



Peppol

The future is open

OpenPeppol AS4 webinar

17-12-2019

www.Peppol.eu

Peppol is owned by OpenPeppol AISBL

Agenda

1. Status of AS4 migration and migration policy
2. Presentation of AS4 gateway implementations and products
3. Onboarding test procedures for AS4
4. Questions from Members on implementation aspects.

AS4 migration status and policy

Jesper Larsen – OpenPeppol Support Lead

Current status and planning for the migration to AS4

- 67 AS4 certified Peppol Service providers (incl. AU-NZ and other only AS4 providers)
- 40 providers are currently doing the AS4 test
- Out of 261 already AS2 certified providers 203 are missing AS4!

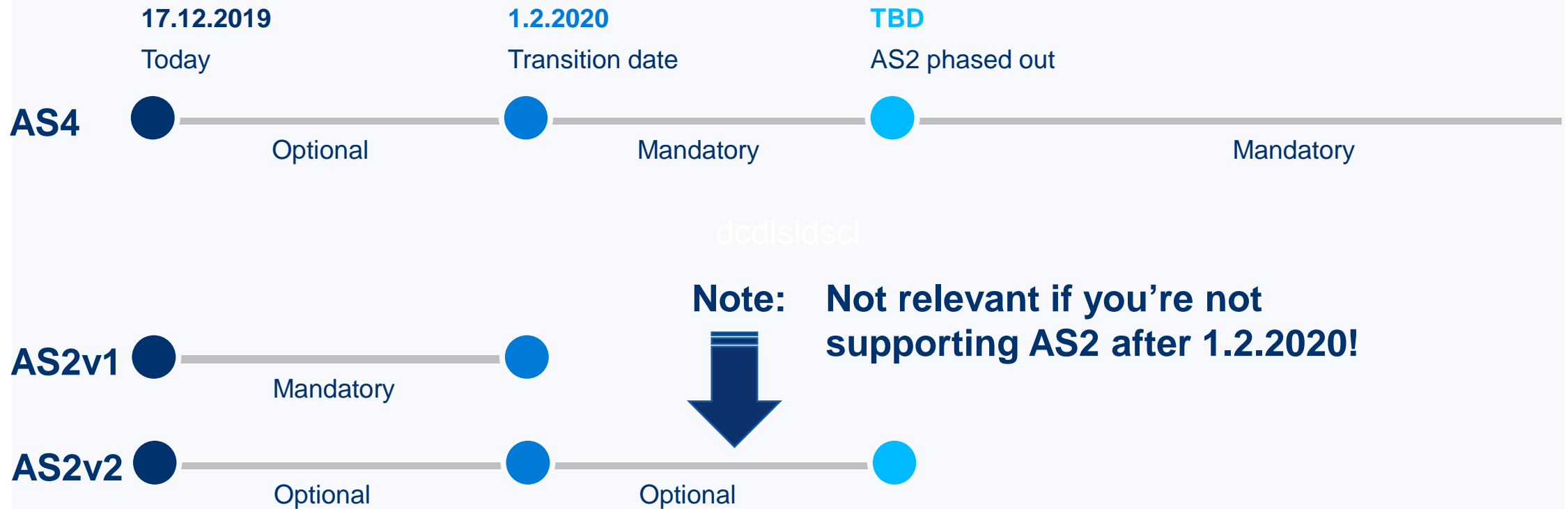
Actions:

- Monthly reports being sent to PAs for escalation
- Communication and awareness

AS4 migration policy

- Explains the central dates, actions and responsibilities in the migration from Peppol AS2 to Peppol AS4 as the new mandatory transport protocol
- The important date is: **2020-02-01**
 - On this date all Peppol service providers with a need to exchange messages in production **MUST** have done the Peppol AS4 onboarding test (more on this test later)
 - On this date all receivers in the SML **MUST** be registered with the Peppol AS4 profile as a minimum
 - After this date Sending Peppol Providers/Access Points are strongly encouraged to prioritize AS4 in situations where the receiver has support for both AS2 and AS4
 - When the volume of exchanged messages using the AS2 protocol drops below 20% a phase out date for AS2 will be set

AS4 and AS2 Transition Timeline



Enforcement and monitoring

- OpenPeppol will actively monitor all receivers in the SML for AS4 support and advise accordingly
- The Peppol Authorities will actively engage all providers not ready with AS4 **2020-02-01** in accordance to the compliance policy escalation
- No one is cut or revoked from the Network after **2020-02-01** as a general principle but providers missing AS4 must show active measures to getting AS4 support ASAP.
- The true parties loosing here is the end users (buyer and suppliers) if they have a Peppol provider that does not have maximum reachability because they are missing AS4 support

AS4 implementations and products



phase4

Open Source, integrateable Java solution
for sending and receiving AS4 messages
over the Peppol network

By Philip Helger

Key facts



- Open Source
- Java 8+
- Apache 2 licensed
- Generic AS4 solution
- Tailored solution for Peppol available
 - Certificates, SBDH, SMP lookup, Document Validation...
- Separation between client and server part
- <https://github.com/phax/phase4>

Pros and Cons



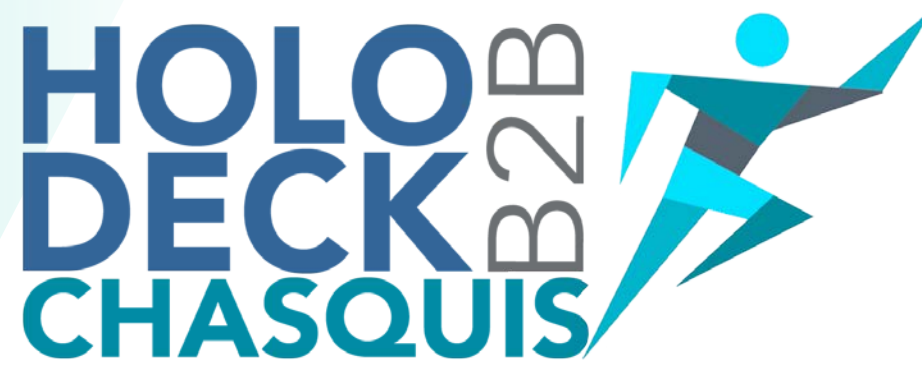
- Pros
 - Open Source
 - Standards based
 - Business friendly license
 - Highly customizable
 - Special focus on Peppol
- Cons
 - One man show
 - No 24/7 support available
 - No standalone version available

Commercial help is available
for setting it up

philip@helger.com

Also have a look at my SMP:





Peppol gateways

<http://holodeck-b2b.com/peppol>

Holodeck B2B – AS4 messaging

Chasquis Peppol gateway

- Fully tested, CEF and Peppol conformant
- Already in use in the network
- Fast & easy to implement



Works with your current back end

- Stand alone solution

Integration: file based or REST API

- SBDH based
- Provide your business document and the gateway does the rest

Pre- and Post-Award supported

- REM evidences with timestamp for Pre-award



Modular design for customization and upgrading

- Easy to upgrade your gateway
- Customer specific extensions possible

Multiprotocol option – dynamically configured

- 1 gateway for *AS4 and AS2*
- Provides flexibility in date of gateway switch



More information on our gateways:

Holodeck-B2B.com/Peppol

Questions?

Like to schedule a call to discuss gateways?

Renate@Chasquis-messaging.com



Peppol by Galaxy Gateway

Hans Berg

hans.berg@tickstar.com

+46 739 887 881

www.galaxygw.com

Peppol AS4 Access Point by Galaxy Gateway

- On-premise
- SaaS
- AS4 currently undergoing interop testing
- Peppol Testbed runs scheduled in January



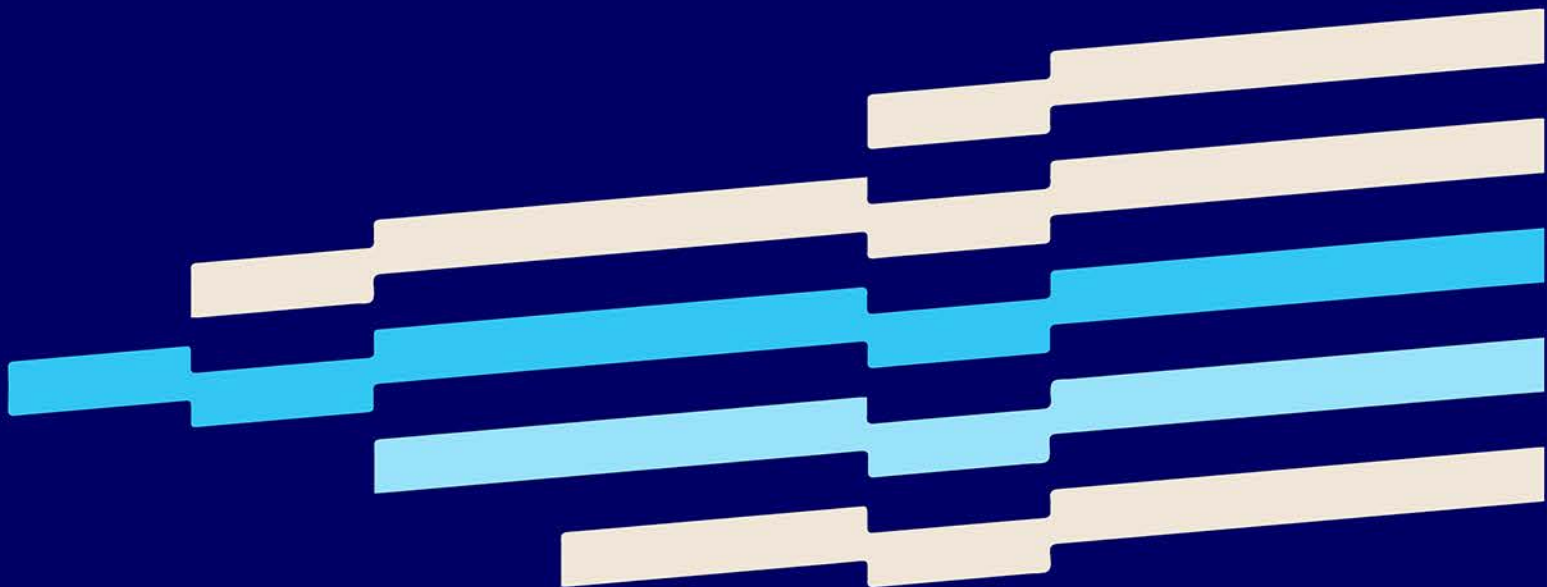
Difi

Agency for Public Management
and eGovernment

Oxalis AS4

—

Klaus Vilstrup Pedersen
kpe@digdir.no
Difi



Oxalis

- Oxalis version 4.1.0
 - Supporting AS2v1
 - Supporting AS2v2
 - <https://github.com/difi/Oxalis>
 - Video: <https://vimeo.com/268449561>
- Oxalis AS4 RC10
 - <https://github.com/difi/Oxalis-AS4>
 - Video: <https://vimeo.com/366420949>







CEF eDelivery - Domibus

PEPPOL AS2 to AS4 migration info session

17 December 2019

Agenda

Domibus in the PEPPOL eDelivery network

Other eDelivery AS4 conformant solutions



Domibus in the PEPPOL eDelivery network

Domibus background

- Domibus has its origins in the eCODEX project and was further refined in Large Scale Pilots such as e-SENS.
- At the end of e-SENS, Domibus and its code was transferred to the CEF eDelivery team at EC DIGIT.
- Currently, Domibus is the sample implementation e-Delivery AS4 profile solution maintained by the European Commission.
- It is implemented in Java and the source code is freely available under the EUPL 1.2 license.

Domibus in the PEPPOL eDelivery network

- Domibus successfully passed the AS4 tests of the PEPPOL centralized test platform
- The version used was Domibus 4.01, released on 07/12/18
 - The latest release 4.1.2, released in November 2019, is available from <https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/Domibus>
 - PEPPOL specific configuration settings are described in the Administration Guide, available from the same location

Domibus in the PEPPOL eDelivery network

- Domibus only provides support for AS4, not for AS2
- During the AS4 migration transition period, users might need to run an additional AS2 AP
 - This means that in the SMP there will be
 - An entry for the Domibus AS4 URL using the transportProfile attribute value “peppol-transport-as4-v2_0”
 - An entry for the other implementation’s AS2 URL using the transportProfile attribute value “busdox-transport-as2-ver1p0”
 - After the transition period the AS2 AP and it’s associated SMP entry can be removed

Roadmap for Domibus

More information on CEF Digital

Domibus releases

Release	Status	Features	Release date	End of support
v4.3				
	PLANNED	<ul style="list-style-type: none">• Possibility to visualize the non-repudiation receipts in the Admin console• Technical improvements• Maintenance of Domibus 4.1• Maintenance of Domibus 4.2	2021	-
v4.2				
v4.2	PLANNED	<ul style="list-style-type: none">• Possibility to prioritize sending messages based on predefined criteria: based on service and action, or authenticated user or a message property• Improve Pmode configuration tool with scalable solution• Technical improvements• Maintenance of Domibus 4.0• Maintenance of Domibus 4.1	21.09.2020 (RC) 10.12.2020 (FR)	10.12.2022
v4.1				
				LTS
v4.1.2	CURRENT	<ul style="list-style-type: none">• Possibility to encrypt passwords in the configuration files• Possibility to encrypt payloads at rest• Possibility to upload and download the current PMode via the managed REST services• JMS Queues statistics• FS Plugin fix to save the MessageInfo in metadata.xml• Test Service improvements	29.11.2019	29.11.2021


Are you aware of any issues or limitations?

- **eDelivery Governance and Procedures** are documented on a public Internet Page:
 - <https://ec.europa.eu/cefdigital/wiki/display/EDELGOV/Governance+and+Procedures>
- **Change Requests, public consultations and reports** can be followed up via a page that requires a EU Login account:
 - <https://ec.europa.eu/cefdigital/wiki/display/EDELGOV/>

Governance and Procedures

Created by Vivian BAAS, last modified by Gianmarco PIVA on Oct 16, 2017


This page presents an overview of the rules, procedures and guidelines that apply to the Operational Governance of the DSIs and to the DSI Operation.



Non-paper on the IT Governance

The "Non-paper on the IT Governance of CEF Building Block Digital Service Infrastructures (DSIs)" sets out an 'integrated' IT Governance Model that aims to align both policy and implementation, and the operational practices of DSIs with CEF's long-term strategic goals. Its goal is to promote coherence across CEF building block DSIs and build trust between them and the sector-specific DSIs, while promoting efficiency and avoiding the duplication of structures.


[Download](#)



Change Management

Change Management is the process responsible for controlling the lifecycle of all Changes. The goal of the Change Management process is to ensure that standardised methods and procedures are used for efficient and prompt handling of all Changes, in order to minimise the impact of change-related incidents upon service quality, and consequently to improve the day-to-day operations of the organisation.

[Download](#)



Change Management of eDelivery specifications

This document addresses three types of CEF eDelivery specification documents and provides a simple change management process for CEF eDelivery and a related support policy. It also defines a metadata scheme for CEF eDelivery Specifications and explains how it relates to the support policy.

[Download](#)



Other eDelivery AS4 conformant solutions

eDelivery AS4 conformant solutions

Access Point software

eDelivery AS4 conformant solutions

Access Point specifications

SMP software

SMP specifications

SML software

SML service

SML specifications

PKI Service

Security Controls guidance

Connector specifications

Onboarding & stakeholders follow-up

eDelivery Conformance testing

eDelivery Connectivity testing

Cost estimation tool

Self-assessment tool

eDelivery Service Desk

Training and Deployment

eDelivery Developers Community

Trust Models Guidance

eDelivery AS4 conformant solutions

This page lists the solutions that have passed or are in the process of passing the conformance testing according to the eDelivery AS4 profile:

<ul style="list-style-type: none">AxwayB2BRouterBabelwayBizbrainsDomibus (EC sample implementation)eefacta ServerEESSI AS4.NETEdicom ASx ServerData InterchangeDCS EIPFlameHolodeck B2BIBM	<ul style="list-style-type: none">iFenixLaurentiusMendelsonNavitasoft - IP Systems AS4-IPNotaOXALISPagerophase4RSSBusSEEBURGERViaAdValvas GatewayADESIntegration Cloud
--	--

A document listing [all vendors supporting AS4](#), including the ones that have not gone through the [CEF conformance testing process](#), is available at bottom of this page.

LEGEND

CP

Common Profile

4C

Four Corner Topology

DS

Dynamic Sender

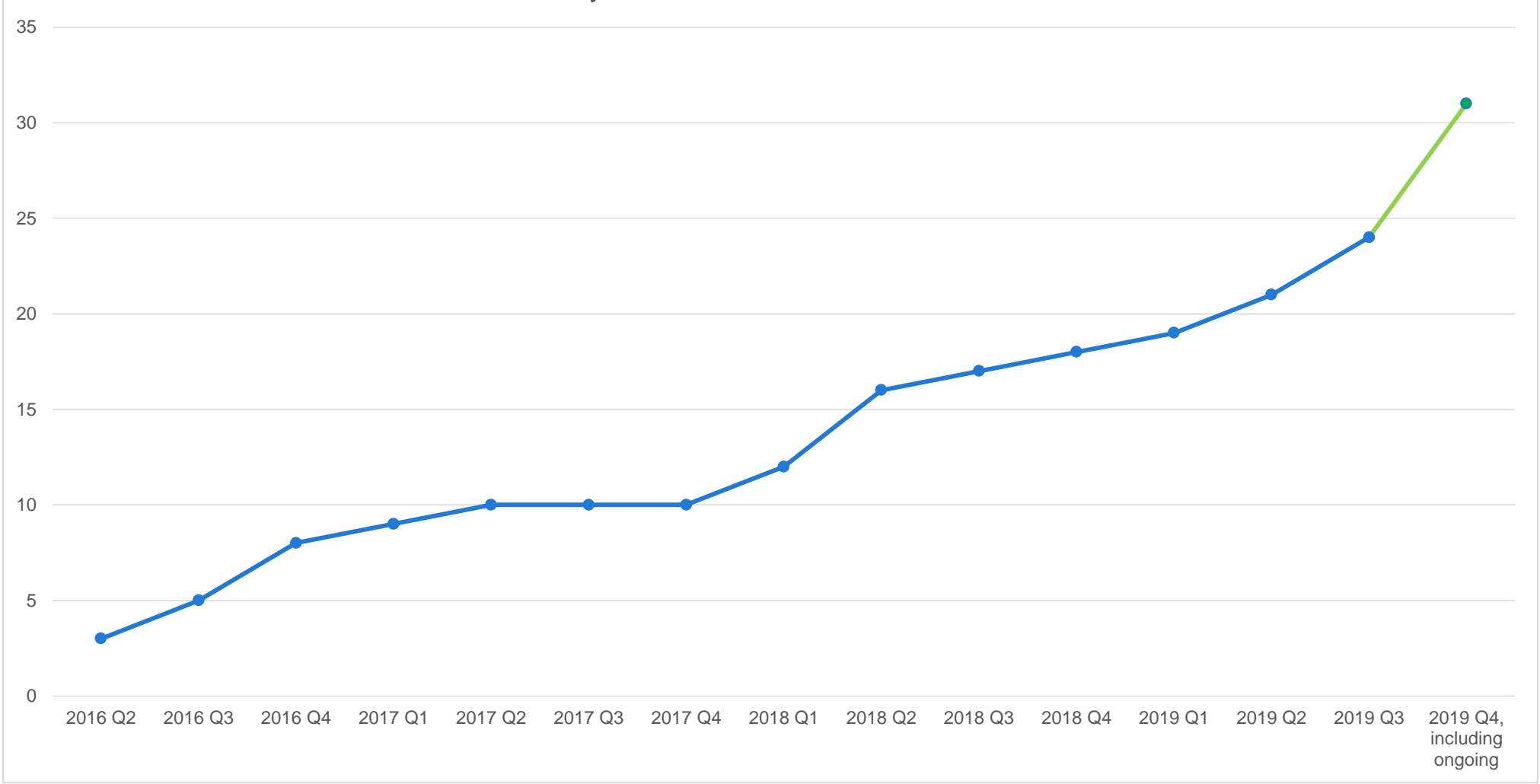
DR

Dynamic Receiver

More information on CEF Digital

[Conformant Solutions](#) >

eDelivery AS4 conformant solutions evolution





For questions or support contact:

CEF-EDELIVERY-SUPPORT@ec.europa.eu

AS4 onboarding testing process

Jesper Larsen – OpenPeppol Operations Support Lead
Mikael Aksamit – OpenPeppol Operations 2nd level support

Peppol testbed

- Test Bed managed by OpenPeppol Operations
- Self service – No human interference needed from OpenPeppol
- Your test certificate gives you access to the testbed service
 - Obtained through the service desk: <https://openPeppol.atlassian.net/servicedesk/customer/portal/1>

Pre-requisites

- Prerequisites
 - Read the Testbed guide
 - Make sure your SSL configuration is correct (Grade A or above)
 - Try to complete at least one successful transaction in your own unit test
 - No need to publish participants in the SMP/SMK during the test

Test process

- Configure your browser to be allowed using Peppol certificates for client authentications
- Browse: <https://testbed.Peppol.eu/secure/suite/view>

- Enroll for a Test Suite

Active Test Suites:



No active sessions found.

Enroll for a session by clicking the add button in the top right corner.

- Follow the steps and complete the Test Cases

Test process

- Configure your browser to be allowed using Peppol certificates for client authentications
 - Browse: <https://testbed.Peppol.eu/secure/suite/view>
 - Enroll for a Test Suite
 - Follow the steps and complete the Test Cases (one finished testcase opens the next)
-
- Test case 1: Testbed sends a BIS Invoice to tester
 - Test case 2: Tester sends back the BIS Invoice to testbed
 - Test case 3: Testbed sends a large BIS Order to tester
 - Test case 4: Tester sends the large BIS Order back to the testbed

Active Test Suites:

AS4 Conformance/onboarding test suite. Version 2.0

Enrolled: 2019-10-31T15:30:47

Status: COMPLETED

AS4 Endpoint: <http://phax.mooo.com/c2/as4>

Configured receiver: 9914:abc

Certificate: POP000306 (PEPPOL TEST AP)

Completed: 2019-11-01T21:50:36

Report: 

#212 OUTBOUND Testbed sends to testing AP

COMPLETED

#222 INBOUND Testing AP sends back to Testbed

COMPLETED ✓

#232 **OUTBOUND** Testbed sends large file to testing AP

COMPLETED

#242 INBOUND Testing AP sends large file back to Testbed

COMPLETED ✓

#252 INBOUND Testbed simulates effect of invalid certificates

COMPLETED ✓

OpenPEPPOL TestBed Report

[Test suite details](#)

- AP Certificate: POP000306
- Test suite: [d=4] Conformance/onboarding test suite, Version 2.0
- Profile: AS4
- Endpoint: <http://phax.moox.com/c2/as4>
- Receiver: 9914-abc (AT:WAT)
- Completed: Nov 01 2019 21:50:36 CET

Completed test cases

Case	Direction	Type	Status	Completed	Audit
Testbed sends to testing AP	OUTBOUND	POSITIVE	COMPLETED	Oct 31 2019 15:38:54 CET	743.212
Testing AP sends back to Testbed	INBOUND	POSITIVE	COMPLETED	Oct 31 2019 16:27:13 CET	743.222
Testbed sends large file to testing AP	OUTBOUND	POSITIVE	COMPLETED	Oct 31 2019 16:27:26 CET	743.232
Testing AP sends large file back to Testbed	INBOUND	POSITIVE	COMPLETED	Oct 31 2019 16:31:42 CET	743.242
Testbed simulates effect of invalid certificates	INBOUND	NEGATIVE	COMPLETED	Nov 01 2019 21:50:36 CET	743.252

Experiences so far

- Self customized or self build AS4 solutions tend to struggle completing the test
- Reading the Peppol AS4 profile correctly (referencing into other specs can be complex)
- Where to get support?
- Remember to send in the test report if you want to onboard!

Useful links

- Testbed: <https://testbed.Peppol.eu/secure/suite/view>
- Testbed guide: http://Peppol.eu/wp-content/uploads/2018/12/Peppol-Testbed-and-Onboarding_v1p2.pdf
- Peppol AS4 profile: <http://docs.Peppol.eu/edelivery/as4/specification>
- Peppol AS4 implementations: <https://Peppol.eu/downloads/Peppolimplementations/>
- Certified AS4 providers: <https://Peppol.eu/who-is-who/certified-as4-Peppol-service-providers/>
- Peppol Jira Service desk: <https://openPeppol.atlassian.net/servicedesk/customer/portal/1>

Questions

?

