

ATNP/CCB WP/11-__

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AERONAUTICAL TELECOMMUNICATIONS NETWORK PANEL(ATNP)

CONFIGURATION CONTROL BOARD – 11TH MEETING

WG 3 - APPLICATIONS AND UPPER LAYERS – 18TH MEETING

Tokyo, 1st December – 3rd December 1999 (eighteenth meeting)

SME3 CCB Report

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Summary

This paper provides a summary status of PDRs raised against the Sub-Volume III SARPs since the Phuket WGW/1 meeting.

Table of contents

1.	INTRODUCTION	2
2.	SUMMARY OF ATSMHS PDRS	2
3.	SUMMARY OF AIDC PDRS.....	3
4.	RECOMMENDATION.....	4
5.	ATTACHMENT A : DETAILS OF SUB-VOLUME 3 PDRS	4

1. INTRODUCTION

The goal of this paper is to provide the CCB / Working Group / Subgroup with the current status of the Sub-Volume 3 PDRs.

2. SUMMARY OF ATSMHS PDRS

The following table lists all PDRs raised against the ATSMHS SARPs (Doc 9705, Sub-Volume 3, Chapter 1) since their approval at the Phuket ATNP WG/1 meeting.

Number	Name	Status (post CCB/9)	Comments
97060014	ATSMHS / use of implicit-conversion flag and EITS	RESOLVED	Included in Edition 1
97060015	ATSMHS / conversion of forwarded messages	RESOLVED	Included in Edition 1
97060016	ATSMHS / MHS priority and ATS-Message-Priority mismatch	RESOLVED	Included in Edition 1
97060017	ATSMHS / prohibited character check in converted AMHS messages	FORWARDED	to be addressed in Edition 2 of Guidance Material
97060018	ATSMHS / erroneous cross-references to Sub-Volume 5	RESOLVED	Included in Edition 1
97060019	ATSMHS / recommendation on report generation	RESOLVED	Included in Edition 1
97100040	ATSMHS / editorial corrections	RESOLVED	Included in Edition 2
98030005	ATSMHS / Year 2000 dependency	RESOLVED	Included in Edition 2

3. SUMMARY OF AIDC PDRs

The following table lists all PDRs raised against the AIDC SARPs (Doc 9705, Sub-Volume 3, Chapter 2) since their approval at the Phuket ATNP WG/1 meeting.

Number	Title	Status (post-CCB/9)	Comments
97060020	AIDC / Errors and inconsistencies in AIDC Abstract Definition	RESOLVED	Included in Edition 1
97060021	AIDC / Provision of the Called ICAO Facility Designation when Info-transfer-request is invoked outside a dialogue	RESOLVED	Included in Edition 1
97060022	AIDC / construction of the calling end-system AP-title	RESOLVED	Included in Edition 1
97060023	AIDC / ASN.1 correction : Airport	RESOLVED	Included in Edition 1
97060024	AIDC / sequencing table inconsistent with state tables	RESOLVED	Included in Edition 1
97100004	AIDC / Definition of releaseIndicator	RESOLVED	Included in Edition 1
97100005	AIDC / reference error in SARPs	RESOLVED	Included in Edition 1
97100015	CPDLC/AIDC Airway Name	RESOLVED	Included in Edition 1
97100016	CPDLC/AIDC VHF Frequency/ Frequencyvhfchannel	RESOLVED	Included in Edition 1
97100027	AIDC / Year 2000 dependency	RESOLVED	Included in Edition 1
97100033	AIDC / ASN.1 message type and Abort issue	RESOLVED	Included in Edition 1
97100042	AIDC / AIDC Abstract Definition	RESOLVED	Included in Edition 1
97100043	AIDC / Transfer Control Information parameter	RESOLVED	Included in Edition 1
97100044	AIDC / Departure Airport	RESOLVED	Included in Edition 1
97100045	AIDC / AircraftIdentification	RESOLVED	Included in Edition 1
97100046	AIDC / BeaconCode	RESOLVED	Included in Edition 1
98030002	AIDC / Control Function	RESOLVED	Included in Edition 1
98030003	AIDC / Control Function	RESOLVED	Included in Edition 1
98040005	all / ICAO V2.2 problems	RESOLVED	Included in Edition 1
98050019	CPDLC/AIDC problems with ICAO V2.2 CPDLC SARPs	RESOLVED	Included in Edition 1

98090006	AIDC / AIDC UCF Indication	WITHDRAWN	
98090009	AIDC / AIDC PM variable names	RESOLVED	Included in Edition 2
99080002	AIDC / Transfer Control protocol states	REJECTED	
99080003	AIDC / Provider Abort indication parameters	RESOLVED	For inclusion in Edition 3
99100001	AIDC / Bad started timer	Rec. : ACCEPT/ RESOLVE	For inclusion in Edition 3
99100002	AIDC / Coord-Start Service Bad vr1/vs1	Rec. : ACCEPT/ RESOLVE	For inclusion in Edition 3
99110001	AIDC / Bad timers 1CT/2CT	Rec. : ACCEPT/ RESOLVE	For inclusion in Edition 3
99110002	AIDC / Coord-end incomplete text	Rec. : ACCEPT/ RESOLVE	For inclusion in Edition 3
99110003	AIDC / Latitude Semantics	Rec. :	For inclusion in Edition 3
99110004	AIDC / ASN.1 of FrequencyVHF	Rec. : REJECT	

4. RECOMMENDATION

The CCB is invited to note the information provided.

5. ATTACHMENT A : DETAILS OF SUB-VOLUME 3 PDRS

PDR 99100001

PDR 99100002

PDR 99110001

PDR 99110002

PDR99 110003

PDR 99110004

Title : ICAO 9705 - Bad started timer

PDR Reference: 99100001
 Originator Reference: -
 SARPs Document Reference:
 SARPs Sub_Volume III Status: SUBMITTED
 Impact: B (Bug)
 PDR Revision Date:
 PDR Submission Date: 18/10/99
 Submitting State/Organization: CENA/CHARME
 Project Submitting Author Name: Mathieu JEAN
 Submitting Author E-mail Address: jean@cenatls.cena.dgac.fr
 Submitting Author Supplemental
 Contact Information:
 SARPs Date: ICAO 9705 Edition 2
 SARPs Language: English

Summary of Defect:

In the section 3.2.6.1.33.2.1 b) 2) i) C), there is the sentence :

if the variable vrl=info-trans, then start the timer t1NC.

I think it is a mistake. According to the others sections : 3.2.6.1.33.2.1 b) 3) C), 3.2.6.1.34.2.1 c) 1) i) C), 3.2.6.1.34.2.1 c) 2) i) C), when vrl or vs1 have the value info-trans, it is always an Info-Transfer timer (t1IN or t2IN) which is started and not a Notifying-Coordinating timer (t1NC).

Assigned SME: Sub-Volume III SME

Proposed SARPs amendment:

1) section 3.2.6.1.33.2.1 b) 2) i) C), replace :

"if the variable vrl=info-trans, then start the timer t1NC."

with:

"if the variable vrl=info-trans, then start the timer t1IN."

2) Table 3.2.6-4 (State Table), cell located in row AIDC-ucf REQ and column "IDLE", fourth level-1 bullet, replace:

```
". if c1 & c32 {
. start t1NC
-> IDLE } "
```

with

```
". if c1 & c32 {
. start t1IN
-> IDLE } "
```

SME Recommendation to CCB: ACCEPT / RESOLVE

CCB Decision: (CCB/11) ?

Title : ICAO 9705 - Coord-Start service : Bad vrl/vs1

PDR Reference: 99100002
Originator Reference: -
SARPs Document Reference: SARPs Sub_Volume III
Status: SUBMITTED
Impact:
PDR Revision Date:
PDR Submission Date: 28/10/99
Submitting State/Organization: CENA/CHARME Project
Submitting Author Name: Mathieu JEAN
Submitting Author E-mail Address: jean@cenatls.cena.dgac.fr
Submitting Author Supplemental
Contact Information:
SARPs Date: ICAO 9705 Edition 2
SARPs Language: English

Summary of Defect:

In the sections 3.2.6.1.7.2.1. and 3.2.6.1.8.2.1., it is specified that the value vrl/vs1 is set to 'back'.

I think vrl and vs1 must be initialized with 'coord-start'.

For example, when the ASE receives a Coord-Start Ind, vrl is set to 'back', but on the next User-Cnf-Req (section 3.2.6.1.33.2.1. b) 2) i) or ii)), there is just a check on vrl with 'notify', 'coord-start', 'info-trans' and 'end'. But no check on 'back'.

In the same way, when the ASE receives a Coord-Start Req, vs1 is set to 'back', but on the next User-Cnf-Ind (section 3.2.6.1.34.2.1 c) 1) i)), there is just a check on vs1 with 'notify', 'coord-start', 'info-trans' and 'end'.

The CHARME implementation detects a protocol error.

Additional comments:

Indeed this is a defect of the SARPs. The objective of vrl = back must have been the case when the state is TRANSFERRED; in that case 'back' means 'go to BACKWARD-COORDINATING on receipt of matching ucf.req/ind'. However the separate value 'back' does not seem to be necessary since the transition to BACKWARD-COORDINATING can be inferred from state = TRANSFERRED when ucf is received.

Proposed SARPs amendment:

1. Section 3.2.6.1.7.2.1 h) Replace :

h) set the variable vs1 = back and vs2 = Msg Number

with :

h) set the variable vs1 = coord-start and vs2 = Msg Number

2. Section 3.2.6.1.8.2.1. h) Replace :

h) set the variable vr1 = back and vs2 = Msg Number

with :

h) set the variable vr1 = coord-start and vs2 = Msg Number

3. Section 3.2.6.1.33.2.1 b) 2) viii) A) Replace :

A) if the variable vr1 = back, then enter the BACKWARD COORDINATING state.

with :

A) if the variable vr1 = coord-start, then enter the BACKWARD COORDINATING state.

4. Section 3.2.6.1.34.2.1 c) 1) vii) A) Replace :

A) if the variable vs1 = back, then enter the state BACKWARD COORDINATING

with :

A) if the variable vs1 = coord-start, then enter the state BACKWARD COORDINATING

5. Table 3.2.6-4 (State Table), cell located in row AIDC-ucf REQ and column "TRANSFERRING", second level-1 bullet, replace:

". if c1 & c26 => BACKWARD-COORDINATING"

with

". if c1 & c6 => BACKWARD-COORDINATING"

6. Table 3.2.6-4 (State Table), cell located in row "rcv AIDC-ucf-REQ pdu" and column "TRANSFERRING", second level-1 bullet, replace:

". if c1 & c27 => BACKWARD-COORDINATING"

with

". if c1 & c7 => BACKWARD-COORDINATING"

SME Recommendation to CCB: ACCEPT / RESOLVE

CCB Decision: (CCB/11) ?

Title : ICAO 9705 - Figure 3.2.10-10 - Bad timers 1CT/2CT

PDR Reference: 99110001
Originator Reference: -
SARPs Document Reference: SARPs Sub_Volume III
Status: SUBMITTED
Impact: B
PDR Revision Date:
PDR Submission Date: 02/11/99
Submitting State/Organization: CENA/CHARME Project
Submitting Author Name: Mathieu JEAN
Submitting Author E-mail Address: jean@cenatls.cena.dgac.fr
Submitting Author Supplemental
Contact Information:
SARPs Date: ICAO 9705 Edition 2
SARPs Language: English

Summary of Defect:

In the figure 3.2.10-10, when a positive User-Cnf Request is sent after a Coordinate-End Indication, the timer t2CT is set.
When the User-Cnf Indication is received, the timer t1CT is set.

I think it is a mistake and the both timers have to be reversed on the figure.

In the section 3.2.6.1.33.2.1 b) 2) iii) A) I), the timer t1CT is set when a User-Cnf Request is sent in the NEGOCIATING state with 'vr1 = coord-end' In the section 3.2.6.1.34.2.1 c) 1) ii) B), the timer t2CT is set when a User-Cnf Indication is received in the NEGOCIATING state with 'vs1 = coord-end'.

Proposed SARPs amendment:

Figure 3.2.10-10 :

reverse the both timers 1CT/2CT on the figure.

SME Recommendation to CCB: ACCEPT / RESOLVE

CCB Decision: (CCB/11) ?

Title : ICAO 9705 - Coord-End : incomplete text.

PDR Reference: 99110002
Originator Reference: -
SARPs Document Reference: SARPs Sub_Volume III
Status: SUBMITTED
Impact: B (Bug)
PDR Revision Date:
PDR Submission Date: 03/11/99
Submitting State/Organization: CENA/CHARME Project
Submitting Author Name: Mathieu JEAN
Submitting Author E-mail Address: jean@cenatls.cena.dgac.fr
Submitting Author Supplemental
Contact Information:
SARPs Date: ICAO 9705 Edition 2
SARPs Language: English

Summary of Defect:

According to the section 3.2.6.1.10.2.1 f) 2) (Coord-End Indication), the variable vre could receive the value accept when the Result parameter has the value 'accept'.

When the Result parameter has the value 'reject', there is no sentence to set the variable vre with reject.

This incomplete text raises an error because after receiving a negative Coord-End indication, the user sends a User-Cnf request. According to the section 3.2.6.1.33.2.1 b) 2) iii) A), vre has not the value 'reject' and the section II) is not executed.

Assigned SME: Sub-Volume III SME

Proposed SARPs amendment:

Replace :

"2) if the AIDC-crd-end Result parameter has the value "accept" then set the variable vre = accept; and"

with :

"2) if the AIDC-crd-end Result parameter has the value "accept" then set the variable vre = accept;

3) if the AIDC-crd-end Result parameter has the value "reject" then set the variable vre = reject; and"

SME Recommendation to CCB: ACCEPT / RESOLVE

CCB Decision: (CCB/11) ?

Title: AIDC / ASN.1 Semantics of Latitude

PDR Reference: 99110003
 Originator Reference: ONS-SV3-07
 SARPs Document Reference: 3.2.1.1 page III-230
 Status: SUBMITTED
 PDR Revision Date:
 PDR Submission Date: 09 Nov. 1999
 Submitting State/Organization: USA
 Submitting Author Name: Moulton, James
 Submitting Author E-mail Address: moulton@ons.com
 Submitting Author
 Supplemental Contact Information: 22636 Glenn Drive Suite 305
 Sterling, VA 20164 USA
 SARPs Date: Doc. 9705
 SARPs Language: English

Summary of Defect: The ASN.1 for longitude and latitude include a definition of degrees with a resolution of .001. Optionally, minutes and seconds may be specified. There is no discussion of the semantics of decimal degrees and minutes/seconds.

Assigned SME: Sub-Volume III SME

Proposed SARPs amendment:

OPTION 1 (provided by PDR author)

Make degrees with a resolution of 1 and add a choice for the remainder of the resolution range:

```
Latitude ::= SEQUENCE
{
  latitudeDegrees [0] LatitudeDegrees latitudePartDegrees [1]
  LatitudePartDegrees latitudeDirection [2] LatitudeDirection
}
LatitudeDegrees ::= INTEGER(0..90)
unit = Degree, Range (0..90) resolution 1
LatitudePartDegrees ::= CHOICE
{
  thousandths [0] Thousandths
  latitudeMinSec [1] LatitudeMinSec
}
Thousandths ::= INTEGER(0..1000)
unit = thousandths (.001) Range 0..1000
LatitudeMinSec ::= SEQUENCE
{
  latitudeMinutes [0] DegreeMinutes OPTIONAL latitudeSeconds [1]
  DegreeSeconds OPTIONAL
}
```

OPTION 2 (preferred by SME)

Check consistency with ADSP Documentation. If a change is needed, preference should be given if possible to an alignment with the syntax used in CPDLC.

SME Recommendation to CCB: <resolve, reject, forward>

CCB Decision:

Title: AIDC / ASN.1 of FrequencyVHF
PDR Reference: 99110004
Originator Reference: ONS-SV3-08
SARPs Document Reference: 3.2.1.1 page III-244
Status: SUBMITTED
PDR Revision Date:
PDR Submission Date: 09 Nov. 99
Submitting State/Organization: USA
Submitting Author Name: Moulton, James
Submitting Author E-mail Address: moulton@ons.com
Submitting Author
Supplemental Contact Information: 22636 Glenn Drive Suite 305
Sterling, VA 20164 USA
SARPs Date: Doc. 9705
SARPs Language: English

Summary of Defect: The ASN.1 for FrequencyVHF does not correspond to the voice frequency range. In AIDC, this construct is used in TransferComm and it encompasses the entire voice band. The resolution in use today is 8.33Mz

Assigned SME: Sub-Volume III SME

Proposed SARPs amendment:

FrequencyVHF ::INTEGER(0..22)
unit = 118MHz +n*8.33Khz separation (22 channels)

SME Comment:

This subject has been discussed at considerable length on the basis of PDR 97100016 (CPDLC/AIDC VHFfrequency/ VHFfrequencyChannel). The definitions were then aligned between CPDLC and AIDC, and due consideration was given to the 8.33 spacing issue.

The AIDC ASN.1 definition is fully aligned on the resolution of PDR 97100016. Looking further at the subject in CPDLC, it appears that the ASN.1 definition uses a different terminology (in CPDLC the ASN.1 type is FrequencyVHF instead of FrequencyVHFChannel for AIDC). However the definition and range are identical in both sub-volumes. In conclusion, there might be a need for an editorial update in either AIDC or CPDLC, but not for a change in the ASN.1 syntax.

SME Recommendation to CCB: REJECT

CCB Decision: (CCB/11)

?