eBusiness in a
Global Context

Anders Grangård
Vice Chair UN/CEFACT Forum

Agenda

- Global Standards – UN/CEFACT
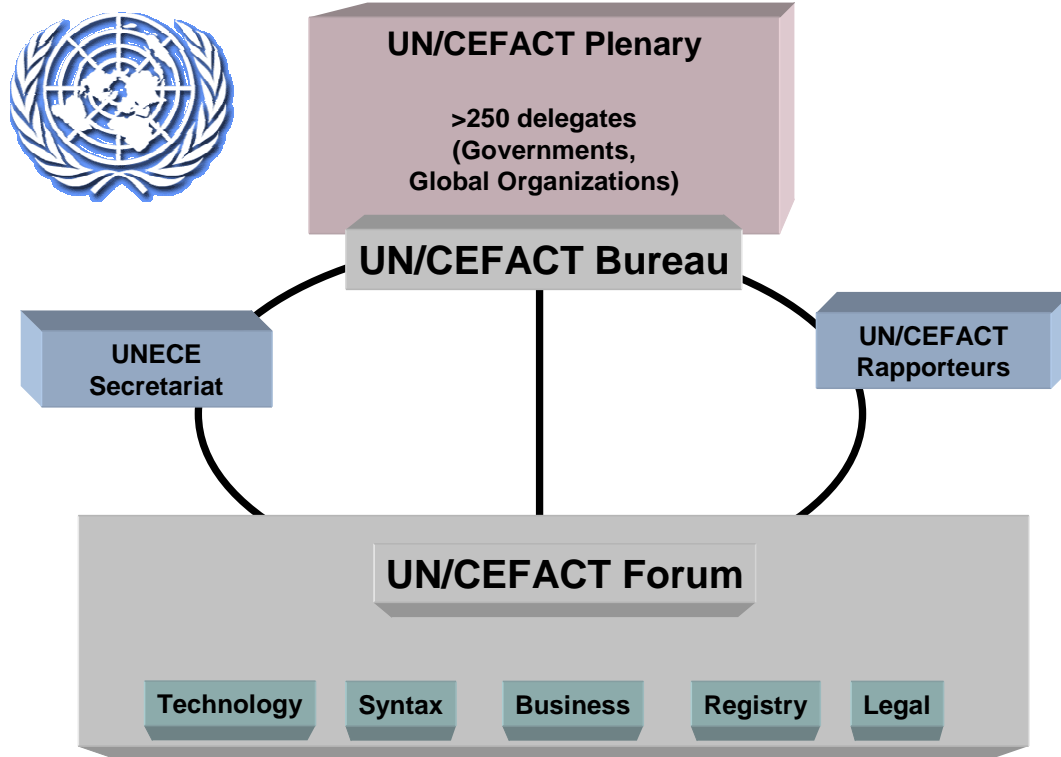- Regional Standards – CEN/ISSS
- Applied Standards – GS1

UN/CEFACT is:

- An office in Geneva producing trade facilitation standards for the world
- NOT !!!
- It is a forum where WE can meet to form the future of eBusiness together that is:
  - Platform & SW neutral
  - Cross industry
  - Global
- It is a wealth of world class experts
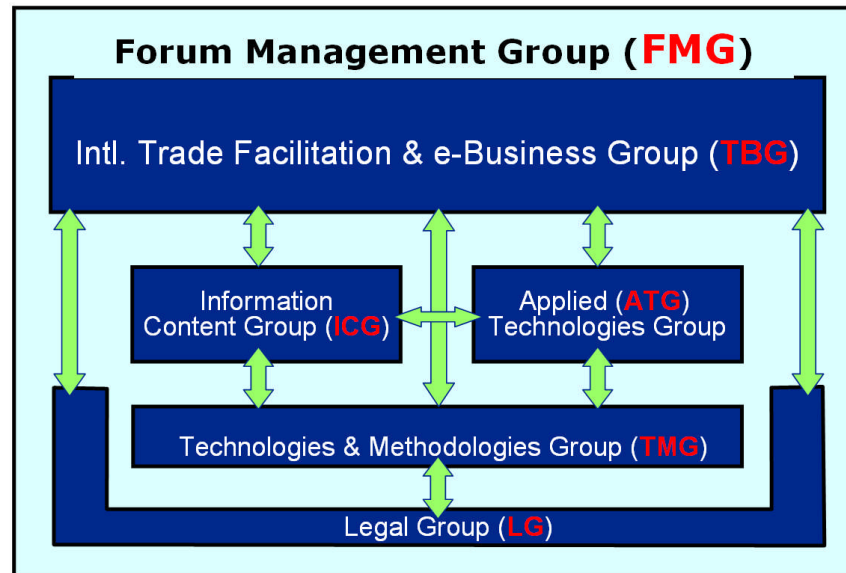- It is a globally recognised quality stamp

UN/CEFACT

- Mission:
  - Trade Facilitation
  - To improve the ability of business, trade and administrative organizations, from developed, developing and transitional economies, to exchange products and relevant services effectively.
  - Contribute to the growth of global commerce
- Focus:
  - The worldwide facilitation of national and international transactions, through the simplification and harmonization of procedures and information flows.
  - Development and maintenance of Standards, Recommendations and Tools for trade facilitation, to address the needs of business and governments

International Trade & Business Processes Group (TBG)

TBG Working Group		Chair
TBG1	Supply Chain & e-Procurement	C Janssen
TBG2	Digital Paper	M. Dill
TBG3	Transportation & Logistics	D. Vankemmel
TBG4	Customs	G. Diepens
TBG5	Finance	Y. Gailly
TBG6	Architecture & Construction	B. Longhi
TBG7	Statistics Collection & Reporting	C. Nelson
TBG8	Insurance	B. Grossman
TBG9	Travel, Tourism and Leisure	P. Heilig
TBG10	Healthcare	Fr. van Bommel
TBG11	Social Services	
TBG12	Accounting & Audit	R. Lemense
TBG13	Environmental	D. Schwarz
TBG14	Business Process Analysis	N. Sharma
TBG15	International Trade Procedures	G. Cragge
TBG16	Entry Points	A. Dechamps
TBG17	Harmonisation	St. Korsgaard
TBG18	Agriculture	Br. Prépin
TBG19	e-Government	J.P. Henninot

Forum Structure

UN/CEFACT

Forum Management Group (FMG)

Intl. Trade Facilitation & e-Business Group (TBG)

Information Content Group (ICG)

Applied (ATG) Technologies Group

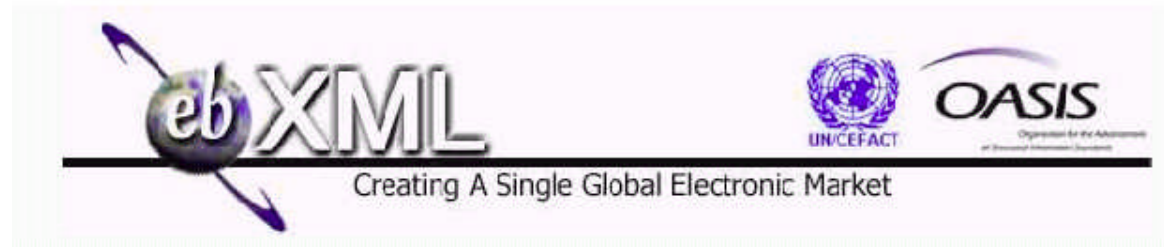Technologies & Methodologies Group (TMG)

Legal Group (LG)

UN/CEFACT

- Extensive Track-Record:
  - UN/EDIFACT
  - UN/Layout Key
  - UNeDocs
- Current Work:
  - UMM (UN/CEFACT Modelling Methodology) and related work (Business Process)
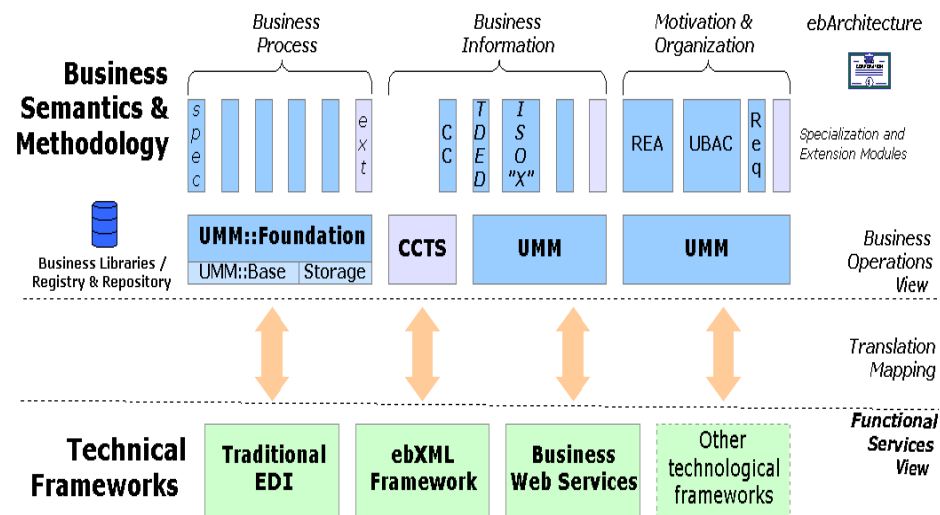 - Core Components
  - Much more…

Recent development

- Cross Industry Invoice (CII) XML Schema released
- eTendering XML Schema released
- UNeDOCS Business Requirement Specification (BRS) released
- CCTS version 3.0 in public review
- Open Development Process
- Creation of cross domain project on Public Electronic Procurement managed by TBG19 and supported by TBG1 and TBG6

Creating A Single Global Electronic Market

- The Multi-Enterprise eCommerce Framework
- Interoperable, open, global, B2B 'standard'
- Complex solution and SME support
- Leveraging existing technologies and standards
- Integration of business processes:
  - By electronic means
  - Independent of the technical solution.
  - Allowing business processes and technologies to evolve independently

Technology Neutral Approach

Copyright Financial Toolsmiths AB, 2003

ebXML Focus Areas

- Semantic Framework
  - Meta-model for defining business process
  - A set of re-useable core components (common business semantics)

- Infrastructure
  - Transport, Routing, Packaging
  - Business Service Interface
  - Collaboration Protocol Profiles/Agreements
  - Shared repository network
    - company profiles, business process models and related message structures
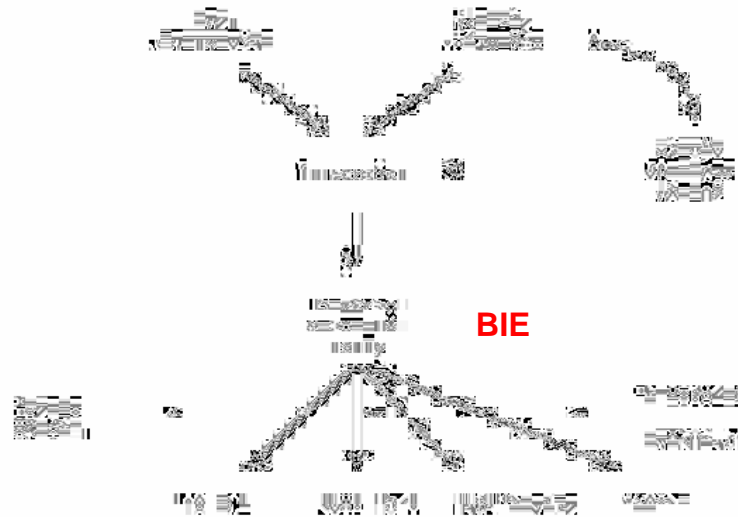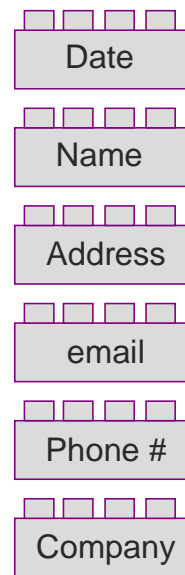
Core Components

- <u>Designed to capture</u>:
  - Business concepts (commonality)
  - Relationship between business concepts
  - Individual pieces (objects) of business information in a context

- <u>Format:</u>
  - Syntax Neutral
  - Building blocks of meta-data
  - Uniquely identified
  - Facilitate multi-lingual support

Core Component concepts

BIE

Business Messages

UN/CEFACT

Date

Name

Address

email

Phone #

Company

Name

Address

email

Phone #

Company

Party ID

Party

Order.Date

Cost

Line Item

PO #

Invoice
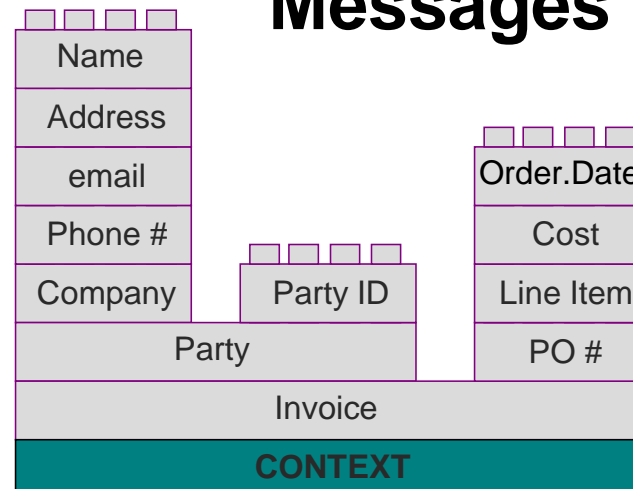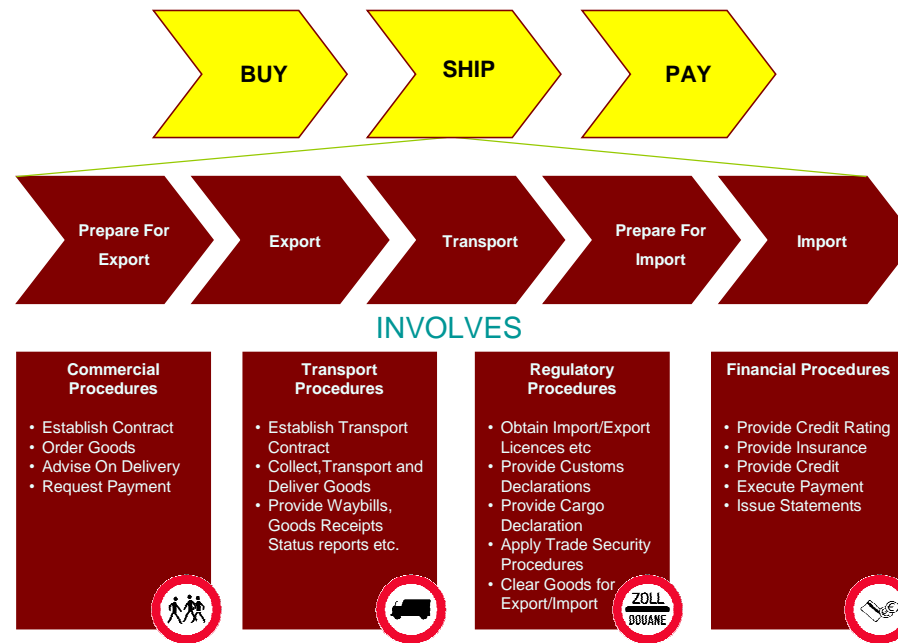
CONTEXT

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Business process

- The choreography of activities and business logic amongst multiple actors.
- State Management.
- Work inherits from UMM models.
- Captures business logic at runtime.
- Works with CCTS.
- Project within TMG.

INTERNATIONAL TRADE TRANSACTION PROCESS

UN/CEFACT

BUY **SHIP** **PAY**

| Prepare For Export | Export | Transport | Prepare For Import | Import |

INVOLVES

Commercial Procedures
- Establish Contract
- Order Goods
- Advise On Delivery
- Request Payment

Transport Procedures
- Establish Transport Contract
- Collect,Transport and Deliver Goods
- Provide Waybills, Goods Receipts Status reports etc.

Regulatory Procedures
- Obtain Import/Export Licences etc
- Provide Customs Declarations
- Provide Cargo Declaration
- Apply Trade Security Procedures
- Clear Goods for Export/Import

Financial Procedures
- Provide Credit Rating
- Provide Insurance
- Provide Credit
- Execute Payment
- Issue Statements

ZOLL DOUANE

External Relations

- MoU - ISO, IEC, ITU, UNECE
  - Meetings in Beijing in October 2005 and in Vancouver in March 2006.
- UN/CEFACT - OASIS
  - A new Cooperation Agreement was signed on 21 June 2005.
  - ebXML, UBL
- Many other organizations
  - Some are delegations in UN/CEFACT
    - GS1, SWIFT, …
  - Some are not
    - OAG, CEN/ISSS, XBRL, …

http://www.UNCEFACT.org

CEN/ISSS

eInvoicing Work Shop

What is CEN?

- The European Standards Committee (French acronym)

- One of three European Standardization Organizations, recognized by the EC

- A non-profit association, whose members are national standards bodies (BSI, DIN, AFNOR, etc.)

- Now 30 members – EU and 3 EFTA

- Affiliate members – new applicant countries

- Creating the European single market, in partnership with:

  – CENELEC - electro-technical standards

  – ETSI – electronic communication standards

- Providing a ready-made pan-European network

eInv Phase I - Background

- CEN Focus Group report on the standards implications of EU Directive 2001/115/EC published 2003
- CEN/ISSS eInvoicing Workshop phase 1 completed 2006
- Participants grown from 6 to >50
- 9 CWA summarised in two general statements:
  - The invoice is the most important document in business processes
  - However the invoice is not a stand-alone document - it must be integrated with other processes to guarantee that business operations can be streamlined and automated.

Phase I – CEN Workshop Agreements

CWA	Subject
15574	Commission Recommendation *1994/820/EC* October 1994, *proposed revision* with the requirements of Directive 2001/115/EC
15575	Directive invoice content details as *UN/CEFACT Core Components*
15576	Recommendation to allow *coded identifiers* as an alternative to the current unstructured clear text identifications
15577	Standardized set of *codes* in eInvoice messages for *VAT exemptions*
15578	*Survey* of VAT *Data Element* usage in the Member States and the use of codes for VAT *Exemptions*
15579	E-invoices and *digital signatures*
15580	*Storage* of Electronic Invoices
15581	Guidelines for eInvoicing *Service Providers*
15582	eInvoice *Reference Model* for EU VAT purposes specification

Phase II – Proposed CEN Workshop Agreements

CWA	Subject
# 1	Adoption programme for electronic invoicing in business processes in Europe
# 2	Compliance of electronic invoice implementations with Council Directive 2001/115/EC and the national legislation as regards electronic invoices
# 3	Cost-effective authentication and integrity of electronic invoices regardless of formats and technologies
# 4	Effective implementation of compliant electronic invoice systems in using emerging technologies and business processes
# 5	Network infrastructure of invoice operators throughout Europe

GS1 eCom

GS1: Who are we?

GS1 is a not-for-profit standards organisation

30 years of experience

108 member organisations representing **all points** in the supply chain

Over a **million** companies doing business across **145** countries

Over **20** represented sectors (FMCG, healthcare, transport, defence…)

Countries with GS1 Member Organisations
Countries served on a direct basis from
GS1 Global Office (Brussels)

GS1: A Broad Portfolio

- GS1 has a full portfolio of **products.**

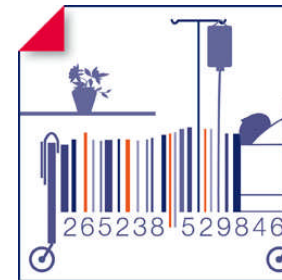|	
GS1 BarCodes	**Global standards for automatic identification** Rapid and accurate item, asset or location identification
GS1 eCom	**Global standards for electronic business messaging** Rapid, efficient & accurate business data exchange
GS1 GDSN	**The environment for global data synchronisation** Standardised, reliable data for effective business transactions
GS1 EPCglobal	**Global standards for RFID-based identification** More accurate, immediate and cost effective visibility of information

GS1 eCom

GS1 offers **solutions,** each integrating a number of GS1 products.

Traceability is a robust solution for tracking and tracing items such as food or pharmaceuticals through the supply chain.

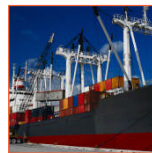**Patient Safety** ensures the prevention of medical errors and counterfeiting through the healthcare supply chain.

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GS1 has active programs in several specific industry **sectors**.

Defence: Global Solutions offered by GS1 play a role in the defence sector including but not limited to procurement, logistics and asset tracking. GS1 standards are endorsed by the North Atlantic Treaty Organisation (NATO).

Transport & Logistics: Today no transport and logistics company can be efficient without robust information technology and data communication support. GS1 standards help hundreds of T&L companies.

Apparel: The textile industry is a highly diversified and complex area. GS1 provides solutions for collaborative design, supply chain management and counterfeit prevention.

- GS1 provides a wide variety of **services** to its user companies.

  - Implementation support
  - Benchmarking
  - Verification tools and calculators
  - Consulting services
  - Software
  - Guides and manuals
  - Training and education
  - Helpdesk
  - And more…

World of GS1 eCom

	Total	EANCOM	GS1 XML	WEB EDI
Countries	54	42	33	21
Users	100.000	70.000	15.000	18.000
Message implemented (not implemented)		43 (4)	54 (15)	
Growth		10% per Year	GDSN + Regionally B2B + UIM	20% per Year

Top Three Challenges

- Divergences of eCom standards
  - National vs International
  - Standard vs non-standard
  - EANCOM vs XML
  - Divergences in same message implementation

- Integration

- SME penetration

More Information

Contact details

Anders Grangard
Director, GS1 eCom
D   +32 (0)2 788 7854
E   anders.grangard@gs1.org
W   www.gs1.org

The global language of business
www.gs1.org

UN/CEFACT & UBL

- **UN/CEFACT and OASIS/UBL Collaboration:** Work Plan for 2007
  - Currently covers
    - Supply chain (TBG1)
    - Transport (TBG3)
    - Harmonisation of CC (TBG17)
    - XML NDR (ATG2)
    - Code lists (ICG/TMG/ATG)
- This work is guided by the principles described in the "Cooperation Agreement Between UN/ECE on Behalf of UN/CEFACT and OASIS" (May 2005) and the "OASIS / UBL TC and UN/CEFACT Collaboration Statement" (May 2006).

MoU Between
UNECE and OASIS

- The parties will appoint representatives to jointly develop and recommend an OASIS-UNECE-UN/CEFACT project alignment and coordination plan, addressing areas of common technical interest, including:

    i) Harmonization of core data components, UBL, other business data entity libraries, etc.

    ii) Naming and Design Rules.

    iii) Mechanisms for business process specification.

    iv) Adoption and promotion efforts for the ebXML specifications.

    v) Identity, addressing and e-signature functionalities with potential for interoperability across UNeDocs, Universal Postal Union practices, and other trade facilitation ID and e-signature instances.

/UBL and UN/CEFACT Collaboration Statement

- Consistent with the Cooperation Agreement between OASIS and UN/CEFACT of June 2005:

  1. UN/CEFACT recognizes UBL 2 as appropriate first-generation XML documents for eBusiness.
  2. For OASIS and UN/CEFACT:
     a) future UN/CEFACT deliverables constitute the upgrade path for UBL, and
     b) the maintenance of UBL 2.x remains with the OASIS UBL TC
  3. In the expectation that UN/CEFACT will produce its own integrated set of XML schemas within a period of three years, OASIS will produce no further major versions of UBL past UBL 2.
  4. OASIS will grant UN/CEFACT a perpetual, irrevocable license to create derivative works based on UBL.

Temporary
ebXML syntax