AMHS Profile for OPMET IWXXM data exchange

AFSG Planning Group

Appendix H to the EUR AMHS Manual

- New Appendix to the EUR AMHS Manual presented at AFSG/21 meeting (24-28 April 2017)
- Appendix H: Application/Service oriented AMHS Profiles
- Purpose:
  - The definition of specific AMHS profiles for the support of given applications/ services, acting in limited environment, using ATS Message Handling Service
- AFSG/21 adopted the proposed solution and the amendment proposal of the EUR AMHS Manual

AMHS profile for OPMET IWXXM data exchange

- Dedicated chapter in Appendix H for the AMHS profile for OPMET IWXXM data exchange
  - Scope of the profile
  - Definition of the profile
  - Proposed Conformance Tests

AMHS profile for OPMET IWXXM data exchange

- Scope of the profile
  - AMHS UAs submitting and/or receiving OPMET data in IWXXM format through a P2/P3 or P2/P7 interface, as part of:
    - National OPMET Centre (NOC)
    - Regional OPMET Centre (ROC)
    - Interregional OPMET Gateway (IROG)
    - Regional OPMET Databank (RODB)
    - Any terminal or system receiving or requesting OPMET data in IWXXM format
  - Assumptions:
    - The MET Domain may add further data types to the IWXXM without affecting the AMHS profile
    - Data compression will always be performed in the MET domain
    - The MET Domain will define procedures for the submission of RQX messages to RODBs

AMHS profile for OPMET IWXXM data exchange

- Definition of the profile
  - Level of service
    - Exclusive use of the extended service
    - IPM-Heading-extensions (IHE)
      - ATS priority
      - Filing Time
      - OHI
    - File Transfer Body Part (FTBP)
  - Number of body parts
    - Exactly one body-party, which is an FTBP

Selection of IPM heading parameters and values

Ref	*Element*	*Doc 9880 static support (Extended Service) Orig/Rec*	*Doc 9880 reference*	*Dynamic action upon generation of IWXXM message*	*Value and/or comments*
Part 1: AMH21/A.1.2 IPM heading fields					
1	this-IPM	M/M	3.1.2.2.1, 3.1.4.2.1 (AMH21 support)	G	
2	originator	M/M		G	Address of the originating OPMET system (MET switch)
3	authorizing-users	O/M		X	
4	primary-recipients	M/M		G	Recipient addresses are populated by the MET switch based on its routing table (EUR Doc 033, ref. [1] section 4.1.4)
5	copy-recipients	M/M		X	
6	blind-copy-recipients	O/M		X	
7	replied-to-IPM	M/M		X	
8	obsoleted-IPMs	O/M		X	
9	related-IPMs	O/M		X	
10	subject	M/M		G	This field shall carry the TTAAiiCCCCYYGGggBBB part of the filename of FTBP. It is assumed that the subject field is easier to access for human operators in case of retrieval or analysis of transferred messages
11	expiry-time	O/M		X	
12	reply-time	O/M		X	
13	reply-recipients	O/M		X	
14	importance	O/M		X	The receiving UA shall assume that this field takes its default value ("normal")
15	sensitivity	O/M		X	
16	auto-forwarded	O/M		X	

Ref	*Element*	*Doc 9880 static support (Extended Service) Orig/Rec*	*Doc 9880 reference*	*Dynamic action upon generation of IWXXM message*	*Value and/or comments*
Part 1: AMH21/A.1.2 IPM heading fields					
..	....				
17	extensions	M/M	3.3.4.1	G	
17.6	authorization-time	M/M	3.3.4.2	G	Equivalent to filing time
17.12	originators-reference	M/M	3.3.4.3	X	To avoid confusion with the use of this field in the IHE context (where it is carrying data converted to/from AFTN OHI)
17.13	precedence-policy-identifier	M/M	3.3.4.5, 3.3.4.6 and 3.3.4.7	G	OID value {iso (1) identified-organisation (3) icao (27) atn-amhs (8) parameters (0) amhs-precedence-policy (0)} (see Doc 9880, ref. [5], 3.3.4.7)
Part 4: AMH21/A.1.5 common data types					
1	RecipientSpecifier				
1.2	notification-requests	M/M	3.3.6	X	
1.2.1	rn	M/M	3.3.6	X	IWXXM never use priority SS
1.2.2	nrn	M/M		X	Doc 9880 does not foresee the presence of nrn-request
1.4	recipient-extensions	M/M	3.3.4.1	G	
1.4.3	precedence	M/M	3.3.4.8	G	Equivalent to priority GG: precedence value = 28 (TAF, METAR/SPECI, and also in case of AMD, COR or RTD reports/bulletins) Equivalent to priority FF: precedence value = 57 (AIRMET, SIGMET, VAA, TCA)
2	ORDescriptor				
2.1	formal-name	M1/M1		G	used for originator-address and recipient-addresses

M = mandatory support (static support)
M1 = mandatory O/R name minimal support (static support)
O = optional support (static support) or optionally generated (dynamic behaviour)
G = generated
X = not used

File Transfer parameters

Ref	*Element*	*European ATS Messaging Service Profile - static support* *Orig/Rec*	*European ATS Messaging Service Profile - reference*	*Dynamic action upon generation of IWXXM message*	*Value and/or comments*
1	related-stored-file	-			
2	contents-type				
2.1	document-type				
2.1.1	document-type-name	M/M	A.2.4.2.1	G	default OID value: 1.0.8571.5.3 {iso(1) standard(0) 8571(8571) document-type(5) unstructured-binary(3)}
3	environment				
3.1	application-reference				
3.1.1	registered-identifier	O/M	A.2.4.2.2 and A.2.4.2.6	G	OID value: 1.3.27.8.1.2 {iso (1) identified-organisation (3) icao (27) stn-amhs (8) application (1) digital-met (2)}
3.4	user-visible-string	O/M	A.2.4.2.6	G	"Digital MET"
4	compression	-			See para 3.2.3.4.2 below
5	file-attributes				
5.1	pathname				
5.1.1	incomplete-pathname	O/M	A.2.4.2.3	G	bulletin file name as specified in EUR Doc 033, ref. [1], section 5.1.4
5.5	date-and-time-of-last-modification	O/M	A.2.4.2.4	O	
5.13	object-size				
5.13.2	actual-values	O/M	A.2.4.2.5	O	
6	extensions	-			

M = mandatory support (static support)
O = optional support (static support) or optionally generated (dynamic behaviour)
G = generated
X = not used

Selection of used P3/P1 envelope parameter values

- IPMs with precedence value of 28
  - priority abstract-value ‘non-urgent’
- IPMs with precedence value of 57
  - priority abstract-value ‘normal’
- Encoded-Information-Types in P3 submission-envelope
  - shall be limited to the OID value for FTBP {joint-iso-itu-t(2) mhs(6) ipms(1) eit(12) file-transfer(0)}

AMHS profile for OPMET IWXXM data exchange

- Proposed Conformance Tests
  - Profile specific submission tests
  - Profile specific delivery tests
  - Submission and delivery tests according to Appendix D-UA

Q&A

Thank you