



MIDAD DETAILED STUDY INPUT

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→ MIDAD Elements (to be addressed by Detailed Study)

- **MIDAD legal entity (entities)** The MIDAD project, development, implementation, operation, processes, harmonisation between states and so on, must be handled by a specific (legal) entity
This element will not be defined in the Detailed Study but is a key prerequisite
- **Technical AIM Platform** The technical base to run the AIM services. Network, hardware, software applications
- **AIM Platform continuous maintenance** As the Technical AIM Platform is a mission critical element permanent services has to be guaranteed
- **AIM platform/system operation** The network and AIM platform has to be operated by a proper entity
- **Data Migration support** An centralised entity which supports Data Migration should be element of the MIDAD project
- **Migration services** The process to “migrate” existing data, application, processes on the MIDAD platform must be supported

→ MIDAD Elements (to be addressed by Detailed Study)

- **Training** An entity to provide training services within for MIDAD participants has to be defined
- **Operational Support** Frequentis offers initial support in the phase from acceptance to cut-over and beyond
- **24/7** Helpdesk services must be available for MIDAD
- **Error/Incident Reporting and Change Management platform** MIDAD needs a centralised online platform for it's participants/customers for incident and error management as well as for change management
- **Standards / Safety Cases** The MIDAD entity has to ensure that Standards, Safety Cases, Data Quality is ensured. A safety engineering competency centre could support that

→ MIDAD Elements (to be addressed by Detailed Study)

→ **Integration between large AIM data repositories** The detailed study should also address if and how MIDAD would be connected with other large regional AIM data repositories (like EAD, CAD/ATNS, FAA and so on)

→ **Integration of systems of different suppliers** MIDAD must provide a concept to integrate existing AIM solutions. Statements like:

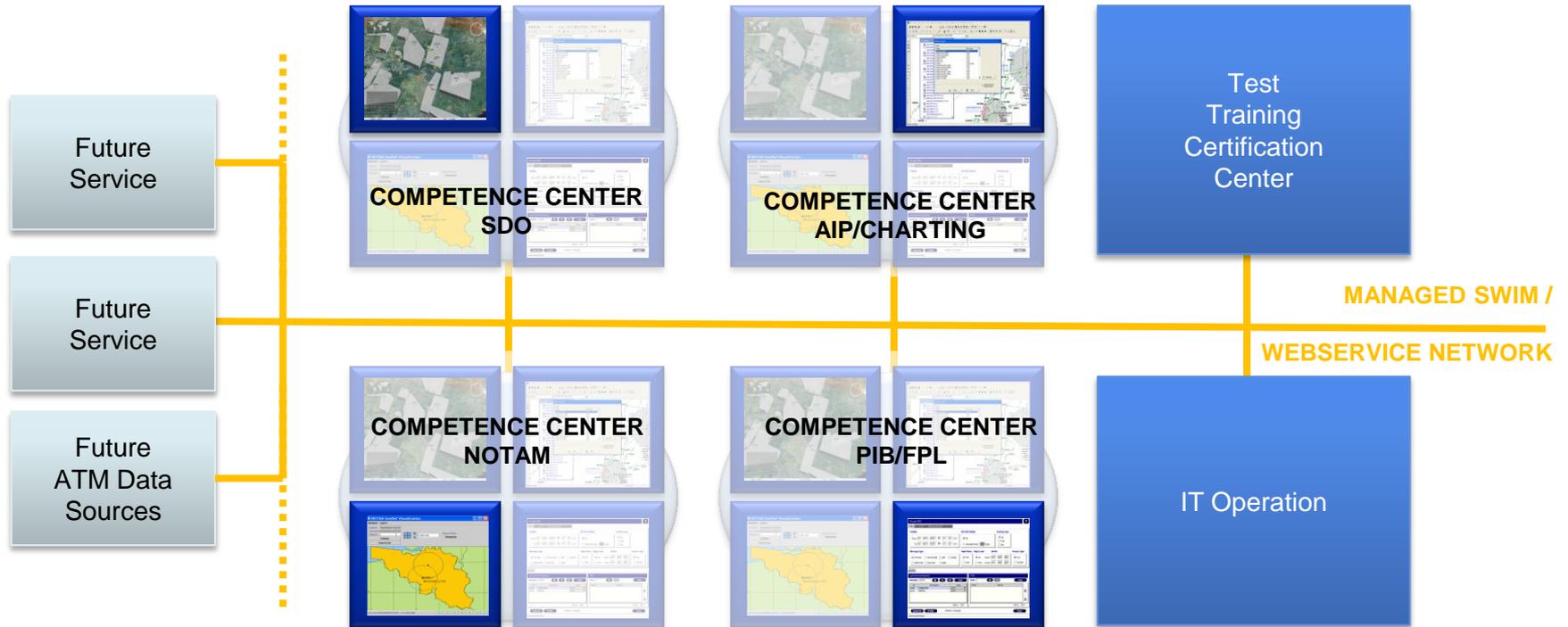
- these systems are integrated by up-/downloading AIXM data
- the databases will be automatically synchronised

are not satisfying as there are different implementation concepts e.g. for temporary data

The use of SWIM adapters should be investigated

→ MIDAD Topology

Centers of Competence within a managed Network



→ MIDAD Topology

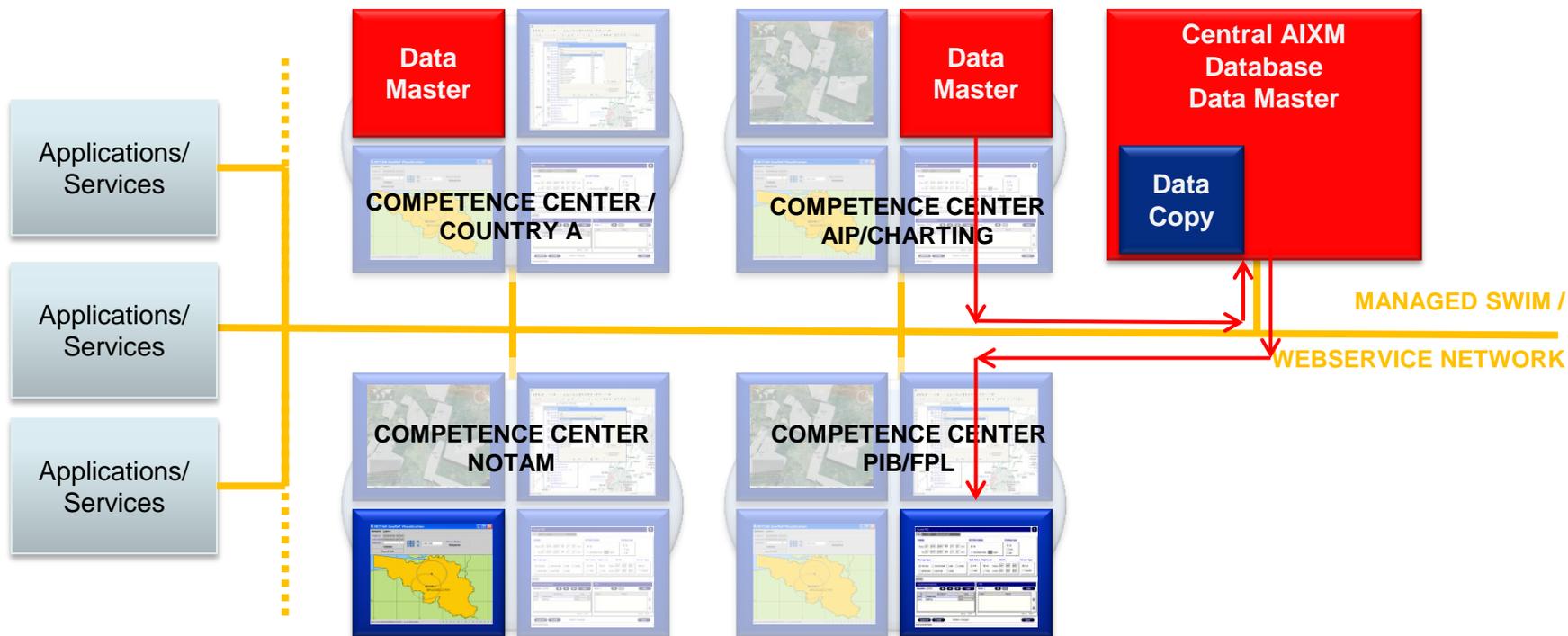
- **Centers of Competence** The MIDAD Framework should have the capability that the services required within the Framework can be provided by different organisations/countries.
E.g. one Centre of Competency delivers charting services for MIDAD, another Centre of Competency provides Training Services.
- All Centres of Competence are connected via a **Managed SWIM/Webservices 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, centralised or mixed functionality
- Connect to EAD and other regional AIXM Data Repositories to **access and share AIM data** automatically on a **global basis**.

→ Database Topology: Logically Centralised or Centralised

Centers of Excellence within a managed Network



→ 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

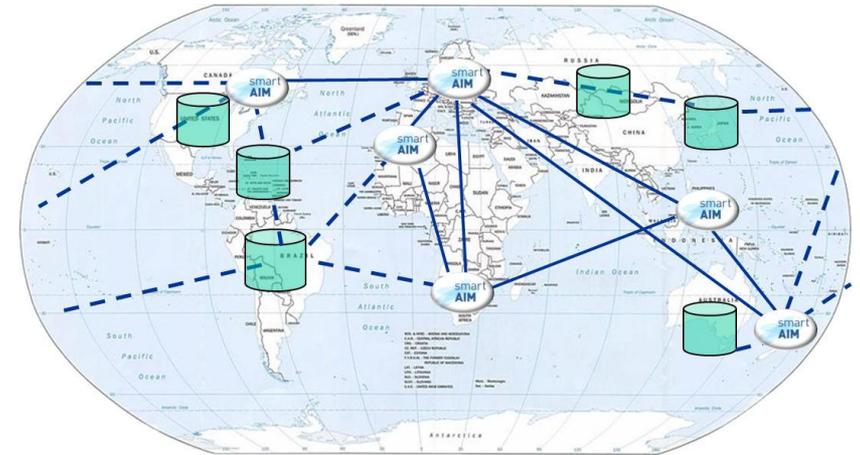
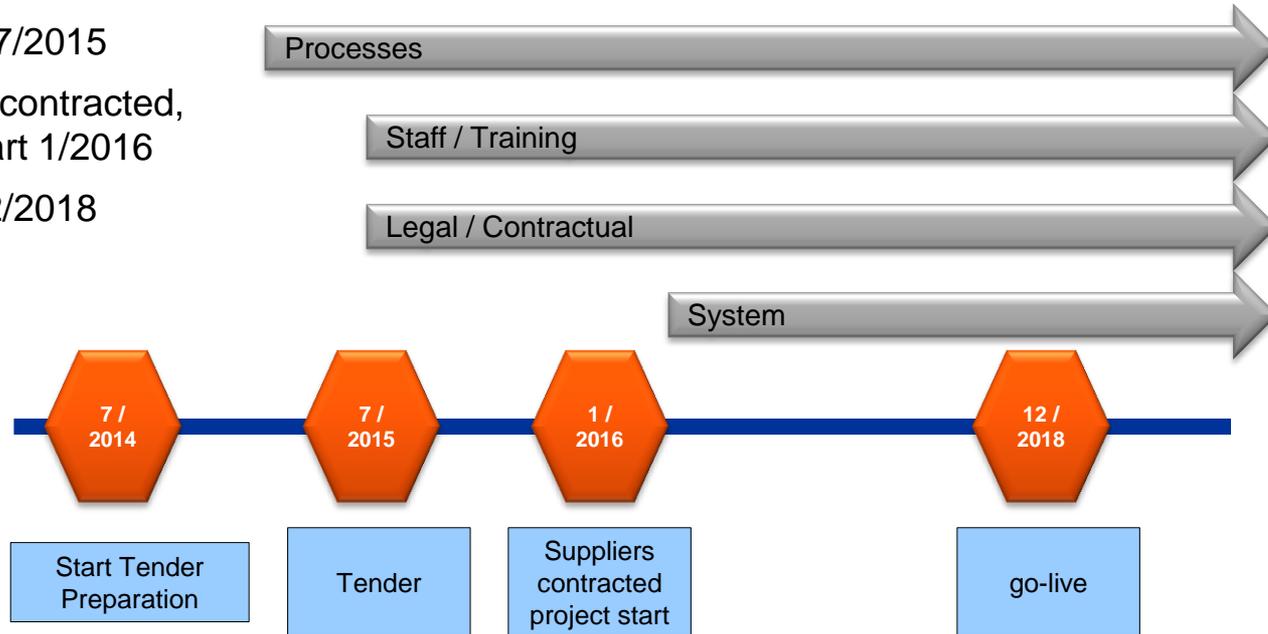


Figure: Regional Hub Concept

→ Project Duration

- Start Tender Preparation – 7/2014
- Tender – 7/2015
- Suppliers contracted, project start 1/2016
- Go-live 12/2018



Transition to MIDAD completed