EUROCONTROL

AERONAUTICAL TELECOMMUNICATION NETWORK PANEL

WORKING GROUP 3 (APPLICATIONS AND UPPER LAYERS)
Honolulu, USA, 19 - 22 January 1999

SME 4 (ATN Upper Layers) Status Report

Presented by: Tony Kerr (Sub-Volume 4 SME)

SUMMARY
This paper provides a summary status of PDRs raised against the Sub-Volume 4 (Upper Layer Communications Service) ATN SARPs.
The Working Group is invited to approve this report.

1.   INTRODUCTION

The goal of this paper is to provide WG3 with the current status of the Proposed Defect Reports (PDRs) raised against Sub-Volume 4 (Upper Layer Communications Service) of the ATN SARPs.

2.   SUMMARY OF PDRS

The following table lists all PDRs raised against the ULCS SARPs (Sub-Volume 4) since their approval at the Phuket ATNP WGW/1 meeting.

The PDRs referenced in this WP are available on the CENA server by ftp.

PDR No.	Title	ASN.1 affected?	Status (CCB/6)	Comments
97060025	ULCS D-ABORT	n/a	REJECTED	
97060026	ULCS ACSE Abort	no	Adopted	Incl. in ICAO Doc. 9705
97060027	ULCS 1.1	no	Adopted	Incl. in ICAO Doc. 9705
97100030	ULCS ISO ULEFF Renumbering	no	Adopted	Incl. in ICAO Doc. 9705
97100031	ULCS Negative Session Response	no	Adopted	Incl. in ICAO Doc. 9705
97100035	ULCS CF State Table	no	Adopted	Incl. in ICAO Doc. 9705
97100041	ULCS D-Start Version Number	no	Adopted	Incl. in ICAO Doc. 9705
97110002	PER encodings should use full-encoding OCTET STRING choice	yes	REJECTED CCB/5	CAMAL text added
97120001	Naming of multiple AEs	no	FORWARDED CCB/5	See separate WP
98030007	CTS AE-Qualifier registration	no	REJECTED CCB/6	
98090007	New AE-Qualifier for METAR	no	Resolved	
98100006	Predicate missing in CF state table	no	Proposed	Attached
98100009	AARQ parameter support	no	Proposed	Attached
98100010	New AE-Qualifier for GACS AE	no	Resolved	

Statistics:

ADOPTED in 9705	6
RESOLVED in 9705/Amd 1	2
FORWARDED	1
ACCEPTED	0
REJECTED	3
PROPOSED	2
TOTAL	14

There are also some editorial PDRs which apply to multiple Sub-Volumes, including Sub-Volume 4. These are summarised in the following table:

PDR No.	Title	ASN.1 affected?	Status (CCB/6)	Comments
97060001 (part)	Corrections to ICAO V2.0 produced by ICAO secretariat (see also UL-DR 106)	no	Resolved	Incl. in ICAO V2.2
97110001 (part)	Corrections to ICAO V2.1 produced by ICAO secretariat	no	Resolved	Incl. in ICAO V2.2
98040005 (part)	Corrections to ICAO V2.2 produced by ICAO secretariat	no	Resolved	Incl. in ICAO V2.2 (Final)

3.   SUMMARY OF IMPACT ON SARPS

None of these PDR resolutions affect the ability of ULCS implementations to interwork. Thus, all versions of the ULCS SARPs produced since the Ninth meeting of WG3 in Phuket in March 1997 are compatible at the protocol level.

4.   CONCLUSION

The Working group is invited to note the information provided, in particular the fact that there are no compatibility problems to date since the ULCS SARPs were placed under configuration control in March 1997.

Title: Predicate missing in the CF state table

PDR Reference: 98100006

Originator Reference: PDR-ACI-ULS-980917

SARPs Document Reference: ULCS SARPS section 4.3.3

Status: PROPOSED

PDR Revision Date: 17/11/98 (ACCEPTED -> PROPOSED)

                                              26/10/98 (SUBMITTED -> ACCEPTED)

PDR Submission Date: 13/10/98

Submitting State/Organization: ACI

Submitting Author Name: Christophe ARNAUD / Shawn Stokes

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Submitting Author Supplemental

Contact Information:

SARPs Date: IV2.3

SARPs Language: English

Summary of Defect:

Table 4.3-4 of the ULCS indicates that, in the Release Pending State (STA3), and upon receipt of a P-DATA.ind conveying a RLRQ, the Control Function (CF) should generate a P-RELEASE indication to ACSE, and enter in the Release Collision State (STA4).

But there is two reasons why a CF may be in STA3:

* case 1: the DS-user issued a D-END.req (i.e. the CF is the Release Initiator)

* case 2: while in the Data-Transfer phase (STA2), a P-DATA.ind conveying a RLRQ was received (i.e. the CF is the Release Responder)

If the CF is the Release Initiator (case 1) then the action specified in table 4.3-4 is correct, and the CF should move to the Release Collision State (STA4) as specified.

Otherwise, i.e. if the CF is the Release Responder, the receipt of a second RLRQ from the remote ACSE entity should be treated as an error (the action in the table is no longer valid).

The p2 predicate is missing in one of the cells of table 4.3-4 that leads to the STA4 state.

Assigned SME: Sub-Volume IV SME (Tony Kerr)

Proposed SARPs amendment (proposal by originator):

1. Change in ULCS SARPs table 4.3-4

Event Source: P-DATA.ind(RLRQ)

State: STA3

Change cell from:

> STA4
>
> P-RELEASE ind

to:

> p2: STA4
>
> P-RELEASE ind

2. Change in ULCS SARPs section 4.3.3.6.5.2.2.2 from:

b) if in the RELEASE PENDING state, then invoke a P-RELEASE Indication primitive at the ACSE lower service boundary with the RLRQ as User Data, and enter the RELEASE COLLISION state;

to:

b) if in the RELEASE PENDING state, and the CF is the Release Initiator, then invoke a P-RELEASE Indication primitive at the ACSE lower service boundary with the RLRQ as User Data, and enter the RELEASE COLLISION state;

Impact on interoperability:

Without this amendment, in the unlikely event that a peer ACPM issued two consecutive RLRQ APDUs then this would not be detected by the CF, but the local ACPM should abort the association. With this amendment, then the CF will abort the association before the event is passed to the ACPM. There is therefore no impact on interoperability.

SME Recommendation to CCB:

Progress the PDR to RESOLVED, with the solution as proposed by the originator.

CCB Decision: PROPOSED (ccb chair, CCB-8 input)

Title:	AARQ parameter support
PDR Reference:	98100009
Originator Reference:	(email 15/10/98)
SARPs Document Reference:	ULCS SARPs Table 4.6-9
Status:	PROPOSED
PDR Revision Date:	17/11/98 (SUBMITTED -> PROPOSED)
PDR Submission Date:	28/10/98
Submitting State/Organization:	ATNP/WG3/SG2
Submitting Author Name:	Greg Saccone
Submitting Author E-mail Address:	gsaccone@home.com
Submitting Author Supplemental Contact Information:	Tel: (604) 681-5829
SARPs Date:	Doc 9705 ed 1
SARPs Language:	English

Summary of Defect:

Table 4.3-8 (D-START request primitive) specifies the Calling AP- and Calling AE-Invocation Identifiers as not used, but table 4.6-9 (Supported AARQ Parameters) shows them as optional for the sender

Table 4.6-9 does seem inconsistent, especially since the Called parameters are all X for sending. The Calling invocation ids should be X for sending.

Also, the calling AP title and calling AE qualifier should be M for sending, not O as currently specified, since support for Calling Peer ID is mandatory, even though it may not always be used in every instance of communication.

Assigned SME: Sub-Volume IV SME (Tony Kerr)

Proposed SARPs amendment:

In Table 4.6-9, in the column (Sender, ATN Support):

a) Change the entry for row 5 (Calling AP title) from O to M

b) Change the entry for row 6 (Calling AE qualifier) from O to M

c) Change the entry for row 7 (Calling AP invocation-identifier) from O to X

d) Change the entry for row 8 (Calling AE invocation-identifier) from O to X

Impact on interoperability:

There should be no impact on interoperability. A strict interpretation of Table 4.6-9 would have allowed a valid implementation to omit support for Calling AP title and calling AE

qualifier fields in AARQ APDUs.   However, this would then have been inconsistent with 4.3.3.3.2.2.1.e).

SME Recommendation to CCB:

Progress the PDR to RESOLVED, with the solution as proposed above.

CCB Decision: PROPOSED (ccb chair, CCB-8 input)