PIDX - PEPPOL USE CASE

2019 PIDX US SPRING CONFERENCE
Juan Fernando Montoya
AGENDA

- PEPPOL VISION
- PEPPOL FUNDAMENTALS
- PIDX & PEPPOL USE CASE
- LESSONS LEARNED
- Q&A
PEPPOL VISION

PEPPOL - Pan-European Public Procurement Online

To enable businesses to communicate electronically with any European government institution in the procurement process.

The use of PEPPOL is governed by a multi-lateral agreement structure which is owned and maintained by OpenPEPPOL.

OpenPEPPOL is a non-profit international association under Belgian law (Association Internationale Sans But Lucratif – AISBL)

‘Connect once, connect to all’

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PEPPOL FUNDAMENTALS

INTEROPERABILITY
PEPPOL standardizes three basic elements required for interoperability: Routing, Delivery and Format.

POST-AWARD PROCESS
-eCatalogues to exchange information about goods and services.
-Invoice, Credit Memo and Orders providing the buyer and suppliers with defined procedures

OPEN PLATFORM

PEPPOL COMPONENTS – THREE PILLARS
-The Network (PEPPOL eDelivery Network)
-PEPPOL BIS, Business Interoperability Specifications
-Transport Infrastructure Agreements, TIA. The legal framework that defines the network governance

INFRASTRUCTURE
PEPPOL infrastructure is mainly driven by the European public sector and is to be used for Business To Government and Business To Business participants.
PEPPOL NETWORK

**Supplier**

1. Supplier preferred format, protocol

2. Supplier Access Point

**Buyer**

4. Buyer preferred format, protocol

3. Buyer Access Point

**Address Registry**

**SML**

Service Metadata Locator

**SMP**

Service Metadata Publisher

Capability look-up

**Exchange of Peppol BIS Documents between Access Points**

- Supplier Access Point
- Buyer Access Point
- UBL-XML
- AS2

Sender AP must send valid PEPPOL BIS documents
PEPPOL FUNDAMENTALS

PEPPOL ACCESS POINT VALIDATIONS

- **Validation of syntax**
- **International Rules**
- **OpenPeppol EU general rules**
- **Country common rules**
- **Country specific rules**

- **UBL 2.1 Schema**
- **CEN BII Core**
  - Currency, Country, Tax, Totals.
- **Peppol BIS**
  - Rules and Regulations
- **CIUS**
  - Core Invoice Usage Specification

- Compliant

Country Specific

Country Specific

Country Specific

Country Specific

Supplier Access Point

INVOICE

INVOICE

Supplier AP Validations
There are 12 PEPPOL Authorities:

- Agency for Digital Italy (AgID), **Italy**
- Beleid en Ondersteuning – Stratégie et Appui (BOSA), **Belgium**
- Danish Business Authority, **Denmark**
- Agency for Public Management and eGovernment (Difi), **Norway**
- Department of Health and Social Care (NHS), **England**
- Agency for Digital Government (DIGG), **Sweden**
- Ministry of Entrepreneurship and Technology, **Poland**
- SimplerInvoicing, **Netherlands**
- Office of Government Procurement, **Ireland**
- Koordinierungsstelle für IT-Standards (KoSIT), **Germany**
- Info-communications Media Development Authority (IMDA), **Singapore**
- Ministry of Business Innovation and Employment (New Zealand)

Also, **OpenPEPPOL AISBL** as an interim choice where no national Authority exists.

Possible PEPPOL Authorities in 2019?

EU/EEA countries with PEPPOL Access Points without a PEPPOL Authority at national level
- Austria
- Croatia
- Cyprus
- Czech Republic
- Estonia
- Finland
- France
- Greece
- Iceland
- Lithuania
- Malta
- Portugal
- Slovenia
- Spain
- Switzerland

Outside Europe
- USA
- Canada

Source: peppol.eu
PEPPOL REACH AND COUNTRY PROFILES

2019

Q1

NORWAY: The new standard of EHF Invoice and Credit Note 3.0 will be mandatory for B2G e-invoicing

Q2

POLAND & SWEDEN: Using PEPPOL Access Points, all invoices sent to public administrations will be required to be sent electronically

Q3

Directive 2014/55/EU: States that all public, European administrations must have the capabilities in place to accept electronic invoices from their suppliers

Q4

Australia and New Zealand: Transition to PEPPOL for eInvoicing B2B and B2G by end of 2019

SINGAPORE: Launched a nationwide e-invoicing framework in January 2019 based on the PEPPOL Interoperability Framework

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PIDX & PEPPOL USE CASE

Getting Started with PEPPOL

- Access Point supplier selection
- Define Format and Protocol ↔
- Determine PEPPOL mapping requirements
PIDX & PEPPOL USE CASE

Requirement:
Develop mappings for PIDX & PEPPOL interoperability

Choice on Format and Protocol between Supplier and Access Point

PIDX - RNIF
PEPPOL 2.0 Document types

**Post-Award**

- PEPPOL BIS 1A Catalogue
- PEPPOL BIS 3A Order
- PEPPOL BIS 4A Invoice
- PEPPOL BIS 5A Billing
- PEPPOL BIS 28A Ordering
- PEPPOL BIS 30A Dispatch Advice
- PEPPOL BIS 42A Order Agreement
- PEPPOL BIS 36A Message Level

**PIDX INVOICE**

- PEPPOL EHF 5a Billing
  - Basic invoice
  - Invoice Response

**PIDX PO**

- PEPPOL EHF 28a Ordering
  - Detailed POs
  - Limited POs

**PIDX OC**

- PEPPOL EHF 42a Order Agreement
  - Used to receive other documents

EHF: Norwegian: Elektronisk Handelsformat (Electronic Commerce Format)
### PIDX INVOICE TO PEPPOL EHF 5a Billing

- **Become familiar with Peppol documents and requirements**
- **Evaluate what will impact your current billing process and solutions**
- **While defining the mappings determine how to standardize**
- **Define a long term strategy for future projects**

This will help scaling developments for multiple countries, have more flexibility for deployment (multi-customer) when needed, and ensure clear patterns on how workflows in same documents should interact around the data they need to exchange.

<table>
<thead>
<tr>
<th>Field</th>
<th>Transformation</th>
</tr>
</thead>
<tbody>
<tr>
<td>TaxIdentifierNumber</td>
<td>NO:ORGNR \ NO:VAT → 123456789MVA</td>
</tr>
<tr>
<td>Bank Account</td>
<td>IBAN, BBAN Validated → NOK &amp; USD, SWIFT-BIC</td>
</tr>
<tr>
<td>Unit of Measure</td>
<td>UNECERec20</td>
</tr>
<tr>
<td>TAX Rate</td>
<td>TAX Category UNCL5305 - ‘0’ → ‘Z’</td>
</tr>
</tbody>
</table>

**Equivalent Sections**

- Seller → AccountingSupplierParty
- BillTo → AccountingCustomerParty
- RemitTo → Payment Means
- InvoiceLineItem → InvoiceLine

**Changes**

- DUNS → NO:ORGNR (TAX ID) (Routing)
- InvoiceTypeCode listID="UNCL1001">380<
- DocumentCurrencyCode listID="ISO4217">NOK<

**Responses & Attachment**

- Invoice Response from Access Point validations
- PIDX - PEPPOL Payload Attachment → B64
# PIDX & PEPPOL EHF 2.0 MAPPING KEY INFORMATION

## PIDX INVOICE To PEPPOL EHF 5a Billing

<table>
<thead>
<tr>
<th>EQUIVALENT SECTIONS</th>
<th>FACTS</th>
<th>RESPONSES &amp; ATTACHMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seller → AccountingSupplierParty</td>
<td>DUNS → NO:ORGNR (TAX ID) (Routing)</td>
<td>Invoice Response from Access Point validations</td>
</tr>
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<td>PIDX - PEPPOL Payload Attachment — B64</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MASTER DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>TaxIdentifierNumber → NO:ORGNR \ NO:VAT → 123456789MVA</td>
</tr>
<tr>
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<td>TAX Rate → TAX Category UNCL5305 - ‘0’ → ‘Z’</td>
</tr>
</tbody>
</table>

**HEADER:** peppol5a:ver2.0:extended:urn:www.difi.no:ehf:faktura:ver2.0
## PIDX & PEPPOL EHF 2.0 MAPPING KEY INFORMATION

### PEPPOL EHF 28a Ordering 1.0 To PIDX ORDER

<table>
<thead>
<tr>
<th>EQUIVALENT SECTIONS</th>
<th>FACTS</th>
<th>ATTACHMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>BuyerCustomerParty → SoldTo</td>
<td>NO:ORGNR → DUNS</td>
<td>Peppol Payload UBL attachment</td>
</tr>
<tr>
<td>SellerSupplierParty → Seller</td>
<td>Alignment with UNECERec20</td>
<td>PIDX Payload Attachment</td>
</tr>
<tr>
<td>BillTo → NA, Delivery → ShipToParty, PaymentTerms, OrderLine → OrderCreateDetails</td>
<td>Document handling</td>
<td></td>
</tr>
</tbody>
</table>

### REGULATIONS

There are no formal requirements to order content according to Norwegian regulations UBL 2.1 — CEN BII2

### PEPPOL ORDER - RESPONSE

- Ordering supports also the Order responses
- Acceptance/changes at Header or Line level

**HEADER:** peppol28a:ver1.0:extended:urn:www.difi.no:ehf:ordre:ver1.0
## PIDX & PEPPOL EHF 2.0 Mapping Key Information

### PEPPOL EHF 42a Order Agreement To PIDX ORDER CHANGE

<table>
<thead>
<tr>
<th>EQUIVALENT SECTIONS</th>
<th>FACTS</th>
<th>ATTACHMENT</th>
</tr>
</thead>
</table>
| SellerSupplierParty → Seller  
BuyerCustomerParty → SoldTo | NO:ORGNR → DUNS | Peppol Payload UBL attachment |
| LegalMonetaryTotal + OrderLine → OrderChangeDetails | Specific for document handling | PIDX Payload Attachment |

### PEPPOL ORDER AGREEMENT

Ordering and Order Agreement documents share similar structure and PEPPOL specifications.

### PIDX

```xml
<pidx:OrderChange pidx:transactionPurposeIndicator="ProForma"/>
```

**HEADER:** peppol42a:ver1.0:extended:urn:fdc:difi.no:2017:ehf:spec:1.0
PIDX & PEPPOL LESSONS LEARNED

- Access Point Supplier should have Peppol experience in multiple countries
- There will be challenges with new Peppol releases - continuous development
- Access Point supplier must have PIDX knowledge
- Access Point long term relationship is very important
- PIDX can be used to deploy PEPPOL, Fiscal Electronic Invoicing and others
Thank you!