



**Difi**

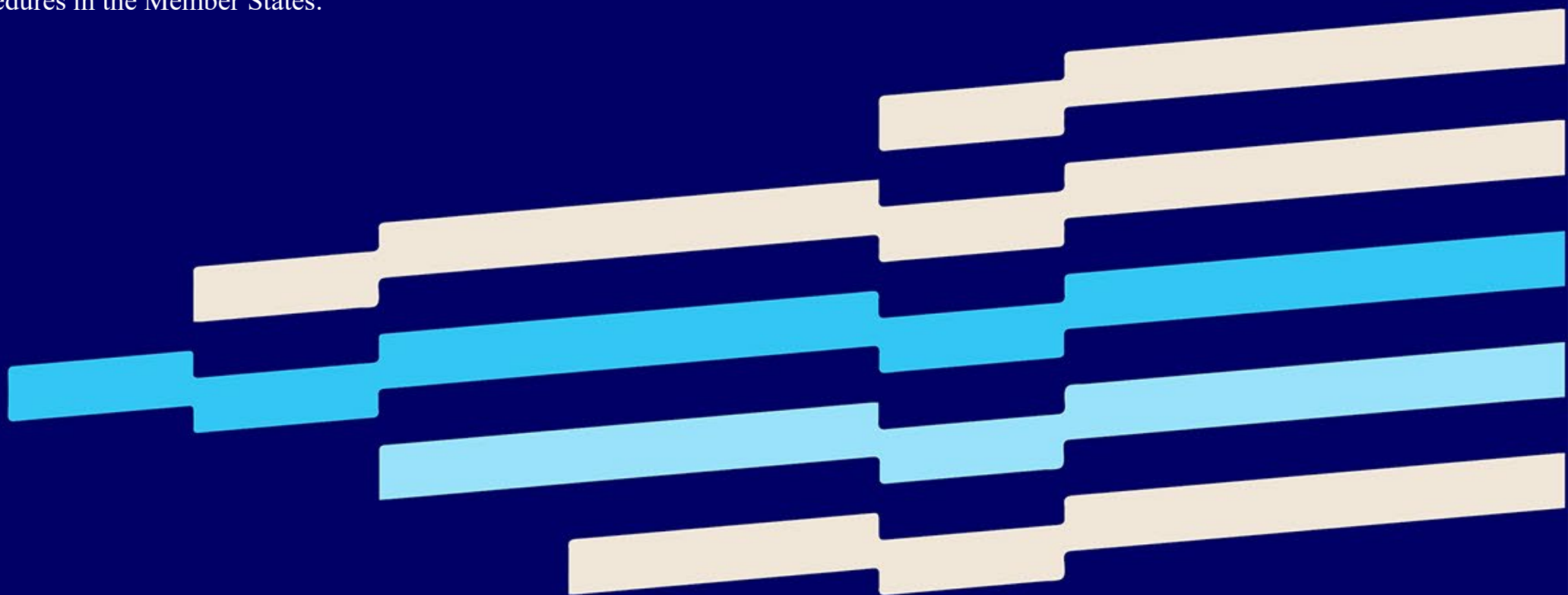
Direktoratet for  
forvaltning og ikt

# Call - CEF-TC-2017-2 – eProcurement

Task: The priority outcomes is to help to complete the transition to eProcurement in the Member States. In particular, they will facilitate cross-border bidding and contribute to simplify public procurement procedures in the Member States.

—

Jens Aabol Senior advisor  
Brussel, 16.October 2019



# Who are we?

Difi and Diputación de Bizkaia as Public entities

EU-Supply, Visma, Merzell and Pixelware as suppliers for Contracting Authority's

Amesto as a supplier for the Economic operators



Diputación de Bizkaia



**amesto**



| eu-supply.com |

# The Project

- **Project timeline**
  - Start date: January 2018
  - End-date: 31.May 2019
  - New end-date: 31.October 2019
- **Transport: New Access Points**
  - Using AS4
  - ASiC
  - Testing with CEF Core Service and PEPPOL testbed
  - Testing with INTERPLAT consortium
- **BIS eProcurement formats**
  - **P001** - Procurement Procedure Subscription
  - **P002** - Procurement Documents Access
  - **P003** - Tender Submission
  - Testing with CEF ITB/ISA testbed

# Challenges

- **Project timeline**
  - Start date: January 2018
  - End-date: 31.May 2019 <<< Was not be ready – do to poor documentation/spesifications/ruls form OpenPEPPOL (eSens)
  - New end-date: 31.October 2019 <<< Granted
- **Transport: New Access Points**
  - <<< Missing Pre-award agreement from OpenPEPPOL for the Pre-award domain (Access Point agreement)
  - Using AS4 <<< Oxalis was not CEF conformant for a long (is conformant now)
  - ASiC <<< Use of encrypting – missing PEPPOL Service Provider certificates issued by OpenPEPPOL
  - Testing with CEF Core Service <<< Testing with CEF is a challenge
  - PEPPOL testbed – <<<was not updated
  - Testing with INTERPLAT consortium <<<are not ready for testing
- **BIS eProcurement formats**
  - <<< BIS specifications are not as good as they should be. Sent RFC to OpenPEPPOL
  - **P001** - Procurement Procedure Subscription <<< Documentation/specification/rules must updates needed
  - **P002** - Procurement Documents Access <<< Documentation/specification/rules must updates needed
  - **P003** - Tender Submission <<< Documentation/specification/rules must updates needed
  - Testing with CEF ITB/ISA testbed  
<<< OpenPEPPOL must send new rules and specifications before CEF ITB/ISA validator will be updated

# Timeline

Milestone and activity number	Milestone and activity title	Indicative start date	Indicative end date	New Indicative end date	New Indicative end date	jan.18	feb.18	mar.18	apr.18	mai.18	jun.18	jul.18	aug.18	sep.18	okt.18	nov.18	des.18	jan.19	feb.19	mar.19	apr.19	mai.19	jun.19	jul.19	aug.19	sep.19	okt.19	nov.19	des.19																
<b>Activity 1</b>	Project management	01.01.2018	31.05.2019	31.05.2019	31.10.2019	[Yellow bar]																				[Orange bar]		Final report																	
<b>Milestone 1</b>	Action is successfully completed		31.05.2019	31.05.2019	31.10.2019																																								
<b>Activity 2</b>	Contribute to developing and implementing EHF and PEPPOL BIS ESPD, as well as eCertis	01.01.2018	31.05.2019	31.05.2019	Deleted																																								
<b>Milestone 2</b>	Deliver EHF and PEPPOL BIS ESPD guidelines and validator based on the ESPD-EDM version 2		01.05.2019	01.05.2019	Deleted																																								
<b>Milestone 3</b>	eCertis validation by the eProcurement core service platform: The beneficiary(ies) will demonstrate via a remote meeting with DG GROW their system integration with eCertis		15.05.2019	15.05.2019	Deleted																																								
<b>Milestone 4</b>	ESPD validation by the eProcurement core service platform: The beneficiary(ies) will demonstrate via a remote meeting with DG GROW that the ESPD implementation is compliant with the ESPD-EDM by checking XML files with the ITB test platform		15.05.2019	15.05.2019	Deleted																																								
<b>Activity 3</b>	Deploy and run five AS4 Access Points through the PEPPOL transport infrastructure	01.01.2018	31.05.2019	31.05.2019	31.10.2019	[Yellow bar]																				[Orange bar]																			
<b>Milestone 5</b>	eDelivery validation: The Access Point and Service Metadata Publisher are up and running and have passed the connectivity test provided by the e-Delivery Core Service Platform		30.09.2018	01.02.2019	31.10.2019																																								
<b>Activity 4</b>	Contribute to the adaption of PEPPOL transport infrastructure agreement (PEPPOL TIA)	01.01.2018	31.05.2019	31.05.2019	31.10.2019	[Yellow bar]																				[Orange bar]																			
<b>Milestone 8</b>	Deliver an updated approved version of PEPPOL TIA		15.05.2019	15.05.2019	31.10.2019																																								
<b>Activity 5</b>	Implement eTendering documents in EHF or PEPPOL BIS formats	01.05.2018	31.05.2019	31.05.2019	31.10.2019						[Yellow bar]															[Orange bar]																			
<b>Milestone 6</b>	eTendering interface validation by the eProcurement core service platform: The beneficiary(ies) will demonstrate that the eTendering interface is compliant with the eTendering profiles in the ITB test platform		31.12.2018	01.02.2019	31.10.2019																																								
<b>Activity 6</b>	Marketing eTendering documents and eProcurement solutions	01.06.2018	31.05.2019	31.05.2019	31.10.2019						[Yellow bar]															[Orange bar]																			
<b>Milestone 7</b>	Marketing activities successfully completed and resulting in the increased use of eTender documents sent/received via the PEPPOL infrastructure (eDelivery)		15.05.2019	15.05.2019	31.10.2019																																								



Milestone

Original end-date

Status today  
New end-date

**Project ends October 31<sup>st</sup>, 2019**



# Access Point

# Access Points with AS4 protocol

- 4 new Access Points are getting ready
- Using the “OpenPEPPOL testbed” for approval of new AS4 Access Points
- Using the “eDelivery CEF core service” for approval for new AS4 Access Points
  - Connectivity testing is an issue with all installations except Domibus



# Formats



# eTender and EHF ESPD



- ESPD
  - UBL 2.2 – ready for use
  - ESPD EDM 2.0.2 is in an official version but is it good enough? DGGrow is working on a final, final, final version ESPD 2.0.3.
  - ESPD-INT project has published ESPDemd 2.0 (*This is **not** a PEPPOL ESPD BIS 2.0 version!!*)
  - EHF ESPD 1.1 is ready for use. It is based on ESPD 1.0.2 with Lot. This will be used in Norway

eTender documents are ready (these are the documents that are to be developed and sent in this project):

- **P001 - Procurement Procedure Subscription**
  - EO sends a **T001** to CA – “query for information about the Tender - **Subscribe to Procedure**”
  - CA sends a **T002** “receipt - **Subscribe to Procedure Confirmation**” to EO  
The EO is registered in the CA system so that all new information from the CA also goes to the EO.
- **P002 - Procurement Documents Access**
  - EO sends a **T003** to CA - “asking for documents to the Tender - **Tender Status Enquiry**”
  - CA sends a **T004** to EO with all documents in the **Call for Tenders** (or a link to where the documents are placed)  
**ESPD** will be sent but in various versions (ESPD 1.0.2 or ESPD 2.0.2 or EHF ESPD 1.1 or no ESPD)  
The EO is registered in the CA system so that all new information from the CA also goes to the EO.
- **P003 - Tender Submission**
  - EO sends a **T005** to CA – **Tender** “containing all the documents for the bid”  
**ESPD** will be sent but in various versions (ESPD 1.0.2 or ESPD 2.0.2 or EHF ESPD 1.1 or no ESPD)  
ASiC is used – signed by the EO service provider, encrypted with the CA certificate, zipped
  - CA sends at **T006** to EO - **Tender Receipt** – to confirm that the Tender message has been received

# Transport

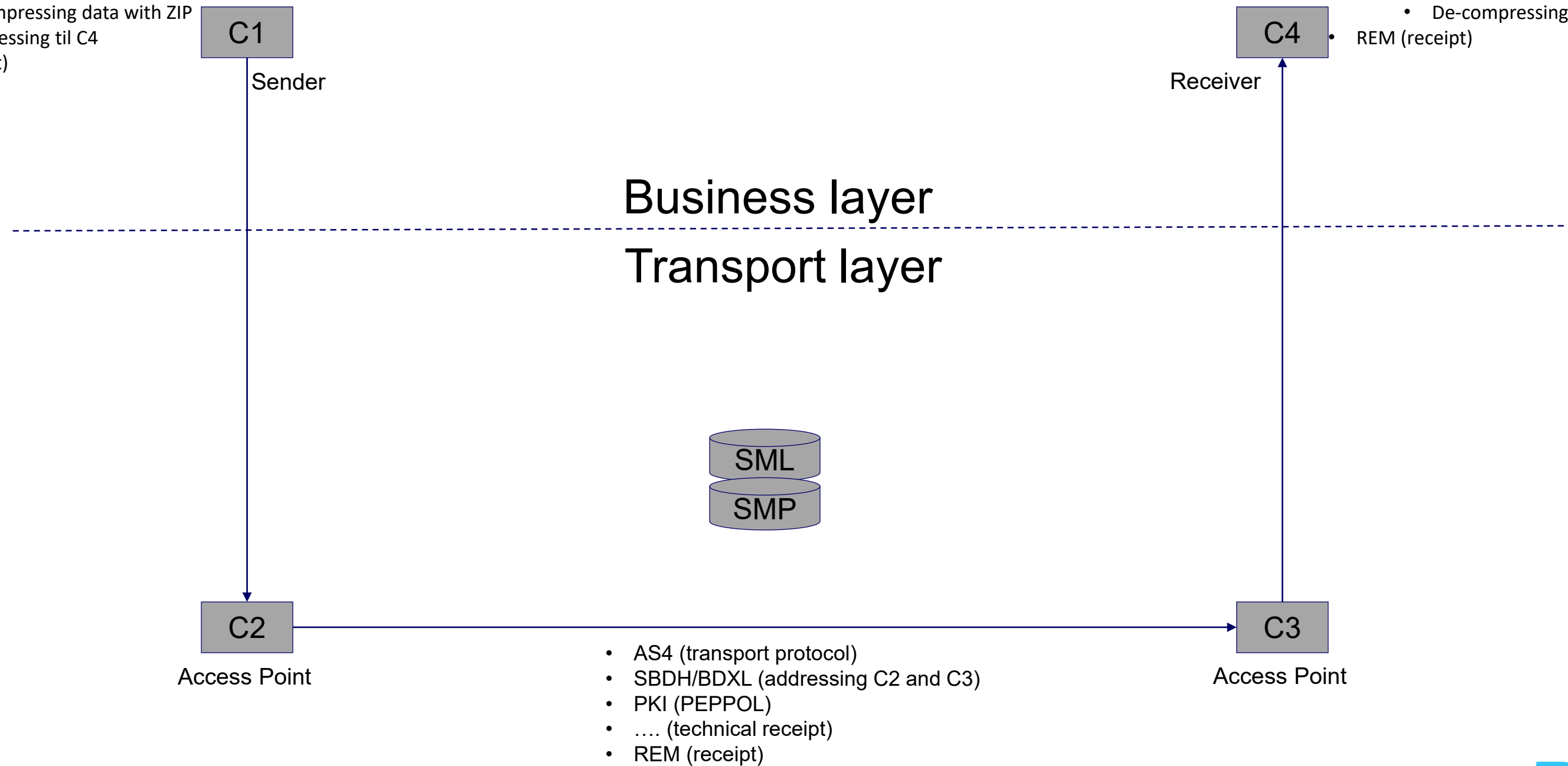
# Using PEPPOL 4-corner - Process – pre-award – AS4 (sending/receiving tendering documents)

## Process called AS4:

- ASiC (packing of the eTendering documents)
  - C4 – encryption – [SHA2 – 256](#),  
Format=[CMS RFC 5652](#), Key length= 256, Algorithm=AES-256, Certificate=....
  - C1 – signing of documents/manifest with hash
  - Compressing data with ZIP
- SBDH – addressing til C4
- REM (receipt)

## Process called AS4:


- ASiC (unpacking of the eTendering documents)
  - De-compressing ZIP
  - C4 – de-encryption
  - C1 – signature check
  - De-compressing ZIP
- REM (receipt)

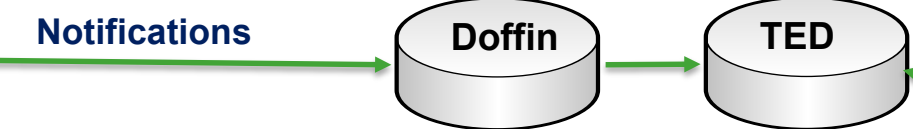


# Tendering

**CA**

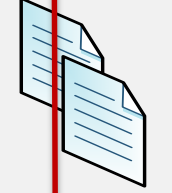
- Dekryptering
- ESPD
- Validation

1 



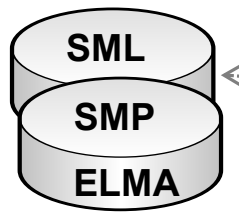
**EO**

Office systems

4 

Encryption public key  
Certificate from CA  
(Algoritme=AES-256  
CMS (Cades -n BES))

Addressing




- STORK
- ID-Protén

**Services for CA**  
Service poriver: **T005:**

- UnEncrypte
- Unpakking ASiC
- Validate Signing (PEPPOL PKI on pre-award)

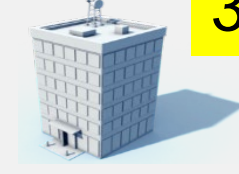
**T006:**

- Packing the T006

2 

**Accesspoint CA**

- Timestamp

3 

**Accesspoint EO**

- Sending the ASiC to CA

**Services for EO**  
Service poriver **T005:** 4a

- Authentication
- Validate the format
- Encrypte
- Pakking ASiC
- Signing with EO certificate (new Service Provider certificate from PEPPOL)
- Signing with public key from EO
- Sending the message

**T006:**

- Unpacking the message T006

Certifikat from PEPPOL PKI



Soap msg (AS4):  
Timestamp  
Hach til melding  
Hach til ASiC payload

eDelivery

New pre-award Certificate from PEPPOL

# ASiC

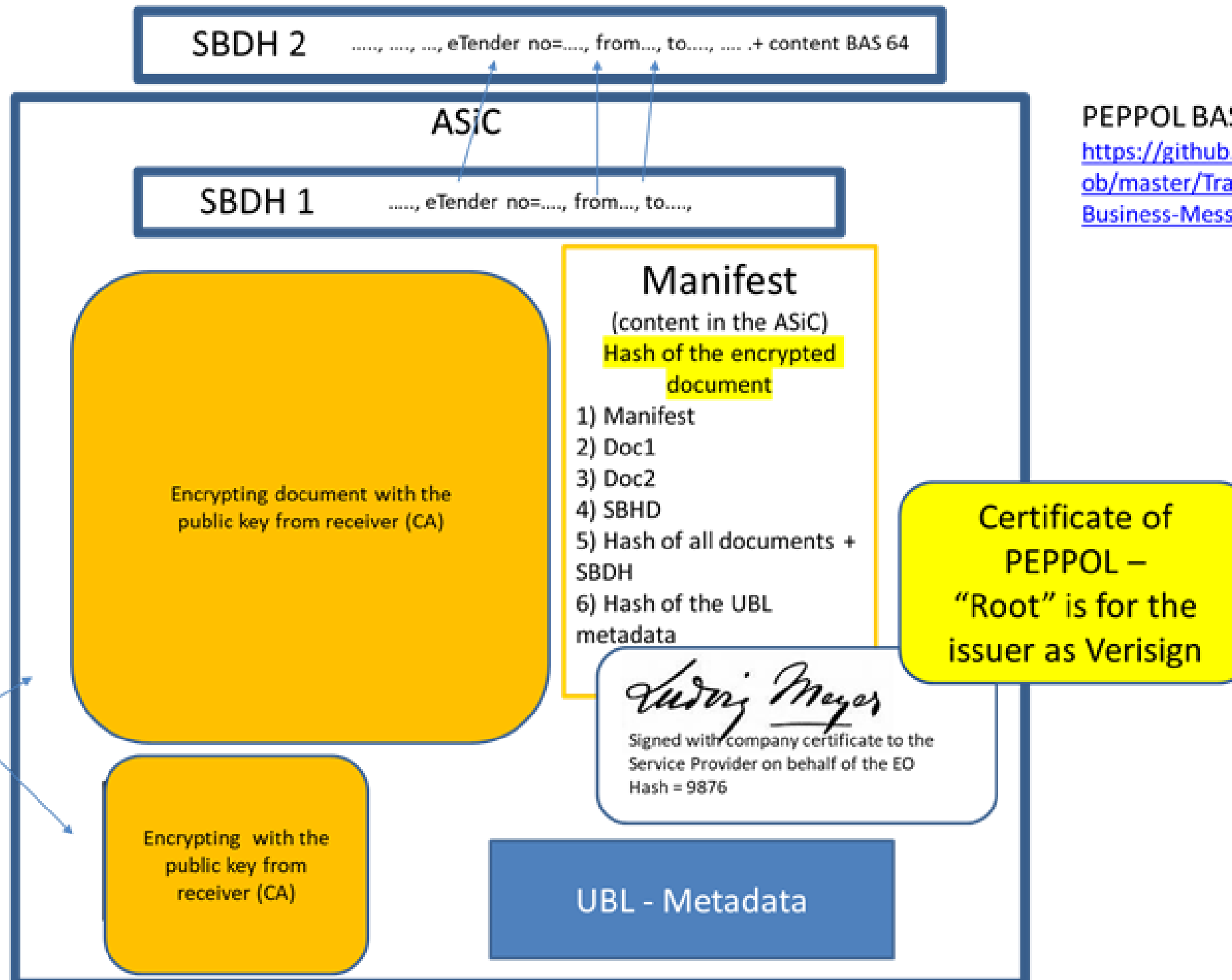
# Payload for this project

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(ASiC is used?? – signed by the EO service provider, encrypted with the CA certificate, zipped)
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# ASiC container

T005

TenderSubmission  
must be encrypted.  
All other transactions  
does not need to  
be encrypted



PEPPOL BAS 64 compression

<https://github.com/OpenPEPPOL/documentation/blob/master/TransportInfrastructure/PEPPOL-EDN-Business-Message-Envelope-1.2-2019-02-01.pdf>

Separately encrypted documents

