7 Meeting of the CAREC Customs Cooperation Committee Issy-Kul, 8-9 Sept. 2008

The Single Window and Data Harmonization in Line with the International Standards

Mario APOSTOLOV, Regional Adviser, UNECE mario.apostolov@unece.org

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Trade Facilitation & the Single Window

PROBLEM – In order to carry out a foreign trade operation various control agencies require about 40 documents with often repeated data

- => SOLUTION:
- Simplify or cut procedures or documents
- Align them with international standards
- Automate documents and processes RESULT: goods and trade information move faster across borders



Why Single Window

Key TF issue in WTO + EC building EU-wide SW

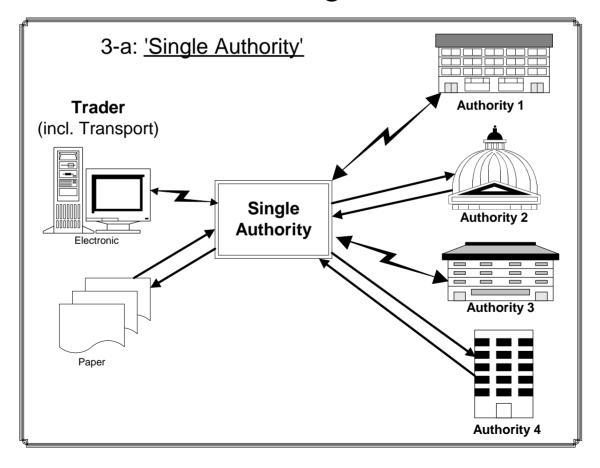
• <u>Definition</u>: a system that allows all participants in trade and transport file requested information in only one place, in a standard format, in order to carry out import, export and transit operations.

Benefits:

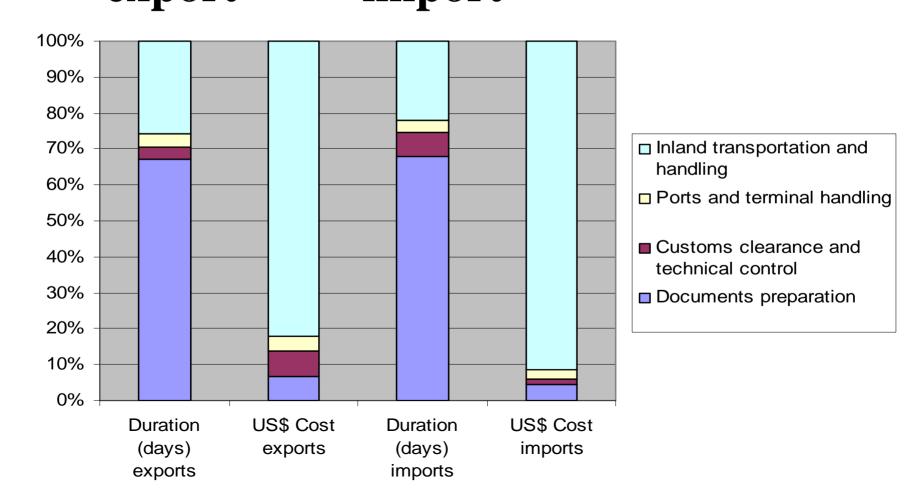
- For the authorities
- More efficient distribution of resources
- Better gathering of fees and duties
- More compliance from business
- More security (on the basis of better risk analysis)
- Less corruption, more transparency
- For private business
- Cut costs by cutting the time to prepare documents
- Faster clearance of goods
- Predictable and more efficient explanation and implementation of rules
- More transparency

General model of the Single Window

Traders and control agencies may be located in different places, but information flows among them are connected.



Length of export and import operations in Mongolia import export



Problems to solve

- 1. Lack of cooperation between government agencies and business
- 2. Competing institutional and individual interests
- 3. Lack of transparency and predictability
- 4. Complex Customs procedures (about 60% of the work on TF); excessive documentary requirements
- 5. Insufficient use of ICT
- 6. High cost of implementing a Single Window solution
- 7. Insufficient use of international standards



What is needed?

- 1. Political will
- 2. Cooperation among agencies
- 3. Clear vision from the beginning
- 4. Leading organization
- 5. Technical assistance / financing
- 6. Public-private partnership

Two directions of work in building a Single Window

Policy work

- Building political will
- Interagency management group
- Draft concept paper and a feasibility study
- Appoint a lead organization (e.g. Customs)
- Harmonize policy

(~90% of the work - negotiations)

Technical work

- Interagency technical group
- Data harmonization
- Developing a SW system
- Alignment with international standards

(~10% technical work)

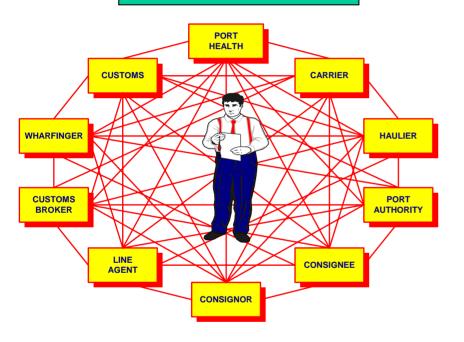
Package of UNECE and **UN/CEFACT** recommendations

- •Recommendation 33: principles for building a Single Window
- Draft Recommendation 34 on data harmonization
- •Draft Recommendation 35 on the legal aspects of the Single Window
- UNECE 40+ years of work on setting standards for trade facilitation
- UNECE, World Bank, GTZ, ADB, BOMCA, USAID will help, but the basic work, i.e. building consensus among agecies remains for the countries.
- WTO negotiations on a new agreement on Trade Facilitation, including SW?



Rec. 33: The Single Window Concept

FROM

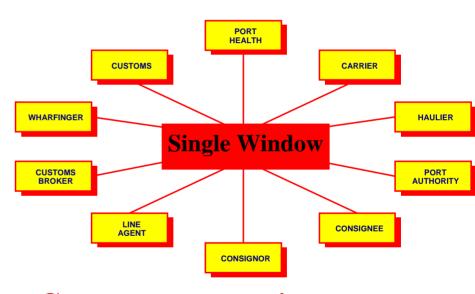


Mountains of paper

30% mistakes

Weeks for clearance

TO



Customs, export, import, etc. processes together

Many documents filed together

Appr. 1 hour for clearance

PRACTICAL STEPS FOR IMPLEMENTING A SINGLE WINDOW

UNECE Recommendation 33

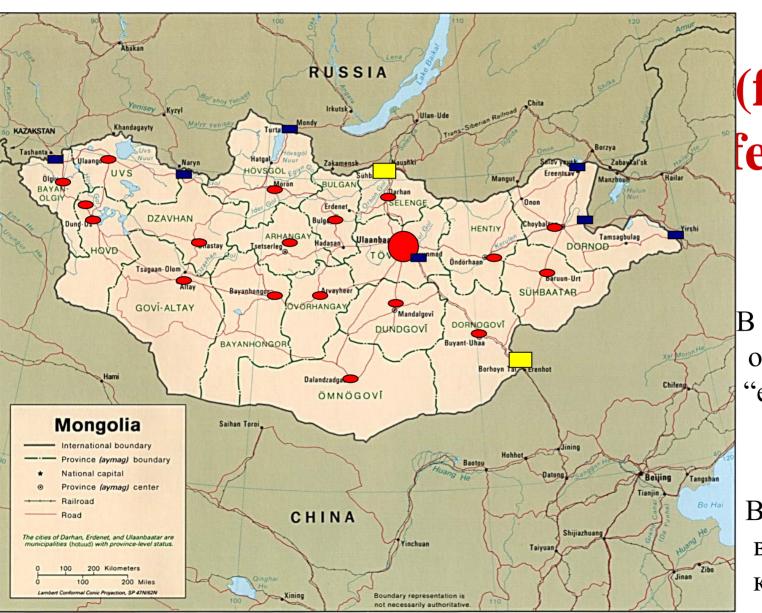
- 1. Business can make a well argumented request
- 2. Create interagency groups:
 - 1. of decision-makers
 - 2. of technical specialists
- 3. Develop a Single Window
- 4. Analysis of purpose
- 5. Feasibility study
- 6. Selection of a lead agency
- 7. Draft a Work Plan
- 8. Creating the technical system: data harmonizat°, information exchange system

Lessons from world practice

- Single Window systems can be built in very different countries!
- High-level political support (e.g. PM) and a **strong lead organization** needed.
- Have a clear vision from the very beginning why is the SW needed? How should it be built (what model, what scope)?
- Establish effective control over various organizations!
- Everyone / every agency should work in the same direction!
- Step-by-step
- 90 % negotiations, 10 % technical work
- Involve the business community in the exercise in the process of planning, decision-making and execution
- Ready to face new tasks on every stage
- Where to start: a) build political will (done in MN); b) Data Harmonization (start the technical work with this)



What should be



done? (from the feasibility study)

В каждом пункте, обслуживаемом "единым окном"

Взаимодействие всех агентств в каждом пункте



What should be done?

(analyzed in the feasibility study)

What processes are covered (in each place)?

```
freight forwarding
              import
              export
        Customs clearance
           certification
Transportation (internal, external)
     Road / railway transport
        Dangerous goods
            Statistics
             Payment
```



What should be done?

(analyzed in the feasibility study)

3. What documents should be covered?

Manifests (with amendments) Certificates (phytosanitary, sanitary) etc, etc.



Why harmonize data? (draft **Recommendation 34)**

In order to:

- Create the environment for a Single Window systems
- Link different countries' Single Window systems
- Create electronic trade documents (in XML format) with shared data elements

Using:

- International standards (a) UNTDED http://www.unece.org/trade/untded/untded2005.pdf
 - (b) WCO Data Model and (c) Core Components (UNeDocs data model), best practice (of USA, EU, East Asia)

UNECE Initiatives on data harmonization

- Southeast Europe (AL, BA, BG, HR, GR, MK, MD, ME, RO, RS, TR, UNMIK/Kosovo):
 - Created the basis for Single Window projects in MK, RS
 - Started practical harmonization work in 2 documents: data analysis in the SAD, Phytosanitary Certificate and the CMR Consignment Note

With EurAsEC (BY, KZ, KG, RU, TJ, UZ):

- Seminars: Moscow 2006 & Almaty 2007 on data harmonization, the Single Window and SAD
- Planned seminar in St Petersburg on legal issues and practical exercise as in Belgrade.

Standards applied:

- UN Layout Key for trade documents (ISO 3535)
- UN Trade Data Elements Directory (UNTDED) (ISO7372, endorsed by WCO)
- UN codes for locations (LOCODE), types of transport, units of measurement, etc.
- WCO Data Model
- UNEDIFACT (the only global EDI standard)
- Core Components

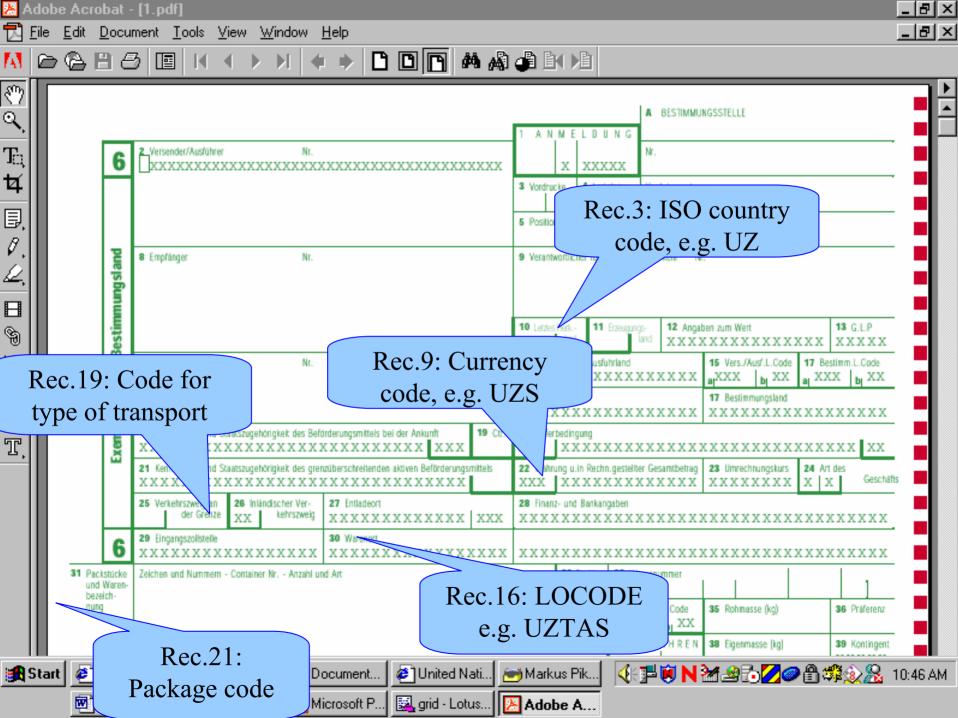


UNECE Recommendation 1: UN Layout Key for trade

http://www.unece.org/cefact/recommend ations/rec01/rec01_01cf15.pdf

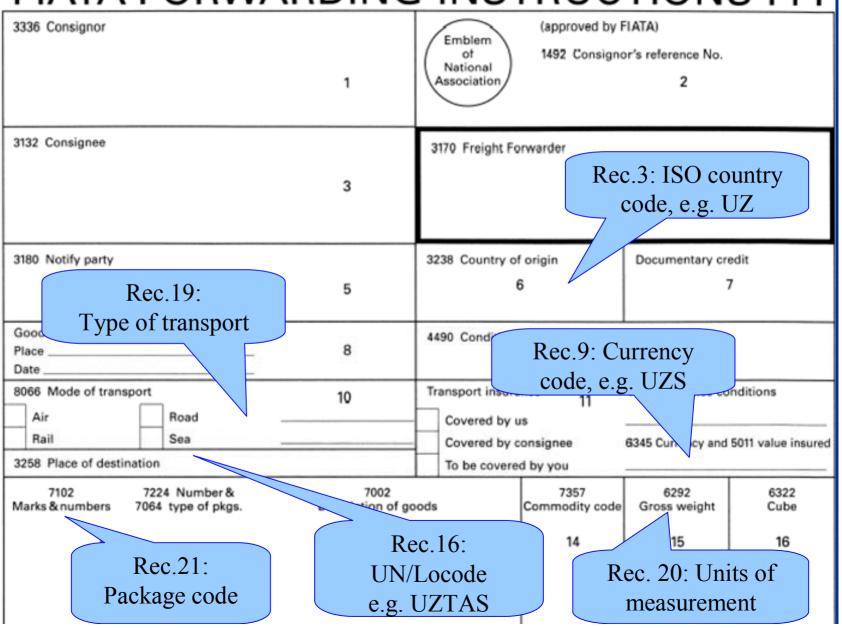
documents

Consignor (Exporter)	Date, Reference	e No, etc.	F KEY FOR TRAI	DE DOCUMENTS		
Consignee	Byer (if other th	an consignee) or of	her address			
Notify or delivery address	Country whence	e consigned				
	Country of orig	Country of origin		Sountry of doctination		
			Country of destination			
Transport details	Terms of delive	Terms of delivery and payment				
Shipping marks; Container No. Number and kind of pa	ackages; Goods description	Commodity No.	Gross weight	Cube		
			Net quantity	Value		
		J	l	L		
			4			
		1				
		-60				
		0				
	41577					
06		Place and date or	fissue; Authentica	tion		
Free			,	-		



UNECE United Nations Economic Commission for Europe

FIATA FORWARDING INSTRUCTIONS FFI



Using UNECE and UNCEFACT codes

• ISO country codes (UNECE Recommendation 3) – 2-alpha codes:

MN

Mongolia

> China CN

Russia
RU

➤ United Kingdom GB

> Tuvalu TV

 \triangleright Serbia YU -> CS -> RS

➤ Montenegro YU -> CS -> ME

IANA/ICANN uses these codes as country codes in Internet (Top Level Domain country codes, TLDcc) e.g. .mn for Mongolia

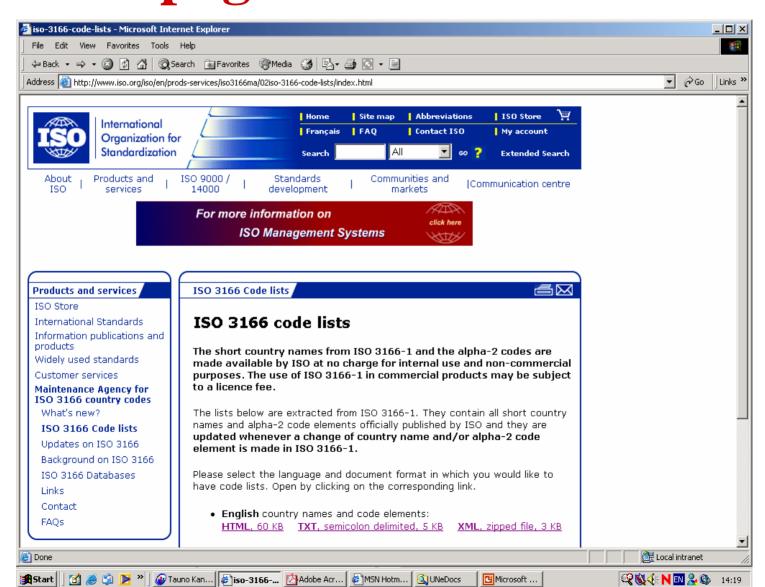
UN/LOCODE - Code for Trade and Transport Locations

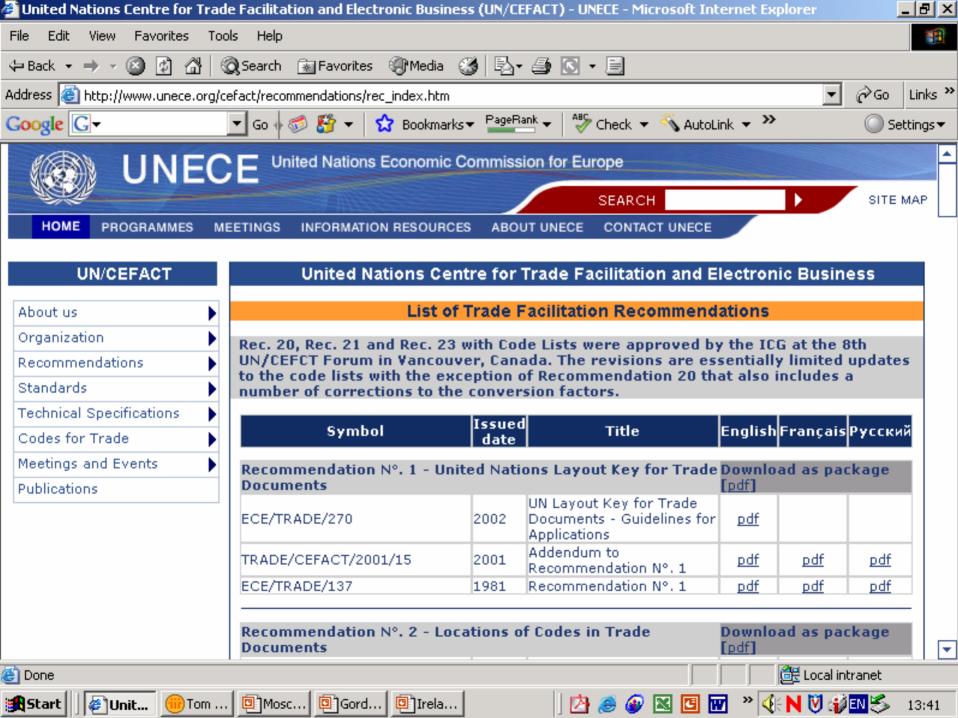
- UN/LOCODE (UNECE Recommendation N°16) 5-alpha code: ISO 2-alpha CC +; 3-alpha location code:
- Tirana AL TIA (10 LOCODE entries for AL)
- Sarajevo BA SJJ (47 entries for Bosnia and Herzegovina)
- Belgrade RS BEG (country code: YU -> CS -> RS)
- Podgorica ME TGD
- Istanbul TR IST (519 LOCODE entries for TR)
- Astana KZ AST (earlier KZTSE Tselinograd)
- Shanghai CN SHA
- London GB LON (3529 LOCODE entries in UK)
- GBLHR Heathrow airport; TV Tuvalu.
- Used by ISO, ICANN, IATA
- >48,500 trade & transport related locations in ~240 countries/territories

Currency codes 4217

- Currency codes ISO (UNECE Recommendation 9): 3alpha code ISO3166-1 = 2-alpha country code + 1alpha mnemonic currency indicator
- Uzbekistan UZS Uzbek Sum
- Mongolia MNT Tugrik
- Russia RUB Rouble
- Kazakhstan KZT Kazakh Tenge
- CHF Swiss Frank Switzerland
- EUR Euro France
- There is a three digit currency code as well, e.g.: EUR = 978; UZS = 860 (Uzbek Sum)

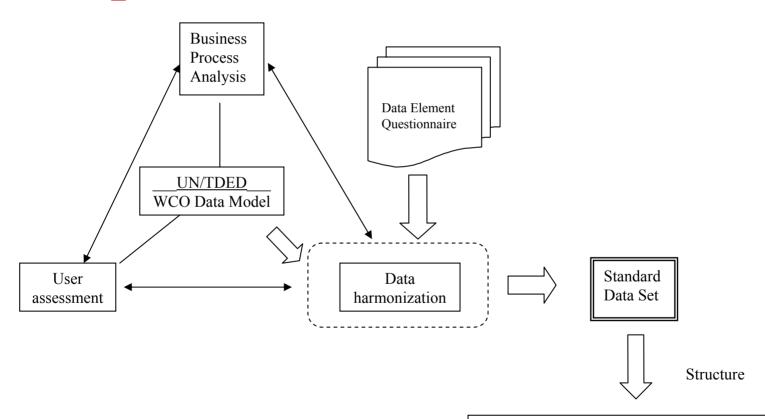
Web page of ISO 3166 codes







Data harmonization & modelling (US best practice / UNECE draft Rec.34)



Data modelling (incl. mapping to UNTDED) Regional agreement / harmonized data model

Results of the analysis in the US

- >100 agencies use international trade data
- 300 forms for international trade
- The Single Window project cut requirements from 10,000 fields with data elements to 300.
- Tasks now:
 - Continue cutting required fields
 - Make 23 federal agencies on trade collaborate
 - Continue harmonization among agencies
- Asure alignment with UNTDED and WCO Data Model



Steps to take

First harmonize nationally (agencies in a country) then regionally.

- Create <u>interagency team</u> (WG) on data harmonization (ACE/ITDS Data Harmonization team in the USA) to work on a Standard Data Set (SDS) – superset of all required data and their definitions.
- Carry out a survey of data requirements; create a list of all requirements.
- Analyze the data requirements (find out matching definitions, map data definitions to the UNTDED; align close ones; eliminate unnecessary ones).
- Create a common data set.
- On this basis, create a data model (ICT).

Table for data analysis (e.g. in the SAD)

COUNTRY ELEMENT NO [EU SAD BOX NO]	DOCU MENT	ELEMENT NUMBER OF WCO EQUIVAL ENT	UNTDED MAPPING FROM WCO DM	UNTDED MAPPING FROM EU-COM	SUGGESTED UNTDED 2005 MAPPING	CC REFERENCE	DATA ELEMENT NAME REFERENCE	DATA ELEMENT DESCRIPTION	COMMENTS
								The following definitions were taken from the EU Commission Regulation 2286/2003	
1	SAD	001	1001	1001	1001	UN00000311	Declaration		This is identical to the EU SAD, down to the code list.
2	SAD	071, 239– 245 (address)	3036	3336	3336	UN00000379	Consignor/Exporter	Full name and address of the consignor/exporter	
2a	SAD	072	3039	3337	3337	UN00000377	Consignor/Exporter No.	The identification number assigned by the competent authorities.	
3	SAD	*	N/A	1046	N/A	**	Forms	The number of the subset in relation to the total number of subsets of forms and continuation forms used. E.g. if there is one EX form and two EX/c forms, 1/3 will be entered on the EX form, 2/3 on the first EX/c form, and 3/3 on the second EX/c form.	Not required in electronic environment, hence not available in WCO DM.
4	SAD	013	6061	1166	1166	**	Loading lists	The number of any loading lists attached, or of commercial descriptive lists where these are authorised by the competent authority	This data element makes no sense in an electronic environment.
5	SAD	228	6061	7240	7240	**	Items	The total number of items declared by the person concerned in all the forms and continuation forms (or loading lists or commercial lists) used. The number of items must correspond to the number of boxes 31 to be completed.	
6	SAD	146	6061	7370	7370	**	Total packages	The total number of packages making up the consignment in question.	
7	SAD	009 or 016	1097 or 1202	1004	1097 or 1202	**	Reference number	The commercial reference number assigned by the person concerned to the consignment in question. It may take the form of a Unique Consignment Reference.	

Standardization and modelling tools

- 1. UN Trade Data Elements Directory (UNTDED) ISO7372, endorsed by WCO
- WCO Data Model
- 3. Core Components



Standardization Tools: CCL

TDED and Core Component Libraries

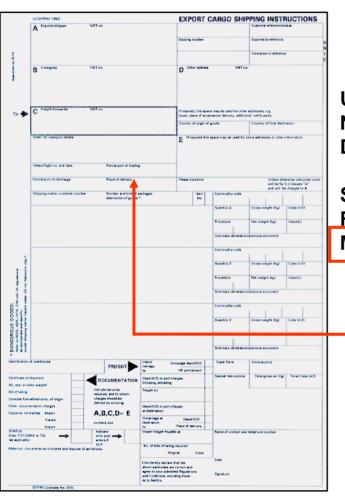
- Data and data structures
- Document layouts → UN Layout Key
- Methodology to standardize

ISO 15000-5 Core Component Technical Specification (CCTS 2.01)

UN Trade Data Elements Directory UNTDED

	B2	2 = Document. Type Name	.Text			
	Α	В	С	D	Е	
1	UID	ISO7372 TDED Name	Definition	TDED repr.	Locations, Bridges	
2	1000	Document. Type Name.Text	Free text name of a document such as 352 for Proforma invoice, 380 for Commercial invoice.	an35	UNLK: L 02, P 45-80 MAR: IMO/FAL 1-7	
3	1001	Document. Type.Code	Code specifying the name of a document such as 352 for Proforma invoice, 380 for Commercial invoice.	an3	UNLK: L 04, P 41-45 CIMP: (120): a1 SAD: (SAD 1(first to third subdivision))	
4	1099	Transport Means. Stay.Identifier	Identifier of the stay of a means of transport in a port or airport	an35		
5	4219	Transport Service. Priority.Code	Code specifying the priority of a transport service.	an3	CIMP: (704):a1	П
6	5068	Invoice. Line Item. Amount	Total sum charged with respect to a single line item of an invoice.	n18	UNLK: L 56, P 63-80	П
7	5070	Consignment. For Customs Total.Amount	Total amount for customs purposes of all goods in a consignment, whether or not they are subject to the same customs procedure, and have the same tariff/statistical heading, country information and duty regime	n18	AWB: L 24, P 71-81 CIMP: (509):n12, or the letters 'NCV'	
8	6094	Consolidation. Package.Quantity	Count of the total number of packages in all of the consignments referred to as one consolidation.	n16		П
9	6292	Goods Item. Gross Weight.Measure	Weight (mass) of goods including packaging but excluding the carrier's equipment.	n14	AWB: L 33-44, P 13-19 CIM: L 28-33, P 63-74 (CIM 26) CIMP: (600):n7 CMR: L 28-42, P 63-71 (CMR 11) SAD: (SAD 35) UNLK: L 28-52, P 63-74	
10					0.12.13.2.20.02,1.00.74	+

UNLK & TDED Mapping Example



UID 2280

Transport Means. Actual Departure. Date Time Name

Definition Date and or time of the departure of means

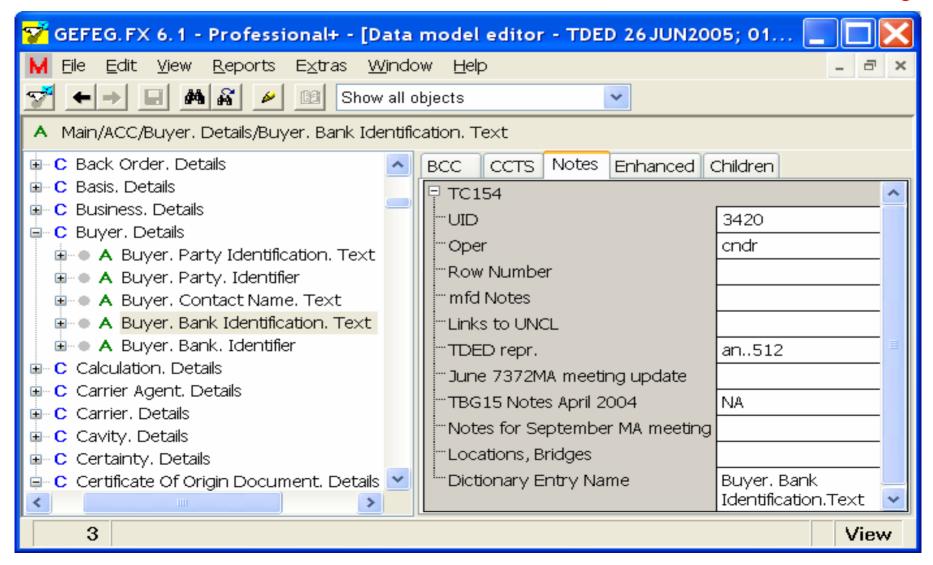
of transport

Synonym Flight Date, Sailing Date

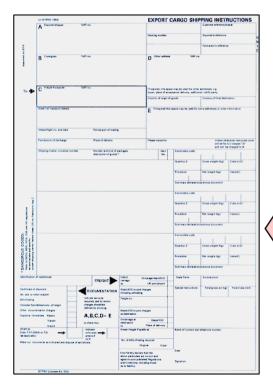
Repr. an..17

Mapping UNLK: L 17, P 16

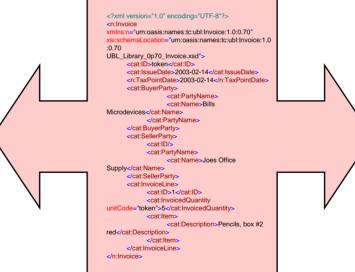
TDED – a semi structured dictionary



Combined Approach



Electronic Document Exchange XML or UN/EDIFACT



Electronic Edit Form

FIATA Freight Forwarding Instructions

5D-8509-22

Switzerland

asse Transport Limited

AET-10869

225 KG

89 Rud de confederation

ID: F1ATA ER-2484/234

Not applicable now

Covered by Consignee Freight Prepaid

31453334

LX Logistics mbH Bismarckstrasse 19 DE-D-69115 Heidelber

Germany

BB and Co

France

12 Rue de stand

FR-33000 Paris

ID: CD-3 / 84784

Tax Ref: 585-848

Notify party

Francois Wil

TEL: +33450012154

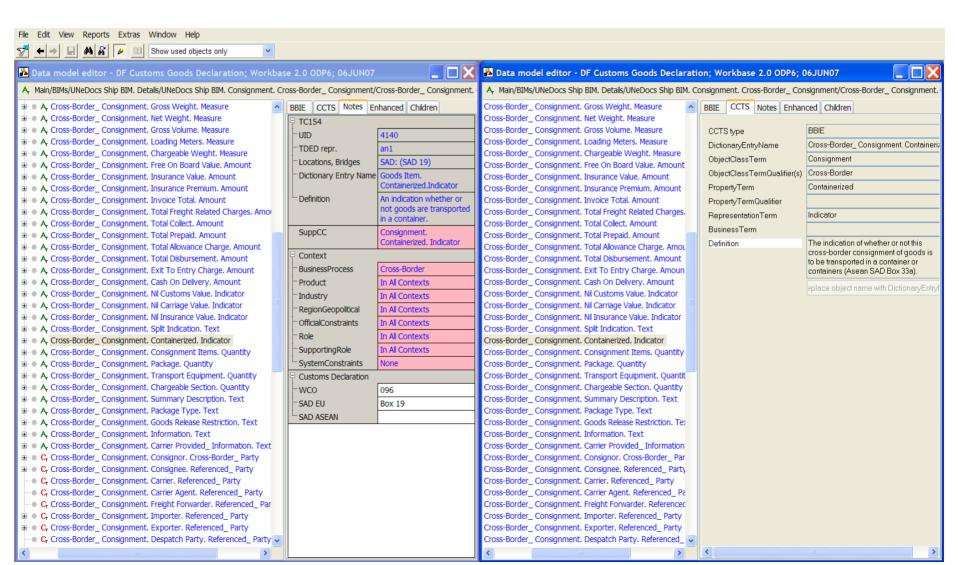
23, rue de la chamonio FR-35689452 Annecy

Place DEHEI Heidelberg

2004-10-28

Paper Document aligned to UN Layout Key

The UNeDocs Workbase



A simple business requires...

Exportation of Frozen Shrimps (Thailand) 15 Parties involved

30 documents & 788 data elements needed to be filled in (~6 e-docs, and most data elements are filled 30 times!)

- Proforma Invoice
- 2. Purchase Order
- 3. Request for Sampling
- Test Report
- Shipping Particulars
- 6. Booking Confirmation
- 7. Inland Haulage Booking Form
- 8. Inland Haulage Booking Confirmation
- 9. Commercial Invoice
- 10. Packing List
- 11. Application Form for Import, Export, Pass Animals/Animal Remains Through Thailand (R. 1/1)
- 12. Export License(R. 9)
- 13. Insurance Request Form
- 14. Cover Note
- Insurance Policy

- Export Declaration
- 17. Goods Transition Control List
- 18. Request for Port Entry (TKT 308.2)
- 19. Equipment Interchange Receipt
- 20. Container Loading List
- 21. Manifest
- 22. Outward Container List
- 23. Bill of Lading
- 24. Request for Health Certificate
- 25. Health Certificate
- 26. Request for C/O
- 27. Certificate of Origin
- 28. Halal Certificate 2
- Application for Irrecoverable Documentary Letter of Credit
- 30. Letter of Credit



A simple business requires...

Exportation of Frozen Shrimps (Thailand)

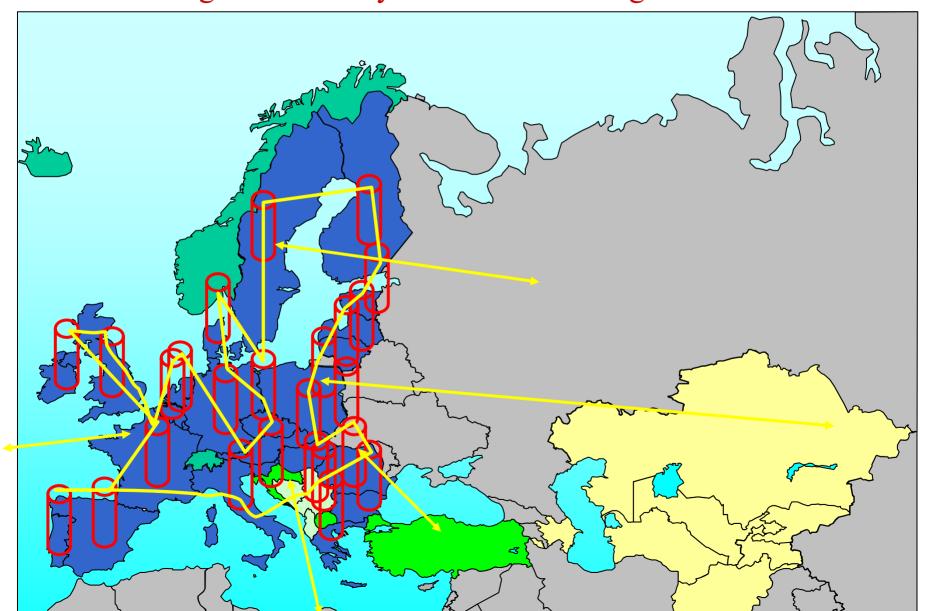
A complete set of documents is needed:

Trade – Transport – Customs – Insurance – Certificates - Finance

Single Window in the EU

	What: To enable economic operators to <u>lodge electronically</u> <u>and once only</u> all the information required by customs and non-customs legislation for EU cross-border movements of goods.
□ <u>How</u> :	
	☐ By fostering the development of national single windows systems in all Member States
	☐ By ensuring that national single window systems and EU centrally-managed systems operate smoothly together.
	Details of Single Window design currently discussed within EU.
	Programme coordinated by DG TAXUD.

Network of Single Window systems linked through international standards





The Single Administrative Document (SAD) and the Single Window

- The SAD substituted for about 200 various forms required by Customs and statistical services in the 18 EC countries that initially started using it.
- By decreasing the number and standardizing the required data, the SAD simplifies the work of traders and customs officers
- The SAD is more and more replaced by EDI
- Currently, the SAD is seen as part of the work for establishing a Single Window in the European Union
- The SAD is adopted by EurAsEC since 1 January 2007



Rec.3: Country code COMMUNAUTÉ EUROPÉENNE ISO, e.g. UZ Rec. 19: Type of transport 1---Rec.9: Currency code, e.g. UZS Rec.16: Location code UN/LOCODE e.g. UZTAS Rec.21: Package code

SAD Context and objectives

The SAD

Cationalizes and reduces dministrative documentation

- Ensures openness in national administrative requirements
- Reduces amount of data
- Standardizes and harmonizes data

SAD standardizes and harmonizes data

- As far as possible use international standards
 - ✓ Country codes (iso alpha 2 codes ISO 3166-derived) (Boxes 15, 17, 21, 34 ...)
 - ✓ Currency codes (box 22 ISO 4217)
 - ✓ Modes of transport (boxes 25 and 26 UN-ECE rec. 28)
 - ✓ Customs offices (box 29, 51 UN LOCODE partially)
 - ✓ Package codes (box 31 UN-ECE rec. 21)
 - ✓ Commodity code (box 33 HS code)
 - ✓ Documents identification (boxes 1, 40, 44, partially 1001 Edifact codes)

SAD standardizes and harmonizes data

- ➤ Use of common codes for as many data elements as possible
 - ✓ Trader identification numbers (boxes 2, 8 ...)
 - ✓ Delivery terms (box 20)
 - ✓ *Nature of transaction (box 24)*
 - ✓ Preference codes (box 36)
 - ✓ Procedure codes (box 37 partially)
 - ✓ *Valuation method code (box 43)*
 - ✓ Special mentions (box 44 partially coded)
 - \checkmark Tax types (box 47)
 - ✓ *Mode of payment (box 47)*













Thanks!

Mario Apostolov **UNECE** Regional Adviser

tel.: +41 22 9171134, fax: +41 22 9170037

e-mail: mario.apostolov@unece.org