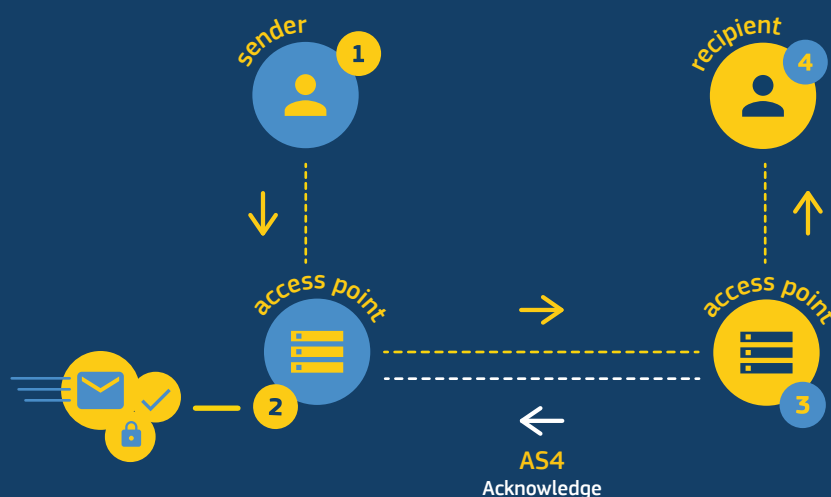# eDelivery

The eDelivery Building Block of the Connecting Europe Facility proposes the use of the AS4 messaging protocol to create a secure channel for the transmission of documents and data by electronic means, over the internet or via a private network. AS4 both provides evidence relating to the handling of the transmitted data as well as protecting it against the risk of loss, theft, damage or any unauthorised alterations.

Projects use eDelivery to exchange documents and data in a secure way among many participants (within Europe and beyond). To achieve this, the participants have to connect to an AS4 Access Point. Each one of these Access Points becomes an independent node within a distributed messaging infrastructure. Each of these infrastructures can accommodate thousands of nodes, in other words, they are easily scalable. Furthermore, the use of a common protocol enables interoperability across different types of business applications as they simply need to connect to the AS4 Access Point to start exchanging data with the other participants of the project.

eDelivery is **FREE OF CHARGE** and you can benefit from **GRANT FUNDING** AND **SUPPORTING SERVICES** for your implementation

sender 1

access point 2

→

AS4
Acknowledge

recipient 4

access point 3

1 **Submit: sends message**

2 **Send: processing step 1**
a) Validation and compression of the user message;
b) Signing of the compressed message;
c) Encryption of the signed compressed message.

3 **Send: processing step 2**
a) Receives and decrypts the encrypted message;
b) Verifies the sender's signature;
c) Decompresses the decrypted message;
d) Validates the original user message;
e) Sends the acknowledgement to the sender Access Point;
f) Archives the user message.

4 **Deliver: receives message**

Key concepts

AS4
The AS4 profile of eDelivery is the AS4 Usage Profile defined by eSENS based on the AS4 Profile of ebMS3 OASIS Standard. AS4 itself is based on other standards, in particular on OASIS ebXML Messaging Services, which in turn is based on various Web Service specifications.

Access Point
During the message exchange process, the back-end systems of the users don't exchange data directly with each other. Instead, this is done through Access Points, which are conformant to the same technical specifications and therefore capable of communicating with each other.

ERDS
An Electronic Registered Delivery Service is a service that makes it possible to transmit data between third parties by electronic means and provides evidence relating to the handling of the transmitted data, including proof of sending and receiving the data.

Who can use eDelivery?

Policy Domain Owners

Policy domain owners involved in the roll out of EU or national policies that require the secure exchange of documents and data are the main target of the services of eDelivery DSI. By adopting eDelivery, these actors make sure that public administrations can exchange any type of data and documents across borders.

eDelivery is already being used in a number of cross-border EU projects in several policy domains. These include the Business Registers Interconnection System (BRIS), the Online Dispute Resolution (ODR) platform, the Electronic Exchange of Social Security Information (EESSI) project, the eJustice Portal and the EU Common Entry Gate (EU-CEG) project.

Software and Service Providers

The eDelivery DSI is also appealing for service and software vendors in the eDelivery domain. These actors can benefit from the CEF eDelivery services when upgrading their solutions to become conformant with the technical specifications.

3.2m
messages
exchanged
per
month

240
access points
deployed in
Members States
and associated countries

28
Member
States
covered

What are the benefits?

- **Vendor-neutral** i.e. the specifications are not proprietary and controlled by one vendor;
- **Multi-vendor** i.e. multiple products and solutions are available from different vendors;
- **Aligned to the Electronic Registered Delivery Service of eIDAS** i.e. it enables trust;
- **Reliable** i.e. recovers automatically if transmission is unsuccessful due to temporary disruption;
- **Domain-independent** i.e. it can be used in every policy domain of the EU;
- **Scalable** i.e. it has no inherent limits on number of participants or messages.

How to get started?

The European Commission makes a number of services available to the public and private sector at **no cost.** For example:

- **Self assessment,** a survey that assesses the requirements of the users interested in re-using the CEF eDelivery components;
- **Open source sample software** of an AS4 Access Point, known as Domibus (other commercial and open source products are also available);
- **Training sessions** on AS4 **and deployment** of its sample Access Point (Domibus);
- **Connectivity testing** to test if a newly installed Access Point can successfully communicate with the AS4 Access Point hosted by the European Commission;
- **Conformance testing** to ensure that AS4 solutions to be offered in the market, as software or as a service, comply with the AS4 implementation guidelines of CEF;
- **Service Desk** providing user support on the overall CEF eDelivery service offering.

eDelivery, ERDS and the eIDAS Regulation

eDelivery has strong links to Regulation (EU) 910/2014 on Electronic identification and trust services, commonly known as 'eIDAS'. The eIDAS Regulation establishes a legal framework to facilitate cross-border recognition between existing national legal systems related to Electronic Registered Delivery Services (ERDS).

eDelivery is fully aligned to eIDAS ERDS. eIDAS also establishes the principle that electronic documents should not be denied legal effect on the grounds that it is in an electronic form. eDelivery supports this fundamental principle of the Digital age by promoting the alignment between its technical specifications and the eIDAS regulatory framework.

For more information please consult our Security Controls guidance document.

eDelivery is one of the Connecting Europe building blocks