



COMSOFT Contributions to OWS-7

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COMSOFT
is making the link

COMSOFT: Location



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COMSOFT: Aeronautical Information Management

- **CADAS-AIM_{DB}**
Fully featured AIXM 5 compliant Aeronautical Database
- **CADAS-IMS**
COMSOFT Aeronautical Data Access System is a highly sophisticated Aeronautical Information and Messaging System, based on the latest web application technology.
- **CADAS-ATS**
AMHS & ATS User Agent is an advanced messaging solution adapted to the needs and wishes of ATS operators.

CADAS  **AIM**
Aeronautical Information Management











CADAS  **IMS**
Information Management & Services



CADAS

COMSOFT's Aeronautical Data Access System

COMSOFT: History of CADAS


	 <p>2007</p> <p>Launch of IMS</p>	 <p>2008</p> <p>Teaming agreement with Synclude for eAIP</p>	 <p>2009</p> <p>First release of AIXM 5 database CADAS-AIM_{DB}</p>	  <p>2011</p> <p>AIXM 5 based AIM for CAAS operational in Singapore</p>
<p>2003</p>	<p>2007</p>	<p>2008</p>	<p>2009</p>	<p>2010</p>
<p>Launch of CADAS product line (ATS)</p>	<p>9 operational CADAS/AIS installations worldwide</p>	<p>Country wide FPL Management in UK operational</p>	<p>SAT for Vietnamese AIS/AIM system</p>	<p>First CADAS-AIM_{DB} operational in Estonia (EANS)</p>
<p>2003</p>	<p>2007</p>	<p>2008</p>	<p>2009</p>	<p>2010</p>
				

COMSOFT: CADAS-AIM_{DB} Highlights

- Comprehensive AIXM 5.1 database implementation with temporality, etc.
- Market ready solution
- EANS (First operational AIXM 5.1 Database worldwide(?) with eAIP production environment)
- Ongoing AIXM 5.1 projects with ANSPs (Singapore, Estonia, Oman, Qatar)
- Ongoing AIXM 5.1 collaborations with value-adding companies
- System Interface CAW (COMSOFT AIXM 5 Web-Service), a superset of WFS-T 2.0
- CABS (COMSOFT AIXM 5 Broker Subsystem) with AIXM 5 Java-API for easy integration into other products
- AIXM 4.5/AIXM 5.1 mapping



COMSOFT: AIXM Data Front-End

CADAS  IMS Information Management & Services

ICAO-Code

Valid From / To Sequence Number Interpretation

Designator Description

Name

Type

Organisation Type

City(ies)

Authority

Contacts	Name	Title	Purpose
	<input type="text"/>	<input type="text"/>	<input type="text"/> <input type="button" value="±"/>

ICAO Code

IATA Code

ICAO Certification

Airport Reference Point (ARP) [8.570456,50.03330525](#)

Reference Temperature Lowest Temperature

Secondary Power Supply

Wind Direction Indicator (WDI)

Landing Direction Indicator (LDI)

COMSOFT: Digital NOTAM Front-End

CADAS IMS
Information Management & Services

[Home](#) | [Create](#) | [Retrieve](#) | [NOTAM Summary](#) | [Operator's Queue](#) | [Data Administration](#) | [Administration](#)
Logged in as: horia Logout

New NOTAM

AFTN Header

Message Series, Number and Identifier

Qualifiers

FIR	NOTAM Code	Traffic Purpose	Scope	Lower Limit	Upper Limit	Coordinates, Radius
Q) LTAA / Q RA	CA	IV	IIBO	W	000	999

A) LTAA Identification of ICAO location indicator

Period of Validity

Text of NOTAM; Plain-Language Entry (using ICAO Abbreviations)

AIRSPACE ANKARA ACC WEST CLOSED

E) Lower Limit F) Upper Limit G)

AIXM Features

Select one or more Airspaces:

LTCR	▲	Name: ANKARA ACC WEST
LTCM		Lower Limit: 0 M
LTCI		Upper Limit: 999 FL
LCCCR11		
LTAC_A_COW	▼	
LTANKZ1		
LTCK		
LTCS		
LTAO		
LTDS		
LTPI6		

[Refresh](#)

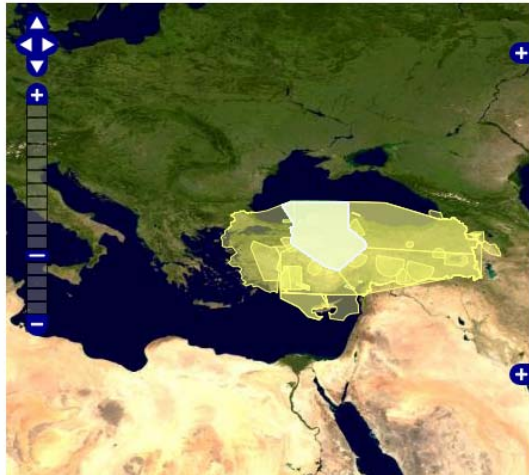
[Submit](#)
[Clear](#)
[Auto Addressees](#)

[Save Template](#)
[Load Template](#)

System Status

Number of items in the personal queue: 0
No unread items in the queue

Map

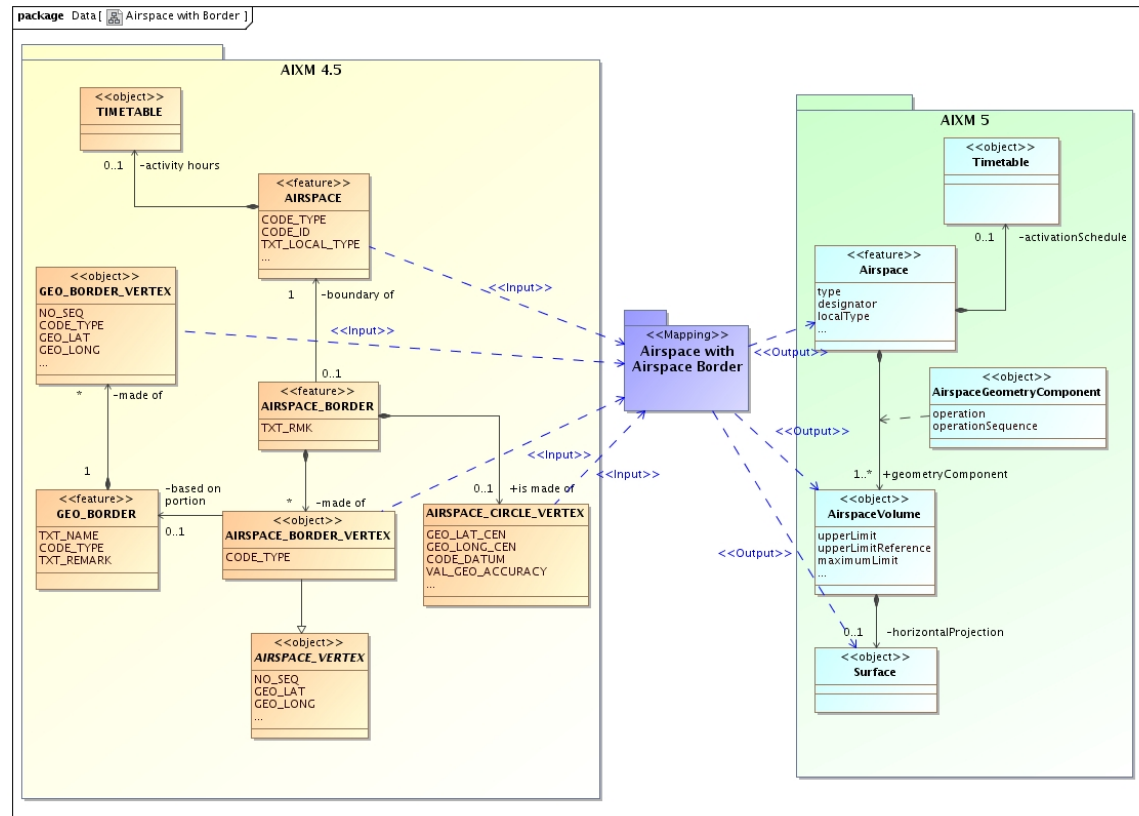


Mouse Position
 29° 42' 52.78" N
 034° 40' 56.62" E

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COMSOFT: Data Conversion Support

- ATL (AIXM 5 Translation Language)
 - Mapping from/to AIXM 5
 - Data fusion and splitting
 - Re-fetching of data
- Current exchange formats:
 - AIXM 5 (native)
 - AIXM 4.5 (translated)

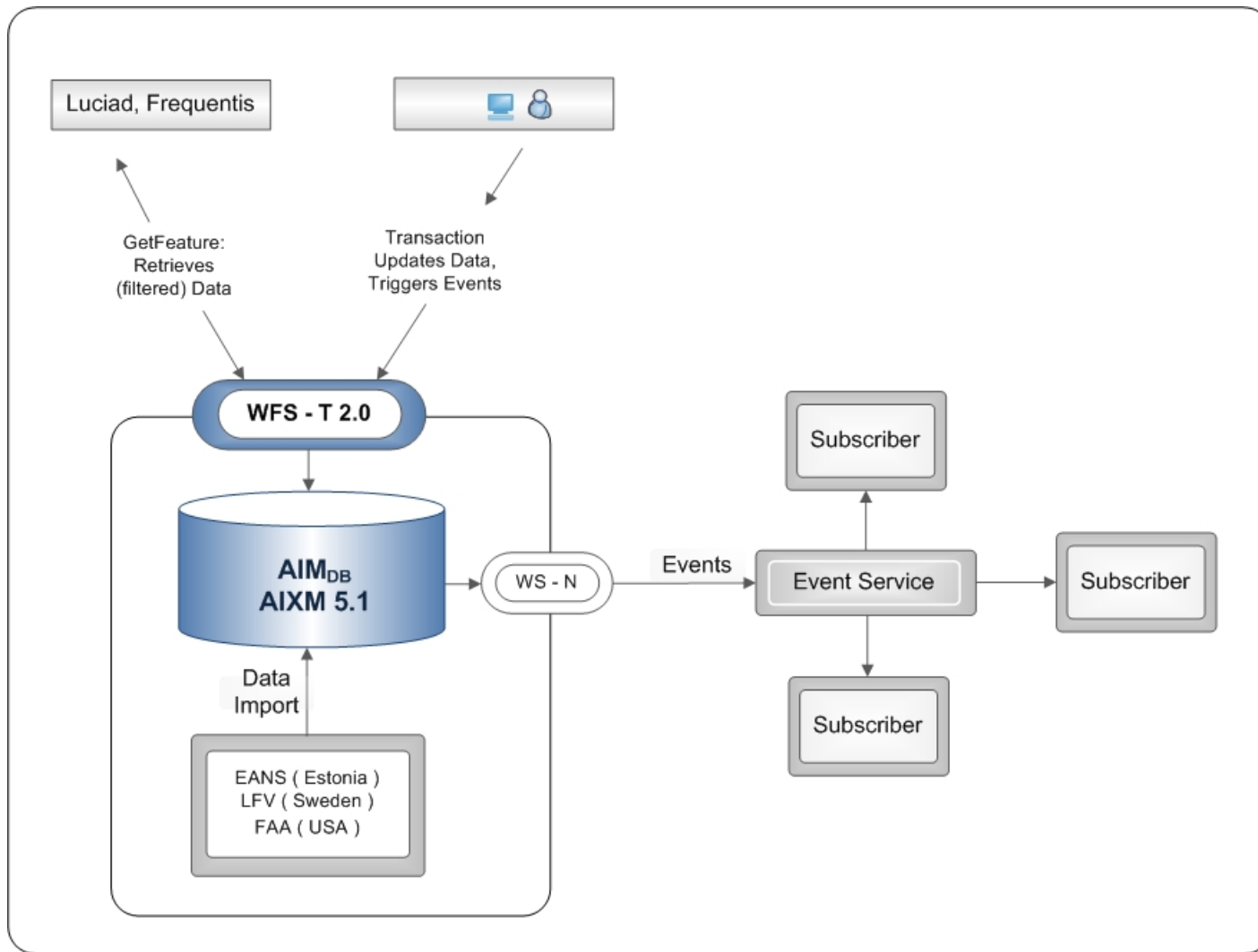


COMSOFT: Contribution to OWS-7

- COMSOFT's AIXM 5 database CADAS-AIM_{DB}
 - WFS-T 2.0 implementation, a subset of CADAS-AIM_{DB}'s native Web-Service interface CAW
 - Web Service Notification Interface for digital NOTAM events
- Complete Estonian AIP data set
- Conversion of AIXM 4.5 data into AIXM 5.1



COMSOFT's AIXM 5.1 Datastore CADAS-AIM_{DB}



COMSOFT: OWS-7 Issues with AIXM / WFS

- WFS 2.0 Specification is only partly suitable for temporal model in AIXM
 - The main entities dealt with are time slices, not features
 - There are two options:
 - The features offered by the WFS are the features in AIXM
 - The features offered by the WFS are the time slices in AIXM
- Requirement of gml:id to be unique for a feature complicates server and client implementation
 - Using a GetFeature request with multiple queries, the response may contain the same feature multiple times
- Exception Reporting: a place for warnings
 - Either all requested operations are completely successful or they fail at all
- WFS filters tend to become complex



Thank You!

