member evaluations, the following Defect Reports changed in status from **SUBMITTED** to **ACCEPTED**:

95110053.DR - IDRP Persistent False Routes 95110054.DR - Authentication of Join Event
95110054.DR - Authentication of Join Event
95110055.DR - Multiple Concurrent Adjacencies 95110056.DR - Routing Policy
95110056.DR - Routing Policy
95110057.DR - Route Initiation APRL Problems 95110058.DR - ISH PDU Priority
95110058.DR - ISH PDU Priority
95110059.DR - Priority Architecture
95110060.DR - ISO 8208 Diagnostic Codes 95110061.DR - Call Rejection/Mobile SNDCF Problems
95110062.DR - Ch. 2 Editorial Changes
95110063.DR - Mapping of BIS PDUs onto CLNP 95110065.DR - MD4 Ambiguity
95110065.DR - MD4 Ambiguity
95110067.DR - TP Security Label Changes

2.1.2   REJECTED DRs

Based on CCB member conclusions, the following two DRs will change in status from SUBMITTED to **REJECTED**:

95110064.DR - BISPDUs/CLNP Mapping - Submitted DR is a duplicate of 95110063.DR.
95110066.DR - Security Concept - Security requirements specified in Chs. 5 & 6. No specific defects indicated in DR.

2.1.3 SUBMITTED DRs

The following DRs are currently in **SUBMITTED** status:

95110068.DR - Address Field Name Change (Routing Domain Selector) in Chapter 4, Figure 4-1.
95120069.DR - Route Merging Problem (ref. WP168)
95120070.DR - Mapping of Communications Priorities

2.2　PROPOSED STATUS FOR SUBMITTED DRs

Based upon review of the contents of the SUBMITTED DRs as presented in Appendix A, the following revised status is recommended:

95110068.DR

This DR proposes that in Chapter 4, Network and Transport Addressing Specification, Figure 4-1 (page 4-3), the address field group named "Routing Domain Identifier" (VER+ADM+RDF+ARS) should be called "Routing Domain Selector", since RDI has a different definition in ISO 10747 (see ISO/IEC 10747:1993 section 5-10).

To avoid confusion by implementers, it is recommended that that the RFI title be changed to RDF as proposed for Figure 4-1.

95110069.DR

This DR deals with the problem with the Route Merging specification consequent on change proposal in WG2/WP168 "Persistent False Routes" Problem. A paper describing these problems titled "***Route Merging Problem found during TAR/D Testing***", containing proposed changes to 8.3.1.6.2 of the SARPS, has been circulated for review and comments on the technical list.

It is proposed that this paper be reviewed and discussed by WG2 and an appropriated Group decision obtained.

95110070.DR

This DR proposes that Table 10-1 in Chapter 10 of the SARPS should be modified to reflect two modes (types) of VDL and the proper assignment of priorities**.**

It is proposed that the changes to Table 10-1, reflecting two modes (types) of VDL and the proper assignment of priorities, be accepted assubmitted.

2.3   *CHANGE PROPOSAL CURRENT STATUS*

2.3.1   ACCEPTED CPs

Based on majority decisions of CCB member evaluations, the following Change Proposals changed in status from **SUBMITTED** to **ACCEPTED**:

95110017.CP - Persistent False Routes
95110018.CP - Call Rejection Mobile SNDCF Problems
95110019.CP - Interpretation of ISO 8208 diagnostic Codes
95110020.CP - ISH PDU Priority
95110021.CP - Route Initiation APRL Problems
95110022.CP - Routing Policy
95110023.CP - Multiple Concurrent Adjacencies
95110024.CP - Authentication of Join Event
95110025.CP - MD4 Ambiguity
95110026.CP - Ch. 2 replacement Text
95001127.CP - Security Function
95110028.CP - T4F30
95110029.CP - End System APRLs
95110030.CP - iSecu
95110031.CP - Intermediate System APRLs

2.3.2   SUBMITTED CPs

The following CPs are currently in the **SUBMITTED** status:

95110032.CP - IDRP APRLs (SECP, LQOSR)
95120033.CP - Mapping of Communications Priorities

2.4   *PROPOSED STATUS FOR SUBMITTED CPs*

Based upon review of the contents of the SUBMITTED CPs as presented in Appendix B, the following revised status is recommended:

95110032.CP

This CP indicates that the correction originally proposed concerning SECP in 95010039.DR has already been made in Version 3.0 of the SARPs (ISO status is "O"). It also recommends that, in section 8.3.3.1.13, the ISO Status should be changed from "O" to "M".

This CP should be changed to ACCEPTED with incorporation of the change in section 8.3.3.1.13.

95120033.CP

As indicated in Section 2.2 of this document relating to 95120070.DR, it is proposed that the changes to
Table 10-1, reflecting two modes (types) of VDL and the proper assignment of priorities, be accepted as
indicated in the revised Table 10-1 as presented in this CP.

APPENDIX A - SUBMITTED DRs

A.1   95120068.DR

Title   : Routing Domain Selector in NSAP figure
Defect Report Reference   : 95120068.DR
Status   : **SUBMITTED**
Defect Report Revision Date   : 04/12/95
Defect Report Format Revision Date: 20 January 1995
Defect Report Submission Date : 04/12/95
Submitting State/Organization: Eurocontrol
Submitting Author Name: Jean-Pierre Briand
Submitting Author E-mail Address: bri@eurocontrol.fr
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Tel: +33 1 69 88 76 19
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ATN SARPs & Guidance Material Draft Version: 3.0
SARPs/GM Document Reference: Chapter 4, Figure 4-1, (page A7-3 !!!)
Category: EDITORIAL

Summary of Defect:

In figure 4-1, the address field group named "Routing Domain Identifier"
(VER+ADM+RDF+ARS) should be called "Routing Domain Selector", since RDI has
a different definition in ISO 10747.

Discussion:
Related Requirements:
CCB Decision Date:
CCB Recommended Action:

A.2 95120069.DR

Title: Route Merging Problem
Defect Report Reference: 95120069.DR
Status: SUBMITTED
Defect Report Revision Date: 22/12/95
Defect Report Format Revision Date: 20 January 1995
Defect Report Submission Date: 22/12/95
Submitting State/Organization: Eurocontrol/MWA
Submitting Author Name: Tony Whyman
Submitting Author E-mail Address: whyman@mwassocs.demon.co.uk
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ATN SARPs & Guidance Material Draft Version: 3.0
SARPs/GM Document Reference: Section 8.3.1.6.3, Page 8-6
Category: MAJOR

Summary of Defect:

Problem with Route Merging specification consequent on change proposal in
WG2/WP168 "Persistent
False Routes" Problem. See attached paper for details.

Discussion:

This paper has already been circulated for comments on the technical list
and is now being formally submitted as a defect report.

Related Requirements:
CCB Decision Date:
CCB Recommended Action:

A.3   95120070.DR

Title: Mapping of Communications Priorities in the ATN
Defect Report Reference: 95120070.DR
Status: SUBMITTED
Defect Report Revision Date: 26/12/95
Defect Report Format Revision Date:
Defect Report Submission Date: 26/12/95
Submitting State/Organization: U.S.
Submitting Author Name: Hung, B.
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MITRE Corp., 7525 Colshire Dr., MS W309, McLean, VA 22102, USA;
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ATN SARPs & Guidance Material Draft Version: Version 3.0
SARPs/GM Document Reference:
Draft GM Table 10-1: Mapping of Communications Priorities in the ATN
Category: Minor

Summary of Defect:

Table 10-1: Mapping of Communication Priorities in the ATN in the draft GM incorrectly defines the
mapping of priorities for the VDL subnetwork.

Discussion:

Table 10-1 in the draft GM defines the mapping of priorities between ATN and its subnetworks. One of
these subnetworks is the VDL subnetwork. There are two major defects regarding the VDL subnetwork.
The first defect is there is more than one type of VDL subnetwork for
the ATN instead of just one type. The second defect is the incorrect assignment of priorities in the VDL
subnetwork. The AMCP is developing standards for two types of VDL subnetwork for the ATN.
Working Group C (WG-C) has essentially completed the development of draft VDL SARPs and GM for
Carrier Sense Multiple Access (CSMA) mode. This CSMA mode is also known as mode 2. This WG
is currently validating the VDL mode 2 draft SARPs. Working Group D (WG-D) is developing the draft
VDL SARPs and GM for Time Division Multiple Access (TDMA) mode. This TDMA mode is also
known as mode 3. The mode 2 VDL does not support priority service; all data messages are treated with
the same priority. Also, certain categories of messages are precluded by ITU regulations. The mode 3
VDL supports priority service. The number of levels of priorities is to be determined (TBD). Similar to
mode 2 VDL, mode 3 VDL is precluded from servicing certain categories of messages due to the ITU
regulations.

Given the above, Table 10-1 should be modified to reflect two modes (types) of VDL and the proper
assignment of priorities.

Related Requirements:
CCB Decision Date:
CCB Recommended Action:

APPENDIX B - SUBMITTED CPs

B.1   95110032.CP

Title: IDRP APRLs (SECP, LQOSR)
Change Proposal Reference: 95110032.CP
Status: SUBMITTED
DR or CR Reference: 95010039.DR
Change Proposal Revision Date   : 27/11/95
Change proposal Format Revision Date: 20 January 1995
Change Proposal Submission Date : 27/11/95
Submitting State/Organization: France (STNA)
Submitting Author Name: Ricci Christine
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ATN SARPs & GM Draft Version: Draft 3.0
SARPs & GM Document Reference: Sections 8.3.3.1.12, 8.3.3.1.13

Summary of Proposal   :

In section 8.3.3.1.12, the correction concerning SECP has already been
made in Version 3.0 of the SARPs (ISO Status is 'O').

In section 8.3.3.1.13, the ISO Status concerning LQOSR should be
changed from 'O' to 'M'.

Discussion   :
Impact on Requirements   :
CCB Decision Date   :
CCB Recommended Action   :

B.2   95120033.CP

Title: Mapping of Communications Priorities in the ATN
Change Proposal Reference: 95120033.CP
Defect Report or Change Request Reference: 95120070.DR
Status: SUBMITTED
Change Proposal Revision Date: 26/12/95
Change Proposal Format Revision Date: 20 January 1995
Change Proposal Submission Date : 26/12/95
Submitting State/Organization: U.S.
Submitting Author Name: Hung, B.
Submitting Author E-mail Address: bhung@mitre.org
Submitting Author Supplemental Contact Information:
MITRE Corp., 7525 Colshire Dr., MS W309, McLean, VA 22012; Tel.
703-883-7783; FAX 703-883-1251.
ATN SARPs & Guidance Material Draft Version: Version 3.0
SARPs/GM Document Reference: Draft GM Table 10-1: Mapping of
 Communication Priorities in the ATN.

Summary of Proposal:

This CP proposes to modify Table 10-1: Mapping of Communication Priorities in the ATN in the draft
GM because the mapping of priorities for VDL the subnetwork is incorrect.

Discussion:

 Table 10-1 in the draft GM defines the mapping of priorities between ATN and its subnetworks. One of
these subnetworks is the VDL subnetwork. There are two major defects regarding the VDL subnetwork.
 The first defect is there is more than one type of VDL subnetwork for the ATN instead of just one type.
The second defect is the incorrect assignment of priorities in the VDL subnetwork.

The AMCP is developing standards for two types of VDL subnetwork for the ATN. Working Group C
(WG-C) has essentially completed the development of draft VDL SARPs and GM for Carrier Sense
Multiple Access (CSMA) mode. This CSMA mode is also known as mode 2. This WG is currently
validating the VDL mode 2 draft SARPs. Working Group D (WG-D) is developing the draft VDL SARPs
and GM for Time Division Multiple Access (TDMA) mode. This TDMA mode is also known as mode 3.

The mode 2 VDL does not support priority service; all data messages are treated with the same priority.
Also, certain categories of messages are precluded by ITU regulations.

The mode 3 VDL supports priority service. The number of levels of priorities is to be determined (TBD).
Similar to mode 2 VDL, mode 3 VDL is precluded from servicing certain categories of messages due to
the ITU regulations.

Given the above, Table 10-1 should be modified to reflect two modes (types) of VDL and the proper
assignment of priorities. The proposed modified Table 10-1 is given in the attached Word file.

Impact on Requirements:
CCB Decision Date:
CCB Recommended Action:

B.3   Table 10-1

Table 10-1: Mapping of Communication Priorities in the ATN

Category of Messages	Corresponding Communication Protocol Priority					
	Subnetwork					
	SN UNITDATA	CIDIN	Mode S	AMSS	VDL	
					CSMA	TDMA
Network/Systems Management	14	TBD	HIGH	14	N/A	TBD
Distress Communications	13	TBD	HIGH	14	N/A	TBD
Urgent Communications	12	TBD	HIGH	14	N/A	TBD
Communications relating to Direction Finding	11	TBD	HIGH	11	N/A	TBD
Flight Safety Messages	10	TBD	HIGH	11	N/A	TBD
Meteorological Communications	9	TBD	LOW	8	N/A	TBD
Flight Regularity Communications	8	TBD	LOW	7	N/A	TBD
Aeronautical Information Service Messages	7	TBD	*	6	N/A	TBD
Network/Systems Administration	6	TBD	*	5	N/A	TBD
Aeronautical Administrative Messages	5	TBD	*	5	N/A	TBD
<unassigned>	4	TBD	*	5	*	*
Urgent Priority Administrative and U.N. Charter Communications	3	TBD	*	3	*	*
High Priority Administrative and State/Government Communications	2	TBD	*	2	*	*
Normal Priority Administrative	1	TBD	*	1	*	*
Low Priority Administrative	0	TBD	*	0	*	*

Note 1.⎯ The term "message(s)" in this table conforms to existing Annex 10 terminology. However, in the remainder of the Manual, the term "message" is used in the broadcast sense to all types communications traffic via the ATN.

Note 2.⎯ "" indicates due to legal frequency allocation reasons no traffic of this priority category can pass over this subnetwork. Note also that it is security, not priority protocol mechanisms that can be used to restrict traffic in this way.*

Note 3.⎯ TBD indicates these priority values are To Be Determined.

Note 4.⎯ N/A (Not Applicable) indicates priority is not supported; there is only one priority in this subnetwork and all messages have the same priority.