eDelivery Value Proposition Webinar

28 September 2023

2014
Created and piloted by Member States

Powered by the European Commission
2023

2024+
Future ahead

Connecting Europe Facility (2014-2020)

DIGITAL EUROPE PROGRAMME

Digital Europe Programme (2021-2027)

Once-Only Technical System

Peppol
The future is open

entsog
european network of transmission system operators for gas

Hrvatska pošta

ICS2

Available to anyone

DIGITAL EUROPE PROGRAMME

DEP 2023-2024 ☑
DEP 2025-2027 ☐

2028 onwards

eDelivery message exchange

Airline travel ⇔ eDelivery

Airline travel

- Airport

- Passenger & luggage

- Boarding card & luggage labels

- Check-in & boarding procedure

- Airplane

- Purpose and sequence of travel

- Airport arrival and departure infrastructure

eDelivery

- eDelivery Access Point

- Business payload (main document and attachments)

- eDelivery AS4 metadata

- Standardised packaging of payload

- eDelivery AS4 message (envelope and payload)

- Business workflows and data exchange agreements

- Product-specific interfacing with business IT systems

Scope of eDelivery

Out of scope

Data Exchange Agreements

End-to-end encryption

Payload (structured/unstructured)

In scope

Message Exchange model
Topology
Messaging protocol
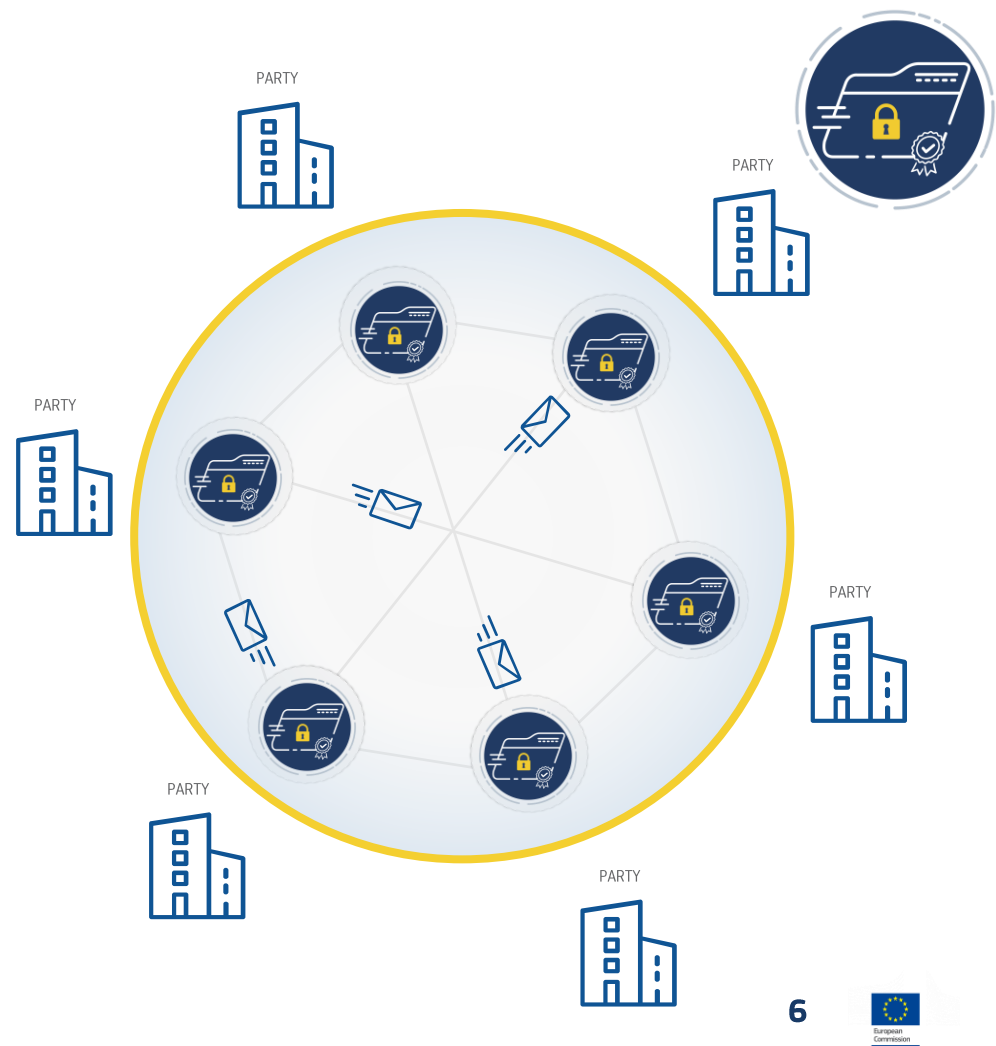Integration approach

(Participant) Discovery model
Static vs. Dynamic

Security Model
Trust Model
Security Controls

Network (public/private, e.g., Internet, TESTA, VPN...)

PARTY

PARTY

PARTY

PARTY

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Scope of eDelivery
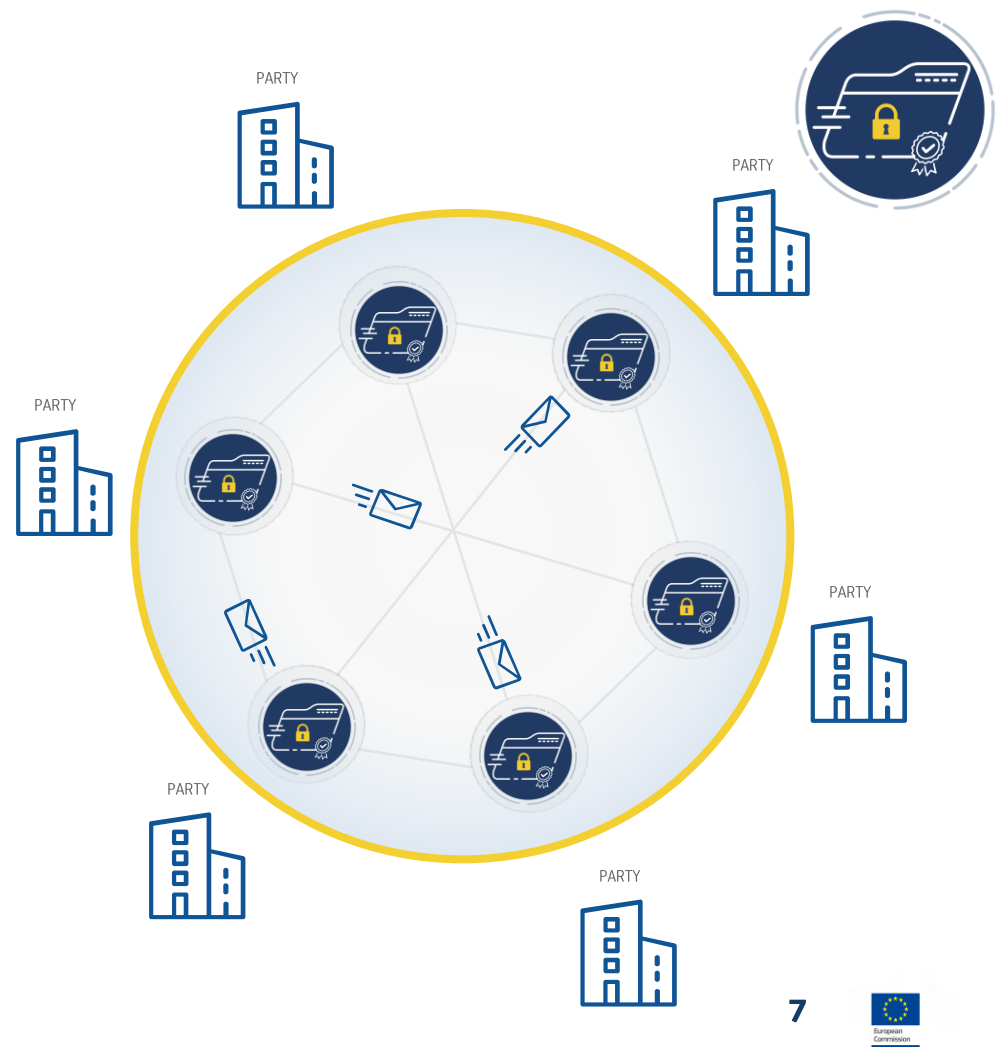
Providing Single Network

Providing service

Technical Specifications

Sample Software

Support Services

Stakeholder Management

Back-end system for user access (C1 and C4)

PARTY

PARTY

PARTY

PARTY

PARTY

PARTY

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Example: Using eDelivery
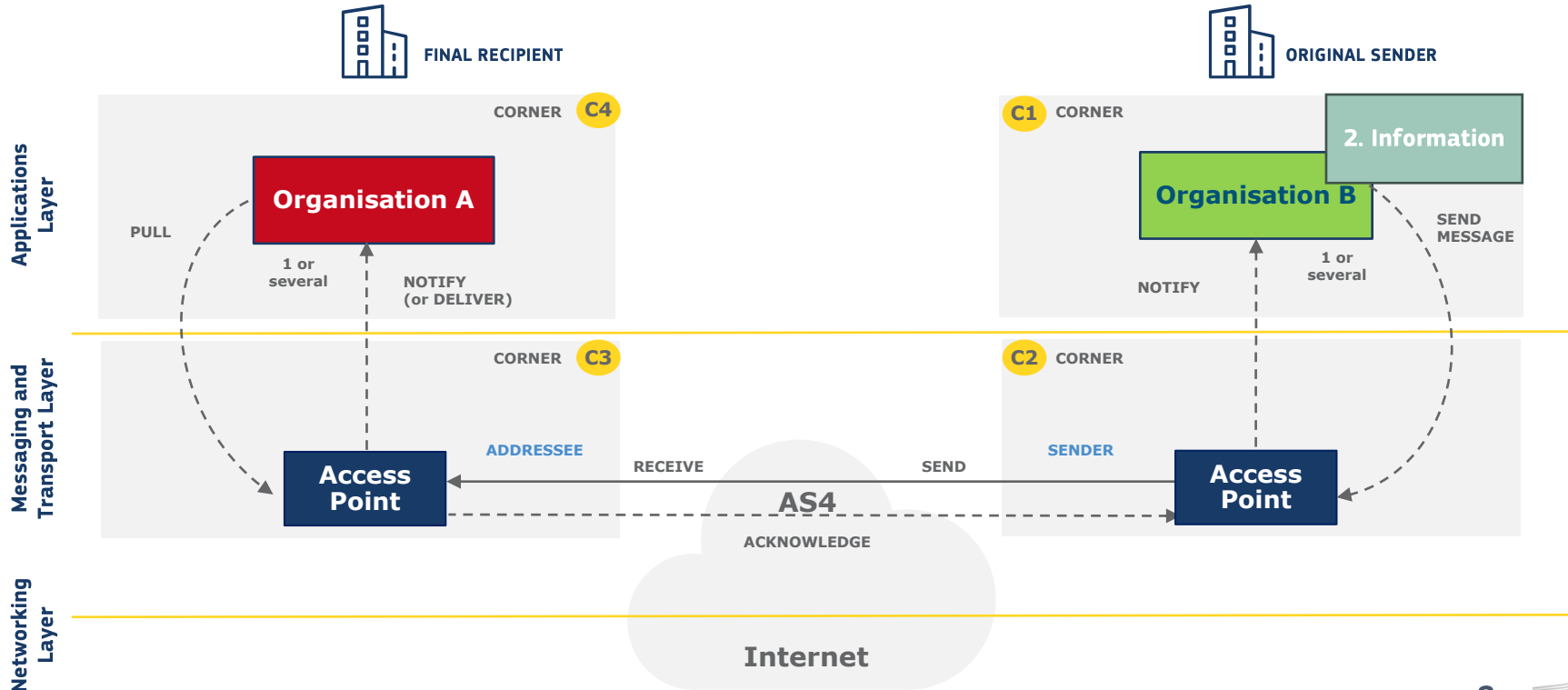
The Organisation A acts as sender
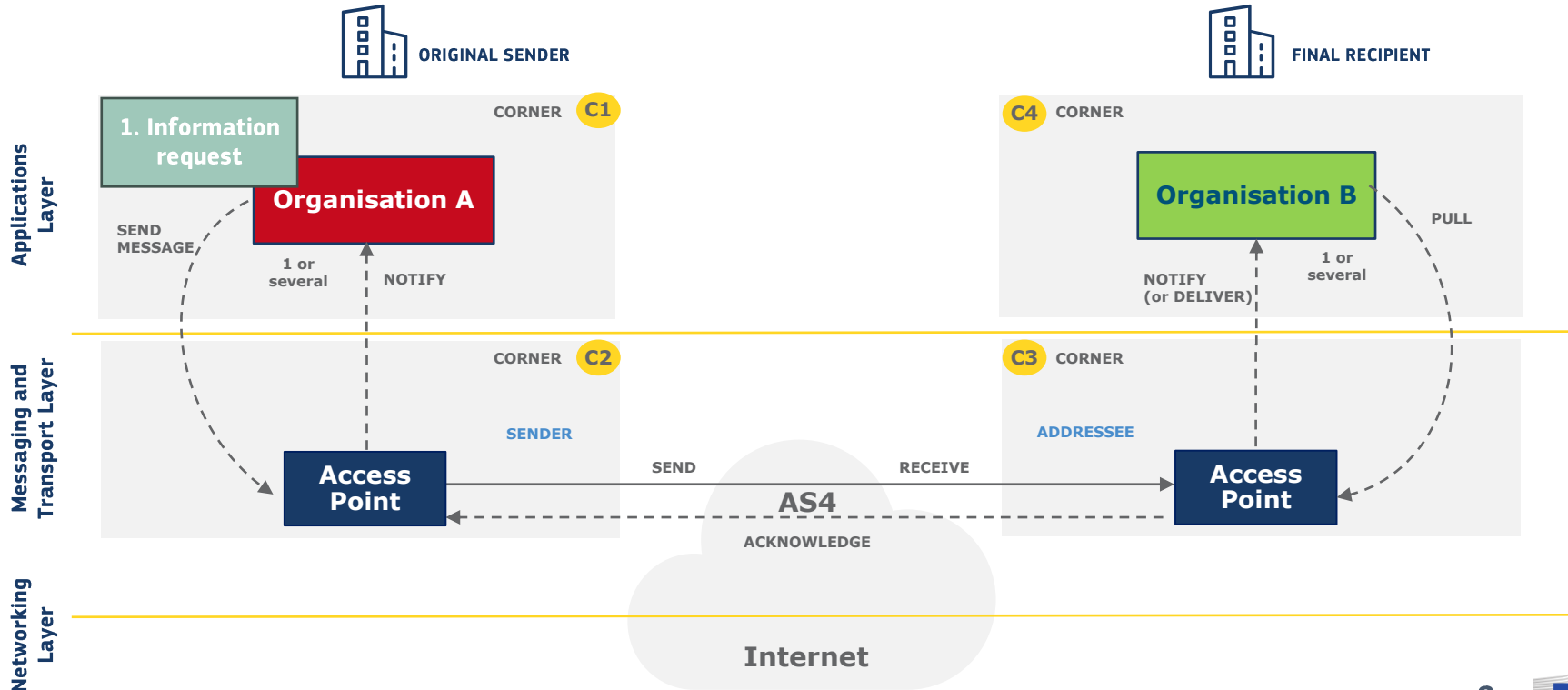
Example: Using eDelivery

The Organisation B acts as sender

European digital ecosystems using / planning to use eDelivery

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Once-Only Technical System (OOTS)

European Health Data Space (HealthData@EU)

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Interconnection of Insolvency Registers (IRI)

Business Registers Interconnection System (BRIS)

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European Product Registry for Energy Labelling (EPREL)

DECIDE Decision

European Maritime Single Window environment (EMSWe)

European Database on Medical Devices (EUDAMED)

Beneficial Ownership Registers Interconnection System (BORIS)

ECHA
EUROPEAN CHEMICALS AGENCY
Poison Centres Notification System (PCN)

EU Common Entry Gate for Tobacco Reporting (EU-CEG)

eEvidence Digital Exchange System

EUCARIS

eFTI Regulation

Council Information Exchange Platform (CIxP)

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European Crew Database (ECDB)

Standardised protocol

The eDelivery public interface is based on OASIS/ISO ebMS3/AS4, further refined by the eDelivery AS4 profile. Cross-domain and cross-project interoperability is facilitated by using the same standardized protocol.

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European Database on Medical Devices (EUDAMED)

EU Common Entry Gate for Tobacco Reporting (EU-CEG)

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Interoperability

Interconnecting systems based on open standards already used in countless other projects provides further interoperability opportunities after initial creation.

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ECHA EUROPEAN CHEMICALS AGENCY — **Poison Centres Notification System (PCN)**

eEvidence Digital Exchange System

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Security, accountability and reliability

The eDelivery AS4 profile has built-in secure exchange of data (encrypted) in a reliable way (one-time message delivery with retries). AS4 acknowledgement receipts provide accountability & non-repudiation of receipt.

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Scalability

eDelivery solutions can continue to be used even when the number of participants/messages in the network grows.

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Payload and business agnostic

eDelivery is payload- and business-agnostic. Once created, the network can be reused to support arbitrary new workflows and datasets.

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Asynchronous messaging

The eDelivery AS4 profile is asynchronous. Synchronous communication can be emulated through various techniques.

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Mature solution

eDelivery is already used in production in tens of projects across Europe with varying sizes and needs.

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System (OOTS)

European Health
Data Space
(HealthData@EU)

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Beneficial Ownership
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EUROPEAN CHEMICALS AGENCY

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eEvidence
Digital Exchange
System

EUCARIS

eFTI Regulation

Council Information
Exchange Platform
(CIxP)

EU Common Entry
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European Crew
Database (ECDB)

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Vendor-neutral

eDelivery specifications are not proprietary or controlled by one vendor alone. eDelivery is available in multiple products and solutions from different vendors to choose from.

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European Database on Medical Devices (EUDAMED)

EU Common Entry Gate for Tobacco Reporting (EU-CEG)

EUROPEAN e-JUSTICE

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Cost-efficient

Reusing an existing and proven building block that benefits from public investment of millions of euro and ongoing funding is much more cost-efficient than developing a custom solution.

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National digital ecosystems using eDelivery (AS4)

eDelivery Service Providers

EU Send

EP Send

And many more private eDelivery Service Providers

➡️ **Offer eDelivery Access Points as a service**

➡️ **Support participation of their customers in the digital ecosystems**

eDelivery Conformance testing

Testing to verify that
- an implementation of the eDelivery Access Point and SMP specifications,
- a software package either commercial or Open Source,

conforms to the relevant eDelivery specifications.

eDelivery AS4 conformant solutions

linQsupply®
axway
babelway
mendelson e-commerce gmbh
DOCUMENT CENTRIC SOLUTIONS

IDA INFRONT
ADDNODE GROUP

AdValvas europe

b2brouter

Galaxy GATEWAY

eas.x edicomas server

PAGERO

Bizbrains
Integration accomplished.

software AG

DESCARTES

phase4 OSS

Cleo
...never stops®

[OXALIS]

cdata arc

AS4.NET

qvalia

navitasoft

ion-AP

iFENIX GENESIS IT

HOLO DECK B2B

SEEBURGER
Business Integration

data X interchange

Harmony
eDelivery Access

IP systems

IBM

nota

Evolution of eDelivery AS4 conformant solutions (2016–2023)

Chart values on y-axis: 0, 10, 20, 30, 40

x-axis labels: 2016 Q2, 2016 Q4, 2017 Q2, 2017 Q4, 2018 Q2, 2018 Q4, 2019 Q2, 2019 Q4, 2020 Q2, 2020 Q4, 2021 Q2, 2021 Q4, 2022 Q2, 2022 Q4

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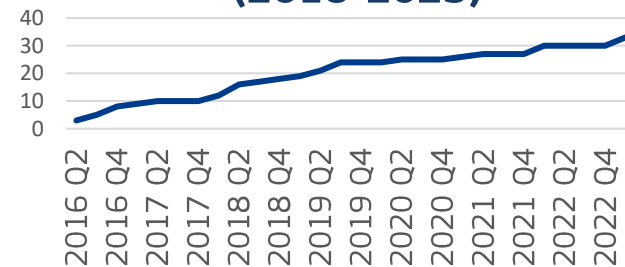
eDelivery Service offering

SOFTWARE

Sample software maintained by the EC (with documentation)
Access Point (AP)
Service Metadata Publisher (SMP)
Service Metadata Locator (SML)

OPERATIONS SERVICES		
Managed services	Testing services	Supporting services
Public Key Infrastructure (PKI)	Connectivity testing	Training & Deployment
Service Metadata Locator (SML)	Conformance testing	Service Desk

STAKEHOLDER MANAGEMENT SERVICES	
Onboarding services (for stakeholders)	Community management services
Self-assessment tool	Developers Community
Onboarding of new stakeholders	Market guide
Cost estimation tool	

TECHNICAL SPECIFICATIONS					
Access point specifications	SMP specifications	SML specifications	Security control guidance	Trust models guidance	Guidance on digital certificates

STANDARDS OF SOs
Standards monitoring

Service offering Description (SoD)

Service Level Arrangements (SLA)

eLearning, videos, success stories

Digital Europe platform

Digital Europe

European Commission

Would like to learn more about eDelivery?

Stay in touch!

eDelivery User Community

The eDelivery User Community space enables stakeholders to share experiences and best practices on the exchange of electronic data and documents between public administrations, businesses and citizens. Pan-European projects (re)using eDelivery have their own sub-communities within this space.
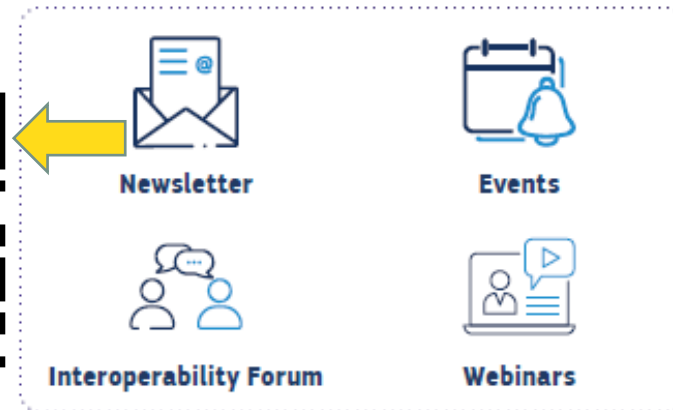
Register for personalised eDelivery news here 🌐 https://europa.eu/!8rtpfj

More about eDelivery

🐦 @edeliveryBB

▶ https://europa.eu/!hwcjvy
PeerTube

▶ eDelivery events (DEP) - YouTube

Newsletter

Events

Interoperability Forum

Webinars

Survey to collect the interests to future webinars

2023 Calendar

eDelivery

Archive of past events

**eDelivery Informal Cooperation Network
9 November**

**eDelivery Interoperability Forum
28 November**

SEMIC 20 conference 23

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Once-Only Technical System

Have a question?

eGov Portal

Deliver Documents

eDelivery
Exchange data and documents
online reliably and securely

Bogdan Dumitriu

To continue the conversation,
contact our team via email

Emails:
EC-digital-building-blocks@ec.europa.eu

EC-eDelivery-support@ec.europa.eu

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Thank you

& stay in touch

Part of Digital Europe Building Blocks

A **Building Block** is an open and reusable digital solution.

What?

It can take the shape of **frameworks, standards, software products or software as a service (SaaS)**, or any combination thereof.

How?

It promotes the adoption of the same **open standards and technical specifications** by the **different sectors** of the Union for the most basic & common functionalities of their projects or platforms.

Why?

Building Blocks enable interoperability across borders and sectors.

eDelivery
Exchange online data and documents reliably and securely.

eInvoicing
Promote the implementation of the European standard for electronic invoicing across borders.

eSignature
Create and verify electronic signatures between businesses and EU citizens.

eID
Allow citizens to prove who they are across borders, making it easier to access online services in another EU Member State.

Buy

Buy a compliant, interoperable solution from the market.

Reuse

Reuse sample software available through Digital Europe.

Build

Build an EU-compliant solution from scratch based on Building Block standards.

eDelivery definitions

Payload

The actual information or message in transmitted data, as opposed to automatically generated metadata.

Access Point

Implementation of a standardised message exchange protocol through which messages can be sent and received in a network.

Network

A system of technologies and protocols designed to transmit data two or more access points.

Metadata

Data that provides information about other data. It can include information such as the author, date created, file size, file type, and other descriptive information like in the case of eDelivery the address of the sender and of the recipient.

eDelivery Message Exchange

1 Submit
Sender sends message to sending AP

2 Send
Sending AP processes message
a) Validation and compression of the user message;
b) Signing of the compressed message;
c) Encryption of the signed compressed message.

3 Receive
Receiving AP processes message
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 sending AP;
f) Stores the user message for download.

4 Deliver
Recipient receives message from receiving AP

sender 1

recipient 4

access point 2

access point 3

AS4 Acknowledge