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Steps for IWXXM implementation

EUR Data Management Group

IWXXM Implementation Workshop
AFI-Region 15./16. September 2020

Zoom Webinar Platform





IWXXM implementation steps

- Aeronautical MET Provider to NOC

- Data production: IWXXM (recommended) or (initially) TAC
- Connection to NOC MET Switch
 - Any suitable connection (e.g. GTS socket, FTP, AMHS P3)





IWXXM implementation steps

- NOC (MET Switch)

- Any suitable connection to COM Centre
 - P3 AMHS connection with extended services to Message Transfer Agent (MTA) recommended
- Should do the following (otherwise these functions could be done by a ROC)
 - TAC to IWXXM translation if IWXXM data not produced at origin
 - IWXXM data aggregation (bulletins) → should mirror existing TAC bulletins!
 - Compression/decompression
- Message validation
- IWXXM data routing





IWXXM implementation steps

- National AFS COM Centre (COM Switch)
 - Extended P1 AMHS connection with COM Centre of associated ROC
 - International distribution to associated ROC





IWXXM implementation steps

- ROC/IROG

- Same requirements as NOC
- Additionally:
 - MET Switch:
 - » TAC to IWXXM translation (LoA with NOC)
 - » Off-line validation & statistics (to be specified)
 - Provide IWXXM implementation aid to NOCs (bi-lateral tests, ...)





IWXXM implementation steps

- RODBs

- Same requirements as NOC
- Additionally:
 - Storage of IWXXM data
 - Implementation of IWXXM RQX-request/reply procedure in parallel with TAC RQM-request/reply





IWXXM implementation steps

- **Testing - validation**
 - MET provider – NOC
 - NOC – ROC
 - Bi-lateral end-to-end tests
- **OPMET data registration**
 - According to the OPMET Update procedure (EUR Doc 18)





Bilateral Testing - General

- IWXXM-messages are operationally to be exchanged via ext. AMHS using FTBPs (File Transfer Body Parts)
- Testing the good format of IWXXM-messages could also be done offline (FTP, TCP/IP-socket connection,..)



What should be testes? (1)



- AMHS interoperability
 - This should at least be done between the NOCs AMHS implementation and the national COM-centre
 - The tests should consist of
 - different body part types (ia5 text, general text, file transfer)
 - different content sizes
 - IPM Heading extension (IHE) or ATS-message-header
 - In case AFI is going to use a dedicated IWXXM profile (like in the EUR-region), the correct usage should also be tested

What should be testes? (2)



- **IWXXM interoperability**
 - between the MET-switches of the testing partners
 - should at least consist of
 - encoding and decoding
 - generell format checking (schema & schematron)
- **RODB interoperability**
 - In case an RODB (Regional OPMET Database) is involved, the tests should also consist of
 - Storage of IWXXM bulletins in the ROBD
 - Request of IWXXM bulletins from the ROBD

What should be testes? (3)



- Long term testing
 - IWXXM-messages should be exchanged for a longer period.
 - Data should be checked regularly for any identified schema/schematron-errors



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THANK YOU