

eDelivery

The eDelivery building block of Digital Europe 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 **protects the transmitted data** against the risk of loss, theft, damage or any unauthorised alterations and **provides digitally signed evidence** that serves as acknowledgement of receipt of the transmitted data. Projects use eDelivery to exchange documents and data in a secure way among many participants (within Europe and beyond).

An **eDelivery network** is a network of nodes in which each node is a server operating software conformant with the AS4 messaging protocol (multiple software products are available). The nodes are known as **AS4 Access Points**. eDelivery networks are usually project- or domain-specific; no general-purpose eDelivery network exists. A participant in a given project must **connect their business application to an AS4 Access Point** that is part of the project's eDelivery network. To achieve this, the participant **either sets up its own AS4 Access Point** and receives permission to join the network **or connects via a service provider** who is already established as part of the network. Each node in a network can independently configure which other nodes can send it messages, usually following project-wide rules that govern the network configuration.

An eDelivery network is easily **scalable to accommodate thousands of nodes**. The use of a common protocol enables **interoperability** across heterogeneous 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 Access Points

1

Sender: sends message

2

Sender's Access Point: processes message

- Validates and compresses the user message;
- Signs the compressed message;
- Encrypts the signed compressed message.

3

Recipient's Access Point: processes message

- Receives and decrypts the encrypted message;
- Verifies the sender's signature;
- Decompresses the decrypted message;
- Validates the user message;
- Sends the acknowledgement to the Sender's Access Point;
- Stores the user message for download.

4

Recipient: receives message



Who can benefit from eDelivery?



Government

Public sector entities and agencies that require the secure exchange of documents

eDelivery enables public administrations to adopt a common and agreed European interoperable solution for exchanging any data and documents across borders.



Businesses

Private sector entities exchanging documents securely in B2A or B2B contexts

Building with a standards-based solution allows immediate cost saving through reuse, cross-sector interoperability and alignment with the EC Digital Strategy.



Solution Providers

Services and software providers as enablers of the eDelivery domain

These actors can benefit from the help of eDelivery to develop and offer eDelivery-compliant services and products for a growing market.

Get started

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



Self-assessment

A survey that assesses the requirements of the users interested in re-using the eDelivery components

Open-source sample software

For establishing an AS4 Access Point, a list of commercial and open-source products verified as conformant by eDelivery is available, including EC sample software (Domibus)

Training sessions

On AS4 and deployment of its sample software (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 offered by the market, as software or as a service, comply with the eDelivery AS4 specifications

Service Desk

Providing user support for the overall eDelivery service offering

6 benefits of eDelivery



- **Vendor-neutral:** the specifications are not proprietary and controlled by one vendor.



- **Multi-vendor:** multiple products and solutions are available from different vendors.

- **Reliable:** recovers automatically if transmission is unsuccessful due to temporary disruption.



- **Domain-independent:** it can be used in every policy domain of the EU.

- **eIDAS-ready:** aligned to the Electronic Registered Delivery Service of eIDAS.



- **Scalable:** it has no inherent limits on the number of participants or messages.