ATNP/WG3

WP/8-4

02/10/1996

AERONAUTICAL TELECOMMUNICATIONS NETWORK PANEL(ATNP) WORKING GROUP 3 - APPLICATIONS AND UPPER LAYERS

Alexandria, 7-15 October 1996 (eighth meeting)

Agenda Item 7: Review any proposed SARPs Defects and Proposed Corrections

WP/8-4: Summary of Defect Reports on ATSMHS SARPs

Presented by Jean-Marc Vacher (ATSMHS SARPs Editor)

Summary

This working paper aims at providing WG3 with a summary of Defect Reports on the ATSMHS Draft SARPs and of associated change pages, as collected and resolved by the Ground Applications Subgroup (SG1).

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References

[1] Draft SARPs for ATS Message Handling Services (ATSMHS), version 2.0a

1. Introduction

This WP provides the set of Defect Reports received by the ATSMHS SARPs Editor since the WG3 Munich meeting.

Most of these DRs were discussed by SG1 at its 9th meeting, and corrections were proposed and agreed by SG1 to solve most of the defects.

2. Recommendation

WG3 is invited to consider the changes proposed for the ATSMHS SARPs, to amend them as appropriate and to agree on the change proposals to be presented at ATNP/2 on the basis of this WP.

Defect Number:	ATSMHS001	ATSMHS SARPs Comment Number:	218
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96
Originator Name:	E. Edem		
Originator Reference:	1/7/1996 - Comment 11		
Date Raised:	01/07/96		

Location of Defect (including Section Number):

Section 3.1.3.3.2.4.4

Summary of the Defect:

The SARPs are incomplete since no specification is made of the processing to be performed upon receipt of a D-START-confirm.

Proposed solution or assumptions made (if any):

A clause should be added detailing the processing of the D-START-confirm and in particular the different actions to be taken depending on the values of the QoS, Result, and Reject Source parameters thereof.

Editor's Comment:

See Defect Report resolution on attached page

Date of Resolution:	9th SG1 meeting, Toulouse (23-26 September 1996)
SARPs Version/Date where defect is closed:	26/09/96 - to be input at ATNP/2

Defect Number:	ATSMHS001	ATSMHS SARPs Comment Number:	218
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96

Editor's Comment: SOLUTION

- 1) Insert the following clauses after 3.1.3.3.2.4.7:
- 3.1.3.3.2.4.8. If the result parameter in the D-START-confirmation is set to the abstract-value "rejected (transient)", the ATN Component CF shall :
- re-attempt (a locally defined number of times) the establishment of a dialogue with the same gateway;
 and
- b) if subsequent to the procedure defined in a) a dialogue still cannot be established, attempt the establishment of a dialogue with a prioritised list of gateways which are defined as being alternates to the one which has been determined as unreachable.
- 3.1.3.3.2.4.9. If the result parameter in the D-START-confirmation is set to the abstract-value "rejected (permanent)", the ATN Component CF shall attempt (a locally defined number of times) the establishment of a dialogue with a prioritised list of gateways which are defined as being alternates to the one which has been determined as unreachable.
- 3.1.3.3.2.4.10. If any of the QoS parameters in the D-START-confirmation is unacceptable, the ATN Component CF shall perform the following:
- a) abort the dialogue as specified in 3.1.3.3.2.4.15 (Editor's Note: reference to be updated as appropriate subsequently to this insertion); and
- b) attempt (a locally defined number of times) the establishment of a dialogue with a prioritised list of gateways which are defined as being alternates to the one which has been determined as unreachable with an acceptable QoS.
- Note.- The actual definition of "unacceptable values" for the parameters of the D-START-confirmation is a local matter.
- 3.1.3.3.2.4.11. If subsequent to the procedures defined in 3.1.3.3.2.4.8 to 3.1.3.3.2.4.10 a dialogue still cannot be established, the ATN Component shall:
- a) log the error situation;
- b) store the message for further processing; and
- c) ensure that the message is not discarded.

Note.- The processing to be performed in application of this clause is a local matter.

2) Renumber the subsequent clauses from 3.1.2.3.3.2.4.12 to 3.1.3.3.2.4.21.

Defect Number:	ATSMHS002	ATSMHS SARPs Comment Number:	219
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96
Originator Name:	E. Edem		
Originator Reference:	1/7/1996 - Comment 12		
Date Raised:	01/07/96		

Location of Defect (including Section Number):

Section 3.1.3.3.2.4.6

Summary of the Defect:

The SARPs are incomplete since no explanation is given of what is considered as an "acceptable" value for the D-START-indication parameters.

Proposed solution or assumptions made (if any):

Insert a note after section 3.1.3.3.2.4.6.

Editor's Comment: SOLUTION

Insert the following Note after section 3.1.3.3.2.4.6:

Note.- The actual definition of "acceptable values" for the parameters of the D-START-indication is a local matter.

Date of Resolution:	9th SG1 meeting, Toulouse (23-26 September 1996)
SARPs Version/Date where defect is closed:	26/09/96 - to be input at ATNP/2

Defect Number:	ATSMHS003	ATSMHS SARPs Comment Number:	221
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96
Originator Name:	E. Edem		
Originator Reference:	1/7/1996 - Comment 14		
Date Raised:	01/07/96		

Location of Defect (including Section Number):

Section 3.1.3.3.2.4.7

Summary of the Defect:

The SARPs are incomplete since no explanation is given of what is considered as an "unacceptable" value for the D-START-indication parameters.

Proposed solution or assumptions made (if any):

Insert a note after section 3.1.3.3.2.4.7.

Editor's Comment: SOLUTION

Insert the following Note after section 3.1.3.3.2.4.7:

Note.- The actual definition of "unacceptable values" for the parameters of the D-START-indication is a local matter.

Date of Resolution:		on:	9th SG1 meeting, Toulouse (23-26 September 1996)
	SARPs Version where defect closed:		26/09/96 - to be input at ATNP/2

Defect Number:	ATSMHS004	ATSMHS SARPs Comment Number:	239
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96
Originator Name:	E. Edem		
Originator Reference:	1/7/1996 - Comment 14		
Date Raised:	01/07/96		

Location of Defect (including Section Number):

Section 3.1.3.3.3.5.9

Summary of the Defect:

The SARPs are incomplete since no explanation is given concerning where this "ICAO facility designator" of the GA-Data-request initiator is taken from.

Proposed solution or assumptions made (if any):

Editor's Comment: SOLUTION

1) Change status of Calling Address in the GA-Data-request in Table 3.1.3-1 as follows:

Table 3.1.3-1

GA-Data Service Primitive	Req	Ind
Calling Address	M	M(=)

2) Amend section 3.1.3.3.5.9 to read:

"...which initiated the GA-Data-request, as found in the D-START-indication Calling Address parameter."

Date of Resolution:	9th SG1 meeting, Toulouse (23-26 September 1996)
SARPs Version/Date where defect is closed:	26/09/96 - to be input at ATNP/2

Defect Number:	ATSMHS005	ATSMHS SARPs Comment Number:	241/242
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96
Originator Name:	E. Edem		
Originator Reference:	1 and 2 - 25/7/96		
Date Raised:	25/07/96		

Location of Defect (including Section Number):

Section 3.1.3.

Summary of the Defect:

The SARPs approach is not consistent between the ATS Message Service and the ATN Pass-Through Service, concerning the processing of AFTN messages formatted in ITA-2.

Proposed solution or assumptions made (if any):

Align 3.1.3 on 3.1.2 (AFTN Component).

Editor's Comment: SOLUTION

1) Insert the following clause under the title 3.1.3.1.5:

"If an AFTN/ATN Type A Gateway is connected to an AFTN Centre which is capable of using only ITA-2 format, the AFTN Component of the gateway shall convert messages to/from the IA5-format."

- 2) Delete Note 2, which is then redundant, under the title 3.1.3.1.5
- 3) Replace term "Note 1" with "Note" under the title 3.1.3.1.5

Date of Resolution: 9th SG1 meeting, Toulouse (23-26 September 1996)

SARPs	Version/[Date	26/09/96 - to be input at ATNP/2
where closed:	defect	is	

DEFECT REPORT ON SARPS				
Defect Number:	ATSMHS006	ATSMHS SARPs Comment Number:	243	
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96	
Originator Name:	E. Edem			
Originator Reference:	3 - 25/7/96			
Date Raised:	25/07/96			
Location of Defect (incl	uding Section Number):			
Section 3.1.3.1.8.1b)				
Summary of the Defect				
The SARPs are incomplete since no reference is made about the definition or specification of ICAO-facility-designators which are referred to section 3.1.3.1.8.				
Proposed solution or assumptions made (if any):				

Add a reference to "Sub-Volume" 4 of the SARPs.

Editor's Comment: SOLUTION

Amend item 3.1.3.1.8.1 b) to read:

"...comprised of an ICAO-facility-designator, as specified in 4."

Date of Resolution:	9th SG1 meeting, Toulouse (23-26 September 1996)
SARPs Version/Date where defect is closed:	26/09/96 - to be input at ATNP/2

	DEFECT REPO	THE OH OAK O	P		
Defect Number:	ATSMHS007	ATSMHS SARPs Comment Number:	244		
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96		
Originator Name:	M. Okle				
Originator Reference:	Editorial comments on Draft SARPs "ATS Message Handling Services", Version 2.0, point 1				
Date Raised:	12/08/96				
Location of Defect (incl Section 3.1.2.2.2.1 a)	luding Section Number):				
	Summary of the Defect: Erroneous reference for profile AMH21				
Proposed solution or assumptions made (if any): correct reference is ISO/IEC ISP 12062-3.					
Editor's Comment: S	SOLUTION				
Replace					
"ISO/IEC ISP 12062-2,	"ISO/IEC ISP 12062-2,"				
with					
"ISO/IEC ISP 12062-3,	"ISO/IEC ISP 12062-3,"				
Date of Resolution:	Date of Resolution: 9th SG1 meeting, Toulouse (23-26 September 1996)				
SARPs Version/Date where defect is closed:					

·	DEFECT KEPC	THE OH OAK O			
Defect Number:	ATSMHS008	ATSMHS SARPs Comment Number:	245		
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96		
Originator Name:	M. Okle				
Originator Reference:	Editorial comments on Draft SARPs "ATS Message Handling Services", Version 2.0, point 2				
Date Raised:	12/08/96				
Location of Defect (incl Section 3.1.2.3.2.3.4	uding Section Number):				
	Summary of the Defect: Inconsistent reference to ISO/IEC 10611-1				
·	Proposed solution or assumptions made (if any): for consistency, reference should be made to ISO/IEC ISP 12062-3.				
Editor's Comment: S	Editor's Comment: SOLUTION				
Replace					
"ISO/IEC ISP 10611-1."	"ISO/IEC ISP 10611-1."				
with					
"ISO/IEC ISP 12062-3."					
Date of Resolution:	9th SG1 meeting, Toul	ouse (23-26 September	1996)		
SARPs Version/Date 26/09/96 - to be input at ATNP/2 where defect is closed:					

Defect Number:	ATSMHS009	ATSMHS SARPs Comment Number:	246
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96
Originator Name:	M. Okle		
Originator Reference:	Editorial comments of Services", Version 2.0,	on Draft SARPs "AT point 3	S Message Handling
Date Raised:	12/08/96		

Location of Defect (including Section Number):

Section 3.1.2.3.4.2.3.2

Summary of the Defect:

While the gateway has the DL-expansion capability it does not perform PDAI expansion. This restriction is not explicitly mentioned in the specification.

Proposed solution or assumptions made (if any):

The appropriate place for the amendment of a Note which indicates the restriction is 3.1.2.3.4.2.1.4.2.

Editor's Comment: SOLUTION

insert the following Note after clause 3.1.2.3.4.2.1.4.2:

Note.- A PDAI included in the addressee indicator(s) of an AFTN Message is translated into an MF-Address in the same way as any addressee indicator.

Date of Resolution:	9th SG1 meeting, Toulouse (23-26 September 1996)
SARPs Version/Date where defect is closed:	26/09/96 - to be input at ATNP/2

Defect Number:	ATSMHS010	ATSMHS SARPs Comment Number:	247		
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96		
Originator Name:	M. Okle				
Originator Reference:	Editorial comments on Draft SARPs "ATS Message Handling Services", Version 2.0, point 4				
Date Raised:	12/08/96				
Location of Defect (incl	uding Section Number):				
Section 3.1.2.3.5.2.2.6.2					
Summary of the Defect	:				
The SARPs are incomp responsibility flag shall be		pecified that only MF-Ac	ldresses marked with the		
Proposed solution or assumptions made (if any):					
Editor's Comment: S	Editor's Comment: SOLUTION				
insert the following phrase in clause 3.1.2.3.5.2.2.6.2, after "included in an AMHS message":					
, whose responsibility element in the per-recipient-indicators has the abstract-value "responsible",					
Date of Resolution:	Date of Resolution: 9th SG1 meeting, Toulouse (23-26 September 1996)				
SARPs Version/Date where defect is closed:					

Defect Number:	ATSMHS011	ATSMHS SARPs Comment Number:	249		
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96		
Originator Name:	M. Okle				
Originator Reference:	Editorial comments on Draft SARPs "ATS Message Handling Services", Version 2.0, point 6				
Date Raised:	12/08/96				
Location of Defect (incl	uding Section Number):				
Table 3.1.2-17, Ref. 2.	1.1				
Summary of the Defect	::				
The reference to 3.1.2.	3.5.4.2.4 is meaningless	S			
Proposed solution or assumptions made (if any):					
Editor's Comment: S	Editor's Comment: SOLUTION				
delete the reference to 3.1.2.3.5.4.2.4 in Table 3.1.2-17, Ref. 2.1.1					
Date of Resolution:	Date of Resolution: 9th SG1 meeting, Toulouse (23-26 September 1996)				
SARPs Version/Date 26/09/96 - to be input at ATNP/2 where defect is closed:					

Date of Resolution:

DEFECT REPORT ON SARPS

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Defect Number:	ATSMHS012	ATSMHS SARPs Comment Number:	250		
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96		
Originator Name:	M. Okle				
Originator Reference:	Editorial comments on Draft SARPs "ATS Message Handling Services", Version 2.0, point 7				
Date Raised:	12/08/96				
,	luding Section Number):				
Section 3.1.2.3.2.3					
Summary of the Defect	t:				
The processing of Probes	The processing of Probes by the MTCU is not reflected in this overview.				
Proposed solution or assumptions made (if any):					
Editor's Comment: S	Editor's Comment: SOLUTION				
Replace in 3.1.2.3.2.3.	Replace in 3.1.2.3.2.3.4				
"For the generation of AMHS information objects, and for the processing of received AMHS information objects,					
with	with				
"For the generation of AMHS messages and reports, and for the processing of received AMHS messages, probes and reports,					

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SARPs	Version/[Date	26/09/96 - to be input at ATNP/2
where closed:	defect	is	

DEFECT REPORT ON SARPS					
Defect Number:	ATSMHS013	ATSMHS SARPs Comment Number:	256		
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96		
Originator Name:	E. Edem				
Originator Reference:	ATNP/WG3/SG1 Tould	ouse meeting Flimsy 4			
Date Raised:	26/09/96				
Location of Defect (incl	uding Section Number):				
Section 3.1.3.3.2.4.5					
Summary of the Defect	:				
inconsistency between the	title of the referred Table a	and the text of the clause.			
Proposed solution or as	ssumptions made (if any	y):			
Editor's Comment: S	SOLUTION				
1) replace the title	1) replace the title of Table 3.1.3-2 with:				
"D-START-request/indication parameters"					
2) replace the title of Table 3.1.3-3 with:					
"D-START-response/confirm parameters"					
3) in 3.1.3.3.2.4.5,	3) in 3.1.3.3.2.4.5, replace				

Date of Resolution:	9th SG1 meeting, Toulouse (23-26 September 1996)

"...if the parameters are valid according to Table 3.1.3-2."

" if the parameter values are as indicated in Table 3.1.3-2."

with

SARPs	Version/D	ate	26/09/96 - to be input at ATNP/2
where closed:	defect	is	

	DEFECT REPO	INT ON OAKT O				
Defect Number:	ATSMHS014	ATSMHS SARPs Comment Number:	257			
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date: 2.0a - 04/07/96				
Originator Name:	E. Cerasi					
Originator Reference:		Editorial comments on Draft SARPs "ATS Message Handling Services", Version 2.0, point 7				
Date Raised:	25/09/96					
Location of Defect (incl Section 3.1.2.3.2.4.2	uding Section Number):					
Summary of the Defect: Editorial inconsistency in the order of terms.						
Proposed solution or assumptions made (if any):						
Editor's Comment: SOLUTION						
Replace in 3.1.2.3.2.4.2						
"to pass AMHS messages, probes and reports to"						
with						
"to pass AMHS messages, reports and probes to"						
Date of Resolution:	9th SG1 meeting, Toul	ouse (23-26 September	1996)			
SARPs Version/Date where defect is closed:	•					

Defect Number:	ATSMHS015	ATSMHS SARPs Comment Number:	258		
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96		
Originator Name:	M. Okle				
Originator Reference:	Indirect reference from SG1/ WP/127: Conversion of AFTN Service Messages in the AFTN/AMHS Gateway, Review of actions expected by the Control Position				
Date Raised:	25/09/96				

Location of Defect (including Section Number):

Sections 3.1.2.3.4.3 and 3.1.2.3.4.4, and all places where action by the control position is required.

Summary of the Defect:

- 1) The actions to be undertaken, in the AFTN/AMHS Gateway MTCU or at the Control Position, are unsufficiently described in the SARPs.
- 2) The specification that the considered message is discarded in the MTCU before action at the control position is inappropriate since the Control Position needs the information object to determine its action.

Proposed solution or assumptions made (if any):

Provide Guidance on the subject in GM or further specification in the SARPs.

Editor's Comment:

This DR has an impact on several clauses, due to its direct relationship to the Control Position.

The change pages corresponding to the solution agreed are attached to this report.

Date of Resolution:	principle:	9th	SG1	meeting,	Toulouse	(23-26	September	1996)
	editorial detail	s:	03	3/10/96				

SARPs	Version/E	Date	04/10/96 - to be input at ATNP/2
where closed:	defect	is	

Defect Number:	ATSMHS015	ATSMHS SARPs Comment Number:	258			
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96			
Editor's Comment: SEE SOLUTION HEREAFTER						

3.1.2.3.2.6.1. The AFTN/AMHS Gateway Control Position shall be used as the place where errors which occurred in the AFTN/AMHS Gateway are reported for appropriate action.

Note.- Such errors are usually associated with a specification that an information object is to be automatically discarded.

3.1.2.3.4.1.3. If, for any reason, the processing specified in clauses 3.1.2.3.4.1.1 and 3.1.2.3.4.1.2 cannot be properly achieved, the procedure shall unsuccessfully terminate, resulting in:

- a) logging of the error situation and reporting to a control position; and
- b) <u>storage disearding</u> of the AFTN message for appropriate action at the control position.

3.1.2.3.4.2.1.4.1. The following actions shall be performed in order to translate the originator indicator of an AFTN Message into the MF-Address included in the *originator-name* of the converted AMHS message:

- a) translation into the single MF-Address matching exactly the AF-Address of the originator, if such an MF-Address can be determined from the User address look-up table maintained in the Message Transfer and Control Unit; or
- b) if a) cannot be achieved, translation into the XF-address constructed using the single Management Domain identified by the set of *country-name*, *administration-domain-name* and (if any) *private-domain-name* attributes, determined among the entries in the MD look-up table, if any, matching exactly the following character substrings of the AFTN address and selected among these entries, if several are found, on the basis of a decreasing order of precedence from 1) to 4):
 - 1) characters 1 to 7,
 - 2) characters 1, 2, 5, 6 and 7,
 - 3) characters 1, 2, 3 and 4,
 - 4) characters 1 and 2; or
- c) if no adequate entry can be found in the MD look-up table, or if the procedure defined in b) does not result in a single resulting MD, unsuccessful termination of the procedure resulting in:
 - 1) logging of the error situation and reporting to a control position, and
 - 2) <u>storagediscarding</u> of the AFTN message <u>for appropriate action at the control position</u>.

Note.- The specification above does not constrain the search algorithm provided that the expected result is achieved.

- 3.1.2.3.4.3.1.1. Upon reception by the Message Transfer and Control Unit of an AFTN acknowledgement message, passed from the AFTN Component to be conveyed in the AMHS, the received message shall be processed in one of the following manners depending on whether or not the subject AFTN message previously passed through the Message Transfer and Control Unit:
- a) processing as specified in 3.1.2.3.4.3.1.2, if the subject AFTN message, as identified in the text of AFTN acknowledgement message, previously passed through the Message Transfer and Control Unit; or
- b) <u>processing as follows, unsuccessful termination of the procedure,</u> if the subject AFTN message did not previously pass through the Message Transfer and Control Unit, resulting in:
 - 1) logging of the error situation and reporting to a control position; and
 - conversiondiscarding of the AFTN acknowledgement message into an IPM conveyed with a Message Transfer Envelope as specified in 3.1.2.3.4.3.1.5.
- 3.1.2.3.4.3.1.2. If the subject AFTN message previously passed through the Message Transfer and Control Unit, the AFTN acknowledgement message shall then be processed in one of the following manners depending on whether the subject IPM was received from the AMHS without or with *receipt-notification-request*:
- a) processing as follows, if the subject IPM was received from the AMHS without receipt-notification-request:
 - 1) conversion into an IPM conveyed with a Message Transfer Envelope as specified in 3.1.2.3.4.3.1.52; and
 - 2) logging of the error situation and reporting to a control position; or
- b) processing as specified in 3.1.2.3.4.3.1.3, if the subject IPM was received from the AMHS with *receipt-notification-request*.

(new clause) 3.1.2.3.4.3.1.5. When an AFTN acknowledgement message is converted into an IPM as the result of 3.1.2.3.4.3.1.1 or 3.1.2.3.4.3.1.2, the specification of 3.1.2.3.4.2 shall apply with the exception of the *subject* element in the IPM heading fields, initially specified in Table 3.1.2-5/Part 2/10, which is then generated and takes the value "AFTN service information".

- 3.1.2.3.4.4.1.1. Upon reception by the Message Transfer and Control Unit of an unknown address AFTN service message, passed from the AFTN Component to be conveyed in the AMHS, the received message shall be processed in one of the following manners:
- a) processing as specified in 3.1.2.3.4.4.1.2, if the subject AFTN message, as identified in the unknown address AFTN service message text, previously passed through the Message Transfer and Control Unit; or
- b) unsuccessful termination of the procedure, if the subject AFTN message did not previously pass through the Message Transfer and Control Unit, resulting in:
 - 1) logging of the error situation and reporting to a control position; and
- 2) <u>conversiondiscarding</u> of the unknown address AFTN service message <u>into an IPM conveyed with a Message Transfer Envelope as specified in 3.1.2.3.4.4.1.7.</u>
- 3.1.2.3.4.4.1.2. If the subject AMHS message previously passed through the Message Transfer and Control Unit, the received message shall be processed in either of the following manners depending on whether or not the unknown addressee indicator(s) which caused the generation of the unknown address AFTN service message can be determined:

- processing as specified in 3.1.2.3.4.4.1.3, if at least one valid addressee indicator which caused the a) generation of the unknown address AFTN service message can be found; or
- b) unsuccessful termination of the procedure, if no such valid addressee indicator can be found, resulting in:
 - logging of the error situation and reporting to a control position; and
- -conversiondiscarding of the unknown address AFTN service message into an IPM conveyed with a Message Transfer Envelope as specified in 3.1.2.3.4.4.1.7.
- 3.1.2.3.4.4.1.3. For theeach valid addressee indicators determined as causing the generation of the unknown address AFTN service message, as the result of 3.1.2.3.4.4.1.2, the received message shall be processed as followsin one of the following manners, depending on whether or not the conversion of eachthis unknown addressee indicator into a recipient MF-Address in the same way as specified for an originator indicator in 3.1.2.3.4.2.1.4.1 can be successfully performed by the Message Transfer and Control Unit:
- a) processing as specified in 3.1.2.3.4.4.1.4, for the set ofeach unknown addressee indicators which can be successfully translated into an MF-Address, if any; ander
- b) for the set of unsuccessful termination of the procedure, for each unknown addressee indicator which cannot be successfully translated, if any, processing as followsresulting in:
 - deletion in the text of the unknown address AFTN service message of all unknown addressee 1) indicators processed as specified in a) abovelogging of the error situation and reporting to a control position; and
 - 2) conversiondiscarding of the resulting unknown address AFTN service message into an IPM conveyed with a Message Transfer Envelope as specified in 3.1.2.3.4.4.1.7for the considered unknown addressee indicator(s).
- 3.1.2.3.4.4.1.4. For theeach unknown recipient MF-Addresses determined as the result of 3.1.2.3.4.4.1.3 a), the received message shall be processed as follows one of the following manners, depending on the abstract-values of the originator-report-request and of the originating-MTA-report-request elements in the per-recipient-indicators in the corresponding *per-recipient-fields* of the subject AMHS message:
- a) processing as specified in 3.1.2.3.4.4.1.5, if, for the set of a given recipients which meet the following condition, if any:
 - 1) the abstract-value of the *originator-report-request* differs from "report"; and
 - 2) the abstract-value of the originating-MTA-report-request differs from "report" and from "auditedreport"; or
- processing as follows, unsuccessful termination of the procedure for the given-all other recipients, if-in any b) other case, resulting in:
 - 1) replacement, in the text of the unknown address AFTN service message, of the entire list of unknown addressee indicators with a list restricted to the addressee indicators of these recipients logging of the error situation and reporting to a control position; and
 - 2) conversion of the discarding of theresulting unknown address AFTN service message into an IPM conveyed with a Message Transfer Envelope as specified in 3.1.2.3.4.4.1.7for the considered unknown recipient MF-Address.

Note.- This clause aims at avoiding the generation of a non-delivery-report after the generation of a deliveryreport by the MTCU for the same subject AMHS message.

3.1.2.3.4.4.1.6. A non-delivery report related to the unknown recipient MF-Addresses, which have not been caused the conversion of the unknown address AFTN service message into an IPM discarded as the result of 3.1.2.3.4.4.1.4 and 3.1.2.3.4.4.1.5, shall be generated in compliance with:

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- a) the specification of 3.1.2.3.5.6 using the elements of the subject AMHS message; and
- b) the following specification of abstract-values:
 - 1) "unable-to-transfer" for the *non-delivery-reason-code*; and
 - 2) "unrecognised-OR-name" for the non-delivery-diagnostic-code; and
- c) the exception with respect to 3.1.2.3.5.6, that the *actual-recipient-name* element(s) in each *per-recipient-fields* element of the report take the value of the unknown recipient MF-Address(es) as determined in 3.1.2.3.4.4.1.5.

Note.- The potential future reception of an unknown address AFTN service message to be converted into a non-delivery-report requires the retention by the AFTN/AMHS Gateway of certain elements of the subject AMHS message for later report generation, if required.

(new clause) 3.1.2.3.4.4.1.7. When an unknown address AFTN service message is converted into an IPM as the result of 3.1.2.3.4.4.1.1 to 3.1.2.3.4.4.1.4, the specification of 3.1.2.3.4.2 shall apply with the exception of the *subject* element in the IPM heading fields, initially specified in Table 3.1.2-5/Part 2/10, which is then generated and takes the value "AFTN service information".

3.1.2.3.5.1.2. Upon reception by the Message Transfer and Control Unit of an AMHS message whose *content-type* is either "interpersonal-messaging-1984" or "interpersonal-messaging-1988" passed from the ATN Component, the message shall be processed for conversion into an AFTN message in one of three mutually exclusive manners, depending on the nature of the content:

- a) processing for conversion into an AFTN message as specified in 3.1.2.3.5.2, if the content is an IPM;
- b) processing for conversion into an AFTN service message as specified in 3.1.2.3.5.3, if the content is an IPN which is a Receipt Notification (RN); or
- c) unsuccessful termination of the procedure, if the content is an IPN but not a RN, resulting in:
 - 1) logging of the error situation and reporting to a control position; and
 - 2) <u>storagediscarding</u> of the message for appropriate processing at the control position.

3.1.2.3.5.1.5. Upon reception by the Message Transfer and Control Unit of an ISO/IEC 10021 information object other than those referred to in clauses 3.1.2.3.5.1.1 to 3.1.2.3.5.1.4 above, the processing by the Message Transfer and Control Unit shall unsuccessfully terminate, resulting in:

- a) logging of the error situation and reporting to a control position; and
- b) <u>storagediscarding</u> of the information object for appropriate processing at the control position.

Note.- The Message Transfer and Control Unit requests non-delivery-reports, but never delivery-reports when generating AMHS messages.

3.1.2.3.5.2.3.3. If the *priority-indicator* of a received AMHS message has the value "SS" and if the *notification-requests* element of either a *primary-recipient*, or a *copy-recipient*, or a *blind-copy-recipient* element has an abstract-value different from "rn" and if the *responsibility* element of the corresponding *per-recipient-fields* of the Message Transfer Envelope has the value "responsible", then an error situation shall be logged and reported to a control position for appropriate action.

Note 1.- The Message Transfer and Control Unit generates RNs only for SS priority messages, since they are the only messages for which an end-to-end acknowledgement is possible in the AFTN. A receipt-notification-request included in a message with another priority is ignored, considering that the Message Transfer and Control Unit cannot ensure the actual reception of the message by the end-user.

Note 2.- The above specified error situation, if any, does not cause message rejection.

3.1.2.3.5.3.1.1. Upon reception by the Message Transfer and Control Unit of a RN, passed from the ATN Component to be potentially converted into an AFTN acknowledgement message, the received RN shall be processed in one of the following manners:

- a) processing as specified in 3.1.2.3.5.3.1.2, if the subject IPM has been previously generated by the Message Transfer and Control Unit; or
- b) unsuccessful termination of the procedure, if the subject IPM has not been previously generated by the Message Transfer and Control Unit, resulting in:
 - 1) logging of the error situation and reporting to a control position;
 - 2) <u>storagerejection</u> of the RN for appropriate action at the control position; and
 - 3) generation of a non-delivery report as specified in 3.1.2.3.5.6 with the following elements taking the following abstract-values:
 - i) "unable-to-transfer" for the non-delivery-reason-code;
 - ii) "invalid-arguments" for the non-delivery-diagnostic-code; and
 - "unable to convert RN to AFTN Ack service message due to misrouted RN" for the *supplementary-information*.
- 3.1.2.3.5.3.1.2. For an AMHS RN passed from the ATN Component to the Message Transfer and Control Unit and not rejected as the result of 3.1.2.3.5.3.1.1, the received RN shall be processed in one of the following manners:
- a) processing as specified in 3.1.2.3.5.3.1.3, if the value of the priority indicator of the subject AFTN message was "SS"; or
- b) unsuccessful termination of the procedure, if the value of the priority indicator was different from "SS", resulting in:
 - 1) logging of the error situation and reporting to a control position; and
 - 2) storagediscarding of the RN for appropriate action at the control position.

3.1.2.3.5.4.1.1. Upon reception by the Message Transfer and Control Unit of a non-delivery report, passed from the ATN Component to be potentially converted into an AFTN service message, the received non-delivery report shall

ATN Component to be potentially converted into an AFTN service message, the received non-delivery report shall be processed in one of the following manners:

a) processing as specified in 3.1.2.3.5.4.1.2, if the subject AMHS message has been previously generated by the Message Transfer and Control Unit; or

- b) unsuccessful termination of the procedure, if the subject AMHS message has not been previously generated by the Message Transfer and Control Unit, resulting in:
 - 1) logging of the error situation and reporting to a control position; and
 - 2) storagediscarding of the non-delivery report for appropriate action at the control position.
- 3.1.2.3.5.4.1.2. If the subject AMHS message had been generated by the Message Transfer and Control Unit, the report shall be processed by the Message Transfer and Control Unit in one of the following manners:
- a) conversion of the report into an AFTN service message as specified in 3.1.2.3.5.4.2, if the *non-delivery-diagnostic-code* has the abstract-value "unrecognised-OR-name"; or
- b) <u>processing as followsdiscarding of the report</u>, if the *non-delivery-diagnostic-code* has any other abstract-value "unrecognised-OR-name":
 - 1) logging of the error situation and reporting to a control position; and
 - 2) storage of the non-delivery report for appropriate action at the control position.
- 3.1.2.3.5.4.1.3. A non-delivery report received by the Message Transfer and Control Unit which was not discarded as the result of 3.1.2.3.5.4.1.2 shall be processed by the Message Transfer and Control Unit in one of three mutually exclusive manners:
- a) processing as specified in 3.1.2.3.5.4.2 if there is no *originally-intended-recipient-name* element with a value different of the *actual-recipient-name* in any of the *per-recipient-fields* elements of the report;
- b) <u>processing as follows, discarding of the per-recipient-fields element</u> if at least one *originally-intended-recipient-name* element in one of the *per-recipient-fields* elements has a value different from the value of the *actual-recipient-name*, and if at least one *per-recipient-fields* element in the report does not meet the same condition:
 - 1) logging of the error situation and reporting to a control position; and
 - 2) storage of the corresponding *per-recipient-fields* elements for appropriate action at the control position; or
- c) <u>processing as follows, discarding of the entire report</u> if all *per-recipient-fields* elements of the report include an *originally-intended-recipient-name* element which has a value different from the value of the *actual-recipient-name*:
 - 1) logging of the error situation and reporting to a control position; and
 - 2) storage of the entire report for appropriate action at the control position.

- 3.1.2.3.5.4.2.1. An AMHS Non-Delivery Report received by the Message Transfer and Control Unit, and not stored for action at the control position discarded as the result of 3.1.2.3.5.4.1, shall be converted into an AFTN service message to the originator of the subject AFTN message, indicating that an unknown addressee indicator was specified in the subject AFTN message (unknown address AFTN service message) in compliance with:
- a) the specification of Annex 10, Volume II, 4.4.11.13.3; and
- b) the classification of the components included in Table 3.1.2-16, as specified in the column "action" of Table 3.1.2-16 in accordance with the definition in 3.1.1.

- 3.1.2.3.5.4.2.8. The value of the message text component shall be structured as follows:
- a) a first line composed as specified in Annex 10, Volume II, 4.4.11.13.3, items 1) to 4), using the origin of the subject AFTN message;

- b) a second line composed as specified in Annex 10, Volume II, 4.4.11.13.3, items 5) and 6), using the line-following-the-heading of the subject AFTN message; and
- c) the third and following lines as appropriate composed as specified in Annex 10, Volume II, 4.4.11.13.3, items 7) to 9), using the AF-Address(es) translated as specified in 3.1.2.3.5.4.2.9 from the *actual-recipient-name* elements of the *per-recipient-fields* of the Non-Delivery Report which were not <u>stored for action at the control position-discarded</u> as the result of 3.1.2.3.5.4.1.3.
- 3.1.2.3.5.4.2.9. Each *actual-recipient-name* element used to generate an unknown address AFTN service message as specified in item c) of 3.1.2.3.5.4.2.8 above shall be processed for translation into an AF-Address in one of three mutually exclusive manners, after preliminary conversion of the value of all AMHS address attributes from lower case IA5IRV characters, if any, to upper case IA5IRV characters:
- a) allocation of the value of the first element of the *organizational-unit-names* attribute to the AF-Address, if this value is a syntactically valid AF-Address and if the *organization-name* attribute has the value "AFTN";
- b) determination of an AF-Address matching exactly the MF-Address of the recipient in the User address look-up table maintained in the Message Transfer and Control Unit, if the value of the *organization-name* attribute differs from "AFTN" and if such an exact match can be found; or
- c) if none of the conditions in a) and b) can be met, then:
 - 1) discarding of the MF-Address; and
 - $\underline{12}$) logging of the error situation and reporting to a control position; and
 - 2) storage of the MF-Address for appropriate action at the control position.

Defect Number:	ATSMHS016	ATSMHS SARPs Comment Number:	259
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96
Originator Name:	E. Edem		
Originator Reference:	30/09/96 point 2		
Date Raised:	30/09/96		

Location of Defect (including Section Number):

Sections 3.1.2.3.5.4.1.1 and 3.1.2.3.5.4.1.2

Summary of the Defect:

In the direction AFTN-to-AMHS, an ATS Message Server or the ATN component of an AFTN/AMHS Gateway (or any other MTA, ATS or otherwise, in the chain to the IPM recipient) may reject an IPM and return a NDR to the MTCU (having exhausted its retry/re-routing procedure). As currently specified (subsequent to WG3/SG1/9), the NDR will be sent to the AFTN/AMHS Gateway Control Position (because it cannot be relayed to the originator of the AFTN message). At this point, both the AFTN message and the IPM have been discarded by the MTCU. Hence the AFTN message may be lost.

Proposed solution or assumptions made (if any):

- a. Encapsulate the whole AFTN message in the direction AFTN-to-AMHS.
- b. Set the MT Return of Content EoS to the abstract value "content-return-requested."
- c. Mandate (M) support for the MT Return of Content EoS by ATS Message Servers

(although it is recognised that it is only guaranteed to work if ALL MTAs in the chain to the IPM recipient are ATS Message Servers)

Editor's Comment: TO BE DISCUSSED (OFF WG3/8)

Other solutions are possible, e.g. request of a delivery-report at the AFTN/AMHS Gateway in the generated AMHS message, and retention of the AFTN message by the MTCU until a report has been received.

Date of Resolution: OPEN

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Defect Number:	ATSMHS017	ATSMHS SARPs Comment Number:	260		
SARPs affected (Sub- Volume and Part):	3.1	SARPs Version/Date:	2.0a - 04/07/96		
Originator Name:	J.M. Vacher				
Originator Reference:					
Date Raised:	01/10/96				
Location of Defect (incl	uding Section Number):				
Table 3.1.2-13, "Text" ro	W				
Summary of the Defect	:				
inconsistency between Tal	ble and referenced clause				
Proposed solution or assumptions made (if any):					
The text of the clause is the valid one, it is consistent with the agreed approach to use elements of the AFTN subject message.					
Editor's Comment: SOLUTION					
1) change the "Action" cell value from "T" to "G"					
2) delete the "converted from AMHS parameter" cell value and replace with "-"					
Date of Resolution:	03/10/96				
SARPs Version/Date					
where defect is closed:	To be input at ATNP/2				