Early adopters – large scale eInvoicing and lessons learned

Christian Rasmussen

DIGIT

The Nordic approach

The Nordic approach was good for Scandinavia

…but it was costly to adopt and be first movers

…being alone with a standard or cutting-edge technology also means only one to buy for future upgrades and maintenance

…and it does not cater for the single digital market and cross-border trading, movement, employment and much more

The first steps

2003

Budgetary analysis

A general budgetary analysis of public payments identified a total efficiency potential of appx. € 100 mill./year:

- Elimination of float-days Appx. € 25 mill./year

- Closing of cash tills Appx. € 15 mill./year

- Easy Account Appx. € 30 mill./year

- eInvoicing Appx. € 30 mill./year

- 15 million invoices/year

- Estimated €2 reduction in handling cost/invoice

Funding

The savings estimated had to be divided evenly on the public sector.

The savings was distributed amongst the public institutions (both state and municipal) based on their expected invoicing volume in 2004.

And based on the distribution of the expected savings, each Ministry and municipality were withdrawn the amount of expected saving from their appropriation for 2005 and onwards.

The process:
1. Legislation

Public Payment Act was passed in December 2003

Regulation was necessary: The public sector and all companies had to be committed in order to ensure critical mass

4 initiatives was undertaken:

- Elimination of float-days,

- Closing of cash tills,

- Easy Account

- and eInvoicing

2005

Meanwhile in Sweden...

Swedish facts

Almost **250** public agencies
- Some are very large with regional and local units
- Some are small with a few employees

High level of IT-maturity & Internet access

Production industry an early adopter

Focus on the whole procurement process

Almost 0% e-invoices in 2005

European Commission

2008

FACT BOX

All Swedish government agencies must send and receive electronic invoices no later than July 1, 2008

Potential savings of 400 Million € in 5 years
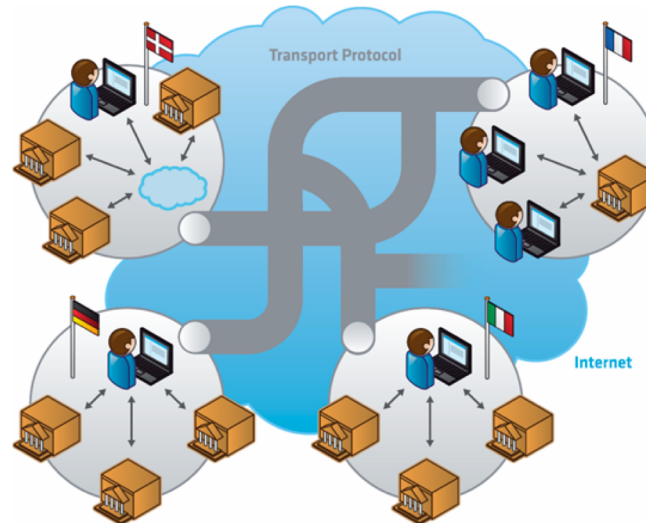
PEPPOL
PAN-EUROPEAN PUBLIC PROCUREMENT ONLINE

The PEPPOL Vision

- *"To enable businesses to communicate electronically with any European government institution in the procurement process, increasing efficiencies and reducing costs."*

The PEPPOL project (2008-2012) was launched to address the key eProcurement challenges in Europe. It has been jointly funded by the EC and a consortium of 18 government agencies from 11 member states

The PEPPOL components – the critical phases
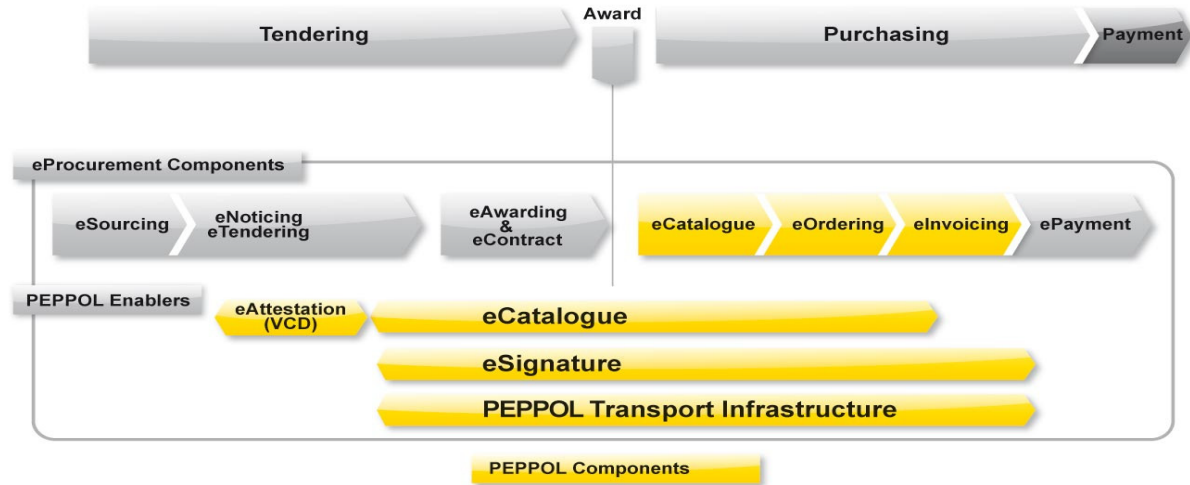
- **PEPPOL Pre-award focus**: eAttestation (VCD), eCatalogues, eSignature validation, potential use of PEPPOL Transport Infrastructure

- **PEPPOL Post-award focus**: eCatalogues, eOrdering, eInvoicing and Transport Infrastructure. Potential use of eSignature validation and eAttestations

2009

Summer of 2009

- In 2009 NemHandel (EasyTrade) was introduced

- NemHandel is an open, shared and yet secure infrastructure using the internet.

- There is only one central component – the NemHandel registry

- NemHandel makes room for solutions that meet the different needs and IT skills of both small and large companies

- NemHandel contain guidelines and components that makes it easy for it-vendors to implement.

- The easier and cheaper it is, the more it-solutions is being offered.

Openness and re-use

- Similar perspective of what we know from CEF building blocks and eDelivery

- Open standards

- Open source components

- International format (UBL 2.0)

- Focus now on e-procurement as opposed to eInvoicing

- Focus is to digitalize and make the end-to-end process from procurement to invoice and payment more effective

European Commission

2011

May 2011

- NemHandel was made mandatory

- All public authorities are now registered in the NemHandels registry with their unique ID (GLN)

- A wide range of eInvoicing solutions are being offered, a lot of new players have emerged
  - Fully integrated in ERP system
  - Partly integrated in ERP system
    - Using an email program to send the invoices.
  - Or using a web-based invoice form
    - Government provided one, but also service providers did the same

Denmark is seeing an increased use business to business

Now the SMEs benefit

– they get paid faster, sometimes within days, and they can invoice their private customers using the same system..

NemHandel – the central costs

- Around 10 million € to establish since beginning in 2007

- Including guidelines, translation of standards, tools to aid implementation, central registry, web based invoice portal, e-mail program etc.

- Around 1 mio € to run and administer the central components each year

European Commission

Meanwhile in Norway...

Facts regarding Norway

Many small businesses
- 201.000 businesses with employees – 98 percent are small and medium sized (from 1 to 100 employees)

240.000.000 invoices covering B2B and B2G

From late 1990's, electronic workflow based on scanned paper invoices has become the most commonly used invoice handling mechanism in the public sector

eInvoicing solutions before 2011
- VAN operators
- Bank solutions

In 2011 the Ministry of Government Reform and Church Affairs issued a Circular mandating use of e-invoicing and recommending PEPPOL
- Standardised business processes
- Standardised information content (semantics)
- Standardised business document formats
- Standardised transport infrastructure (eDelivery mechanism)

Summer of 2011
The eInvoicing project

Target July 1st, 2011

- Norwegian central government entities and regional health authorities shall be able to receive electronic invoices in standard format (EHF)

Target July 1st, 2012

- All central government entities and regional health authorities shall require electronic invoices from their suppliers in standard format (EHF)

Targets 2013 and onwards

- Increase use of EHF-based invoicing among central government entities, regional health authorities AND municipalities

- Introduce EHF in other parts of the procurement process

PEPPOL
PAN-EUROPEAN PUBLIC PROCUREMENT ONLINE
making procurement better.eu

European Commission

2012

Making procurement better

PEPPOL enables businesses across Europe to communicate electronically with public buyers in various stages of the procurement process

🔍 SEARCH

Join us today for knowledge and benefits that make procurement better

Learn more   Already a member   JOIN NOW

2013

Strong increase in number of transactions
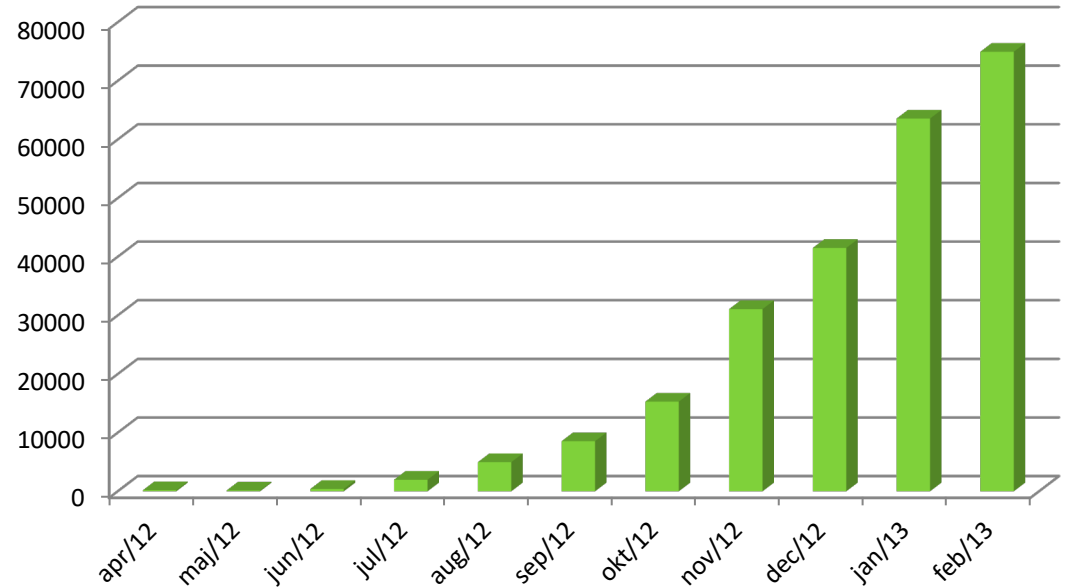
Lessons learned by Norway

Involve

- Big public sector users
- Service providers
- eInvoicing system providers
- ERP vendors

Encourage competition

Mandating eInvoicing through legislative means is the most powerful tools you can use

…if combined with standardisation of

- Business processes
- Information content (semantics)
- Business document formats
- Transport infrastructure

…based on international standardisation efforts and European cooperation

eSENS.eu

- In April 2013 a new project eSENS.eu was initiated again bringing in the public procurement domain and eInvoicing

- During the eSENS project lifetime the directive on public procurement was voted for by the European Parliament and Council

- Main focus for eSENS was further improvements to the common components and building blocks of the past Large Scale Pilots - including new transport components for eDelivery and conformance testing of new semantical mapping and eDocuments

- For eInvoicing this mainly meant piloting with existing PEPPOL BIS standards, as CEN was not ready with the new European standard for eInvoicing

e-SENS goals

to improve the **cross-border access** of citizens and businesses to **public services in Europe**

by provision of **interoperable IT solutions**

Re-using past LSP solutions and building blocks

- SPOCS   "Simple Procedures Online for Cross-border Service
- epSOS   "European Patients Smart Open Services"
- STORK   "Secure idenTity acrOss boRders linKed"
- PEPPOL   "Pan European Public Procurement OnLine"
- e-CODEX   "e-Justice Communication via Online Data EXchange"

PEPPOL
PAN-EUROPEAN PUBLIC PROCUREMENT ONLINE
making procurement better.eu

STORK 2.0
SECURE IDENTITY ACROSS BORDERS LINKED 2.0
making access smarter.eu

SP CS
making business easier.eu

epsos
EUROPEAN PATIENTS SMART OPEN SERVICES
making healthcare better.eu

e CODEX
making justice faster.eu

European Commission

The big picture

PEPPOL (5/2008 – 8/2012)

STORK (7/2008 – 3/2015)

epSOS (7/2008 – 12/2013)

SPOCS (7/2009 – 12/2012)

e-CODEX (12/2010 – 2/2015)

2008	2009	2010	2011	2012	2013	2014	2015

CIP	CEF

2014

Let's connect Europe, together

2018

There is BIG potential in Europa for eInvoicing…

Some European examples:

- Austria

  - **6-8 mio. euro** in savings per year - only by processing the invoice

- Denmark

  - **90 mio. euro** in savings per year - by full electronic handling of invoices

- Ireland

  - **246mio. euro** in savings per year - in est. savings by full electronic handling of invoices

- Finland

  - **29-49 euro** in savings per invoice - by full electronic handling

- EU

  - **240 billion euro** in savings over 6 years - by mass adoption of eInvoices

…but extremely hard to realise:

- More than **150 billion invoices** per year worldwide (est. 2012)

- …but only **3 billion** is electronic eInvoices (est. 2015)

- …Europe (especially Scandinavia) is leading in B2G eInvoices

- …US is leading in B2B

- …Latin & South America in B2C eInvoices

- **Moderate market penetration despite solid business cases**

Mainly due to the barriers

- **Standards & Formats**

- Business models

- Legislation

- eInvoices alone

- World economy

- Islands of procurement

- Global standards
  - ebXML, OASIS UBL2.0, UBL2.0 NES Subset, UN/CEFACT, EDIFACT
- Local/regional standards
  - OIOXML (Denmark), BMF (Belgium), Finvoice (Finland), Svefaktura (Sweden), EHF (Norway)

- **Mappings between all these standards are needed to create interoperability between the sender and receiver of eInvoices**

- **Many eInvoicing suppliers support only 1 standard**

Mainly due to the barriers

- Standards & Formats

- **Business models**

- Legislation

- eInvoices alone

- World economy

- Islands of procurement

- The eInvoice service providers have very different business models of eInvoicing:
  - Fixed pricing per invoice
  - Fee per supplier
  - Fixed subscription
  - Per invoice percentage fee

- **Nearly impossible to support all business models for the client**
- **All parties in the "four corner model" has to benefit from implementation of eInvoice**

European Commission

Mainly due to the barriers

- Standards & Formats

- Business models

- **Legislation**

- **eInvoices alone**

- World economy

- Islands of procurement

- Get the legislation in place first

- Most clients think e-Invoices is the solution to their problems and foster great savings, but many things will follow:

  - Business processes has to be changed and standardized

  - Acknowledgement from receiver and sender is needed

  - Other eDocuments will be needed like eOrders, eCatalogs, notifications, tracking etc.

  - Increased need for support with end-to-end tracking – SLAs

  - Bilateral agreements between sender and receiver – not just plug and play!

European Commission

Mainly due to the barriers

- Standards & Formats

- Business models

- Legislation

- eInvoices alone

- **World economy**

- Islands of procurement

- Countries still suffers from an economic lockdown

- Even cost-saving implementations like eInvoicing is halted

- Many countries want measurements against fraud and corruption but very few are capable of acting upon it – even today – in 2017!

European Commission

Mainly due to the barriers

- Standards & Formats

- Business models

- Legislation

- eInvoices alone

- World economy

- **Islands of procurement**

Many service providers offers:

- Few standards and formats
- Local but highly specialized legislation knowledge
- No cross-border interoperability
- High entry fees – low transaction fees
- e-Invoice as part of a total procurement package

This is called Islands of Procurement!

They can be national, regional or even local and domain specific
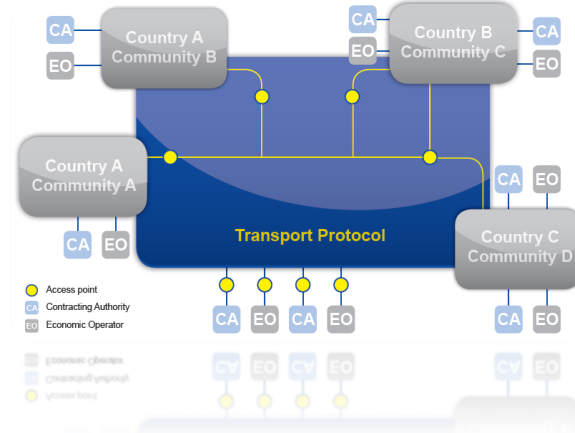
PEPPOL
(Pan-European Public Procurement OnLine)

Fun facts - PEPPOL.eu

- In 2008 the PEPPOL project was initiated on the best practices within mandatory eInvoicing for public administrations in the Nordic countries

- During the PEPPOL project a good number of the approximately 500 different eInvoicing platforms in Europe was connected through a single infrastructure and with a common semantical standard for eInvoicing – the PEPPOL BIS

- PEPPOL initiated the process of interoperability and connectivity between the "Islands of Procurement" in Europe

- At the end of August 2012 the PEPPOL project was finalised, and all services was handed over to the new non-profit association "OpenPEPPOL"

PEPPOL
PAN-EUROPEAN PUBLIC PROCUREMENT ONLINE

About OpenPEPPOL   What is PEPPOL?   Get involve
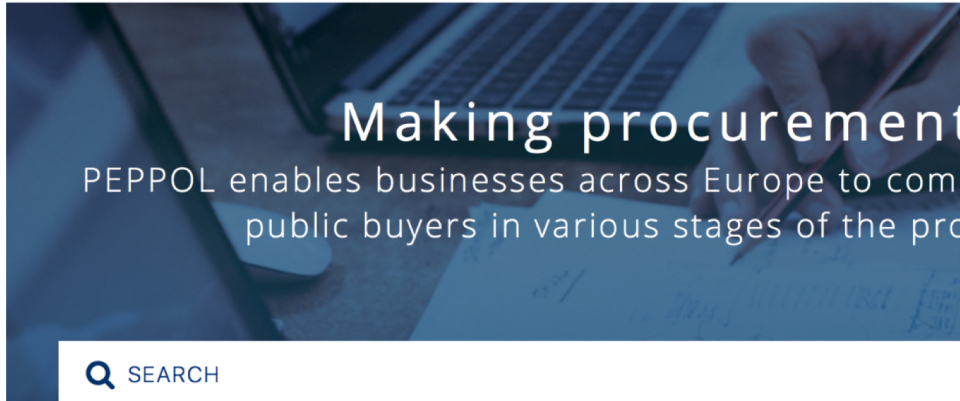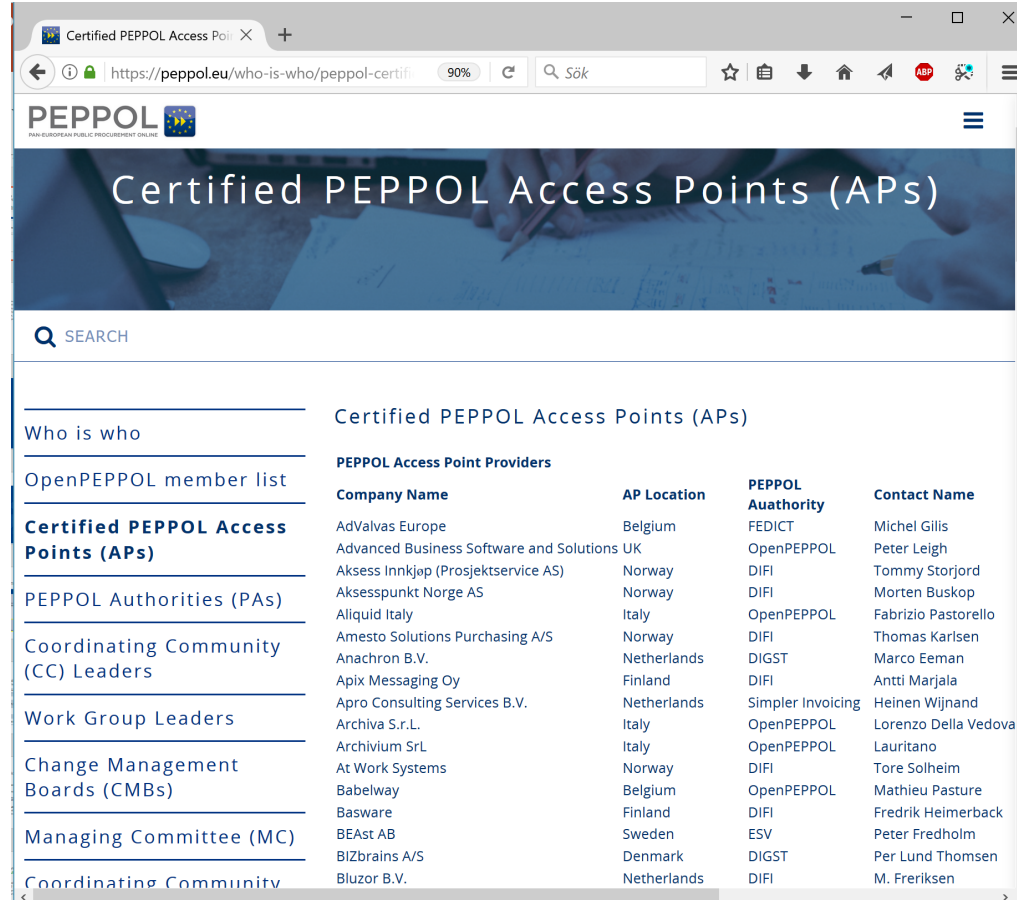
MAKING procurement
PEPPOL enables businesses across Europe to com
public buyers in various stages of the pro

Q SEARCH

Join us today for knowledge and benefits that r

Learn more   Already a member

European
Commission

Certified PEPPOL Access Point Providers

e-SENS
(electronic Simple European Networked Services)

Background and history of CEF eInvoicing - Now

- At the end of March 2017 the eSENS was finalised, and most developed services and building blocks was handed over to the European Commission for further development, maintenance and support

- This included the testing of eInvoicing PEPPOL BIS on eSENS eDelivery AS4 results between the partners of eSENS including a number of eDelivery solution providers

- A number of the partners in eSENS and within the eInvoicing piloting has then applied for CEF eInvoicing funding through the grants made available by the European Commission – more on this later…

e-SENS AS4 conformant solutions

More information on CEF Digital

Conformant Solutions >

Solution	Status
DOMIBUS	Conformant
FLAME	Conformant
HOLODECK	Conformant
IBM	Conformant
LAURENTIUS	Conformant
MENDELSON	Conformant
RSSBus	Conformant
iFenix	Conformant
Axway	Conformant
EESSI AS4.NET	Conformant
ADES	Ongoing
Integration cloud	Ongoing
eefacta Server	Ongoing

■ Conformant
■ Ongoing

Questions?

🐦 **#ConnectingEurope**