Common platform for e-procurement

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Presentation at the UBL symposium
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Agenda

- Who and what is NES?
- Our approach to using UBL 2.0
- The NES deliverables
- Alignment between NES and OIOUBL
- Implementation plan
- Corporation continues to support implementation and continued development.
International corporation

- Corporation between a group of countries and organisations
  - Denmark
    - Danish Ministry of Science, Technology and Innovation (VTU),
    - Danish IT and Telecom Agency (ITST)
  - Sweden
    - Single Face To Industry (SFTI), the public sector initiative in Sweden to promote e-business by the Swedish National Financial Management Authority (ESV), Swedish Association of Local Authorities and Regions (Sveriges Kommuner och Landsting), and Swedish Administrative Development Agency (Verva)
  - Norway
    - Norwegian Ministry of Government Administration and Reform eProcurement Secretariat (www.ehandel.no)
    - e2b Forum (an e-invoicing initiative in the private sector supported by the government - www.e2b.no).
  - Finland
    - State Treasury
    - Tieke Finnish Information Society Development Centre
  - England
    - OGC buying solutions under Office of Government Commerce
  - Island
    - The Financial Management Authority (Fjársýsla Ríkisins).
    - Iceland Committee on e-business and Trade Procedures" ICEPRO

- To facilitating practical use of electronic collaboration based on available international standards
- Focusing on basic e-procurement functions
The purpose of NES is to

- facilitate interoperability and practical use of e-procurement both in domestic and cross border trade
  - Even if the participants in the working group are mainly from the public sector, the group will try to include both business-to-business and business-to-government e-commerce/e-procurement in its work.

- facilitate harmonisation of different types of e-procurement documents
  - This provides an opportunity to base e-procurement documents and processes on a coordinated Northern European subset.

- contribute to the development and use of an international standard for e-procurement
NES has identified UBL as a free and open format, which at this point in time presents the greatest potential for realizing large-scale e-commerce both in a domestic and a cross-border trade.

UBL is an open and freely available library of XML documents for e-commerce:
- Version 1 was released as an OASIS standard in May 2004
- Version 2 is expected to be released as an OASIS standard in December 2006
  - 31 business documents covering an extended e-procurement process and transport
  - Based on ebXML Core Components - ISO 15000-5

Furthermore NES recognises the importance of the standardisation work in progress within UN/CEFACT and are actively working for the adoption of the UBL-specifications in the UN/CEFACT framework.

NES supports and is committed to the ongoing convergence between UBL and UN/CEFACT
Deliverables

- **Business processes and scenarios** based on a common application of UBL applicable for both domestic and cross border trade
- **Business rules and recommendations** for the use of the UBL XML documents
- **A common subset** of the UBL XML documents reflecting the needs expressed in the business rules
- **Formal rules for validation** of the business rules expressed as Schematron
- **General guidelines and code lists** for the use of UBL
Profile

- A description of one or more related business processes supported by the exchange of a defined set of electronic business documents in order to fulfil a defined business purpose.

- The NES profiles are
  - designed to support cross country and domestic trade
  - based on legal/fiscal requirements and agreed best practices

- Each NES profile should be recognised as an independent implementation

- Compliance to NES is measured against NES profiles in the following way:
  - All elements, mandatory and optional, listed in a profile must be understood by anyone receiving the message and claiming to be compliant with the profile stated in the message.
  - Any bilateral additions to messages in a NES profile means that the companies should not use the NES profile ID in the message.
  - Recipient can reject messages that contain elements outside of the profile or elements not in line with the cardinality of the profile.
The added value

What made EDI hard to spread and implement in the past?
- To many choices (in EDIFACT)
- Need to change internal processes
- Need for bilateral agreements
- Need for pre-synchronization of data

Result? Few parties with big volumes – SME left out!

How can NES help implementers and users?
- ERP vendors often present in many countries
- We can offer a harmonized subset
- Take advantage of a bigger community
  - UBL (Thanks Ken and many other contributes for spread sheets and tools)
  - OIO
- Cross border trade – NES is prepared!
Reaching the masses?

- No need for bilateral agreements – The default
  - *But give possibility to agree on extensions if needed*
- Let the reality dictate the terms on how the standard is defined
  - *Gives existing system the possibility to adopt NES with small efforts*
- Central validation service
- Real-time validation tools
- Involvement from the ERP vendors
- Open and free standards
Documentation approach

<table>
<thead>
<tr>
<th>NES Business Requirements and Business rules</th>
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<tbody>
<tr>
<td>UBL Common Library</td>
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<td>UBL Documents</td>
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<tr>
<td>NES Common Library</td>
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<td>NES Generic Documents</td>
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<td>NES Context Specific Documents</td>
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<td>Stand Alone Order</td>
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<td>Establish Catalogue</td>
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<td>Basic eProcurement</td>
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<td>Stand Alone Invoice</td>
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<td>etc</td>
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<td>etc.</td>
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</tbody>
</table>
UBL component re-use & restriction

UBL

REFINEMENT

NES

Stand Alone Invoice
Stand Alone Order
Basic Procurement

AllowanceCharge

cbc:Amount

cbc:BaseAmount

cbc:AccountingCost

cbc:AccountingCostCode

TaxCategory

0..∞

TaxTotal

PaymentMeans

0..∞

cbc:ChargeIndicator

cbc:AllowanceChargeReasonCode

cbc:AllowanceChargeReason

cbc:MultiplierFactorNumeric

cbc:PrepaidIndicator

cbc:SequenceNumeric

cbc:ID
UBL component re-use & restriction

UBL

REFINEMENT

NES

Stand Alone Invoice
Stand Alone Order
Basic Procurement

AllowanceChargeType

- cbc:ID
- cbc:ChargeIndicator
- cbc:AllowanceChargeReasonCode
- cbc:AllowanceChargeReason
- cbc:MultiplierFactorNumeric
- cbc:Amount
- cbc:BaseAmount
- TaxTotal
UBL component re-use & restriction
UBL component re-use & restriction

UBL

REFINEMENT

NES

Stand Alone Invoice
Stand Alone Order
Basic Procurement

AllowanceChargeType

\[ cbc:\text{ChargeIndicator} \]

\[ cbc:\text{AllowanceChargeReason} \]

\[ cbc:\text{MultiplierFactorNumeric} \]

\[ cbc:\text{Amount} \]

\[ cbc:\text{BaseAmount} \]

\[ \text{TaxTotal} \]
Profiles in NES phase 1

- Deliverables will be available for public review beginning of December 2006
- Supporting basic e-procurement functions

<table>
<thead>
<tr>
<th>NES Profile</th>
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<th>Catalogue Item Update</th>
<th>Catalogue Price Update</th>
<th>Order</th>
<th>Order Response Simple</th>
<th>Invoice</th>
<th>Credit Note</th>
<th>Application Response</th>
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</thead>
<tbody>
<tr>
<td>Establish Catalogue</td>
<td>X</td>
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<td>Item update</td>
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<td>Stand alone Order</td>
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<td>Stand alone Invoice</td>
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<td>Stand alone Invoice with Credit Note</td>
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</tbody>
</table>
## "Stand alone" profiles

<table>
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<tr>
<th>Profile</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Stand Alone Purchase Order</td>
<td>This profile complements the ordering profiles for frequent/ repetitive acquisition, in that it provides for electronic ordering of <strong>articles/services that are non-standard</strong> or not readily held in product catalogues. The profile can be used with <strong>no or little integration</strong> to the parties’ ERP systems.</td>
</tr>
<tr>
<td>Stand-alone traditional invoicing</td>
<td>This profile complements the ordering profiles for frequent/ repetitive acquisition, in that it provides for electronic ordering of articles/services that are non-standard or not readily held in product catalogues. The profile can be used with no or little integration to the parties’ ERP systems.</td>
</tr>
<tr>
<td>Invoice with potential Credit note</td>
<td>Traditional invoicing covers claim for payment by means of invoices issued by the supplier or a third party, if outsourced by the supplier. This profile is defined for situations where traditional invoicing is made electronically but where matching of the Invoice to other electronic documents may not be practicable; as a result the stand-alone invoice is to be self-contained and complete as far as the legal requirements on invoices are concerned. In case the invoice is rejected, in full or in part, this scenario provides for a Credit Note to be used as corrective measure. The profile can be used with no or little integration to the parties’ ERP systems. It may be introduced with minimum advance exchange agreement if coding schemes are not used.</td>
</tr>
</tbody>
</table>
## Catalogue profiles

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</table>
| **Establish Catalogue**       | This profile allows a Seller, or a third party acting on his behalf (the ProviderParty), to provide a Catalogue describing products and/or services (Items) available for purchase to a Customers, or a third party acting on his behalf (the ReceiverParty).  
This profile supports the business process of creating a Catalogue at the initiative of the Seller. It does not include functionality for the Buyer to request a Catalogue. Nor does it include functionality for deletion of a Catalogue.  
This process is typically applicable during the initiation of a trading relationship, but may also be used in established trading relationships if substantial changes have been done to the Catalogue or any of its parts. Furthermore the Catalogue message may be used to provide replacements at line level (i.e. only those lines changed or added will be provided). |
| **Catalogue Item Update**     | This profile allows a Seller, or a third party acting on his behalf (the ProviderParty), to provide updates to the item specifications contained in an existing Catalogue.                                                                                                                                                                               |
| **Catalogue Pricing Update**  | This profile allows a Seller, or a third party acting on his behalf (the ProviderParty), to provide updates to the commercial conditions (price) specified for items contained in an existing Catalogue.                                                                                                                                             |
Electronic catalogues

- Catalogues in NES are aimed at providing common and unique identification and specification of products and services as a basis for the procurement process.
- The processes supporting electronic catalogues are related to the transfer of catalogue information from one party (supplier) to another (customer).
- Does not cover the process of actually developing and ensuring the quality of the catalogue content – this is the responsibility of the supplier.
Basic Procurement

| Basic Procurement | This process involves a Purchase Order process including Order confirmation or rejection followed by invoicing process. The purchase order may or may not be placed with reference to a framework agreement, in the latter case the applicable conditions follow from what is stated in the order process and, otherwise, from the sellers public terms and conditions. The purchase order **must reference articles** and article numbers and include pricing. The internal processes to for **transaction handling can be automated** since items are specified with article numbers. The supplier presents to the customer, for the ordered or delivered, received or consumed goods or services, a detailed statement of trade account payable (invoice) with reference to the Purchase Order. The Invoice can be rejected, by sending an Application response messages, if the Invoice is not correct according to trading condition specified in the purchase order submitted. |

An integrated procurement process

Order process
- Free-text order lines (lines without reference to item) are not allowed
- An order can only contain order lines with and reference to item
- The seller may state a accounting cost code
- One order – one contract (if accepted by Seller). Reference to contract on header level.
- Delivery terms, payment means and terms, allowance/charge, delivery address information can be defined on line level.

Billing process
- Invoice must refer to one and only one order for automated ordermatch
- The Credit note is sent when the Supplier has overcharged the Customer in earlier Invoice(s). The Credit note must have a reference to the Invoice number in the original Invoice or a period.
- All legal totals should be positive values in invoices and credit notes.
- Tax codes on line level is mandatory in some domestic cases
- Normally a credit note is to refer to only one identified invoice. There may be cases where credit notes cannot be linked to original invoice(s), for example in case of rejected or returned goods that can not easily be linked to a particular delivery, or when giving discounts based on for example annual quantity.
Scenario: Accepted Order, accepted Invoice

- Supplier accepts Order in full
- Customer accepts Invoice in full

Result:
- Based on the reconciled invoices, the Customer should initiate a payment remittance process.
Scenario: Rejected Order

- Seller rejects Order in full and responds to the Seller using Order response simple

Result:
- No order established.
Scenario: Order accepted, Invoice rejected

- Seller accepts Order
- Customer rejects Invoice and request Creditnote
- The seller sends Credit note matching first Invoice and new correct Invoice.
Use of UBL 2.0 Business Documents

- Application Response
- Attached Document
- Bill of Lading
- Catalogue
- Catalogue Deletion
- Catalogue Item Specification Update
- Catalogue Pricing Update
- Catalogue Request
- Certificate of Origin
- Credit Note
- Debit Note
- Despatch Advice
- Forwarding Instructions
- Freight Invoice
- Invoice
- Order
- Order Cancellation
- Order Change
- Order Response
- Order Response Simple
- Packing List
- Quotation
- Receipt Advice
- Reminder
- Remittance Advice
- Request For Quotation
- Self Billed Credit Note
- Self Billed Invoice
- Statement
- Transportation Status
- Waybill

Used by both NES and OIOUBL - Used by OIOUBL
NES – OIOUBL alignment

Additional Profiles in NES

Alligned use in NES and OIOUBL

Additional Profiles in OIOUBL
Implementation

- Implementation is done within the respective countries
- Each country has their own priorities and targets
The work continues

- The corporation continues to support implementation and continued development.

- NES1
  - Profiles supporting “basic” e-procurement functions

- NES2
  - Maintenance
  - UBL – UN/CEFACT convergence
  - Additional profiles
  - Additional participants

2006 2007 2008 2009
More information?

www.nesubl.eu
available soon
UBL International 2006

http://www ublconference com

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UBL International 2006 is running its inaugural event in Copenhagen
Denmark (Scandinavian Trade Building in Allerød) the week of
November 13-17, 2006.

UBL International is a training summit bringing together worldwide
Universal Business Language expertise to deliver full-day and
half-day lectures and hands-on courses from commercial training
companies, and a full day of free symposium presentations, this
year marking the launch of UBL 2.0!