THALES

Digital NOTAM Workshop
Industry Experience

19-20 May 2014 - Brussels
Hervé Puget – TopSky-AIM Product Manager
Modelise environment & Aeronautical Rules

- Using Static Data (AIXM5) with
  - Digital NOTAM (AIXM5)
  - Terrain & Obstacle (eAIP)
  - Meteo (WXXM)
  - Flight plan (FIXM)
AIM is a key component of ATM Strategy

2 out of every 3 planes take-off and land safely thanks to Thales

TopSky

ATM Solutions

Shaping Tomorrow's Sky

Over 7,000 navaids in operation

Over 180 countries trust Thales

More than 130 Air Traffic Control Systems

Over 3,000 Controller Positions

Over 680 radars in operation

Over 25 Tower Systems in operation

Over 20 Aeronautical Information Mgt Systems

Over 20 ADS-C equipped ATC Centres

1,800 ADS-B & Multilateration Equipment

Thales Air Systems 20/05/2014
TopSky-AIM

- **TopSky-AIXM** (*AIXM5 aeronautical database*)
  - Web client interface (textual and graphical)
  - Operation oriented input forms
  - Eurocontrol Business Rules Engine check
  - Web Services interface

- **TopSky-eAIP** (*Publication component*)
  - Latest Technologies & Direct connection to DB
  - Automatization of AIP Generation

- **TopSky-AIS & TopSky-Internet Briefing**
  - NOF, ARO and MET operation
  - now integrating Digital NOTAM

- **Integrated with third party components**
  - GéoTitan - Procedure design
  - AGC - Charting
Thales contribution to Digital NOTAM

- **AIXM CCB**
  - Lead by Eurocontrol/FAA

- **Feedback to Digital NOTAM focus group**
  - Digital NOTAM Event specification document

- **SESAR Digital NOTAM prototype (WP 13.2.2)**
  - Digital NOTAM in SESAR validation exercises
  - Digital NOTAM in SESAR SWIM Demo
Based on the Digital NOTAM Event specification document  

**VERSION 1.1**

Implement Specific Interface **PER EVENT** (except for « OTHER » event)

**Swimming**  
Aeronautical Information Feature Service - *1st AIM service defined by Thales*

**AIXM5 Database RETRIEVAL**

- **SWIM**
  Aeronautical Information Feature Notification Service

**Digital NOTAM DISTRIBUTION**

- **SWIM** (WS-Notification Broker)  
  Aeronautical Information Notification Service
- **Email**
HMI Definition & Validation

- **HMI Usability** of the “Per Event Interface” using SESAR **Digital NOTAM prototype** (WP 13.2.2)
- **3D AIXM5 Viewer** integration dedicated for Digital NOTAM illustration

Interfaces Definition & Validation

- **AIXM5 Aeronautical Information Feature Service** using **TopSky-AIXM**
- **PIB Production** with DNOTAM converted in Current ICAO NOTAM using **TopSky-AIS** *(also interfaced for ICAO NOTAM Numbering)*
Digital NOTAM **INTEROPERABILITY** with AIXM 5

- ADQ (Metadata, CRC), Timesheet interpretation

Digital NOTAM requires AIXM static **DATA SHARING**

- Database synchronization, AMHS distribution, SWIM services,
- Digital NOTAM Checklist

Digital NOTAM **DISTRIBUTION** not yet defined

- AMHS distribution, SWIM services (Filtering capabilities)

Digital NOTAM on **AMDB**

- Publish AMDB in AIXM 5 format
- and/or **Convert** Digital NOTAM to AMDB

**Interoperability, Data sharing, Distribution** and **Link with AMDB** still requires recommendations & additional specifications
Thank you for your attention!

YOU are WELCOME to visit THALES exhibition in the hall.

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