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Deliverable 8.2
Version 1.0 of the PEPPOL Transport Infrastructure

Revision: 1.0

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Revision History

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1 English: National IT- and Telecom Agency
2 English: Agency for Public Management and eGovernment
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1 Introduction

1.1 Reading instructions
This deliverable sets the background for a set of common documents. A list of used abbreviations and terms, with their definitions, can be found in Deliverable 7.3b. The basis for the implementation is given in deliverable 8.1³.

This document is a container document, that has as attachment the guides and specifications, that together is the version 1 of the PEPPOL Transport Infrastructure. Included in this deliverable is also the reference implementation software components, that are referenced in the guides.

Chapter 2 contains a list of the (attached) specifications and guides.

1.2 Target Audience
This Deliverable is mainly aimed at IT-Architects and Developers, who will create implement the PEPPOL BusDoX.

1.3 Deliverable objective
This document represents Deliverable 8.2 (D8.2; Version 1 of the PEPPOL Transport Infrastructure) of the PEPPOL project (Pan-European Public Procurement OnLine), created by PEPPOL work package 8 (WP8) – Transport Infrastructure.

The aim of this deliverable is to support the implementation of the PEPPOL eProcurement pilots by describing the building blocks needed for implementing Pan European eDelivery BusDox (Business Document Exchange) in the PEPPOL Transport Infrastructure. These descriptions are applicable to both Contracting Authorities and their Suppliers (Economic Operators) and their technology and/or service providers.

Implementation of these specifications, the PEPPOL Transport Infrastructure (Deliverables 8.2), addresses the PEPPOL Infrastructure on Technical interoperability layers of the European Interoperability Framework (EIF) version 2.0.

These descriptions were prepared by PEPPOL Work Package 8 as an outcome from PEPPOL’s Proof-of-Concept (D8.1). It is anticipated that updates will be required during the Test and Production Pilot phases of the PEPPOL project as part of PEPPOL’s overall support and governance policy.

1.4 Deliverable summary
This deliverable gives the specifications of PEPPOL Transport Infrastructure BusDox version 1.0. Also the documentation in the form of guides supports the usage of the provided software components and the setting up of test pilot implementations.

³ The current version of the deliverable can be found on www.peppol.eu in the section results.
The main character of the deliverable provided by WP8 is the provision of a transport infrastructure for Pan European eDelivery of Business Documents that can be used not only within the PEPPOL project or for procurement processes but in general for any request for eDelivery of electronic Business Documents that may rise in a cross European context.

PEPPOL Version 1.0 of the PEPPOL Infrastructure Infrastructure is a document composed of various attachments (shown as shaded) categorised as Profiles, Reference Implementations, Common Guidelines and Software Components.

The deliverable is the BusDox Specifications, guides and reference software building blocks.

1.5 The PEPPOL project

PEPPOL (Pan European Public Procurement On Line) is a 42 Month (May 1st 2008 – October 31st 2011) pilot project under the European Commission’s CIP (Competitiveness and Innovation Programme) initiative.

The project aims to align business processes for eProcurement across all Government Agencies within Europe. The vision is that any company and in particular small and medium-sized enterprises (SMEs) in the EU can communicate electronically with any European governmental institution for the entire procurement process.
On May 1st 2010, following a specification phase and a development phase, PEPPOL entered its test pilot phase and from November 1st 2010 will be supporting production pilots.

The PEPPOL consortium comprises of the leading public eProcurement agencies in Austria, Denmark, Finland, France, Germany, Italy, Norway and Hungary. These have recently been joined by agencies from Greece, Portugal, the UK and Sweden.

The scope and structure of the PEPPOL project is shown in Figure 2. In addition to the work packages shown, WP6 provides project administration and WP7 supports awareness, training and consensus building.

Figure 1: Structure of PEPPOL project

1.6 PEPPOL eProcurement Objectives

The broader vision for PEPPOL is that any company (incl. SMEs) in the EU can communicate electronically with any EU governmental institution for all procurement processes.

The objectives for eProcurement are set by PEPPOL stakeholders. These include:
- Project owners: The sponsors of PEPPOL i.e. EU commission and the beneficiary Member States.
- WP participants: Member States participating in specific PEPPOL work packages.
- Non-beneficiary Member State: stakeholders that gain benefits from the pilot i.e. EU member countries not participating in PEPPOL WP X.

The project owner objectives can be deduced from the I2010\(^4\) strategy, CIP ICT PSP\(^5\) project call and country specific reasons for joining the project. Collectively this can be viewed as supporting a single European market, competiveness and innovation by...

\(^4\) http://ec.europa.eu/information_society/eeurope/i2010/strategy/index_en.htm
\(^5\) http://ec.europa.eu/information_society/eeurope/cip/ict/psp
Removing barriers for cross-border eProcurement
Learning through implementation and operation of eProcurement pilot systems
Raising awareness of eProcurement benefits through a pilot

PEPPOL has adopted a broad definition for cross-border eProcurement. In a typical case a Contracting Authority and an Economic Operator (who may be an SME) are situated in different member states. However, there are also cases where an eProcurement platform is operated in a country different from either the Contracting Authority or the Economic Operator. In the scope of PEPPOL these are also considered as cases when the “cross-border” characteristic can be a barrier to interoperability.

Pilot participant objectives can be deduced from country specific reasons for participating in the project:
- Leveraging existing solutions to handle cross-border eProcurement
- Create traction on interoperability model, thereby securing the investment in the chosen eProcurement interoperability model
- Influence on standardization activities in such a way that they meet the requirements of the participant

There is a strong desire by both Contracting Authorities and Economic Operators for automation and efficiency across the procurement process. This requires good interoperability - that is an information and process model ensuring a flow of information between different parts of the process and ensuring a common understanding of that information. As mentioned above these interoperability requirements have been analyzed according to the European Interoperability Framework.

Non-beneficiary Member State objectives can be deduced from country specific reasons for joining the reference group, for example:
- Leveraging and building upon the experience of the PEPPOL eProcurement project.
- Cost saving by adopting a proven eProcurement interoperability model

Two separate outcomes for PEPPOL deliverables have been identified:
- Interconnecting the eProcurement platforms of Contracting Authorities in participating countries for engaging Economic Operators in other countries.
- Making available open source software together with tools to deal with eProcurement both for Contracting Authorities and Economic Operators (especially SME’s).

PEPPOL has built upon existing work in these areas and continues cooperation with current initiatives.

1.7 PEPPOL Interoperability Approach

Version 2.0 of the EIF defines these interoperability layers as Political, Legal, Organizational, Semantic and Technical. PEPPOL has specialised the EIF 2.0 as shown in figure 3. The Legal and Organisation Business Layer sets context, scope and requirements to the solutions classified into the layers: Organisation Process, Semantic, Technical Interaction and Technical Transport Layers.

5 http://ec.europa.eu/information_society/activities/ict_psp/index_en.htm
2 Guides

This section lists the guides that are created for IT-architects and Developers to use the BusDox specifications and the referenced software component implementations.

Attachment A: Developers Getting Started
Attachment B: .NET Core Library Developer Guide
Attachment C: Java Core Library Developer Guide
Attachment D: Java Service Metadata Locator Developer Guide
Attachment E: Java Service Metadata Publisher Developer Guide
Attachment F: Java Web Registration Developer Guide
Attachment G: Java Web Registration User Guide
Attachment H: Middleware JBoss POC Guide

3 Specifications

This section list the BusDox specifications used in the PEPPOL Transport Infrastructure.

Attachment I: BusDoX Common Definitions
Attachment J: START Profile
Attachment K: LIME Profile
Attachment L: Service Metadata Publishing
Attachment M: Service Metadata Locator Profile
Attachment N: Identifier Schemes
Attachment O: Policy for using Identifiers
4 Software Components

Software Components are referenced in the guides. All software components are placed in the PEPPOL domain of The Open Source Observatory and Repository for European public administrations (OSOR): https://svn.forge.osor.eu/svn/peppol/
Attachment A: Developers Getting Started
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