Digital NOTAM Workshop
EUROCONTROL Keynote

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From idea to implementation

• 1997 – first AIXM version
  • “digital AIP”
  • 2003 – EAD start of operations

• 2003 – “xNOTAM” initial ideas
  • using AIXM 4.5

• 2002 – start of Eurocontrol/FAA AIXM and Digital NOTAM cooperation

• 2008 – AIXM 5.0
  • Embedded Digital NOTAM capabilities

• 2009 – 2014
  • Trials, workshops, pilot implementations
Progress since 2010 Workshop

• 2011 – Event Specification 1.0
  • Most common “NOTAM situations”

• 2012 – 2014 OGC Test Beds
  • Engineering Reports
  • Digital NOTAM services WFS, SLD, WSN, etc.

• Industry prototypes
  • IDS, Comsoft, Thales, Frequentis, Luciad, Snowflake Software, MonitorSoft, etc.

• 2012 – FAA FNS-NDS system deployment

• 2014 → Eurocontrol Digital SNOWTAM WFS service (trial)
Workshop objectives

- **Roll-out** Event Specification 2.0
- **Collect** feedback from implementations
- **Discuss** any perceived/real issues
Workshop Participants

- ANSP: 39%
- Industry: 34%
- Eurocontrol & FAA: 14%
- Airspace users (incl MIL): 7%
- Academic, research, other: 6%
Digital NOTAM – why necessary?

Source EAD

- Europe (L+E+B)
- Pacific (A+N+Y)
- Asia (R+V+W+Z)
- Russia + Central Asia (U)
- Africa (D+F+G+H)
- Mid Asia (O)
- North America (C+K+P)
- South + Central America (M+S+T)
- TOTAL
Current NOTAM - graphical limitations

M1691/14 NOTAMR M1668/14
Q) EBBU/QRTCA/IV/BO/W/045/095/5009N00455E039
A) EBBU
B) 1405051305 C) 1405090950
D) MAY 05 1300-1350, 06 1000-1050, 07 1100-1150, 08 1000-1050 AND 09 0900-0950
E) TEMPO SEGREGATED AREA EBTSA26B ACTIVATED. THE TSA26B IS PERMEABLE DURING ITS ACT FOR TRAFFIC IN AND OUT OF EBFS AND FOR ACFT IN EMERGENCY.
F) 4500FT AMSL
G) FL095
Graphic NOTAM – current representation based on Q line (centre/radius)
Graphic NOTAM – the real geometry of the area (Digital NOTAM)
In practice

- **AIS2AIM Roadmap**

- **Anx15 - Amdt 36** – Appl. date 2010
  - Automation, quality, eAIP, etod <<$$

- **Anx 15 - Amdt 37** – Appl. date 2013
  - AIM inclusion, Roles & Responsibilities, Terminology, IM grouping
  - Automation>> & Digital Data exchange
  - Etod tuning & Airport Mapping Data Bases (AMDBs) inclusion
  - Integrity Values out (classifications kept)
  - AIP Template, SNOWTAM format enhancements

- **Guidance material proposals**
Annex 15 – Coming soon

- **Digital Data services**
  - **Several** Datasets: Aeronautical (AIP), Terrain, Obstacles, Aerodrome Mapping, Instrument Flight Procedure Design
  - "*progressive* introduction of the requirements for digital data publication"
  - "*incentive* - allowed to remove certain AIP tables, if data is made available digitally"
  - Short-term operational sign update [= **Digital NOTAM**]
Digital NOTAM in Europe

- NMOC Functionality
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  - CACD
    - EAIMS interface
    - Phase 1 development (ADQ compliant)
      - Data harmonisation
      - Graphical briefing
      - Weather
      - Digital NOTAM
      - AIS Functionality
        - Support CS2/CS4...
        - Data harmonisation
        - Graphical briefing
        - Weather
        - Digital NOTAM
        - AIS Functionality
          - CS5 – EAIMS Demonstrator
            - CS5 – EAIMS Demonstrator
              - Briefing
              - AIS Functionality
    - EAD
      - ADQ
        - Initial transfer
          - end of life
    - Step 1: OPS
      - end of life
    - Fully: OPS
      - data for EAIMS clients & validation feed-back
A global SWIM Sandbox
During 6 months ‘play’ together in a Non-Operational environment providing/consuming SWIM Services

2013 Participants

- Aeronautical, Meteorological, Flight, Environmental, Surveillance, Aircraft, … services
- All in registry
Sign up for the 2014 SESAR SWIM Master Class Challenge

Driven by the success of previous editions, we are delighted to announce the launch of the third SESAR SWIM Master Class on 24 June 2014.

Enabling global interoperability in ATM through SWIM

WANTED

The SESAR SWIM Master Class is looking for three categories of participants:

1. Developers of SWIM enabled ATM applications
2. Developers of SWIM enabled ATM information services
3. Providers of SWIM compliant infrastructure (new)

SESAR SWIM Master Class is a platform for learning and sharing and the participation of observers is therefore very much encouraged.

• Please participate providing/consuming Digital NOTAM data!
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