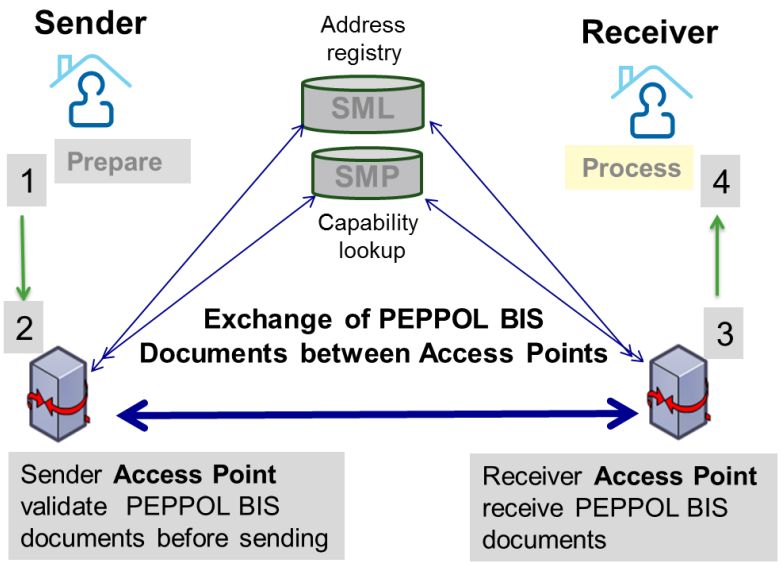
PEPPOL eDelivery state of play

The PEPPOL eDelivery network continues to grow in a stable operations environment as part of the CEF eDelivery DSI. While OpenPEPPOL AISBL manages governance of the PEPPOL eDelivery network, a number of change requests, some originating from pre-award public procurement requirements, are up for discussion as part of the ordinary OpenPEPPOL governance routines this autumn and in 2016.

PEPPOL eDelivery overview

PEPPOL eDelivery is a network of more than hundred access points (AP), nearly fifty service metadata publishers (SMP), a centralized service metadata locator (SML) and PKI-based security brought together by a common set of specifications and a legal framework/set of agreements (PEPPOL TIA). The eDelivery network architecture is defined as a set of loosely coupled building blocks/components that supports flexible and effective updates and enhancements to meet evolving requirements. The specifications and building blocks/components are supported by standardisation efforts in OASIS and in other standards organisations, the OASIS BDXR Technical Committee being the most important. Interoperability is ensured through documented compliance with PEPPOL specifications and commitment to legal obligations laid down in the PEPPOL transport infrastructure agreement (PEPPOL TIA). This gives a highly scalable many-to-many interoperability environment, where new nodes can be added at a low cost without bilateral testing and agreements with existing network participants.



PEPPOL eDelivery network high-level architecture

Currently, more than 40.000 end user organisations are connected to the PEPPOL network through APs, handling around two million transactions on a monthly basis. Most of the transactions are related to invoicing, but the number of product catalogue and ordering transactions based on PEPPOL Business Interoperability Specifications (PEPPOL BIS) are increasing. The PEPPOL network is also open for handling of other transaction types that are not supported by PEPPOL BIS, with construction and insurance industries as examples of sectors currently preparing to use the PEPPOL network.

Agreement between OpenPEPPOL and European Commission

From June 2015, DG DIGIT has assumed responsibility for operations of the SML service as part of the Connecting Europe Facility (CEF) eDelivery digital service infrastructure (DSI) core service platform (CSP) according to an agreement signed between the European Commission (EC) and OpenPEPPOL. The OpenPEPPOL agreement with the European Commission (EC) makes the PEPPOL network a part of CEF eDelivery DSI. This commits DG DIGIT to maintain sample software and support PEPPOL specifications for SML, SMP and AP (including the AS2 transport protocol), to the end of 2017. This is the end date for the current funding of CEF eDelivery DSI CSP as laid down in the 2014 CEF Telecom work programme. It is the intention of the parties to continue the collaboration after 2017 and to work together on defining the terms and conditions for a long-term agreement on this. Under the current agreement, DG DIGIT can add functionality and update software as long as it either, maintains backward compatibility with PEPPOL specifications or is agreed with OpenPEPPOL.

The agreement between EC and OpenPEPPOL leaves the responsibility for maintenance of PEPPOL specifications with OpenPEPPOL. It also identifies OpenPEPPOL as the representative of the PEPPOL Community in interactions with EC. The PEPPOL Community currently consists of three active OpenPEPPOL Coordinating Communities (CC): Pre-award CC, Post-award CC and Transport infrastructure CC. OpenPEPPOL handles governance of the PEPPOL specifications through the coordinating communities and the change management boards established under them. This means that OpenPEPPOL has an organisational set-up and routines for processing and deciding any change requests OpenPEPPOL initiated by its members. This governance structure also includes routines for migration between versions, phase-in and phase-out dates for the specifications etc.

Next steps

The architecture of the PEPPOL network is generic in its nature and allows for use of multiple transport protocols and exchange of multiple document types. This is made possible by the SMP component, that allows a sender to look up the receive capabilities of the recipient, either automated or manually, and to address messages across different technical platforms. The PEPPOL network is designed with a multi-protocol architecture. This allows the parallel use of other transport protocols to meet the business requirements of the different parts of the PEPPOL community. For example AS2 and AS4. It also allows for a soft phase-in and phase-out of protocols and versions of protocols, giving the network participants transition periods for handling updates to their operations.

This autumn, the transport infrastructure CC will analyse and evaluate different requests for how messages with attachments are handled, as well as support for large payloads files and extended security features. Some requirements originate from the growing pre-award public procurement use of the PEPPOL network. Migration from current SML and SMP versions to OASIS BDXR SML and SMP will also be considered. A number of OpenPEPPOL members are also active in the e-SENS e-procurement piloting efforts, taking part in the e-SENS proof of concept testing of the AS4 transport protocol. Based on the results of this testing, it is expected that the possible introduction of AS4 in the PEPPOL network will be discussed in 2016 as part of ordinary OpenPEPPOL change management/governance routines. The use of the AS2 transport protocol has proven efficient, mature and stable and is expected to continue to be a foundation for the expansion of the growing eInvoicing community supporting the implementation of the EU eInvoicing in public procurement directive (2014/55/EU).