



ATNP/WG3/WP15-16

AERONAUTICAL TELECOMMUNICATIONS NETWORK PANEL

Working Group 3

Honolulu (USA), 19 - 22 January 1999

SME 2 (Air-Ground ATN Applications) Status Report

Presented by: F. Picard (Sub-Volume 2 SME)

SUMMARY

This paper contains the open PDRs raised against the Sub-Volume 2 (Air-Ground Applications) ATN SARPs.

6 PDRs have been processed by the SME2 Team since CCB-7 (Bordeaux). CCB-8 (Honolulu – 18th January) has progress 5 of them to the status RESOLVED. WG3 is requested to review the last one.

16 new PDRs have been received in December 98. WG3 is invited to notice the nature of these PDRS.

Current Status

NB PDR			
SARPs	Version	CCB Status	Somme
ADS	IV1.1	WITHDRAWN	2
		ADOPTED	11
	IV2.2	ADOPTED	1
		RESOLVED	7
		REJECTED	2
		WITHDRAWN	1
	IV2.3	ADOPTED	1
		SUBMITTED	4
			4
Somme ADS			33
CM	IV1.1	WITHDRAWN	1
		ADOPTED	2
	IV2.2	RESOLVED	1
		REJECTED	1
		WITHDRAWN	1
	IV2.3	ACCEPTED	2
		SUBMITTED	2
		RESOLVED	2
Somme CM			12
CPDLC	IV1.1	WITHDRAWN	1
		ADOPTED	25
	IV2.2	RESOLVED	1
		REJECTED	2
	IV2.3	PROPOSED	1
		SUBMITTED	3
Somme CPDLC			33
FIS	IV1.1	ADOPTED	9
		ADOPTED	2
	IV2.2	RESOLVED	6
		REJECTED	3
		FORWARDED	1
		ADOPTED	1
	IV2.3	ACCEPTED	2
		SUBMITTED	2
		RESOLVED	3
		REJECTED	1
Somme FIS			30
SV2	IV1.1	ADOPTED	2
		ADOPTED	1
	IV2.3	SUBMITTED	1
		RESOLVED	2
Somme SV2			6
Total			114

PDRs Waiting Final CCB Resolution

6 Proposed Defect Reports related to the SARPs Sub-Volume II have been processed by the SME2 Team since CCB-7 (Bordeaux). 5 have been progress to the RESOLVED status.

	Title	Current Status	Proposed Changes
CPDLC			
98100001	Doc 9705 / Doc 4444	PROPOSED	<ol style="list-style-type: none"> Align Chapter 4 (ASN.1) description to Doc 4444 Align Chapter 7 (Message Intent Tables) description to Doc 4444 <p>OR</p> <p>replace the tables by a pointer to Doc 4444 Amd2 Annex 5.</p>
ADS			
98100008	Inconsistency between protocol and state table	RESOLVED	<ol style="list-style-type: none"> Withdraw PDR 98050018 (align protocol to state table) Align state table to protocol
98120001	PDR 97100007 Follow-up	RESOLVED	<ol style="list-style-type: none"> Set back the abort reason to the correct value.
SV2			
98110002	Missing Exception Handling Procedure	RESOLVED	<ol style="list-style-type: none"> Add a new clause stating that the any ASE must abort the dialogue with reason "protocol error" when a non expected primitive or a non expected value parameter is received.
FIS			
98110003	Stop the t-LI timer	RESOLVED	<ol style="list-style-type: none"> Mandate the FIS-air-ASE to stop the t-LI timer even if the ASE is being killed.
98110004	D-END invocation condition	RESOLVED	<ol style="list-style-type: none"> The FIS-ground-ASE must check that no contract was still in place when the D-END service was invoked by the FIS-air-ASE.

Note that a new PDR has been created to track all editorial errors still present in Doc 9705 Edition 1. This PDR will be closed just before publication of Doc 9705 Amendment 1.

99010004	Doc 9705 Edition 1 Editorial Errors	ACCEPTED	
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PDRs Waiting Initial CCB Acceptance

15 PDRs were received in December 98 after the SG2 meeting, mainly from the ACI Consortium (ASE Project). These PDRs propose to specify addition check on reception of primitives and to handle more properly the exception handling situations. They do not impact the normal operation of the protocols and do not impact the interoperability.

The CCB is invited to ACCEPT these PDRs and forward then to the SME2 Team for technical review.

	Title	Current Status	Proposed Changes
CM			
98120005	Timers need to be reset	ACCEPTED	1. The CM-ASEs should stop the running timers upon receipt of a negative D-START confirmation.
98120006	QOS in D-START primitives	SUBMITTED	1. The CM-ASEs should check the validity of the <i>QOS Routing Class</i> parameter receipt of a D-START indication. 2. The CM-ASEs should check the validity of all QOS parameters upon receipt of a positive D-START confirmation .
98120007	D-START calling peer id	SUBMITTED	1. The CM-air-ASE should check upon receipt of a D-START indication that the Calling Peer Id parameter contains a Ground Facility Designation (not a 24 bit address)
98120008	Conflicting requirements	ACCEPTED	1. There are 2 sections describing the actions of the CM-ground-ASE upon receipt of a positive D-START confirmation leading to the dialogue abort with 2 different reasons ("dialogue-acceptance-not-permitted" and "invalid-PDU"). One should be removed.
CPDLC			
98120009	QOS in D-START primitives	SUBMITTED	1. The CM-ASEs should check the validity of all QOS parameters upon receipt of a positive D-START confirmation .
98120010	D-START calling peer id	SUBMITTED	1. The CM-air-ASE should check upon receipt of a D-START indication that the Calling Peer Id parameter contains a Ground Facility Designation (not a 24 bit address).
99010001	Closure Messages	SUBMITTED	1. The CPDLC-air-users should be allowed to send as closure message system-generated messages (NOT CDA or NOT AUTHORIZED NDA) instead of the response message, LACK or ERROR. 2. The CPDLC-ground-user should be allowed to send as closure message system-generated messages (SERVICE UNAVAILABLE or FLIGHT PLAN NOT HELD) instead of the response message, LACK or ERROR.
ADS			
98120002	Abort Situations	SUBMITTED	1. The CM-ASEs should be allowed to abort the dialogue when an exception is detected upon receipt of a D-START indication (e.g. invalid PDU).
98120003	QOS in D-START	SUBMITTED	1. The ADS-air-ASE should check the validity

	primitives		<p>of the <i>QOS Routing Class</i> parameter receipt of a D-START indication.</p> <ol style="list-style-type: none"> The ADS-ground-ASE should check the validity of all QOS parameters upon receipt of a positive D-START confirmation .
98120004	D-START calling peer id	SUBMITTED	<ol style="list-style-type: none"> The ADS-air-ASE should check upon receipt of a D-START indication that the Calling Peer Id parameter contains a Ground Facility Designation (not a 24 bit address)
ARF			
98120015	Originator parameter	SUBMITTED	<ol style="list-style-type: none"> Upon detection of an exception situation, the ARF-ASEs should abort the dialogue with the Originator parameter set to "provider" (not "user").
FIS			
98120011	Originator parameter	ACCEPTED	<ol style="list-style-type: none"> Upon expiration of the t-LI-1 timer (i.e. no reception of a D-END cnf), the FIS-air-ASE should abort the dialogue with the <i>Originator</i> parameter set to "provider" and the <i>Reason</i> parameter set to "timer-expiration" (not "user").
98120012	Missing Abort Reasons	REJECTED	REJECTED (already covered by PDR 98040002)
98120013	Abort Situations	ACCEPTED	<ol style="list-style-type: none"> The FIS-ground-ASE should be allowed to abort the dialogue when an exception is detected upon receipt of a D-START indication (e.g. invalid PDU). The FIS HI module should not be allowed to invoke directly the FIS-provider-abort indication but should ask the AB module to do it. This will allow the other module to stop the operation properly.
98120014	QOS in D-START primitives	SUBMITTED	<ol style="list-style-type: none"> The FIS-ground-ASE should check the validity of the <i>QOS Routing Class</i> parameter receipt of a D-START indication. The FIS-air-ASE should check the validity of all QOS parameters upon receipt of a positive D-START confirmation .
98120016	Error in subsetting Rules	SUBMITTED	<ol style="list-style-type: none"> The FIS-air-ASE should not be mandated to support the encoding of Uplink APDUs. The FIS-ground-ASE should not be mandated to support the decoding of Uplink APDUs The support by the FIS-ground-ASE of the FISCancelUpdateContract and FISCancelUpdate AcceptUPDU should be mandated only if the FIS-ground-user support the FIS Update Contract.

PDRs waiting final CCB resolution

PDR 98100001

Title: CPDLC vs. ICAO Doc 4444, Amd 2 comparison

PDR Reference: 98100001
Originator Reference: 4444-9705
SARPs Document Reference: 2.3.4, 2.3.7
Status: PROPOSED
PDR Revision Date: 08/12/98: alternative change for chapter 7
23/11/98
chapter 4: changes: 14, 14a
chapter 7: changes: 4a, 4b, 6a, 17a, 20, 33a, 40, 47, 48, 49, 50a, 53a, 60, 61a, 64, 66a, 68
13/11/98 (SUBMITTED -> ACCEPTED -> PROPOSED)
31/10/98
PDR Submission Date: 31/10/98
Submitting State/Organization: USA
Submitting Author Name: Van Trees, SP
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SARPs Date: ICAO Doc 9705, Edition 1.
ICAO Doc 4444, Amendment 2.
SARPs Language: English

Summary of Defect:

The ICAO Doc 4444 (PANS-RAC) definition and ICAO Doc 9705 definition of CPDLC would appear to differ in some details.

The current version of Doc 4444 is Thirteenth Edition - 1996, up to and including Amendment 2. Amd 2, which only became applicable on 5/11/98, includes the complete CPDLC message set as Appendix 5.

Doc 9705 Edition 1 CPDLC Chapter 7 (User Requirements) is aligned with a previous draft of this Annex, which was modified after States requested some: changes in their response to the State Letter (10/97) and approved by ICAO council (02/98).

Some message attributes (specified in Doc 9705 Edition 1 CPDLC Chapter 4 as ASN.1 comments) do not correspond to those specified in Chapter 7.

Assigned SME: Sub-Volume II SME

Proposed SARPs amendment (see file "9810001a.wpd" in directory atnp/ccb/sme2).

Chapter 4:

1. uM0 : change Alr(L) to Alr(M)
2. uM41 : change Resp(W/Y) to Resp (Y)
3. uM127, uM128, uM129, and uM130: change Alr(M) to Alr(L)
4. uM131: change Urg(N) to Urg(U)
5. uM135 through and including uM144: change Alr(M) to Alr(L)
6. uM148 through and including uM154: change Alr(M) to Alr(L)
7. uM158: change Alr(M) to Alr(L)
8. uM168: change Urg(N) to Urg(U)
9. uM175: change Alr(M) to Alr(L)
10. uM180: change Alr(M) to Alr(L)
11. uM182: change Alr(M) to Alr(L)

12. uM184: change Alr(M) to Alr(L)
13. uM200: change Alr(M) to Alr(L) and: change Rsp(R) to Rsp(W/U)
14. uM212 and uM213: change Alr(M) to Alr(L)
- 14a. uM232: change "STATE-TOP-OF-DESCENT" to "STATE TOP OF DESCENT"
15. dM26 and dM27: change Alr(L) to Alr(M)
16. dM29 through and including dM37: change Alr(M) to Alr(L)
17. dM42 through and including dM47: change Alr(M) to Alr(L)
18. dM72 : change Alr(M) to Alr(L)
19. dM76 : change Alr(N) to Alr(L)
20. dM77 : change Alr(N) to Alr(M)
21. dM78 : change Alr(N) to Alr(L)
22. dM79 : change Alr(M) to Alr(L)
23. dM81 through and including dM86: change Urg(N) to Urg(L)
24. dM89 : change Urg(L) to Urg(U)
25. dM103: change Alr(N) to Alr(L).

For Chapter 7:

Two alternative changes are proposed to CCB:

I - ALIGN Doc 9705 Ed. 1 CHAPTER 7

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Note. The changes numbered without extension (1,2,..., 69) identify differences between Doc 9705 Ed1 and the Doc 4444 final softcopy version from the ADS Secretary. The changes numbered with an extension (a,b,..) identify changes between the final softcopy version of the ADS Secretary and the hardcopy version sent to the States by ICAO.

0. Delete Section 2.3.7.1 Note 5 which indicates that in case of inconsistencies between Doc 4444 and Doc 9705 Doc 4444 takes precedence.

In Table 2.3.7-5:

1. uM0, uM1, uM2, uM3: change "ATS" to "ATC"
2. uM211: change "ATS" to "ATC" and change "Next Control Authority" to "next control authority"

In Table 2.3.7-6:

3. uM7 through and including uM18: delete the extra space between the words "for and "the"
4. uM20: change "and the level is to be maintained when reached." to "and once reached the specified level is to be maintained."
- 4a. uM21: change "at the specified time," to "at the specified time"
- 4b. uM22, uM185, uM186: change "at the specified position," to "at the specified position"
5. uM23: change "and the level is to be maintained when reached." to "and once reached the specified level is to be maintained."
6. uM25: change "and when the specified level is reached it is to be maintained." to "and once reached the specified level is to be maintained."
- 6a. uM209: change "position" to "position."
7. uM30: change "A level" to "Instruction that a level"
8. uM34, uM35: change "A cruise" to "Instruction that a cruise"
9. uM220: delete a space between "level" and the period ".".
10. uM36: change "The climb" to "Instruction that the climb"
11. uM37: change "The descent" to "Instruction that the descent"
12. uM40: change "Urgent instruction to immediately stop a climb once the specified level is reached." To "(reserved)"; delete "IMMEDIATELY STOP CLIMB AT [level]" in the "Message Element" column and leave the cell blank; change "D" to "L" and "H" to "L" and "W/U" to "Y" in the last three cells respectively.
13. uM41: change "Urgent instruction to immediately stop a descent once the specified level is reached." To "(reserved)"; delete "IMMEDIATELY STOP DESCENT AT [level]" in the "Message Element" column and leave the cell blank; change "D" to "L" and "H" to "L" and "W/U" to "Y" in the last three cells respectively.
14. uM171: delete one of the spaces between "than" and "the"
15. uM33: change "Reserved." to "(reserved)" and insert "L", "L", and "Y" in the last three cells respectively.
16. At the bottom of Table 2.3.7-6 insert the note in italics as indicated:

"Note.- Wherever the variable "level" is specified, the message can specify either a single level or a vertical range, i.e. block level."

In Table 2.3.7-7:

17. uM46, uM47, uM48, uM50: through and including uM60 change "The specified" to "Instruction that the specified"

17a. uM61, uM63: change "and speed and" to "and speed, and"

18. At the bottom of Table 2.3.7-7 insert the note in italics as indicated:

"Note.- Wherever the variable "level" is specified, the message can specify either a single level or a vertical range, i.e. block level."

In Table 2.3.7-8:

19. uM67, uM68, uM69: change "The cleared" to "Instruction that the cleared"

In Table 2.3.7-9:

20. uM94, uM95, uM98: change "onto" to "on to"

21. At the bottom of Table 2.3.7-9 insert the note in italics as indicated:

"Note.- Wherever the variable "level" is specified, the message can specify either a single level or a vertical range, i.e. block level."

In Table 2.3.7-10:

22. uM106, uM108, uM109, uM115: change "The specified" to "Instruction that the specified"

23. uM188: change "After passing" to "Instruction that after passing"

24. uM107, uM111 through and including uM114, uM189: change "The present" to "Instruction that the present"

25. uM110: change "A speed" to "Instruction that a speed"

26. uM222: change "Instruction" to "Notification", and delete one of two spaces before the word "that"

26a. uM223: change "approach speed" to "approach speed."

27. At the bottom of Table 2.3.7-10 insert the note in italics as indicated:

"Note.- Wherever the variable "level" is specified, the message can specify either a single level or a vertical range, i.e. block level."

In Table 2.3.7-11:

28. uM117, uM120: change "The ATS" to "Instruction that the ATS"

29. uM118, uM119, uM121, uM122: change "At the" to "Instruction that at the"

30. uM123: change "The specified" to "Instruction that the specified"

31. uM124, uM125, uM126: change "The SSR" to "Instruction that the SSR"

32. uM179: change "The 'ident' " to "Instruction that the 'ident' "

In Table 2.3.7-12:

33. Move uM200 from Table 2.3.7-16 to Table 2.3.7-12 and insert it between uM175 and uM180

33a. uM200: change "Used in" to "Instruction used in"

33b and change the "R" in the last cell to a "W/U"

34. uM228: delete one of two space between the words "report" and "the" and add a period after the word "position" at the end of the sentence

35. uM144: change "code (SSR)" to "(SSR) code"

36. At the bottom of Table 2.3.7-12 insert the note in italics as indicated:

"Note.- Wherever the variable "level" is specified, the message can specify either a single level or a vertical range, i.e. block level."

In Table 2.3.7-13:

37. At the bottom of Table 2.3.7-13 insert the note in italics as indicated:

"Note.- Wherever the variable "level" is specified, the message can specify either a single level or a vertical range, i.e. block level."

In Table 2.3.7-14:

38. uM193: change "Indication" to "Notification"

39. uM157: change "A continuous" to "Notification that a continuous"

In Table 2.3.7-15:

40. uM160: change "next" to "specified" and "specified ATSU" to "next data authority. If no data authority is specified, this indicates that any previously specified next data authority is no longer valid."

In Table 2.3.7-16:

41. uM176: change "operator" to "pilot" and change "Visual Meteorological Conditions" to "visual meteorological conditions"
42. uM177: change "operator" to "pilot"
43. Move uM178 to between the uM177 and uM169; then in the "Message Intent/Use" column add the word "(reserved)" and delete "[free text]" in column "Message Element" and change "N" to "L" on the third from last cell and change "N" to "Y" in the last cell.
44. Move uM183 to between the uM170 and uM194
45. Move uM187 to between the newly moved uM183 and uM194 (Table 2.3.7-16)
46. uM199: change "M" to "L" and "W/U" to "N" in the last two cells respectively
47. uM201: change "Not Used." to "Not used" (no italics, no period)
48. uM202: add "Not used", and delete "[free text]" in column "Message Element" and change "D" to "L" and "H" to "L" and "W/U" to "N" in the last three cells respectively.
49. At the bottom of Table 2.3.7-16 insert the note in italics as indicated:
"Note.- Free text message elements have no associated message intent. The capability to send a free text message with any of the attribute combinations already used in the message set has been provided."

In Table 2.3.7-18:

50. At the bottom of Table 2.3.7-18 insert the note in italics as indicated:
"Note.- Wherever the variable "level" is specified, the message can specify either a single level or a vertical range, i.e. block level."

In Table 2.3.7-23:

- 50a. dM78: change "At the specified time" to "Notification that at the specified time"
51. dM37 ("Message Element"): change "LEVEL" to "MAINTAINING"
52. dM47: change "specified code" to "specified (SSR) code"
53. dM89: change "ICAO" to "ATS"
- 53a. dM111 ("Message Element"): change "position]" to "[position]"
54. At the bottom of Table 2.3.7-23 insert the note in italics as indicated:
"Note.- Wherever the variable "level" is specified, the message can specify either a single level or a vertical range, i.e. block level."

In Table 2.3.7-24:

55. At the bottom of Table 2.3.7-24 insert the note in italics as indicated:
"Note.- Wherever the variable "level" is specified, the message can specify either a single level or a vertical range, i.e. block level."

In Table 2.3.7-25:

56. dM57: change "N" to "Y" in the last cell
57. dM59: change "specified route" to "specified route due to an urgent need"
58. dM60: change "parallel track" to "parallel track due to an urgent need"
59. dM61: change "specified level" to "specified level due to an urgent need"
60. dM80: replace the "Message Intent/Use" column by "Notification that the aircraft is deviating up to the specified distance from the cleared route in the specified direction due to an urgent need"
61. At the bottom of Table 2.3.7-25 insert the note in italics as indicated:
"Note.- Wherever the variable "level" is specified, the message can specify either a single level or a vertical range, i.e. block level."

In Table 2.3.7-26:

- 61a. dM62,dM63,dM19,dM107,dM73: change "system generated" to "system-generated"
62. dM63, dM99: change "Current Data Authority" to "current data authority"
63. Switch the order of dM107 and dM64
64. dM100: change "Notification" to "Confirmation" and "acknowledgment refers." to "acknowledgment refers and found it acceptable for display to the responsible person."

In Table 2.3.7-27:

65. dM65, dM66: change "aircraft operator's" to "pilot's"
66. dM74, dM101, dM103: change "aircraft operator" to "pilot"
- 66a. dM103: change "canceled" to "cancelled"
67. dM75: change "operator" to "pilot"
68. At the bottom of Table 2.3.7-27 insert the note in italics as indicated:

"Note.- Free text message elements have no associated message intent. The capability to send a free text message with any of the attribute combinations already used in the message set has been provided."

In Table 2.3.7-28:

69. At the bottom of the table 2.3.7-28 insert the note in italics as indicated:
"Note.- Wherever the variable "level" is specified, the message can specify either a single level or a vertical range, i.e. block level."

II - REMOVE THE TABLES FROM Doc 9705 Ed. 1 CHAPTER 7

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Since Doc 4444 Amd2 is now published, it is now possible to refer to it unambiguously.

1. Delete sections 2.3.7.6.1, 2.3.7.6.2 and 2.3.7.6.3
2. Add the following note in italics to 2.3.7.6 as follows:

Note.- The message set for CPDLC is contained in Appendix 5 of ICAO DOC 4444 (Rules of the Air and Air Traffic Services) 13th Edition, (including Amendment 2, dated 5 November 1998). Message attributes, message presentation guidance, and data structure presentation guidance are presented herein. The actual information exchanged between an aircraft and ground peer or a ground and ground peer CPDLC applications is defined in 2.3.4 above; however, 2.3.4 does not mandate any particular method for presenting this information. The presentation of information to the controller and aircraft crew is a local implementation. The message presentation recommendations contained in Doc 4444 Appendix 5 are one possible means of presenting the information. These recommendations are generally consistent with current ICAO practices for displaying ATC information.

3. Add new 2.3.7.6.1 as follows:

2.3.7.6.1 Message elements shall comply with the intent, use, and element attributes as presented in Doc 4444 Appendix 5.

Impact on interoperability:

There is no impact on interoperability since the changes apply to ASN.1 comments in chapter 4 and to requirements in chapter 7.

SME Recommendation to CCB: RESOLVED. WG3 is requested to select the more appropriate change to chapter 7 amongst the 2 presented above. SG2's preference is the deletion of the tables in chapter 7 (availability of a stable reference and SARPs maintenance reasons). CCB's preference is to delete any reference to Doc 4444 in chapter 7 and to keep the tables in (this would allow a better control of Doc 4444 changes).

CCB Decision: atnp_ccb_chair: SUBMITTED (02/11/98)
atnp_ccb_chair: ACCEPTED (13/11/98)

PDR 99010004

Title: ICAO 9705 Edition 1 Editorial Errors

PDR Reference: 99010004
Originator Reference: -
SARPs Document Reference: All SARPs sub-volumes, see text
Status: ACCEPTED
PDR Revision Date: -
PDR Submission Date: 18/01/99
Submitting State/Organization: CCB
Submitting Author Name: CCB Chair
Submitting Author E-mail Address: atnp_ccb_chair@cenatls.cena.dgac.fr
Submitting Author Supplemental
Contact Information:
SARPs Date: ICAO 9705 Edition 1 (IV 2.3), 06/11/98
SARPs Language: English

Summary of Defect: ICAO 9705 Editorials

Sub-Volume I

(no change)

Sub-Volume II

== Part 1 (CM)

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1/ In section 2.1.5.1.1 Note 4, remove "See 4.3.3".

== Part 2 (ADS)

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- 1/ In section 2.2.1.7.3.4, set in italics "event-ncn"
- 2/ In section 2.2.1.7.3.5 b), set in italics "event-report" and "baseline".
- 3/ In section 2.2.1.7.3.5.14 Note 2, change "in 2.2.1." to "in 2.2.1.7.3.3".
- 4/ In section 2.2.1.7.4.1, set in italics the first occurrence of "reason", set in normal font the second occurrence.
- 5/ In section 2.2.1.7.4.1 Note, change "in place" to "in place.".
- 6/ In Table 2.2.1.7-1, replace "short-term-intent" in the column (Modulus in the Contract Details Parameter" by "short-term-intent-modulus".
- 7/ In 2.2.1.7.7.1 a), set in italics "reporting interval".
- 8/ In 2.2.1.7.7.1.1, change "the" to "The".
- 9/ In 2.2.1.7.7.2.1, change "the" to "The".
- 10/ In 2.2.1.7.9 Note 2, replace "or and" by "or an".
- 11/ In section 2.2.1.1.1 Note 4 b)5) replace "message" by "contract".
- 12/ Add a fullstop to section 2.2.1.1.1 Note 5 a) 6).
- 13/ In section 2.2.1.1.1 Note 5 b)2) replace "demand" by "demand contract".
- 14/ Add a fullstop to section 2.2.1.1.1 Note 5 b) 6).
- 15/ Add a fullstop to section 2.2.1.1.1 Note 6 b) 3).
- 16/ Add a fullstop to section 2.2.1.1.1 Note 7 a) 1).
- 17/ Add a fullstop to section 2.2.2.1.1.
- 18/ In section 2.2.2.1.1 Note 2 a) replace "scope of 2" by "scope of 2.2.2".
- 19/ In section 2.2.2.3.2 Note, remove "and air based".
- 20/ In section 2.2.2.3.8.2, add "Note.-" in front of the note.
- 21/ In section 2.2.2.5.2.1, replace "ADS-ASE" by "ADS-RF-ASE".
- 22/ Add a fullstop to section 2.2.1.3.2.1 Note 5.
- 23/ In section 2.2.1.3.4.7 Note, replace "this" by "This".
- 24/ In section 2.2.1.3.5 Note, replace "aircraft It is" by "aircraft. It is".
- 25/ In section 2.2.1.3.5.6.1 b), set in italics "event-ncn".
- 26/ In section 2.2.1.3.7.3.1, set in italics "event-contract".
- 27/ In section 2.2.1.3.7.4.1, set in italics "NULL".
- 28/ In section 2.2.1.3.13 Note, remove ", or and ADS-ground-user to abort an ADS forward contract with a particular ground system".

- 29/ In section 2.2.1.3.14 Note, remove "or a particular ADS-ground-user - ADS-ground-user pairing".
- 30/ In section 2.2.1.4.2.1, replace "882" by "8824".
- 31/ In section 2.2.1.5.1.1. Note 3, remove "(see 4.3.3.1.2.4)"
- 32/ In section 2.2.2.5.1.1 Note 3, remove "(see 4.3.3.1.2.4)"

== Part 3 (CPDLC)

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- 1/ [CCB - 97050019 6/]

In section 2.3.5.6.6.1 replace "CPDLC-air-ASE" by "CPDLC-ground-ASE".

- 2/ In note 3 of section 2.3.3.3.7, replace:

. "to to" by "to",

. "whata" by "what"

. "dialogue provider service" by "dialogue service provider"

- 3/ In note 3 of section 2.3.3.4.7, replace:

. "dialogue provider service" by "dialogue service provider"

- 4/ In note 2 of section 2.3.3.4.7, replace: . "CPDLC dialogue" by "DSC dialogue"

- 5/ In section 2.3.7.2.2 Note 2, replace "ground system another aircraft" by "ground system with another aircraft".

- 6/ In section 2.3.7.2.2 Note 4, replace "by a the CPDLC" by "by a CPDLC"

- 7/ In section 2.3.7.3.11.5.1, replace "eith" by "with"

- 8/ In section 2.3.7.4.4.2.1 note 4, replace "paramter" by "parameter"

- 9/ In section 2.3.7.4.4.2.1 note 5, replace "paramter" by "parameter", "these SARPs" by "section 2.3.7" and "give" by "gives"

- 10/ In section 2.3.7.4.4.2.1 note 6, replace "CPDLC-end-service" by "CPDLC-end service"

- 11/ Section 2.3.7.4.2.2.1 a), replace "paramter" by "parameter".

- 12/ In section 2.3.7.4.4.2.9, "Result" should be in italics.

- 13/ In section 2.3.7.4.5.1.2, replace "the air-user" by "the CPDLC-air-user".

- 14/ In section 2.3.7.5.1.2.5, replace "CPDLC-response" by "CPDLC-start response"

- 15/ In section 2.3.7.5.1.2.6, replace "CPDLC-response" by "CPDLC-start response"

- 16/ In section 2.3.7.5.1.2.7, replace "If CPDLC-start indication" by "If a CPDLC-start indication".

- 17/ Section 2.3.7.5.4.1 note 5, "these SARPs" by "section 2.3.7" and "give" by "gives"

- 18/ In section 2.3.7.5.4.1 note 6, "DSC-end-service" by "DSC-end service"

- 19/ In section 2.3.7.5.4.1.2.1, replace "accepted. by "accepted".

- 20/ In section 2.3.7.5.4.1.3.1, replace "accepted. by "accepted".

- 21/ In section 2.3.7.5.4.1.4.2 b), replace "rejected. by "rejected".

- 22/ In section 2.3.7.5.4.1.5.2 b), replace "rejected. by "rejected".

- 23/ In section 2.3.7.1 Note 5, replace "in the in the" by "in the".

- 24/ In section 2.3.7.2.1.6 a), replace "aircraft identification" to "aircraft flight identification".

- 25/ In section 2.3.5.1.1. Note 3, remove "See 4.4.3.". .

== Part 4 (FIS)

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- 1/ In section 2.4.5.1.1 Note 3, remove "(see 4.3.3).". .

Sub-Volume III

== Part 1 (AMHS)

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(no change)

== Part 2 (AIDC)

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(no change)

Sub-Volume IV

(no change)

Sub-Volume V

(no change)

Assigned SME: All SMEs

Proposed SARPs amendment: See "Summary of Defect".

SME Recommendation to CCB: RESOLVED

CCB Decision: CCB-8 (Honolulu): SUBMITTED (18/01/99)
CCB-8 (Honolulu): ACCEPTED (18/01/99)