eDelivery
Interoperability Forum

29 February 2024

The eDelivery symbiosis

Building Block

Promote and facilitate the use of eDelivery in the European digitalisation

Ensure long-term custodianship of eDelivery specifications and baseline services

Provide level playing field for projects/users to learn about solution and service providers

Solution and service providers

Provide eDelivery service offerings in response to market needs

Evolve services in line with specifications and provide tailored and user-friendly support

Learn and address customer needs

eDelivery Interoperability Forum

is...

a platform for the eDelivery BB and for solution and service providers to explore together the technical evolution, market opportunities and market needs around eDelivery

and aims to promote knowledge sharing, provide feedback on challenges, needs and preferences, and facilitate the discussion for the way forward

with the objective to...

keep eDelivery solution and services providers up to date with the evolution of the eDelivery building block (e.g., technical specifications)

bring projects and solution/service providers together to facilitate match-making between business needs and service offering

collect input from solution/service providers to guide building block's strategy

convenes...

online for one to two hours

2-4 times / year depending on participation, evolution and needs

Membership in the eDelivery Interoperability Forum

The eDelivery Interoperability Forum is organised in a membership approach. You only need to sign up once.

The registration to join as well as the privacy statement for the membership are available on the sign-up page:
https://ec.europa.eu/eusurvey/runner/edeliveryInteroperabilityForum

Lorem

Lorem

Lorem ipsum

Interoperability Forum meetings

Where we are today, how we got there and where we will go

Topics

Feedback on the eDelivery Building Block from solution and service providers

Exchange on draft specifications and public consultation

Conformant solutions **presentation**

Upcoming **opportunities**

2023

3 May marked the first meeting of the Forum since 2020.
27 June
28 November

Interoperability Forum Archive including agendas, slides and minutes of previous meetings

2024

29 February
18 April
24 October

+ June Interoperability Event

Upcoming events for eDelivery including Interoperability Forum meetings

Today's Agenda

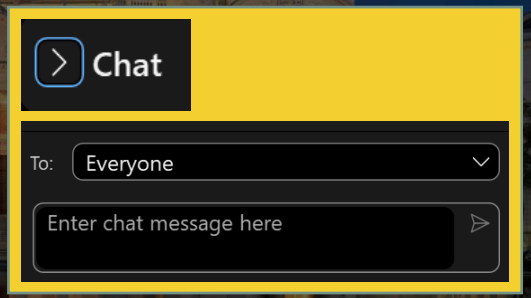
1. ***Welcome: Introduction & Agenda***
   (by Verena Sczech)
2. ***Response to the Public Review Comments***
   (by Bogdan Dumitriu)
3. ***Updates to the New Specifications***
   (by Pim van der Eijk)
4. ***Adoption Plan and Upcoming Engagement***
   (by Bogdan Dumitriu)
5. ***Discussion & Feedback***
   (all)

Reminder

The meeting is not being recorded

Place your Qs in the chat section

Mute your microfone when you do not speak



Disposition of Public Review Comments

Bogdan Dumitriu

What happened before...

The public consultation for eDelivery AS4 and SMP 2.0 specification changes was open from 19 June to 10 November 2023.

Review the slides from the Interoperability Forum meeting on 27 June 2023, where the initial updates to the AS4 2.0 and SMP 2.0 profile were discussed:

Feedback to Public Consultation

The public consultation for eDelivery AS4 and SMP 2.0 specification changes was open from 19 June to 10 November 2023.

The public review comments including detailed answers are available on the consultation pages:

- Consultation on the eDelivery AS4 profile version 2.0 public review comments and response
- Consultation on the eDelivery SMP profile version 2.0 public review comments and response

The following slides **paraphrase and summarise the public review comments and the eDelivery team's responses.**

Responses for the SMP 2.0 profile

OASIS SMP 2.0 Semantics

(1) Add profiling on the Redirection class to require the inclusion of the certificate of the redirected SMP. This enables the client to verify the redirection.

- No clear benefit for redirection to a **known SMP**.
- The suggestion is retained and will be further evaluated for redirection to an **unknown SMP**.
- Premature to profile at this stage as eDelivery user communities may have different requirements or approaches to trust establishment for SMP.

Responses for the SMP 2.0 profile

OASIS SMP 2.0 Semantics

(2) Confusing sentence above the first table in section 3.2

(3) Separate the mapping from P-Mode parameters to SMP query input and the description of how to find the correct Endpoint element into two tables.

(4) ProcessMetadata and Endpoint selection rows should change order

Comments have been addressed in the updated profiles.

Responses for the SMP 2.0 profile

OASIS SMP 2.0 Semantics

(5) Define semantics of an empty Process collection

Semantics for empty processes was implemented in the updated profile, expanding on the suggestion in the comment in case of multiple ProcessMetadata elements.

Responses for the SMP 2.0 profile

Alignment with OASIS AS4 Interoperability Profile for Four-Corner Networks

(6) Use the certificate type code list as specified in section 2.3 of the OASIS AS4 Interoperability Profile for Four-Corner Networks for better alignment and interoperability.

We consider the code list from the W3C Recommendation XKMS 2.0 to be a more accurate reflection of the key usage (especially as it distinguishes between key agreement and encryption certificates).

Responses for the SMP 2.0 profile

U-NAPTR record service field

(7) Use a separate value for the U-NAPTR record service field to reduce the potential ambiguities for callers.

(8) Using the same value for SMP 1.0 and SMP 2.0 complicates migration.

- We agree and now propose the use of the value "**Meta:SMP2**" for publishing links to OASIS SMP 2.0 documents.
- For large networks where this would cause operational issues, the network can decide to use the "**Meta:SMP**" record for both SMP 1.0 and SMP 2.0.

eDelivery BDXL 2.0 profile introduced

Responses for the SMP 2.0 profile

Use of “::” instead of “:” as separator

(9) Only the second usage of the ebCore PartyId Type format as described in section 3.3 should be used.

(10) Use "::" as separator between the scheme ID and identifier value instead of the ‘:’

(11) We propose to use a double colon (::) as a separator

- Aligned section 3.3 to the OASIS 2.0 standard by mandating the use of the schemeID attribute. *(further update after publication of disposition)*
- Allow both the “::” and “:” separators in the SMP 2.0 REST interface when dealing with OASIS ebCore PartyId Type.

eDelivery ebCore Party ID Type 2.0 profile introduced

Responses for the SMP 2.0 profile

Editorial

(12) Add leading “b” in identifier “bdxr-transport-ebms3-as4-v2p0-curve25519

(13) Remove trailing “a” from the sample URI.

(14) Use “OpenPeppol” spelling

(15) Change link to https://peppol.org

(16) Provide link inline and not as a footnote.

(17) Update link to https://docs.peppol.eu/edelivery/

All corrections were implemented

Responses for the AS4 2.0 profile

Security choices

(1) Questioning the benefits of changing from key transport to key agreement, risking incompatibility and forward security.

- Objectives:
  - Propose a new profile that will remain stable for longer period of time
- eDelivery draft profiles are based on the recommendations from the experts in the area of cryptography and XML Security.
- Clarifications received regarding the benefit reaffirm the change.

To be further validated at the Interoperability Event

Responses for the AS4 2.0 profile

Support for XHE and EndpointParticipantIdentifier

(2) Suggestion to replace the SBDH profile enhancement with XHE profile enhancement.

(3) Require or recommend XHE.

- Removed SBDH profile.
- No need for an XHE profile enhancement to exchange multiple payloads in a single message: users can use either SBDH or XHE as regular payload.

Responses for the AS4 2.0 profile

Support for XHE and EndpointParticipantIdentifier

(4) Also use the EndpointParticipantIdentifier message property defined in the OASIS specification to identify the Access Point that should receive technical response messages as described in section 3 of the OASIS specification.

- Open to considering the use of EndpointParticipantIdentifier for the eDelivery AS4 profile if the business need appears.

Updated eDelivery 2.0 specifications

Pim van der Eijk

Updated eDelivery 2.0 draft specifications

The current eDelivery draft specifications are available here:

- Updated eDelivery AS4 2.0 draft specification: https://ec.europa.eu/digital-building-blocks/sites/x/noM5Kg
- Updated eDelivery SMP 2.0 draft specification https://ec.europa.eu/digital-building-blocks/sites/x/r4M5Kg
- New eDelivery BDXL 2.0 draft specification https://ec.europa.eu/digital-building-blocks/sites/x/XQV4Kg
- New eDelivery ebCore Party Id 2.0 draft specification https://ec.europa.eu/digital-building-blocks/sites/x/MZOHKg

The updated and new specifications will be subject to a second public consultation before publication.

eDelivery AS4 2.0 profile

eDelivery AS4 security is built on open standards and specifications:

- XML Security (Signature and Encryption) (IETF, W3C, IANA)
- WS Security specifications (OASIS)
- WS interoperability specifications (WS-I, OASIS)
- ebMS3 and AS4 (OASIS, ISO)

XML Security uses a concept of algorithm identifiers

- Provides forward compatibility with newer algorithms
- IANA XML Security URI registry is updated by IETF RFCs
- Latest update is RFC 9231 (July 2022), a draft update exists
- ebMS3 and AS4 have a similar extensibility in the P-Mode concept

eDelivery AS4 2.0 profile

Over time, the RFCs have moved beyond URI registration:

- E.g. adding new XML schema structures to express algorithm parameters
- All algorithms recommended by the cryptographic experts are now properly supported
- We have worked actively with the editor on RFC9231bis and validated drafts in preliminary implementations (Apache Santuario)

Standardisation:

- IETF is currently the only organization providing active maintenance for XML Security related standards
- We are in discussion with ETSI ESI if they see a role for themselves moving forward

eDelivery AS4 2.0 2024 draft

In the common profile:

- HKDF is used as key derivation function instead of ConcatKDF. HKDF is preferred from a cryptographic point of view for modern applications and protocols.
- Use of HKDF in XML Security is specified in RFC 9231bis.
- The output of HKDF is used to wrap a symmetric encryption key.
- In section 3.4.1, the use of the type attribute on PartyId is required

eDelivery AS4 2.0 2024 draft

In the common profile:

- We continue to use AES key wrapping in creating the encrypted key, even though it is arguably redundant when using HKDF.
- It allows us to stay close to XENC 1.1 spec, XENC 1.1 interoperability test cases, WS-Security and BDEW AS4.
- For X25519, we use the algorithm identifier defined in RFC 9231 instead of the generic ECDH-ES URI.
- The X25519 originator public key is packaged in DER encoded form.

eDelivery AS4 2.0 2024 draft

In the profile enhancements section:

- Removal of the optional SBDH profile enhancement.
  - It has seen limited adoption by eDelivery users, the common profile already supports multiple payloads and the SBDH specification has been superseded by other standards.
  - Users can still use SBDH or similar schemas in their payloads.
- Optional Alternative ECC Option
  - using ECDSA and ECDH-ES and HKDF
  - Not limited to Brainpool curves.
- Four Corner Topology
  - Mandate the use of the type attribute for originalSender and finalRecipeint

eDelivery SMP 2.0 2024 draft

- Clarified the mapping table in section 3.2.
- Updated the section on eDelivery ebCore Party Identifiers to mandate the use of the schemeID attribute of the ParticipantID element in SMP 2.0 documents.
- Document the semantics of absence of a Process in ProcessMetadata
- Editorial.

eDelivery BDXL 2.0 profile (new)

- The service field is set to either Meta:SMP or Meta:SMP2 depending on the version of the OASIS SMP standard.
- Updated section 4.1 states that a separate ebCore Party Id Type and identifier value must be concatenated into an ebCore Party Identifier for use with BDXL.

eDelivery
ebCore Party Id 2.0 profile (new)

- Added a reference to SMP 2.0.
- Removed support for the party identifier notation defined in section 2.7 of [EBCOREP] when used with eDelivery AS4 PartyId and four corner message properties.
- Editorial.

Discussion: Updated eDelivery 2.0 specifications

Experiences

Challenges

Opportunities

Needs

Plans

Please raise your hand if you would like to speak

We are very grateful for your feedback!

Adoption plan and upcoming engagement

Bogdan Dumitriu

2024 eDelivery 2.0 specifications adoption

Prepare → Test → Adopt

January | February | March | April | May | June | July

Publications

- Updated Specifications & disposition of public review
- Test plan
- 2nd public consultation

Events

- Interoperability Forum meeting 29 February
- Interoperability Forum meeting 18 April
- Interoperability Event

Public consultations available soon

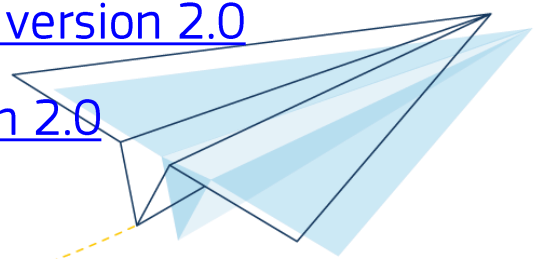
The public consultations on the updated drafts of the eDelivery 2.0 specifications will open from 8 March to 8 April 2024.

Second consultation on the eDelivery AS4 profile version 2.0

Second consultation on the eDelivery SMP profile version 2.0

Consultation on the eDelivery BDXL profile version 2.0

Consultation on the eDelivery ebCore Party Id 2.0



(Links will be functional at the start of the consultations)

Testing Interoperability

The test plan will allow adopters to set up an environment to send a message using the new eDelivery specifications at the Interoperability Event in June

Interoperability event

Who

Developers from the eDelivery Interoperability Forum community
eDelivery service and solution providers

When

- Tentative dates are 13 & 27 June 2024
- Virtual 3-hour sessions

Sign-up

- Express your interest in taking part by emailing EC-DIGITAL-BUILDING-BLOCKS@ec.europa.eu

Initial test plan

Publication of test plan towards the end of April.

Exchange messages:

- one-way push AS4
- one payload
- signed and encrypted
- recipient to validate signature and decrypt

The test plan will contain configuration of party IDs and we will prepare AS4 parameters for the test run.

Next Interoperability Forum meetings

Preliminary Agenda

- DG CNECT policy update
- Report from Public Consultation
- Testing plan & Interoperability Event
- Launch of presentation of conformant solutions
- New eDelivery ecosystem?

18 April 2024

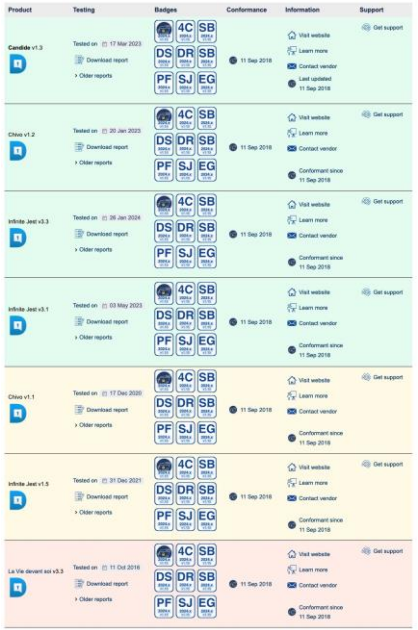
[eDelivery Interoperability Forum. 18 April 2024 - eDelivery User Community - (europa.eu)]

Save the date: 24 October

New eDelivery AS4 solutions listing

The presentation of eDelivery conformant solutions on the eDelivery Website has been discussed initially at the eDelivery Interoperability Forum in June 2023.

- **Launch date**: April 2024
- **Structure**: Traffic-lights system for conformance



Benefits for you:

- Stand out by having your solution tested recently
- Conformance badges for wider application
- Control over displayed information:
  → fill out the form

Benefits for users:

- Easy identification of the most suitable services and products

eDelivery Events 2024

How-to video publications

DomiSMP 5.0 new features.
Available from 19 March

New features in Domibus 5.1 and 5.2.
Available from 24 October

Webinars

eDelivery value proposition.
26 September

Dynamic discovery.
12 December

Community meetings

10th meeting of eDelivery Informal Cooperation Network.
15 May

11th meeting of eDelivery Informal Cooperation Network.
26 November

Feedback & Discussion

Please raise your hand if you would like to speak

We are very grateful for your feedback!

Thank you

Please fill in the feedback survey in the chat

& stay in touch

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

eDelivery events (DEP) - YouTube

Publications

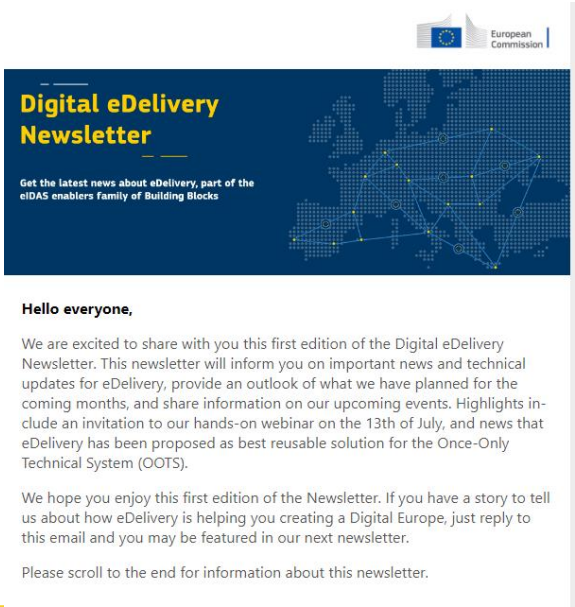
Feel free to register here

eDelivery (4x/year)

https://europa.eu/!v4njKB

Building Blocks (2x/year)

https://europa.eu/!jj87JU



European Commission

Digital eDelivery Newsletter

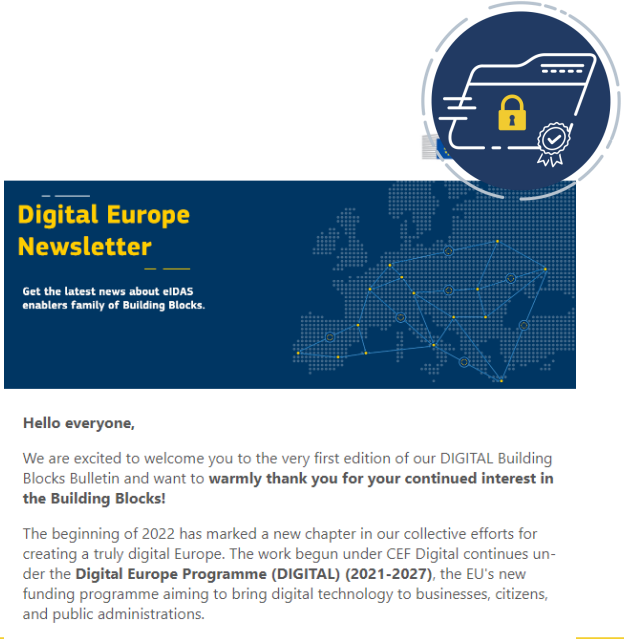
Get the latest news about eDelivery, part of the eIDAS enablers family of Building Blocks

Hello everyone,

We are excited to share with you this first edition of the Digital eDelivery Newsletter. This newsletter will inform you on important news and technical updates for eDelivery, provide an outlook of what we have planned for the coming months, and share information on our upcoming events. Highlights include an invitation to our hands-on webinar on the 13th of July, and news that eDelivery has been proposed as best reusable solution for the Once-Only Technical System (OOTS).

We hope you enjoy this first edition of the Newsletter. If you have a story to tell us about how eDelivery is helping you creating a Digital Europe, just reply to this email and you may be featured in our next newsletter.

Please scroll to the end for information about this newsletter.



Digital Europe Newsletter

Get the latest news about eIDAS enablers family of Building Blocks.

Hello everyone,

We are excited to welcome you to the very first edition of our DIGITAL Building Blocks Bulletin and want to **warmly thank you for your continued interest in the Building Blocks!**

The beginning of 2022 has marked a new chapter in our collective efforts for creating a truly digital Europe. The work begun under CEF Digital continues under the **Digital Europe Programme (DIGITAL) (2021-2027)**, the EU's new funding programme aiming to bring digital technology to businesses, citizens, and public administrations.

Events

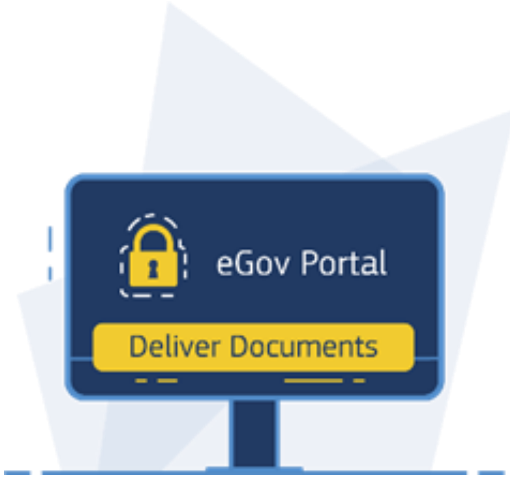
Success stories

News

Technical Updates

European Commission

Have a question?



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