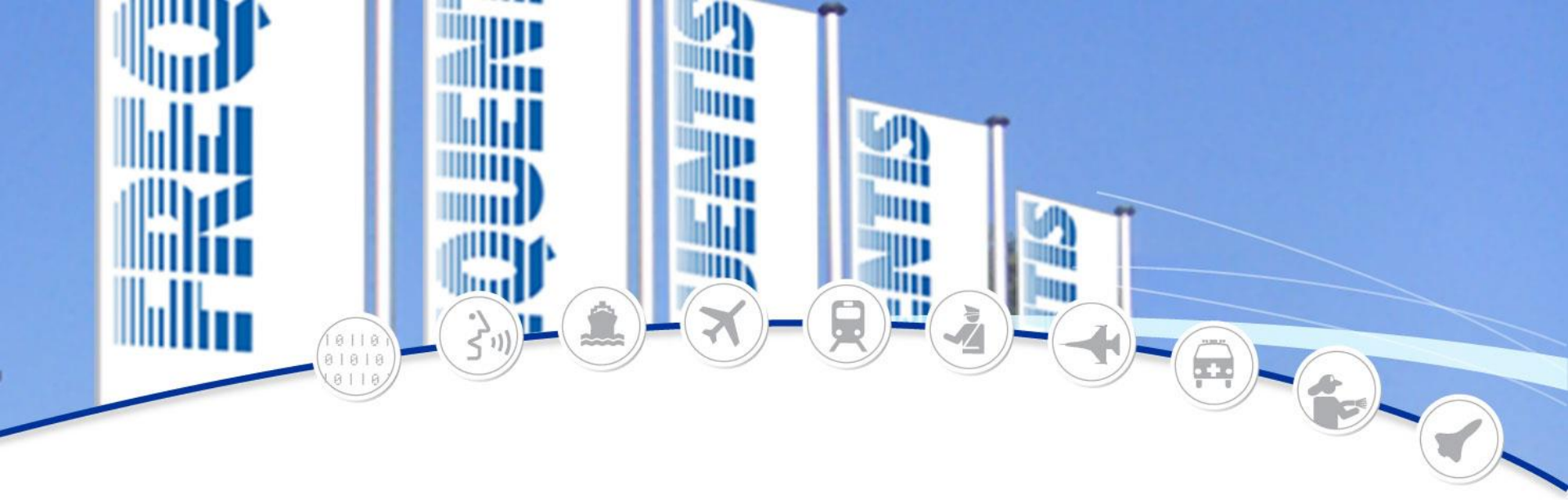


FREQUENTIS – FOR A SAFER WORLD

MIDAD

2013-04-02 | LENNARZ Joachim

FREQUENTIS

→ A Decade EAD

“Revolution is not a word which is normally associated with air traffic management (ATM) concepts, least of all those concerned with the supply of aeronautical data, but, at the time of its launch 10 years ago, the European Aeronautical Information System Database (EAD) was, in its own way, revolutionary.”

Skyway Magazine 1Q2013

Today EAD is more revolutionary than ever before !

→ The same but still different …

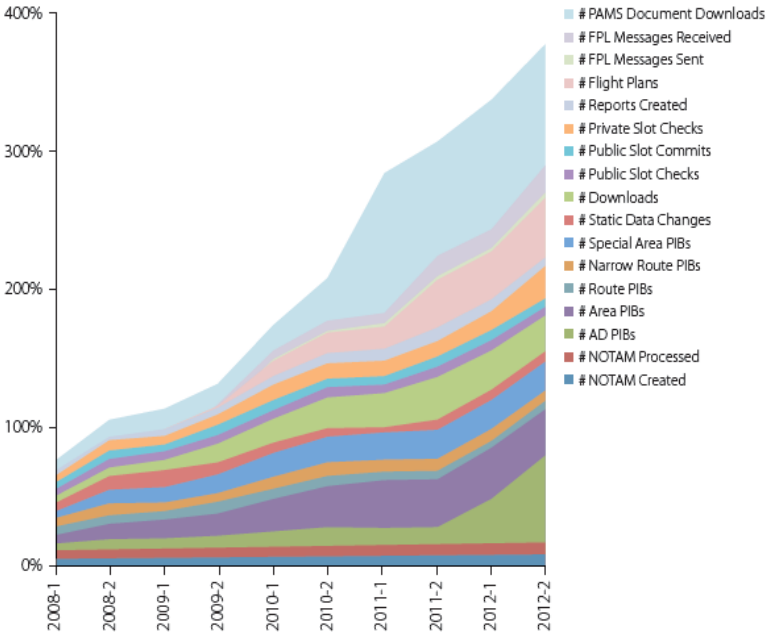
In the 3rd Generation and 18 Releases later

EAD has seen a tremendous growth since the beginning in terms of functionality, users and data that is hold in its repository.

- → **32%** growth per year in **users** since 2003
- → **24%** growth per year in **licenses** sold since 2003

- → **45%** growth per year in **flight plan related message handling** since 2011
- → **7%** growth per year for **NOTAM processed** since 2005

Table three: relative number of EAD activities compared to the baseline for 2008 (100%)

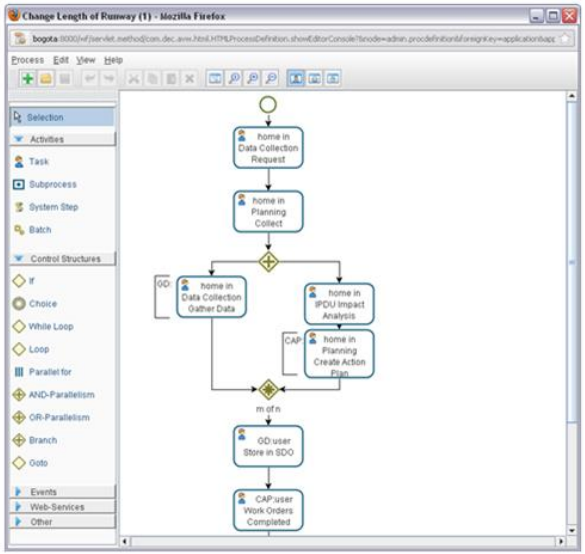


Skyway Magazine 1Q2013

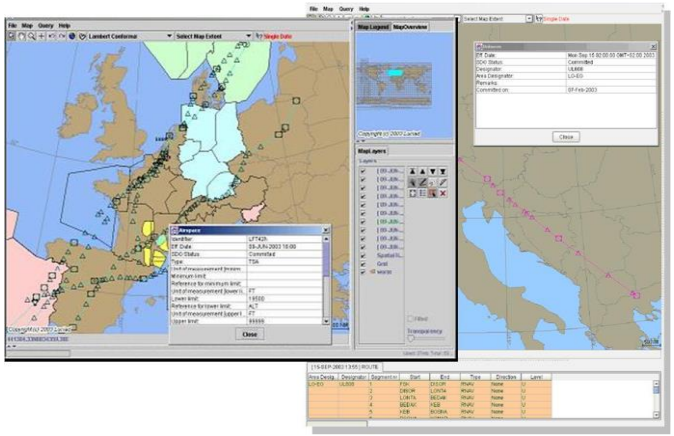
→ Modularity & Flexibility

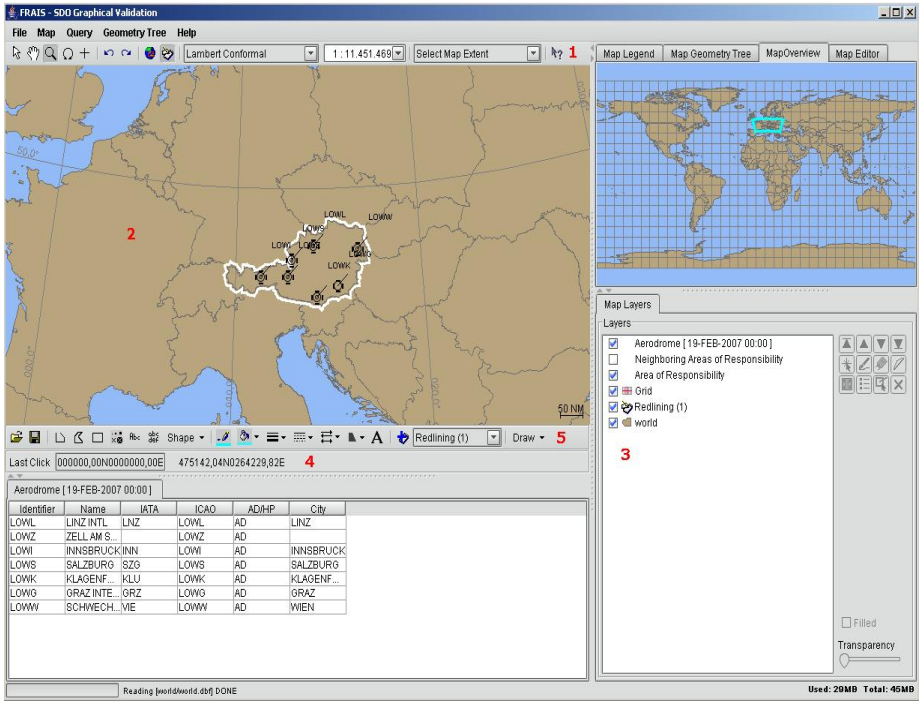
Offering various mechanisms and aspects to the needs of each and every user:

- → Web-based Workflow Management Layer
- → Functional system configurability
- → Centralized collaboration management
- → Architectural EAD cloud concepts



→ SDO

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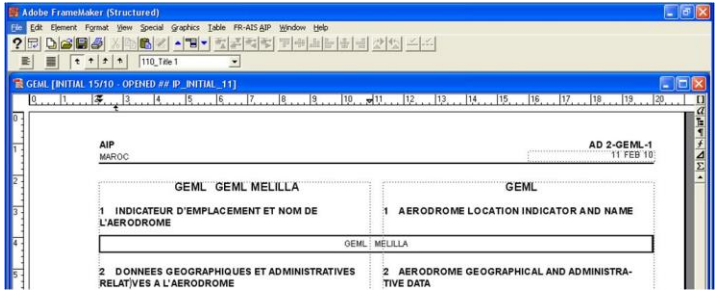
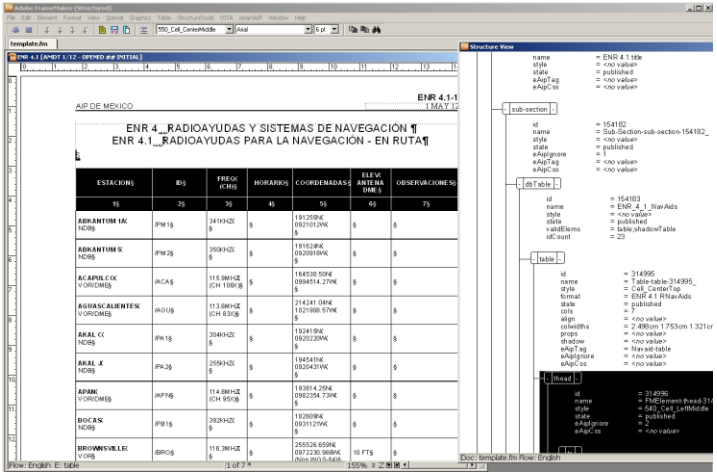
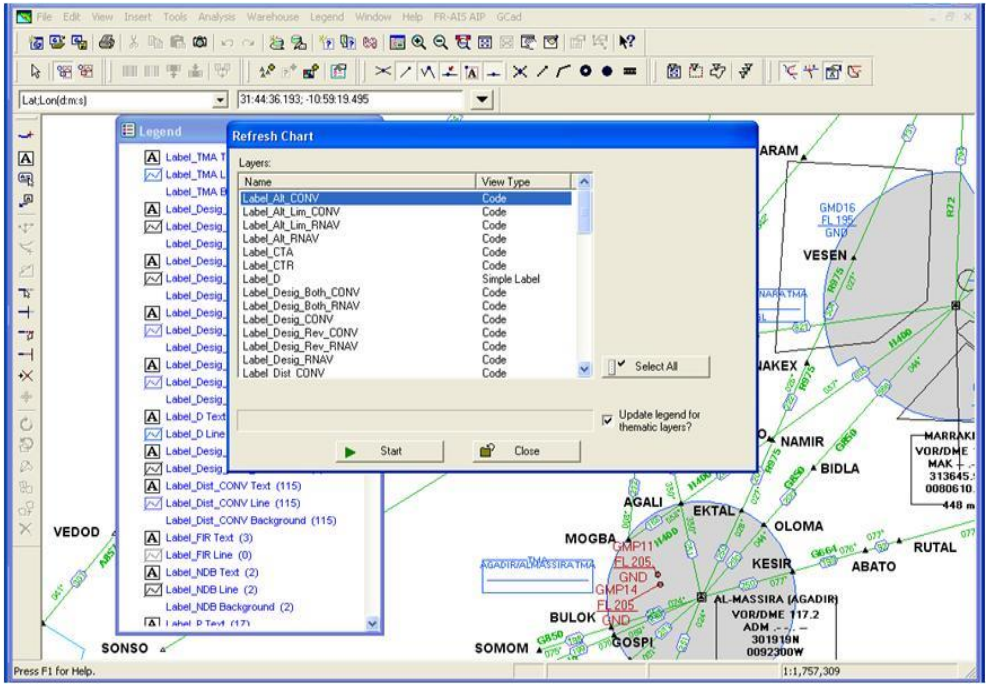
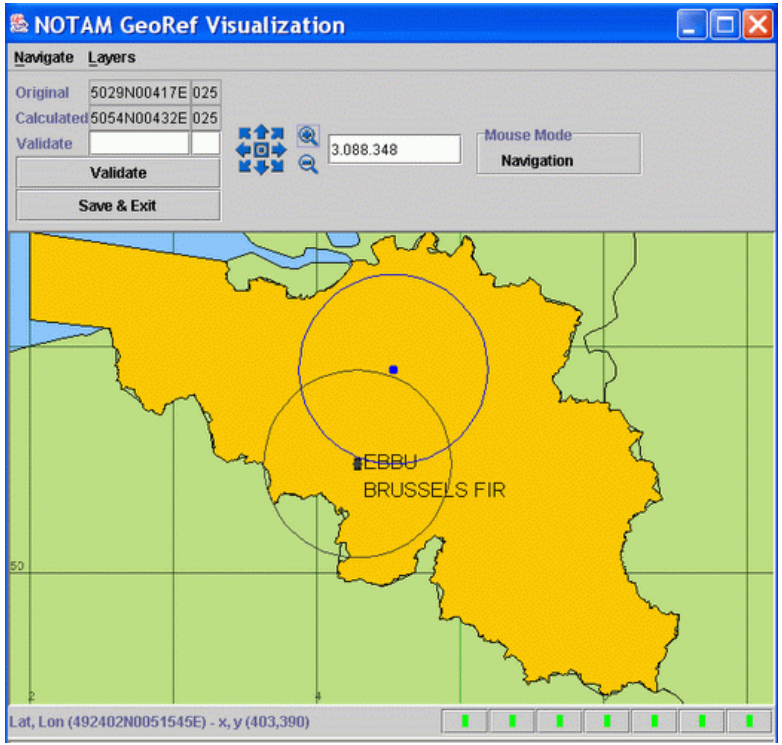
→ AIP & Charting

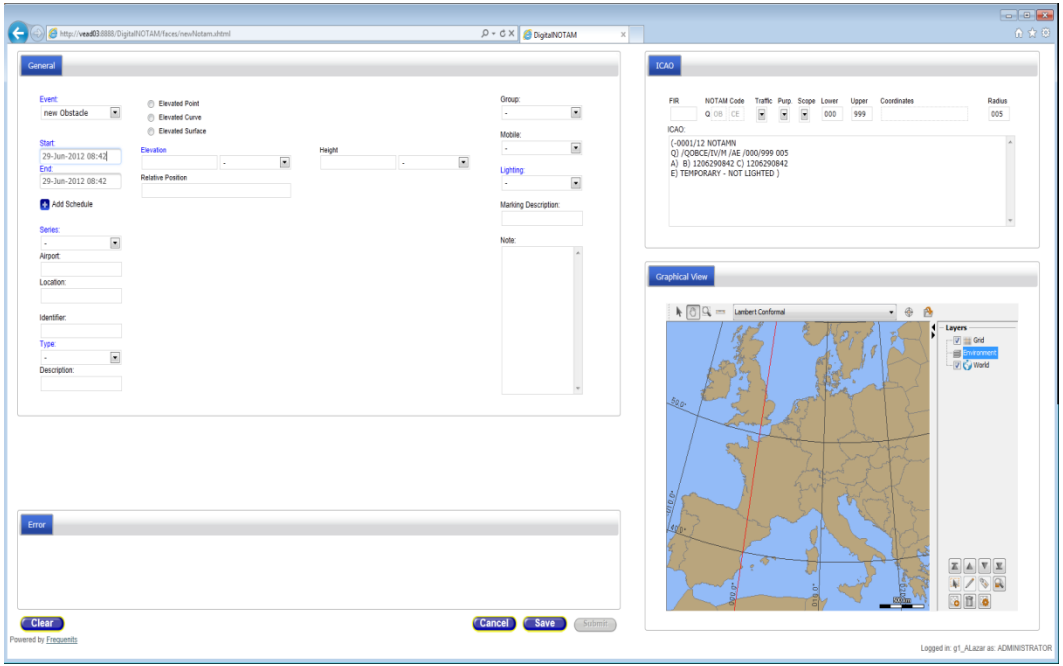






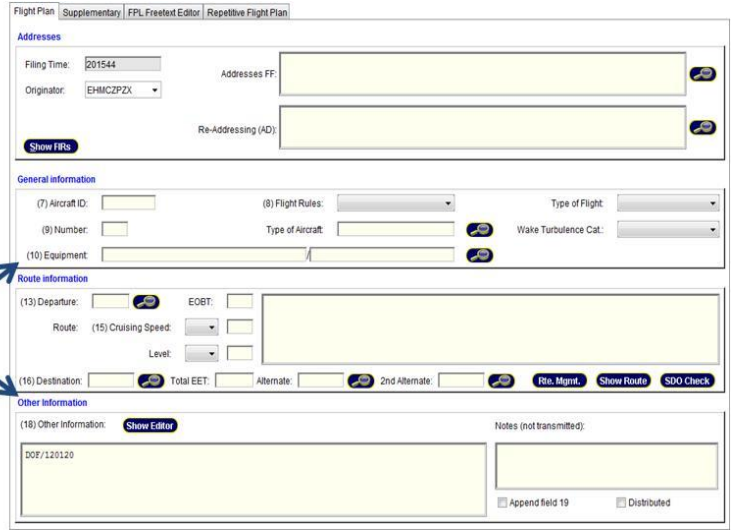
→ NOTAM (Digital)

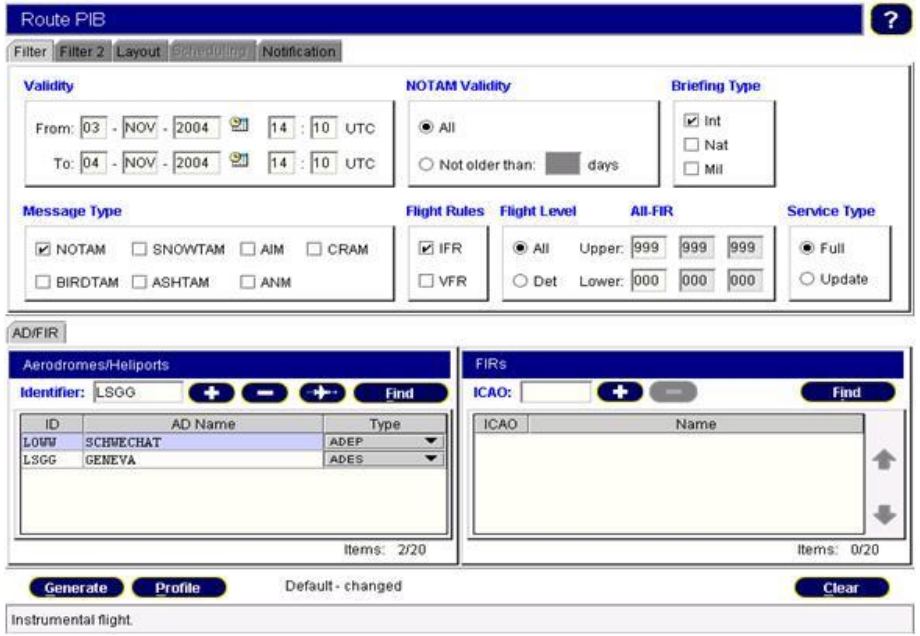




→ FPL & PIB

FPL2012



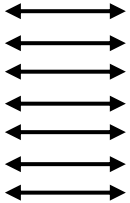


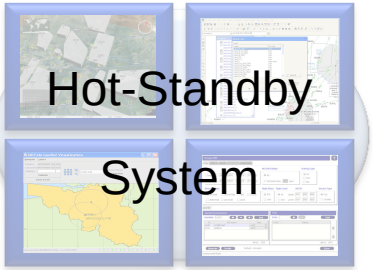
→ EAD System Layout

Centralized Access through a **Centralized System**

Data Users

Data Providers



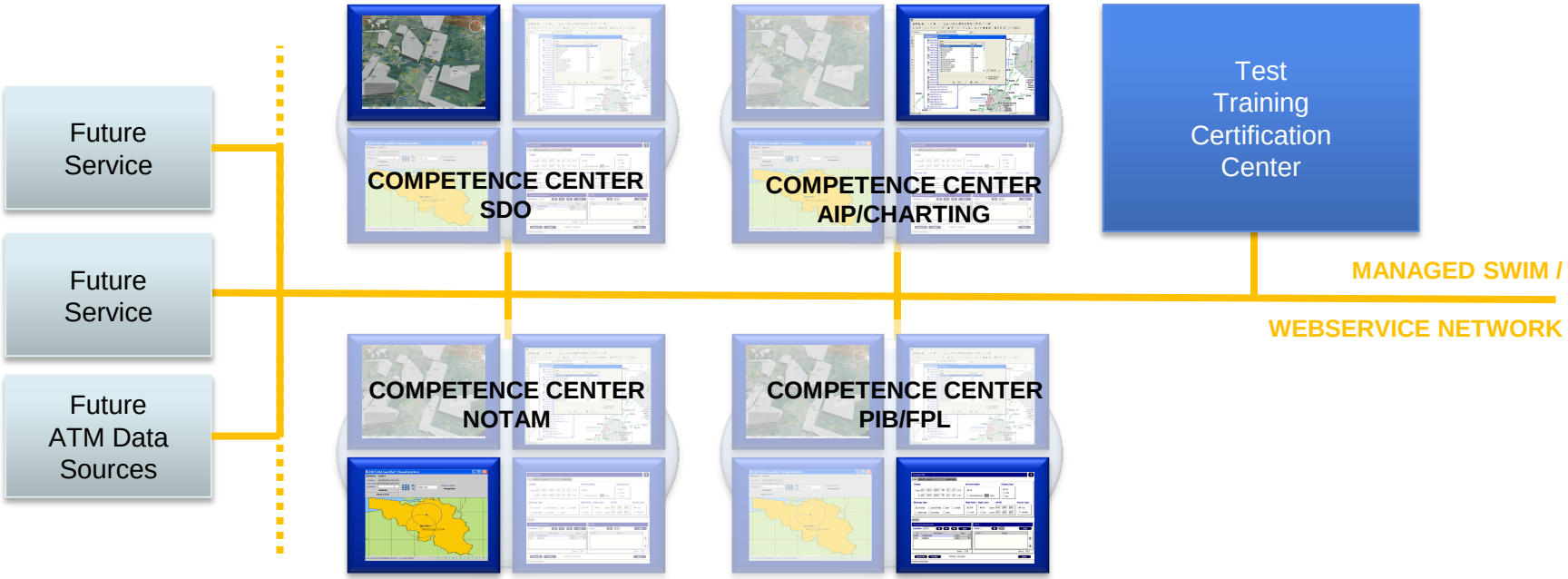


Hot-Standby System

Dublicate System for automated testing

→ Possible MIDAD Layout

Centers of Excellence within a managed Network



→ Advantages

- → **Establish local expertise** for net-wide specialist service delivery
- → Auto-Sync between the server systems – acting as **emergency hot-standby** systems
- → Open **SWIM/Web-Service** architecture that can be further extended by additional services in the future
- → **Use existing local installation** via data upload and download mechanisms – local decision whether to use local, server or mixed functionality
- → Connect to EAD and other regional clusters/hubs to **access and share AIM data** automatically on a **global basis**.

→ MIDAD Processes

- MIDAD will require the introduction of processes which support the overall MIDAD operation, MIDAD upgrades and further developments.
  For example:
  - **Change Control Board Institution**; any change in the platform has to be approved, planned, implemented, tested, be made operational
  - **Documentation Management**; MIDAD will require a lot of documentation, manuals, process descriptions, etc.; these documents have to be managed, adapted, upgraded
  - **Contracts Management**: the MIDAD agency will have to produce contratcs/regulations with all users; the contracts have to be produced, maintained, updated/renewed, executed, invoiced
  - **Certification Management**; due to the open platform character it might be necessary that applications of suppliers have to be tested and certified before they can be used operationally for MIDAD
  - **Test infrastructure and extensive test cycles**; each update of the platform requires intensive testing cycles and safety checks

→ Integration in Global Cloud

- → A concept in which the **location** of servers / data sources is **no longer important**
- → Organisations can **concentrate on their key competencies** and don‘t have to think about technology so much
- → **SWIM and SOA** are related to the concept of cloud computing
  - it does not matter WHERE the hardware is located, only WHAT information is provided and in WHICH quality
- → **Main Benefits**
  - Reduction of data backup cost
  - Reduction of recovery cost
  - Cost sharing due to regional concepts
  - Enabling sales of services for ANSPs

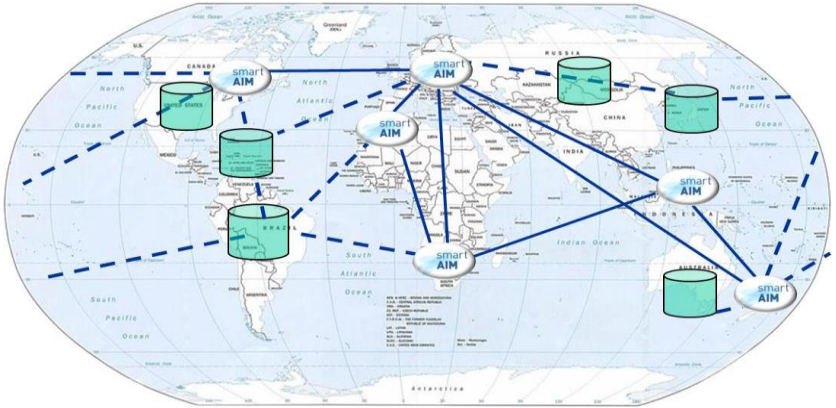
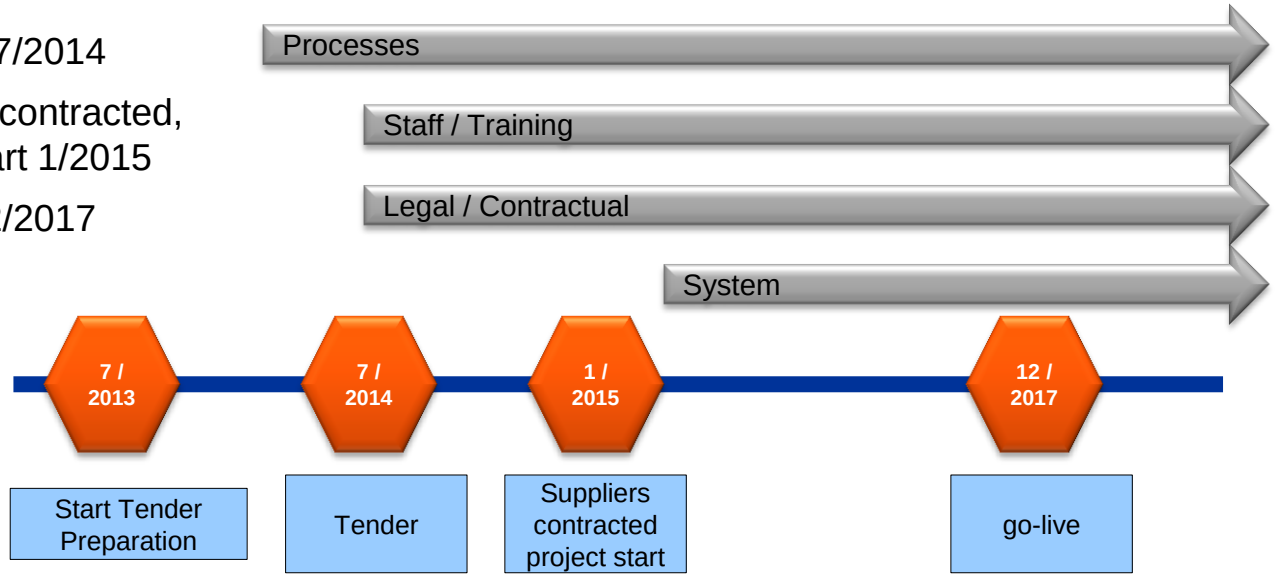


Figure: Regional Hub Concept

→ Schedule/Milestones

- → Start Tender Preparation – 7/2013
- → Tender – 7/2014
- → Suppliers contracted, project start 1/2015
- → Go-live 12/2017



Transition to MIDAD completed

Thank you for your attention

Joachim Lennarz
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Frequentis AG

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