



SATELLITE DISTRIBUTION SYSTEM OPERATIONS GROUP (SADISOPSG)

THIRTEENTH MEETING

Dakar, Senegal, 27 to 29 May 2008

Agenda Item 9: Any other business

INFORMATION ABOUT THE WEATHER EXCHANGE CONCEPTUAL MODEL WORKSHOP, ORGANISED BY EUROCONTROL 18 & 19 DEC 2007

(Presented by the SADISOPSG Technical Development Team)

SUMMARY

This information paper presents information about a workshop, organised by EUROCONTROL 18 to 19 December 2007 on the subject of the exchange of weather related data, part of the implementation of a system wide information management (SWIM).

1. INTRODUCTION

1.1 This paper presents information about a workshop, organised by EUROCONTROL on the subject of the exchange of weather related data, part of the implementation of a system wide information management (SWIM).

1.2 Participants

1.3 Members (around 55) for this open workshop were representatives of ICAO, WMO, FAA, CAA, US Air force, NOAA, Flysafe, DFS; representatives of ICAO subgroups like METG and BMG; representatives from National Meteorological Services (NMS) in Europe.

1.4 Programme

18 December 2007:

- Introduction of the members
- WXCM Scope, Primer and In-depth look (EUROCONTROL)
- WXCM –JMCDM comparison (Joint METOC Conceptual Data Model-by the US)
- Break out sessions (questionnaire in 3 small groups)

19 December 2007:

- WXCM/WXXM Prospects and Scenery (EUROCONTROL)
- NEXTGEN ATM (FAA)
- WXCM/WXXM Implementation Roadmap (EUROCONTROL)
- Workshop Summary

All presentations are available at the EUROCONTROL site:

(http://www.eurocontrol.int/aim/public/standard_page/met.html)

2. GENERAL IMPRESSION

- A broad entry (see 1.2)
- EUROCONTROL is seeking for worldwide support and cooperation for WXXM (Weather Information Exchange Model) among which ICAO, WMO and FAA
- WXCM is a Weather Information Conceptual Model, base for WXXM, a data centric information model developed for Aeronautical Information Management (AIM). WXXM is a formal representation of weather phenomena, forecasts, observations, weather products and geospatial features primarily related to aviation meteorology (see figure 1)
- The core component of WXXM/WXCM is facilitator for information exchange between data providers and data users and an essential component for System wide aeronautical information management (SWIM) (see figure 2).
- WXXM is specified in Unified Modelling Language (UML).
- WXXM/WXCM shall be an open, transparent and interoperable system, based on international standards (OGC,ISO) and ICAO/WMO requirements to ease integration and linking with new and already existing meteorological systems. The system should become a node in ICAO-AFN as well in WMO-WIS.
- The development of WXXM/WXCM is now in the first phase. Summer 2008 a first working model will be available and will be used for a proof of concept. After that a business case/Safety case and Regulatory framework (EU, ICAO, WMO) will follow and finally the institutional issues. The project last till 2020.

3. RELATIONS WITH SADIS

- All products available on SADIS will become available in this WXXM/WXCM model plus associated products available in the meteorological domain
- The SADIS products have their formats, OPMET, GRIB and BUFR. The WXXM/WXCM products will become available as data sets in XML
- The essential component for EUROCONTROL's AIM is to be facilitator for Information exchange between data providers and data users, meaning that applications could integrate different data domains transparently for the user and Key enabler for future ATM by systems-wide aeronautical information management (SWIM)
- Next to the WXXM initiative by EUROCONTROL there are other developments to open, transparent and interoperable systems, based on international standards like WMO's WMO Information System (WIS) and Europe's Infrastructure for SPatial InfoRmation Europe (INSPIRE)

4. **ACTION BY THE SADISOPSG**

- 4.1 The group is invited to note the information in this paper.

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APPENDIX

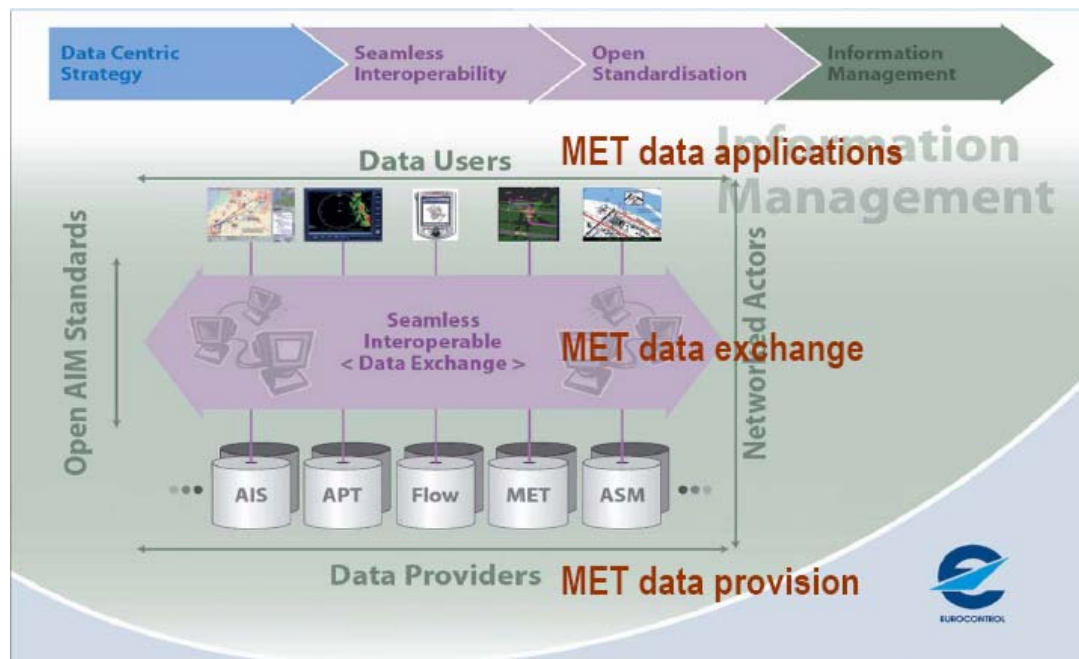


Figure 1 Overview

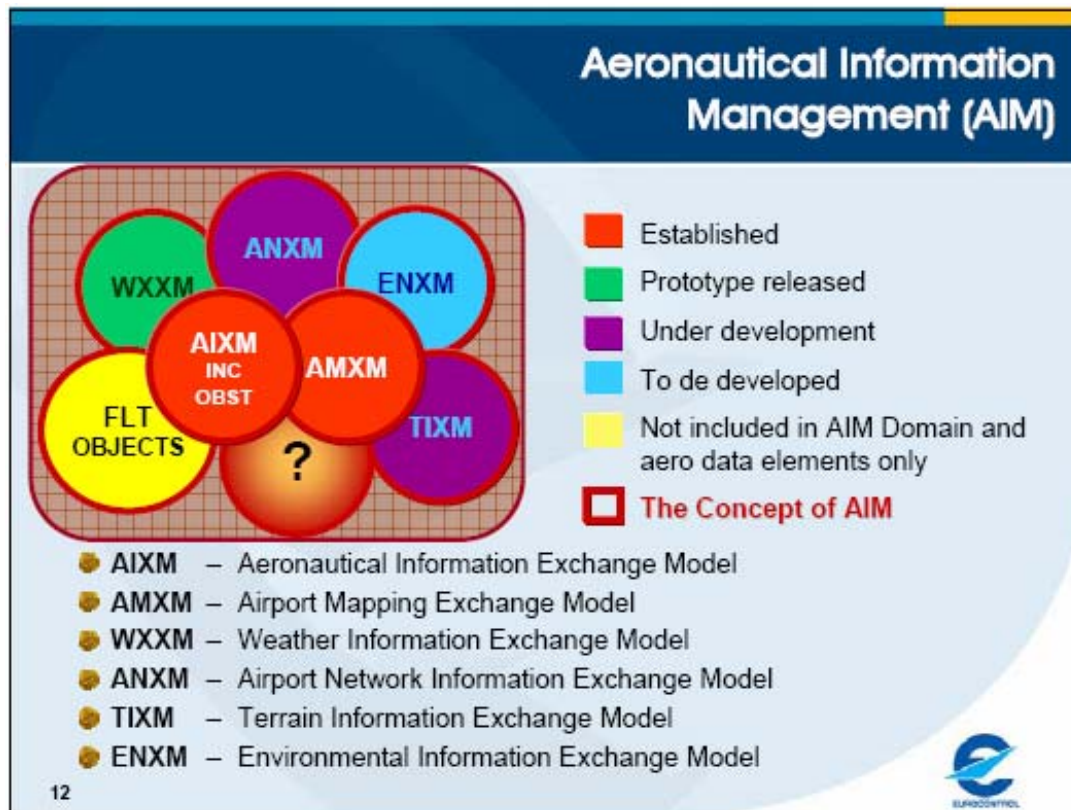


Figure 2 WXXM in AIM as a System Wide Information Management.

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