Working Implementation Agreements for Open Systems Interconnection Protocols: Part 8 - Message Handling Systems

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Foreword

The text in this chapter specifies the North American requirements for use of the MHS ISPs. It also specifies any additional requirements and Recommended Practices that are beyond the scope of the ISPs.

Table of Contents

List of Figures

List of Tables

Part 8 Message Handling Systems

0   Introduction

Scope

References

CCITT

ISO

Editor's Note: [The following reference is in addition to the contents of the same chapter and clause of the OIW Stable Implementation Agreements. It is anticipated that the referenced chapter will be created at the March 1994 OIW Plenary.]

Application Layer - MHS

OIW SIA Chapter ZZ - Working Draft ISP 12063 *Information Processing Systems - International Standardized Profiles AMH3n - Message Handling Systems - EDI Messaging*.

Status
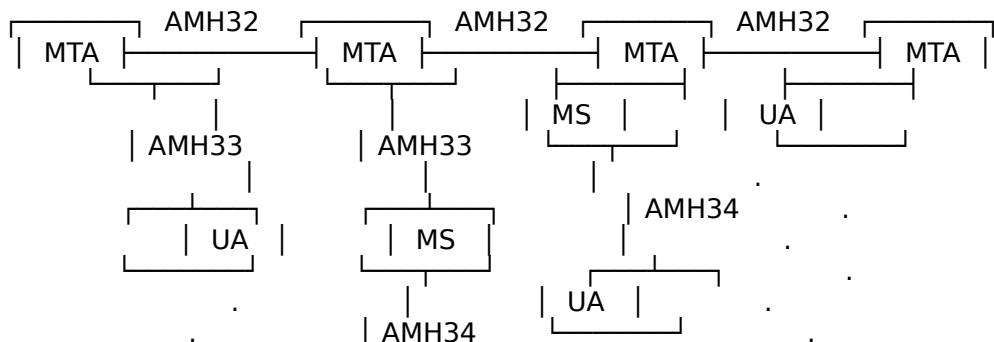
Taxonomy and Functional Groups
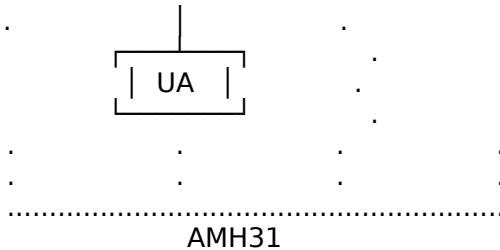
AMH1

AMH2

AMH3

Editor's Note - This will contain similar text to the AMH1 & AMH2 clauses describing the profiles and then the parts of the ISP

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    ┌──────┐  AMH32   ┌──────┐  AMH32   ┌──────┐  AMH32   ┌──────┐
  │ │ MTA  ├──────────┤ MTA  ├──────────┤ MTA  ├──────────┤ MTA │ │
    └──┬───┘          └──┬───┘          └──┬───┘          └──┬───┘
       │                 │            ┌────┴──┐        ┌─────┴─┐
       │                 │            │ MS   │        │ UA   │
    │ AMH33            │ AMH33        └───┬───┘        └───┬───┘
       │                 │               │            .
    ┌──┴───┐          ┌──┴───┐           │ AMH34          .
    │ UA  │          │ MS  │            │           .        .
    └──────┘          └──┬───┘        ┌──┴───┐        .        .
         .               │            │ UA  │        .
      .              │ AMH34         └──────┘           .
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                  .                .            .
           .    ┌────────┐      .        .
           .    │  UA  │      .          .
           .    └────────┘      .          .
           .        .        .        .
           .     .        .        .
            ............................................
                        AMH31
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Figure 3 - Combinations of AMH3n Profiles

Conformance

Common Messaging

MHS Management

NOTE - For further study.

IPM Service

EDI Messaging Service

This clause specifies EDI conformance requirements. Conformance to AMH3 is required, as well as support of the ANSI X12 functional group. Other regional requirements are specified herein.

Criticality mechanisms must be supported for all extension fields.

Introduction

This clause specifies the requirements for an EDI Messaging Service (EDIMS). These requirements are based on Recommendations X.435 and F.435 which define the P(edi) content type and outline various EDIMS operational scenarios.

This EDIMS Implementation Agreement separates the functions of the base standard into a Kernel and optional Functional Groups (FGs). These functional groups may be used to support the different scenarios of the EDIMS.

The following functional groups are defined:

- EDIMS Security

- EDIMS Forwarding

- EDIMS Multipart Body

These agreeements classify the support of these functional groups as follows:

Table 7 - EDIMS Functional Groups

Functional Group	Support
EDIMS Forwarding	O
EDIMS Security	O
EDIMS Multi Part Body	O
Notes	

EDIMS Elements of Service

Table 29 specifies the additional requirements for support of EDIMS EoS by a UA conforming to the EDIMS functional group of this agreement. This table indicates differences from the classifications in part 1 of AMH3. The classification scheme is identical to that defined by the ISP.

Table 8 - EDIMS: Optional EDI Elements of Service

Element of Service	Basic		Functional Group		
	Orig.	Rec.	FG	Orig.	Rec.
Content Confidentiality	o	o	SEC-A,B	c^7	c
Message Security Labeling	o	o	SEC-A,B	c^7	c
Non-repudiation of Delivery	o	o	SEC-A,B	c^7	c
Non-repudiation of Origin	o	o	SEC-A,B	c^7	c
Requested Preferred Delivery Method	m	–			

P(EDI) Protocol

This clause defines the additional requirements for EDI-UA support of the EDI protocol (Pedi). The following tables define differences from the requirements of the AMH3 ISP, Part 2, Annex A.

Table 9 - Delta to pDISP 12063-2, Annex A, Clause A.2.2.1: EDIM Heading Per-Recipient Fields

Ref	Element	Origination		Reception	
		Base	Profile	Base	Profile
12	authorization-information-field		m		m

Table 10 - Delta to pDISP 12063-2, Annex A, Clause A.2.2.6: EDIN Receiver Field

Ref	Element	Origination		Reception	
		Base	Profile	Base	Profile

2	original-edim-identifier		o		
3	first-recipient		o		

Table 11 - Delta to pDISP 12063-2, Annex A, Clause A.2.2.10: Service String Advice Field

Ref	Element	Origination		Reception		Notes
		Base	Profile	Base	Profile	
5	reserved		m		m	This does not make sense; consider adopting o/o from ISP.

Table 12 - Delta to pDISP 12063-2, Annex A, Clause A.2.3.2: EDIM Body Part

Ref	Element	Origination		Reception	
		Base	Profile	Base	Profile
2.2.2	additional-body-parts, 2		m		
Notes: 2	When receiving a multi-part body EDIM and forwarding it without accepting EDI responsibility for it, this field is always present.				

Table 13 - Delta to pDISP 12063-2, Annex A, Clause A.2.4.1: EDIN Common Fields

Ref	Element	Origination		Reception		Notes
		Base	Profile	Base	Profile	
3	first-recipient		m			
5.5	original-content-integrity-check		o		o	This should not be mandatory outside of the security functional groups.

Table 14 - Delta to pDISP 12063-2, Annex A, Clause A.2.4.3: NN Fields

Ref	Element	Origination		Reception	
		Base	Profile	Base	Profile
2.1	nn-ua-ms-reason-code		m		
2.2	nn-uiser-reason-code		m		
2.3	nn-pdau-reason-code		o		
2.3.1	nn-pdau-basic-code		m		
2.3.2	nn-pdau-diagnostic		m		

3	nn-supplementary-information		m		

Table 15 - Delta to pDISP 12063-2, Annex A, Clause A.2.4.4: FN Fields

Ref	Element	Origination		Reception	
		Base	**Profile**	**Base**	**Profile**
3.1.3	fn-security-check			o	o
3.2.2	fn-user-diagnostic		o		
3.3	fn-pdau-reason-code		o		
3.3.1	fn-pdau-basic-code		m		
3.3.2	fn-pdau-diagnostic		m		

Table 16 - Delta to pDISP 12063-2, Annex A, Clause A.3.1: EDI Forwarding, AF and MF

Ref	Element	Profile		Notes/ References
		Orig.	**Rec.**	
A.2.4.4/4	fn-supplementary-information	m		

Table 17 - Delta to pDISP 12063-2, Annex A, Clause A.3.2: EDI Security

Ref	Element	Origination		Reception		Notes
		Base	**Profile**	**Base**	**Profile**	
A.2.4.1/5	notification-security-elements					A, B, C
A.2.4.1/5.1	original-content		c,1		c,1	A, B
A.2.4.1/5.1	original-content-integrity-check		c,1		c,1	A, B
Notes:						
1	One of these two elements must be supported on origination when using the SEC-A or SEC-B EDI security class.					

EDI MS Attributes

This clause defines the additional requirements for EDI-UA and EDI-MS support of the EDI protocol attributes. The following tables define differences from the requirements of the AMH3 ISP, Part 5, Annexes A and B.

Table 18 - Delta to pDISP 12063-5, Annex A: EDI Forwarding class AT and class MF

Ref	Attribute	UA Base	MS Base
	date-and-time-of-preparation		m

Table 19 - Delta to pDISP 12063-5, Annex B, Clause B.1.12: EDI-Specific Attributes

Ref	Attribute	Profile	
		EDI-UA	EDI-MS
	application-reference		o
	edi-notification-requests-for-this-recipient		o
	edim-body-part	o	o
	expiry-time		o
	fn-reason-code		o
	fn-supplementary-information		o
	forwarded-to		o
	interchange-length		o
	nn-reason-code		o
	nn-supplementary-information		o
	notification-time		o
	originator		o
	pn-supplementary-information		o
	processing-priority-code-for-this-recipient	m	
	related-messages		o
	service-string-advice		o
	test-indicator-for-this-recipient	m	
	this-recipient		o

Table 20 - Delta to pDISP 12063-5, Annex B, Clause B.2.1 EDI Forwarding class AT and class MF

Ref	Attribute	Profile	
		EDI-UA	EDI-MS
	edim-body-part	m	m
	incomplete-copy	m	m
	responsibility-forwarded	m	

	responsibility-passing-allowed-for-this-recipient	m	

Table 21 - Delta to pDISP 12063-5, Annex B, Clause B.2.2.1 EDI Security (Class A and B)

Ref	Attribute	Profile	
		EDI-UA	**EDI-MS**
	edi-notification-security-for-this-recipient	m	
	edi-reception-security-for-this-recipient	m	

Table 22 - Delta to pDISP 12063-5, Annex B, Clause B.2.2.2 EDI Security (Class C)

Ref	Attribute	Profile	
		EDI-UA	**EDI-MS**
	edi-application-security-elements	m	
	edi-application-security-extensions	m	

Table 23 - Delta to pDISP 12063, Part 5, Annex B, Clause B.2.3 EDI Multi-Part Body (MPB)

Ref	Attribute	Profile	
		EDI-UA	**EDI-MS**
	cross-referencing-information	o	o
	edim-synopsis		o

Annex (normative)

Naming, Addressing and Routing

Annex (normative)

IPM Body Part Support

Annex (normative)

Object Identifiers

Annex (informative)

Interpretation of Elements of Service

Annex (informative)

Recommended Practices

Annex (informative)

Bibliography

Annex (informative)

Defense Message Handling Profiles

Annex (informative)

Management Domains