



# European Directory Service (EDS)

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## European Directory Service (EDS) in Brief

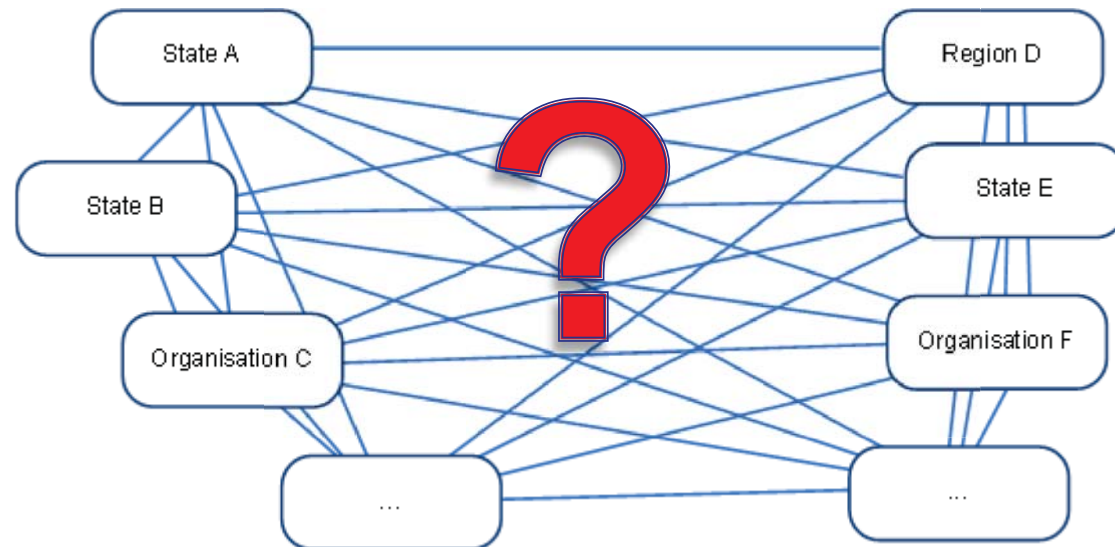
ATN Directory  
in Europe

ATNICG/8 – IP/15

**COMSOFT**  
is making the link

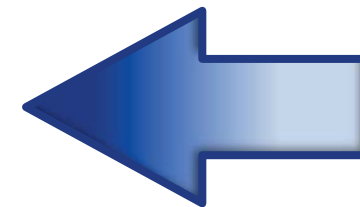
## ATN Directory – status quo

- ICAO Doc 9880
  - Flat structure
  - Any-to-any communication
- Coordination ?
- Manageability ?
- Maintainability ?
- Expandability ?
- Content ?

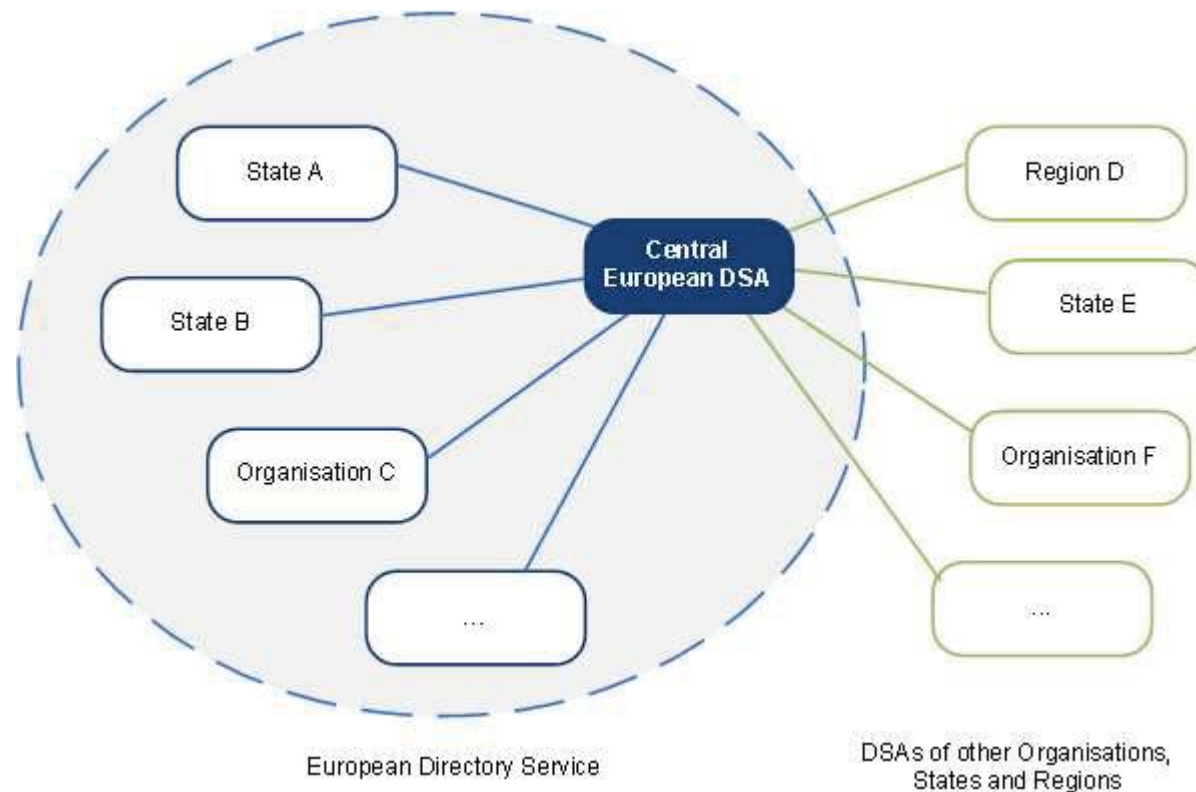


## EDS – Goals

- Solve issues and fill gaps of ATN Directory
  - Weak points and inconsistencies in technical specification
  - Complementary operational specification
  - Concept “ready to get implemented”
  
- Include regional requirements
  - Version management
  - Consistency of distributed information
  - Simplification of communication and exchange of information
  
- European Directory Service (EDS)
  - Regional solution for Europe
  - Built-in migration path
  - Open for interconnection



## EDS – Concept



- Hierarchical structure
- Centralised organisation
- Reduced complexity
- Compatible to ATN Directory

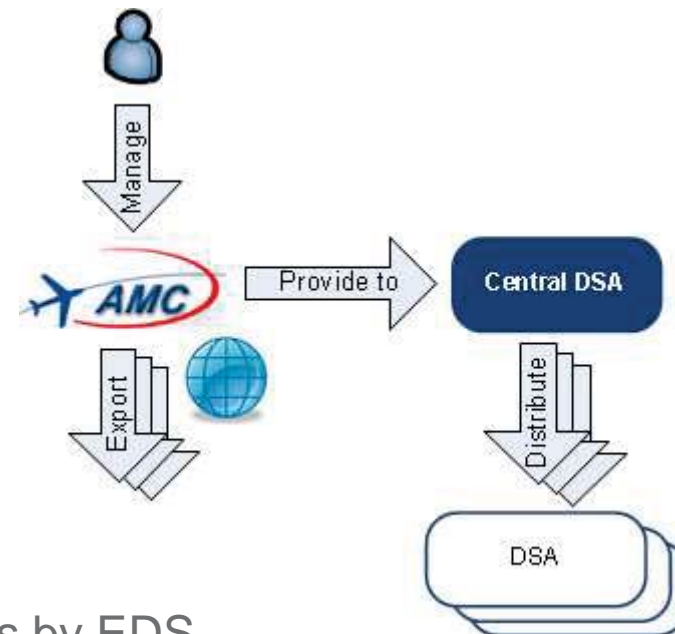
## EDS – Advantages and Benefits

- Fully automated distribution of information by protocol
  - Standard push technology
  - No manual intervention
- Operational concept for Directory services
  - Technical and operational aspects covered
- Hierarchical structure
  - Significant reduction of complexity
  - Open to international and inter-regional exchange of information
- Central management of data and synchronisation with AMC
  - Consistency of information
  - Version management

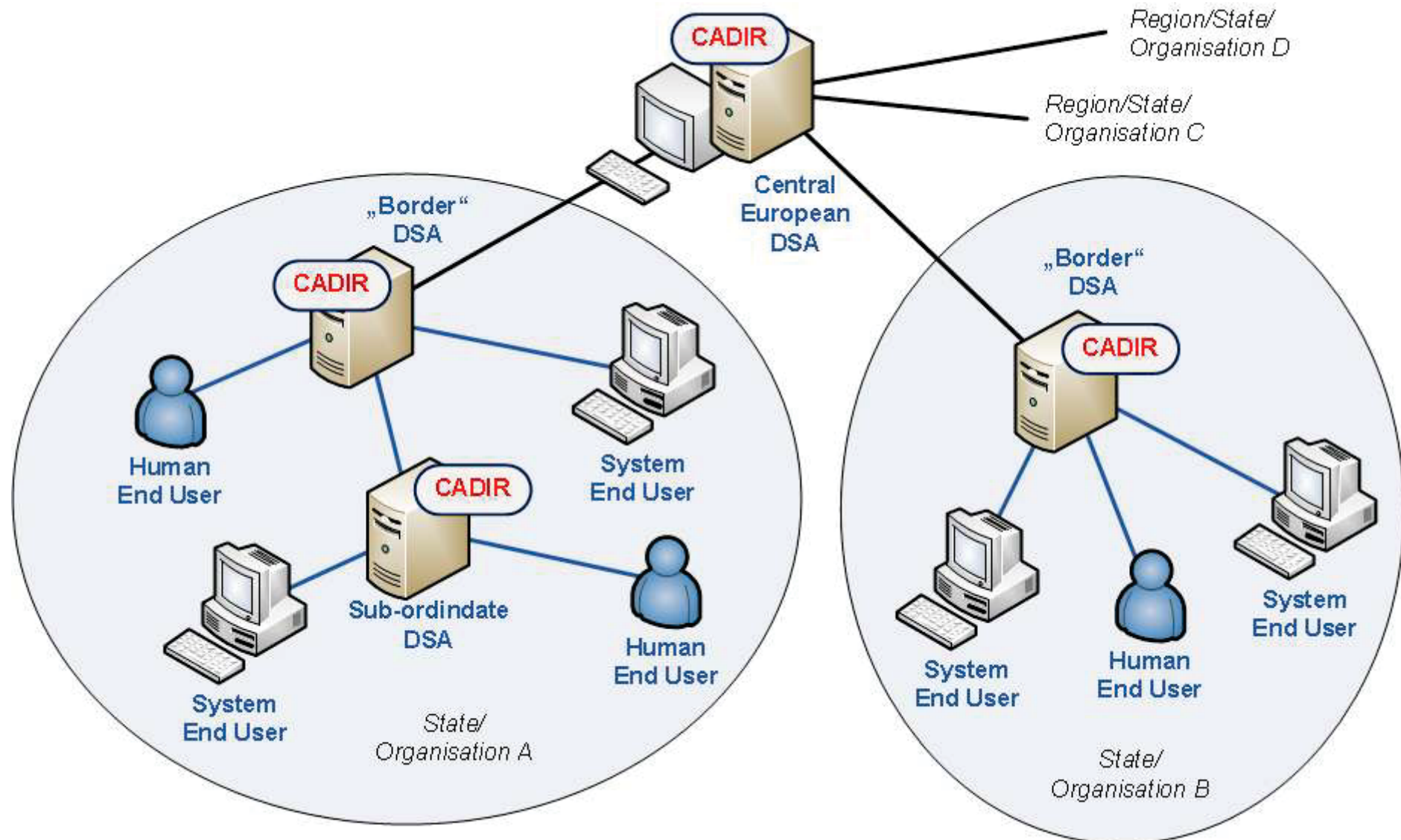


## EDS – Integration and Synchronisation

- ATS Messaging Management Centre (AMC)
  - Management of AMHS address information on global basis
  - Manual Export by individual download (pull)
- European Directory Service
  - Procedures aligned to AMC
  - Information provided by AMC
  - Automated distribution (push)
- Coexistence of AMC and EDS
  - Synchronised overall solution
  - Support of legacy systems by AMC
  - Support of Directory-aware systems by EDS



## EDS – Overall Picture



# EDS – Examples

The screenshot shows the CADIR COMSOFT ATN Directory Server interface. The top navigation bar includes 'Entry Details', 'Tree Browse', 'Search', and 'Cache'. The main content area displays the details for the 'LFPY' entry in the 'European Directory | OPERATIONAL | Encoded' view. The entry details include:

- DN: ou=LFPY,ou=Europe,ou=OPERATIONAL,ou=European-Directory
- ATN-FACILITY-NAME: CPMUR
- MODIFY-TIMESTAMP: 2013-10-10 14:20:32.023+0000

A left-hand sidebar shows a tree view of the directory structure, with 'LFPY' highlighted under the 'OPERATIONAL' section.

The screenshot shows the 'Modify details for New Person' form in the CADIR COMSOFT ATN Directory Server interface. The form includes the following fields and options:

- Extra Properties:
- \* surname:
- \* commonName:
- description:
- telephoneNumber:
- ata-AF-address:
- \* ata-amba-direct-access:  absent  edit  user
- ata-der-certificate:  Browse...
- \* ata-ign-beading-extension:  absent  edit  user
- \* ata-or-address:
- ata-pec-certificate:  Browse...

Buttons for 'Save' and 'Modify' are located on the right side of the form.

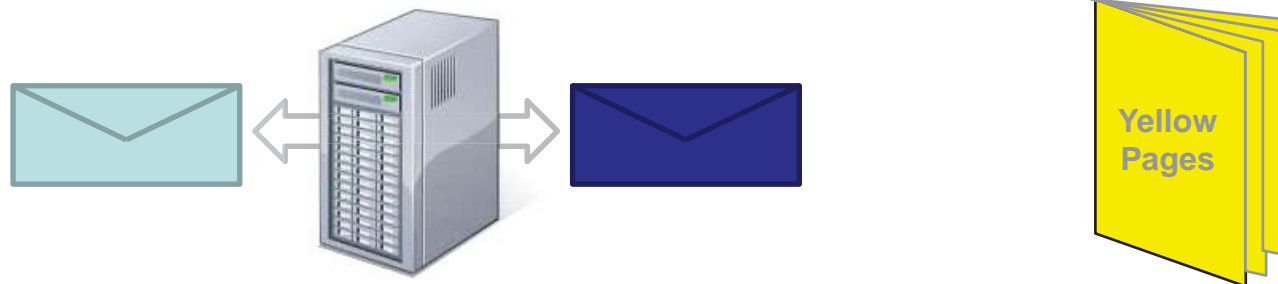


## EDS – Status

- Study on „Directory Service Operational Concept“
  - Initiated by AFSG
  - Conducted by EUROCONTROL
  - Carried out by COMSOFT
  - Resulted in the European Directory Service (EDS)
  - Accepted by AFSG (Appendix G of EUR AMHS Manual)
  
- EDS validation platform at EUROCONTROL
  - Delivery of Central European DSA contracted to COMSOFT
  - COMSOFT ATN Directory Server (CADIR)
  - Open to States and Organisations for testing and validation purposes
  - Interconnection over PENS or Internet VPN
  - Available soon!

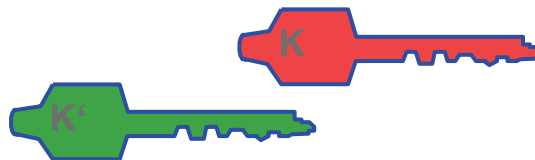
## Directory – Use cases

- Messaging
  - Distribute, update and synchronise address translation data between ATN & AMHS
  - Manage distribution lists
  - Message servers can expand distribution lists to determine members
  - Yellow Pages for ATN users
  - Publish user attributes capabilities (maximum message size etc.)



## Directory – Use cases

- Security
  - Extended services in ATS messaging
  - Distributes PKI information
  - Support X.509 digital signatures and CRLs
  - AMHS/AFTN gateways and user agents
  - Matches ATN needs and supports other applications as well (e.g. secure communication channels, user authentication)



## Directory – Use cases

- Application information
  - Supporting user-applications communicating over the ATN

