PEPPOL AS2 to AS4 background and AS4 migration plan

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AS2 to AS4 background

Where we have been

Letter of Understanding signed between OpenPEPPOL and the European Commission in 2016

Conditions agreed for the completion of the different phases: mostly market-based, ensuring sufficient maturity of the AS4 message exchange protocol specifications and implementations and penetration in the market

December 2017: A first version of a PEPPOL AS4 profile is published

March 2018: Public announcement that the criteria for a second important milestone (T2) have been met – AS4 officially becomes an optional message exchange protocol in the PEPPOL eDelivery Network

Where we are going:

August 2018: Revision of the PEPPOL AS4 profile – now fully compliant with CEF eDelivery specifications

September 2018: Launching of on-boarding test services for AS4 by OpenPEPPOL, starting to on-board the first service providers to implement AS4 for post-award and pre-award use cases

December 2018: Assessment of criteria for the next migration milestone (T3)

January 2019: If T3 conditions are met, new OpenPEPPOL members can start supporting AS4 only

1 July 2019: AS4 becomes mandatory protocol in the PEPPOL eDelivery network, AS2 remains optional
The OpenPEPPOL migration principles

1. To allow a smooth and as friction free transition as possible, supporting two versions of the protocols for new as well as existing service providers must be allowed.

2. To ensure non-disrupted operations and full interoperability of the messages exchanged in the PEPPOL network, the period during which two parallel versions are allowed should be as short as possible.

3. Any changes affecting the current (mandatory) PEPPOL specifications and/or procedures should be notified, communicated and agreed upon in the relevant coordinating community (CC) well in advance.

4. The migration is conducted in four steps at three different points in time, marked as “A”, “B”, “C” and “D” and are defined as follows:
   a. Phase-in
   b. Assessment of transition criteria completion
   c. Transition
   d. Phase-out
The definitions and important dates – preparing and qualifying AS4

a. Phase-in Date

- Date at which the new AS4 profile is introduced as an optional protocol in the PEPPOL eDelivery Network. At this date it should be possible to download the specification for the new PEPPOL AS4 profile. The updated PEPPOL AS4 profile will be optional at this point in time.
- Markup date: December 2017 (publication of first version of the PEPPOL AS4 profile)
- Effective date: beginning September 2018 (new AS4 profile approved after public review)
- AS2 is still the mandatory protocol and is expected to be implemented by all Service Providers joining OpenPEPPOL until a Transition Date is firmly set

b. Assessment of transition criteria completion

- Date at which it is decided to set the final transition date or postpone the transition date for the AS4 PEPPOL profile. This will involve an assessment of the LoU (Letter of Understanding) criteria agreed between the European Commission and OpenPEPPOL. This will basically decide when the new AS4 protocol becomes mandatory
- Target: December 2018
The definitions and important dates – executing the migration to AS4

C. Transition date

- Date at which the new PEPPOL AS4 profile replaces the current PEPPOL AS2 profile as the mandatory protocol. The previous PEPPOL AS2 profile becomes optional
- Target date: By June 2019
- Precondition: That the LoU criteria for transition (T3) are met
- The Transition period is defined as the period during which the current PEPPOL AS2 protocol changes status from mandatory to optional. The new PEPPOL AS4 profile, becomes mandatory, to align with the communication protocol strategy laid out by OpenPEPPOL and the EC.
- From January 2019 onwards (6 months before the transition date) new service providers can implement only AS4 and do not need to implement AS2 as well

D. Phase-out date

- Date after which the old PEPPOL AS2 profile is not supported any more in the PEPPOL network
- Subject to completion of the Phase-out criteria (T4) as stated in the LoU with the EC
The Transition Criteria (T3)

2. Handling of message payload and attachments size in CEF AS4 profile implementations similar to PEPPOL AS2 profile implementations:
   c) Production use of CEF AS4 profile with transactions in the PEPPOL 4-Corner network for 3 on-going months in eInvoicing and 3 on-going months for Tender Submission use cases.

4. Market readiness – previous experience shows that signalling the adoption of a technology will significantly contribute to its adoption by the market. Therefore, it is vital to announce in advance the intentions of moving to AS4.
   a) Support by commonly used platforms: In T2 OpenPEPPOL will survey its Users to identify the integration platforms in use. In T3, the same survey will be run by OpenPEPPOL. The results of the T3 survey should show that the majority of platforms in use support both AS2 and AS4.
   b) Availability of free/affordable AS4 training services, setup and implementation competences at European level and in at least 50% of all Member States and Associated Countries.
   c) Production use of AS4 for at least 30% of all transactions in CEF eDelivery integrated with PKI and SMP in the eProcurement domain including pre and post award.
   d) Support ratio of registered Critical and Urgent incidents measured for PEPPOL support related to Interoperability max 50/50 (AS4/AS2) – number of registered AS4 support incidents should not exceed the number of registered AS2 supports incidents (measured on a 3 months basis).
AS4 in OpenPEPPOL

- First version published December 2017
  - Formal completion of the T2 date
  - However, some incompatibilities with CEF AS4 profile were identified
- Second version: Public review finalised last week, results to be announced
  - Fully compatible with the CEF eDelivery AS4 Profile
  - Takes the approach towards providing implementation guidelines for adopting the CEF AS4 profile in the PEPPOL eDelivery Network, rather than coming up with a new profile
  - Some remarks for improvement, coming from the TICC inside OpenPEPPOL, are being suggested to CEF as change requests, thereby ensuring that any input coming from OpenPEPPOL members will go through the CEF change management process and therefore not risk a breach of compliance between PEPPOL AS4 and CEF eDelivery AS4
What is new in the upcoming version

- The PEPPOL AS4 profile now points directly to the CEF eDelivery AS4 Profile and provides only properties further profiled in PEPPOL
- TLS: The PEPPOL profile will now support TLS Encryption in transport level
- Compression: Compression is now mandatory also in the PEPPOL profile
- IPv4 and IPv6: Both are now supported as stated in the CEF profile
- Use of payload filename: Instead of removing it, made the use of a mandatory filename called "payload.xml" which makes the PEPPOL profile compliant to the CEF profile
- Mandatory Push-Push: Currently is required to be supported by the AS4 Implementation (Access Point) in order to be compliant with CEF. However two way push-push will not be used in the PEPPOL eDelivery Network
  - OpenPEPPOL are in discussions with the CEF eDelivery team on making Push/Push optional
More information

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