



# PEPPOL for dummies

Some basics about PEPPOL network

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# Introduction

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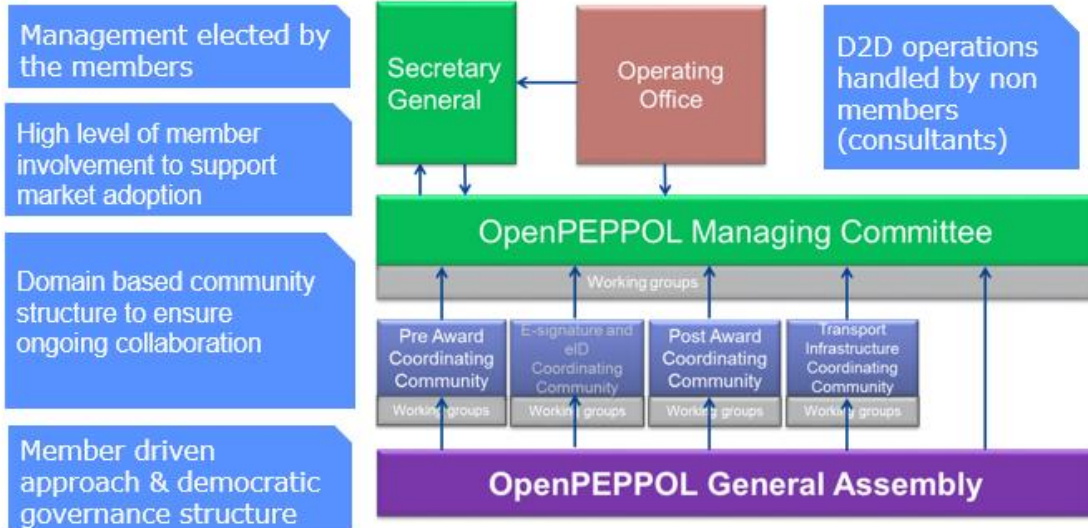
# Terminology

- EU Norm; mean core invoice standard (FprEN 16931-1:2017) ordered by EC from CEN
- Invoice semantic model; mean syntax free definition of the invoice contents
- Syntax; mean for example Finvoice, TEAPPSXML, UBL etc.
- PEPPOL BIS 3.0 Billing; mean PEPPOL implementation of the EU Norm
- OpenPEPPOL is the association governing PEPPOL framework
- PEPPOL is not a "physical network", but it is a framework that consists of:
  - Governance model
  - Agreements
  - Rules
  - Technical specifications

# PEPPOL - OpenPEPPOL

- PEPPOL was initially name for EU funded project (Pan-European Public Procurement On-Line) executed between 2008-2012
- After the project OpenPEPPOL association was founded at 1.9.2012 to govern the framework created in the project
- OpenPEPPOL association is registered in Belgium Belgiaan
- PEPPOL project was mainly public sector driven project where especially Norway (DIFI) and Denmark (DIGST) were active participants

# Governance

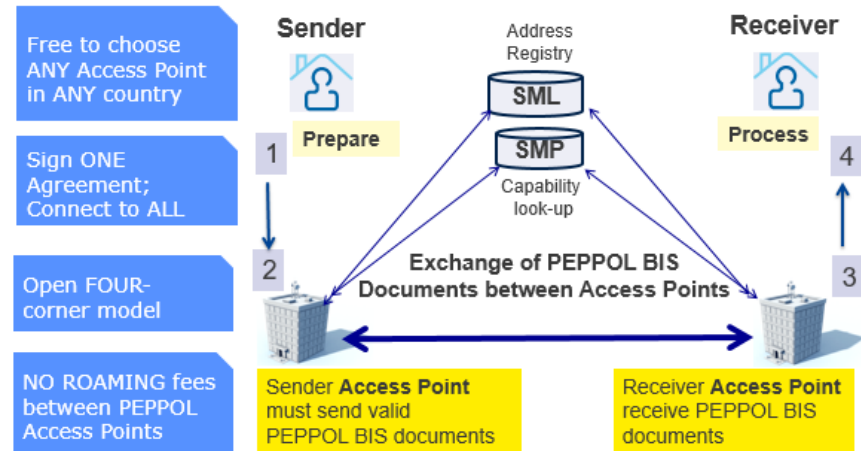


- Secretary General is Andre Hoddevik (DIFI-Norway)
- Electronic invoicing matters managed in “Post Award Coordinating Communityssa”
- GA meeting take place once a year

# PEPPOL roles and infrastructure

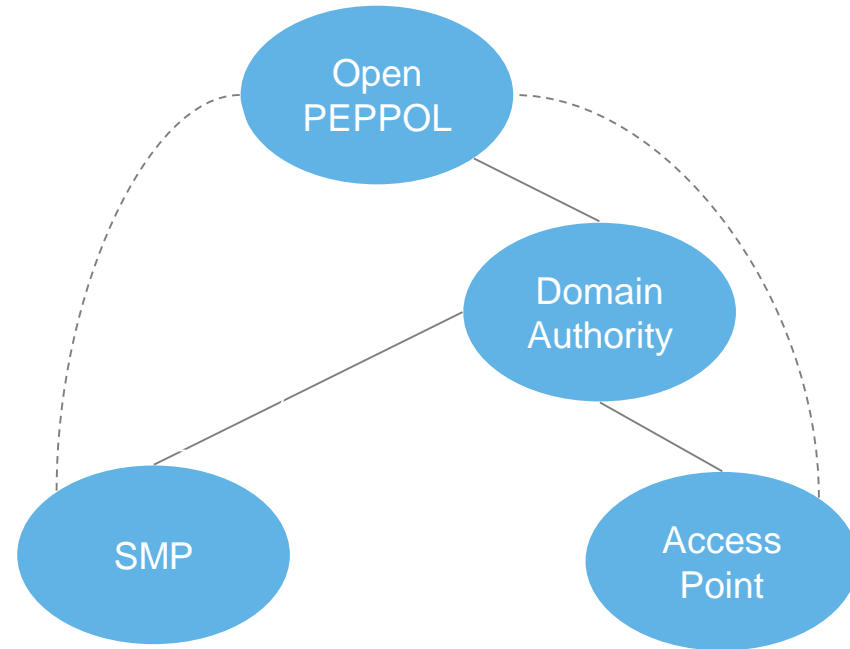
- PEPPOL infrastructure = eDelivery Network
- Central roles
  - Access Point – connects users into the infrastructure
  - SMP – contains user supported services and features
  - SML – contains PEPPOL receiver endpoint addresses

PEPPOL eDelivery Network overview:



# Agreement structure

- Service provider can act in Access Point and SMP roles
- OpenPEPPOL (association) make agreements with Domain Authorities and authorise them to make AP and SMP agreements in their managed domain
- OpenPEPPOL (association) can make directly AP and SMP agreements with service providers



\*AP shall also make specific Transport Infrastructure Agreement



# Status

- October 2019
  - Number of Domain Authorities about 12
  - Number of Access Points about 255
  - Number of SMPs about 127
- EU electronic invoicing directive and EU Norm have clearly activated PEPPOL usage

# Prices and costs



No.	Category of Membership	Sign-up Fees (€)	Annual Fees (€)
<b>1</b>	<b>PEPPOL Authority</b>	<b>3.000</b>	<b>15.000</b>
<b>2</b>	<b>Service Provider</b>		
2a)	<b>Service Provider – Access Point</b>		
	For S1 and S2 size organizations (1-50 employees)	750	1.500
	For S3 size organizations (51-250 employees)	1.500	2.250
	For S4 size organizations (251-2500 employees)	1.500	3.000
	For S5 size organizations (>2500 employees)	1.500	3.750
2b)	<b>Service Provider - Service Metadata Publisher (SMP) Provider</b>		
	S1 size SMP providers (1-10 employees) who are also AP Providers	n/a	n/a
	S1 size SMP providers who are not AP providers	750	1.500
	S2 to S5 SMP providers (more than 10 employees)	1.500	1.500
2c)	<b>Service Provider – Pre-Award</b>	500	800
<b>3</b>	<b>End-user of PEPPOL Based Services</b>		
	For S1 and S2 size organizations (1-50 employees)	500	1.000
	For S3 size organizations (51-250 employees)	1.250	1.750
	For S4 size organizations (251-2500 employees)	1.250	2.500
	For S5 size organizations (>2500 employees)	1.250	3.250
	<b>Observer</b>		
	For Associations and non profit institutions with up to 1500 members/ employees	1.500	750
	For Associations and non profit institutions with more than 1500 members/ employees	1.500	1.500

Current price list is available:  
<http://peppol.eu/get-involved/join-openpeppol/>

# Considering real costs one shall notice

- Subscription and yearly fees are just a portion of the real costs
- Access Points have strict service level requirements concerning servers, data communication, support etc.
- All sent messaging shall be validated using proper Schematron rules
  - EU Norm compliance
  - Requires XSLT 2.0 license
- Maintaining addresses and supported features in chosen SMP
- ...etc

# Connection to PEPPOL network

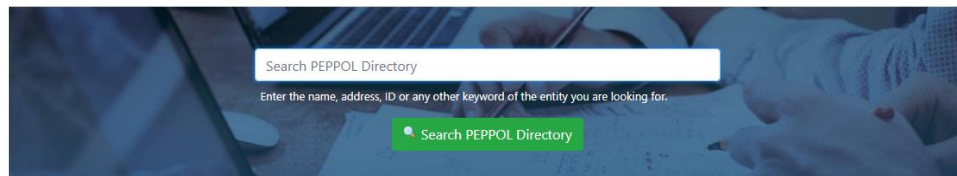
# Data communication

- For today data communication is mainly based using AS2 protocol
- Certificates are managed by PEPPOL
- Mandatory protocol from 1.2.2020 become AS4
- Data communication connection take place through Access Points
- No static connection; all connections are established dynamically using the EndPoint addressing
- Not allowed to restrict incoming connections

# Addressing in PEPPOL network

# Address directory

- PEPPOL have centralized address directory
  - Based on the information available in the SML
  - Quality depends how well SMPs does update the SML information
  - Directory contains only receiver addresses
- Some SMPs have their own directories
- SMP does contain information about the receiver supported services and features



Url: <https://directory.peppol.eu/public>



# Address structure and usage

- Address structure is based on EU Norm defined semantic model
- Address have two parts:
  - Code set (Scheme-id)
  - Code value in the defined code set
- Allowed code sets are published in EU/CEF web pages
- CEN-standard is available free of charge in national standardization organizations. For example in Finland:  
<https://sales.sfs.fi/fi/index/tuotteet/SFS/CEN/ID2/1/525027.html.stx>  
  
<https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/Registry+of+supporting+artefacts+to+implement+EN16931>

# Sub-addressing

- Mean the situation where for example legal organization have a need to send and receive invoices from different operative units using separate addresses
- Most code sets used in PEPPOL don't support this feature
- Examples of code sets that support sub-addressing
  - Finnish OVT-id
  - GLN-number
  - DUNS-number

# EU Norm and PEPPOL BIS 3.0 Billing

# Core Invoice Usage Specification

- EU Norm standard does have ability to make so-called CIUS specifications
    - CIUS may contain more strict requirements to invoice contents; for example it is possible to define certain elements mandatory even though they are in EU Norm defined as optional
  - PEPPOL BIS 3.0 Billing is this kind of CIUS specification
  - Contains for example some country specific rules
  - There are number of different CIUS specifications and more seems to come
- <https://ec.europa.eu/cefdigital/wiki/display/EINVCOMMUNITY/Community-driven+Registry+of+CIUS+%28Core+Invoice+Usage+Specifications%29+and+Extensions>
- PEPPOL BIS 3.0 Billing is mandatory contents requirement for invoices in PEPPOL network (=smallest common nominator)

# It is good to understand EU Norm restrictions

- EU Norm is aimed for B2B invoicing
- Support EU VAT model
- Invoice can reference only one order and delivery (this might change)
- Restricted number of payment methods
- Many mandatory code sets have to be used
- No invoice image as attachment (PEPPOL rule)
- Mandatory invoice contents validation before sending (PEPPOL rule)

# Thank You

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