

Accomplishing the potential
of e-business

EdiSys

E-business standards ebXML and beyond



Presentation at the Workshop on
“eBusiness Solutions and Standards for SMEs
– state of play and perspectives”
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Agenda

1. ebXML

- *The objective and vision of ebXML*
- *The ebXML framework*
- *The ebXML user community*

2. and beyond

- *NES*
 - a common platform for e-procurement based on international standards
- *ePPE*
 - a CEN/ISSS workshop on Business Interoperability Interfaces related to pan-European electronic transactions in public procurement

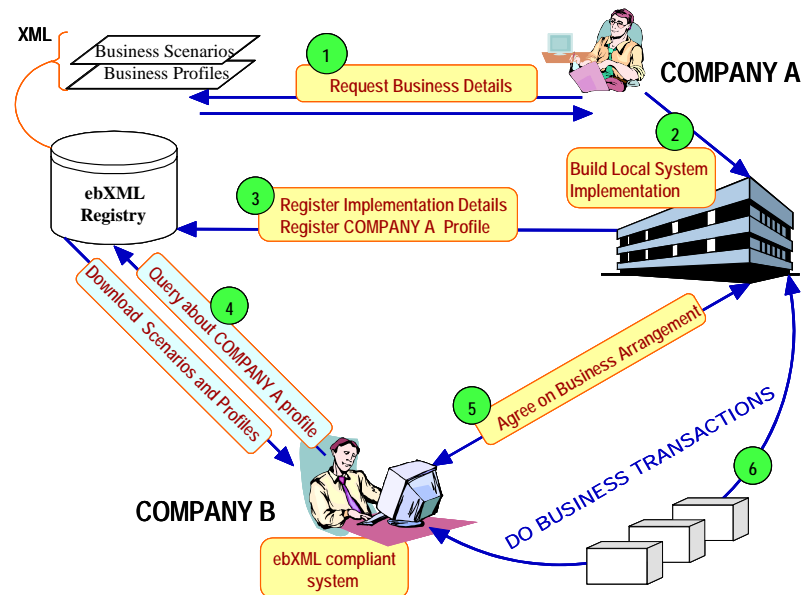
The objective and vision of ebXML



Combining **30 yrs** trade facilitation, **15 yrs** of traditional EDI and **20 yrs** of SGML electronic documentation standards to develop global business process choreographies and semantic definitions for e business



To enable enterprises of any size, in any location to meet and conduct business through the exchange of XML-based messages.



The ebXML framework

A modular suit of technical specifications



The semantic framework

- An e-business modelling methodology (UMM)
- A methodology for specify the semantics of business documents (CCTS*)
- A way to specify the choreography of business collaborations (ebBPSS)

The technical infrastructure

- A secure and reliable way to communicate (ebMS*)
- A way to negotiate and document agreements (ebCPPA*)
- A place to register profiles, agreements, processes, and business information (ebRIM* and ebRS*)

* Also published as ISO TS 15000

ebXML offers

- An open framework, not just another “standard”
 - *allowing business processes and technologies to evolve independently*
- Leverages existing technologies and standards
- A comprehensive framework for Collaborative E-Business Web Services
 - *enabling seamless integration of applications and business processes*
- Provides for secure and reliable communication
- Enables interoperability both at the business and the technology level
 - *both within and across sectors and regions*
- Enables plug & play e-business

ebXML; the recommended B2B framework by IDA!

- "The study has shown that **ebXML is the only framework that is at the same time generic and flexible, and can be used for inter-administrations relations**. Moreover, ebXML is clearly the only trend for organised business communities. **The general recommendation is to follow ebXML standards as much as possible**. This is coherent with the fact that many exchanges between European administrations reflect the interactions between those administrations and the national business world."

*Conclusion by IDA in their study on Business-to-Business frameworks, 2003
(<http://europa.eu.int/ISPO/ida/jsps/doc.jsp?1564>)*

The ebXML user community



The semantic framework

Industry groups and standards bodies are working to bring their vocabularies into alignment around ebXML, promising a new level of interoperability that industry has been seeking for more than a decade.

The technical infrastructure

Major vendors have developed ebXML support into their flagship products and new ebXML vendors are emerging (see <http://www.ebxml.org/tools/index.htm>)

Who is working with Core Components

Industry independent standards groups

- ISO TC154, the current group responsible for EDIFACT and UNTDED – complete alignment to Core Components
- OAGi (Open Applications Group) – OAGIS Version 9.0 and later
- OASIS UBL (Universal Business Language)

Industry dependent standards groups

- ACORD for Insurance Data - evaluating
- AIA (Aerospace Industry Association)
- AIAG, QDETTE and JAMA/JAPIA – for all current and future projects in the international automotive sector.
- BoostAero for its Supply Chain Project in the Aerospace and Defense Industry
- CIDX in the chemical industry for its Material Safety Project
- CIDX (chemical), PIDX (oil) and RAPID (agriculture) – evaluating a move to core component compliance
- EUDIN for European Waste Movement Project
- Eurofer for Messages in European Steel Industry
- HL7 for future Healthcare Data
- IATA (International Air Transport Association)
- IGS.1 for Supply Chain Messages and Cataloging
- IOTA (Open Travel Alliance) - evaluating for Business Data in Travel-Industry
- SWIFT for Messages in Financial Business Processes
- SITPRO and EUROPRO for Sanitary & Phytosanitary Certificates
- XBRL - evaluating for future Accounting & Audit data and collaboration with UN/CEFACT

Governments groups

- Department of Navy – DONXML V2.0
- DCMA (Defense Contract Management Agency)
- NDIA (National Defense Industrial Association)
- US Federal CIO Council

International groups

- eBes – (eBusiness Board for European Standardization) – for its Invoice Processing and Remittance Advice
- GJXDM (Global Justice XML Data Model)
- WCO (World Customs Organization)

National Governments

- Australian Government
- Canadian Government
- Danish Government
- German Government – formal announcement identifying CCTS as future data standard for domestic affairs
- Hong Kong Government
- Korean Government
- Sweden and Norway are evaluating Core components


Software Vendors

- SAP
- Oracle (through OAGIS)



ebXML Messaging 2006 Roundup

- **Big Companies** (for more product information see <http://ebxml.xml.org/products> + vendors own web sites)
 - Oracle AS –
 - integration of ebXML messaging and CPA partner editor / linkage to BPEL engine
 - BEA
 - Support for ebMS v1 and v2
 - Sun – ebMS v2 and Sun Services Registry + java libraries & integration toolset
 - IBM – native support for ebMS v2 and CPA for new WebSphere v6.1
 - Fujitsu – full implementation suite
 - Sybase – full implementation suite
- **Open source solutions**
 - Hermes v1 (ebMS) and Hermes v2 (ebXML + AS2)
 - OrionMSG v3
 - Webswell Connect v3
 - Tamgroup NEXUSE2e
- **Commercial tools + projects sampling from 2006**
 - Oracle (Helena), Axway (GM/VW, T-Mobile), Xenos (NIA) and BNetal (US CDC / DHS), NEXUSE2e (Monsanto, Wilbur-Ellis)

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- A white chess piece, possibly a king or queen, is shown in the left margin of the slide.
- "Systems such as ebXML have reached a point where they are now ready for full deployment".
 - "If, as some contend, the market for Web Services has peaked, and Grid Services are already the next big venture ... it is advisable for SME managers to be very cautious before risking their business ... **ebXML represents a far safer and more viable option at this time**".
 - **"... the investment in ebXML will continue to pay dividends for the foreseeable future"**

ebXML users

(see also www.ebxml.org/implementations/index.htm)

- **IEC (International Electrotechnical Commission)**
 - *has endorsed ebXML for the industry's overall energy market communication, implemented through standards efforts in ebIX, ETSO,*
- **Norwegian Labour and Welfare Organisation**
 - *has adopted ebXML for several of their external relations nationally as well as internationally*
- **UK's National Health Service**
 - *has adopted ebXML for their health care records system*
- **T-mobile**
 - *uses ebXML messaging for its provisioning and maintenance transactions in Europe that involves peer cooperation from equally large telephone equipment suppliers*
- **The Artemis Project**
 - *uses the ebXML registry/repository architecture to store healthcare documents to facilitate their sharing.*
- **The paper industry (papiNet) and energy trading (EFETnet)**
 - *have adopted ebXML messaging in their communication to achieve technical interoperability*
- and many, many more

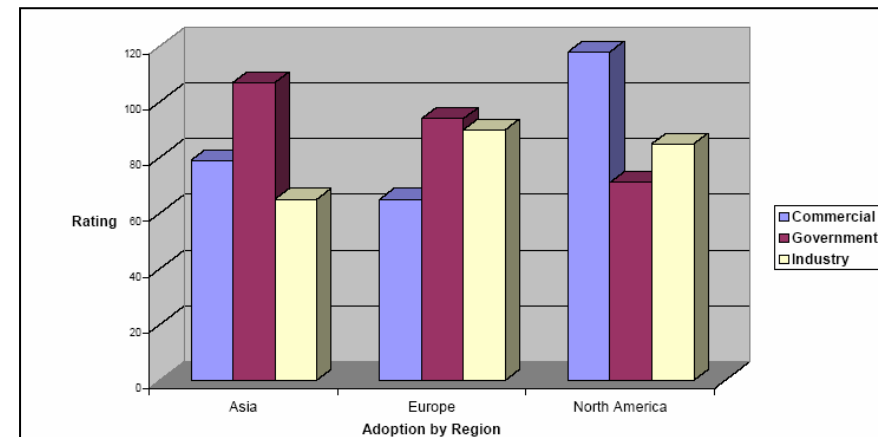
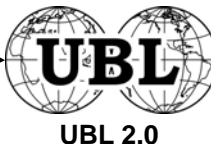
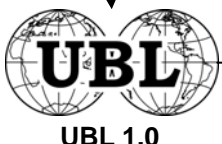
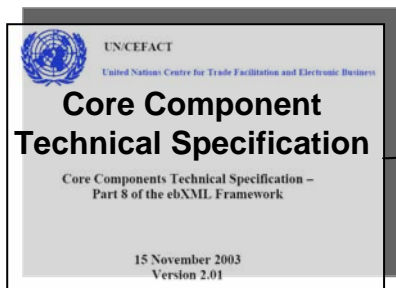


Figure 1 Comparison of ebXML adoption by region, number / size / scope of projects (as of 22 December 2003)

Beyond ebXML



IDAbc

NES

A common platform for e-procurement

- Co-operation between a group of countries and organisations
- To facilitating practical use of electronic collaboration
- Based on available international standards
- The aim is to:
 - *facilitate interoperability and practical use of e-procurement both in domestic and cross border trade*
 - *contribute to the development and use of an international standard for e-procurement*
- Although being based on UBL, NES supports and is committed to the ongoing convergence between UBL and UN/CEFACT



e-procurement is more than just exchange of messages

- **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

Business Process
& scenarios
Business Rules
Business Content

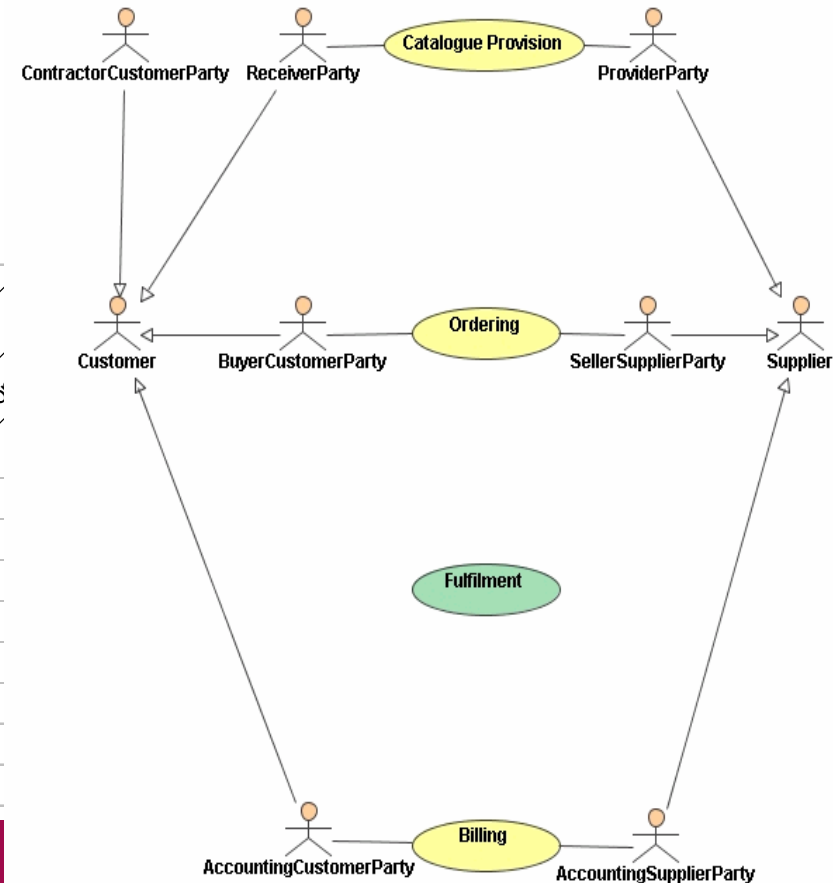
Syntax implementation
based on UBL 2.0

Guidelines
&
Code lists

Profiles in NES phase 1

- Supporting basic e-procurement functions
- **Version 1 release in March 2007**
- Development continues

NES Profile	Catalogue	Catalogue Item Update	Catalogue Price Update	Order	Order Response Simple	Invoice	Credit Note	Application
Catalogue Only	X							X
Catalogue with updates	X	X	X					X
Basic Order Only				X				
Basic Invoice Only						X		
Basic Billing						X	X	X
Basic Billing with dispute						X	X	
Basic Procurement				X	X	X	X	
Simple Procurement				X	X	X	X	X



For more information see ...



www.unece.org/cefact/



www.ebxml.org/
www.ebxml.eu.org



www.oasis-open.org/home/index.php



www.oasis-open.org/committees/tc_home.php?wg_abbrev=ubl



www.nesubl.eu/

Thank you for your attention!