



NOBLE – presentation of the project

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Objective and Context of NOBLE

The OBJECTIVE is to set up an eDelivery infrastructure in 4 Member States

The eDelivery infrastructure will support the cross-border exchange of electronic documents in different domains

NOBLE has started in October 2016 and will finish in September 2017

Project is co-funded by CEF via the 2015 CEF Telecom Call – eDelivery (2015-CEF-TC-2015-1)

9 Partners from 4 Member States are involved in NOBLE:

- Germany
- France
- Greece
- Slovenia

Project is coordinated by Governikus GmbH & Co. KG



Setup of interoperable eDelivery infrastructure in three different domains

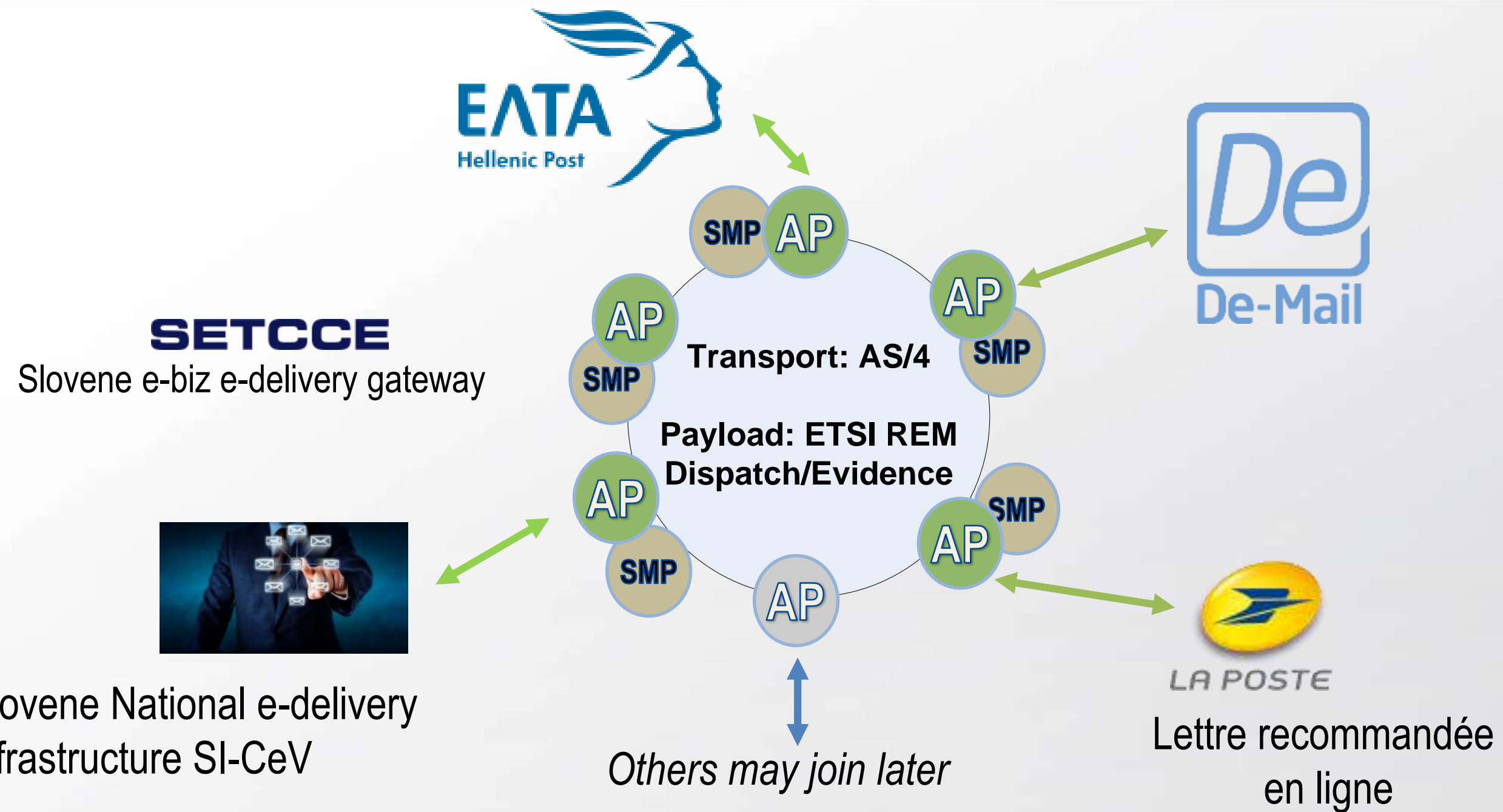
1. General ERDS
 - Business Lifecycle & general purpose
 - 5 Access Points + 5 SMPs

2. German e-Tendering and e-Invoicing Domain
 - Relates to German project “e-Rechnung” (eInvoice)
 - 1 Access Point and SMP

3. Access Points and SMPs Setup for Application on Greek National Level
 - 2 Access Points will be deployed

The focus of the rest of presentation will be on the General purpose ERDS e-delivery domain

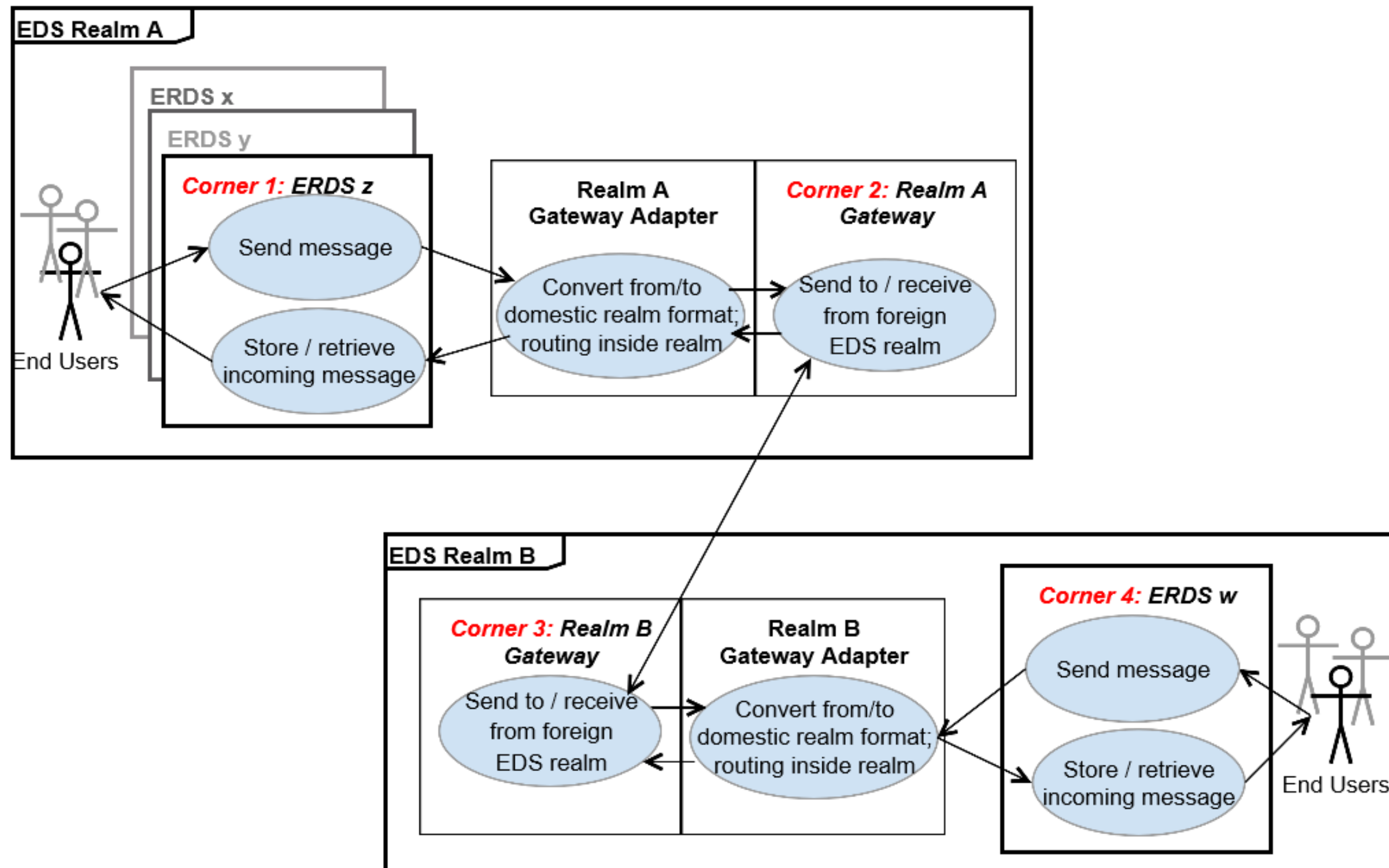
NOBLE General ERDS domain



- **National solutions per Realm use adapters to connect to Gateways /APs**



4 corner model in scope of NOBLE general ERDS domain





High level Requirements of general ERDS domain

- Establish end-to-end Trust (C1 <-> C4)
- Authentication of end-users is performed by C1 and C4
- Cross-realm exchange should support Cross-Realm addressing & routing
- Cross-realm exchange should be payload agnostic
- C2 and C3 Mapping of respective domestic realm message structure format to and from a common message payload format specified for interoperable cross-realm exchange.
- Should support time referenced proofs of send/receive and transport evidences
- e-delivery system shall allow manageable governance and inclusion of new Access points / realms in the future

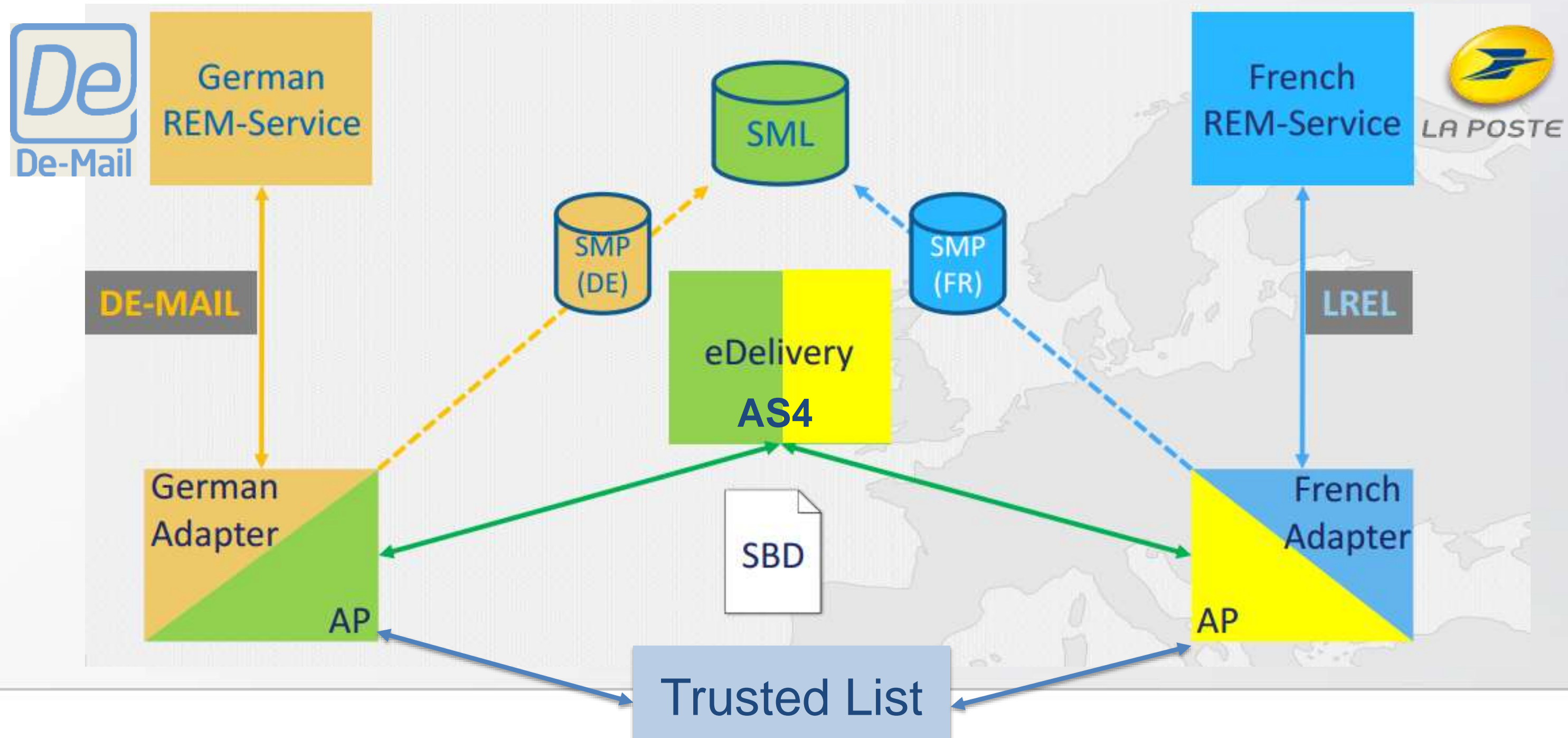


• NOBLE Approach to cross realm e-Delivery

- SMP / SML: provides dynamic discovery and capabilities discovery of the ERDS realm Gateway where the respective message shall be targeted to.
- SMP used for cross-domain addressing
- Trusted List allows for Trust Establishment among access points;
 - allows for free choice of PKI behind, no necessity to use a common community PKI
 - Sealing certificate used for trust establishment between Access Points
- AS4 access points are used for payload exchange (both messages and evidences)
- ERDS domain uses SMP in addition to expose realm specific evidence and authentication capabilities/needs



Example of De-mail and LaPoste message and evidence exchange





Cross Realm payload is based on ETSI REM

SBDH (XML) - must be visible for transport nodes

REMDispatch (XML) - may contain embedded attachments

Attachments 0-n (PDF, binary, ...)

Or: SDBH and

REMEvidence (XML)



What are we re-using from previous projects

- Trusted List Profile for eSens e-Delivery
 - <http://wiki.ds.unipi.gr/display/ESENS/Trust+List+Profile+for+Electronic+Registered+Delivery+Services>
- TL Trust Service attributes integration with P-Mode generation is AP domain specific
 - Specification for WP5.4 available:
<http://wiki.ds.unipi.gr/display/ESENS/Using+Trust+List+in+AS4+Gateways+to+interconnect+ERDS>

we are extending the profile to use the SMP
- CEF TL Manager applicable for Trusted List maintenance
 - <https://joinup.ec.europa.eu/software/tlmanager/release/all>
- Holodeck is being used for deployment of AP



Open questions

- SMP infrastructure used for discovery should be trusted
- What approach to take to Maintenance and Governance model for Trusted List?
 - Option 1 : use domain specific Trusted List
 - Option 2: use the MS Trusted list for qualified services



Connecting Europe Facility
NOBLE (NO Barriers in eDeLivEry)

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Thank you for your attention

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