Standards in a Digital World
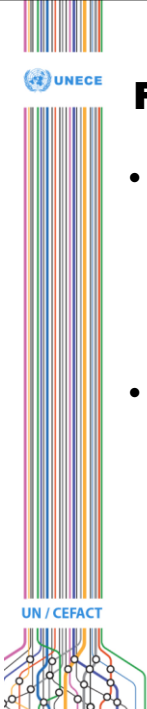
19 April 2019
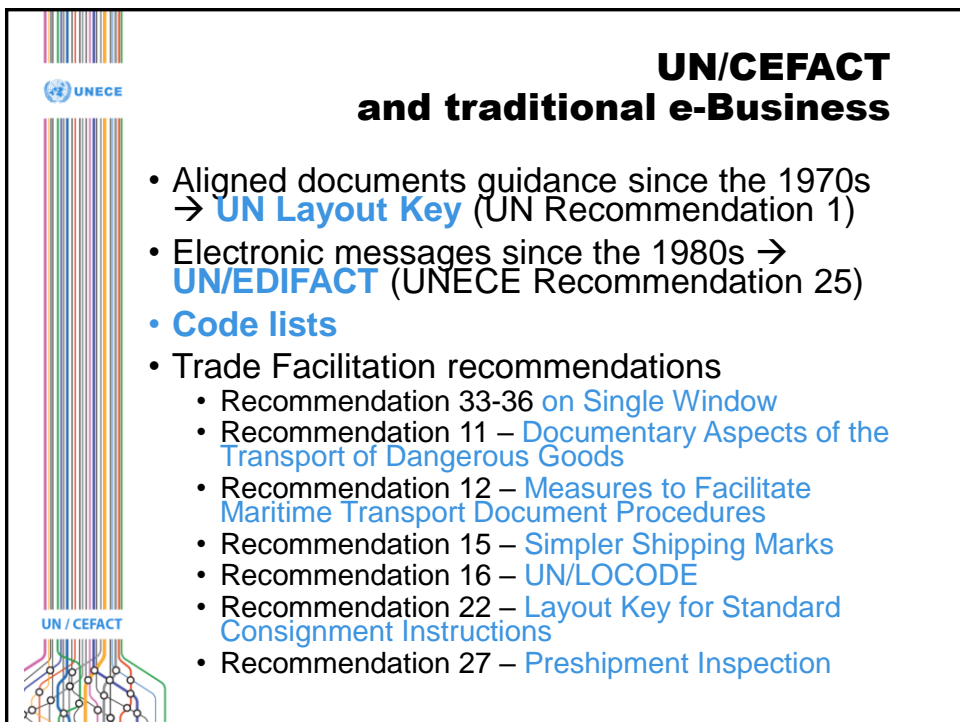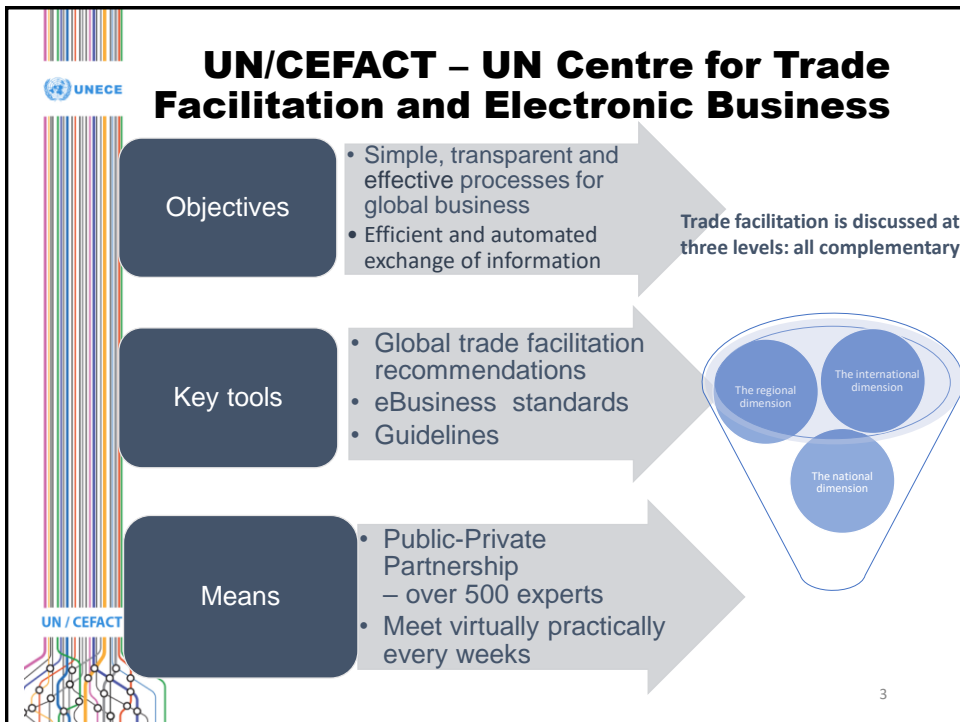Geneva, Palais des Nations

UN/CEFACT vission
http://www.unece.org/cefact

UN/CEFACT – UN Centre for Trade Facilitation and Electronic Business

- UN/CEFACT's mission is to improve the ability of business, trade and administrative organizations, from developed, developing and transitional economies, to exchange products and relevant services effectively.

- Its principal focus is on facilitating national and international transactions, through the simplification and harmonization of processes, procedures and information flows, and so contribute to the growth of global commerce

UN/CEFACT – UN Centre for Trade Facilitation and Electronic Business

Objectives
- Simple, transparent and effective processes for global business
- Efficient and automated exchange of information

Trade facilitation is discussed at three levels: all complementary

Key tools
- Global trade facilitation recommendations
- eBusiness standards
- Guidelines

The regional dimension | The international dimension | The national dimension

Means
- Public-Private Partnership – over 500 experts
- Meet virtually practically every weeks

3

UN/CEFACT and traditional e-Business

- Aligned documents guidance since the 1970s → **UN Layout Key** (UN Recommendation 1)
- Electronic messages since the 1980s → **UN/EDIFACT** (UNECE Recommendation 25)
- **Code lists**
- Trade Facilitation recommendations
  - Recommendation 33-36 on Single Window
  - Recommendation 11 – Documentary Aspects of the Transport of Dangerous Goods
  - Recommendation 12 – Measures to Facilitate Maritime Transport Document Procedures
  - Recommendation 15 – Simpler Shipping Marks
  - Recommendation 16 – UN/LOCODE
  - Recommendation 22 – Layout Key for Standard Consignment Instructions
  - Recommendation 27 – Preshipment Inspection

UN/CEFACT
example of codes

Rec 7
Date Formats

Rec 8
UNIC

Rec 16
UN/Locode

Rec 5
INCOTERMS

Rec 28
Means of Transport

Rec 3
Country Codes

Rec 19
Mode of Transport

Rec 9
Currency Code

Rec 21
Package Codes

Commodity
Code

Rec 15
Shipping Marks

Rec 20 Units of
Measurement

Rec 24
Status Codes

Other EDIFACT
Code Lists

5
5

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Semantic hub

Shipment

A shipment is an identifiable collection of one or more Trade Items (available to be) transported together from the Seller (Original Consignor/Shipper), to the Buyer (Final/Ultimate Consignee):
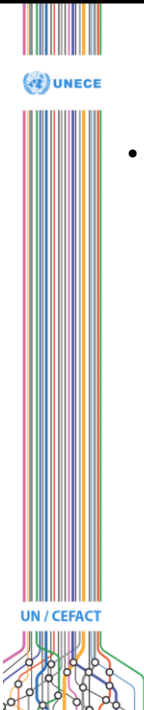
- A Shipment can only be destined for one Buyer
- A Shipment can be made up of some or all Trade Items from one or more Sales Orders
- A Shipment can have only one Customs UCR
- A shipment may form part or all of a Consignment or may be transported in different Consignments.

Consignment

A consignment is a separately identifiable collection of Consignment Items (available to be) transported from one Consignor to one Consignee via one or more modes of transport as specified in one single transport service contractual document:
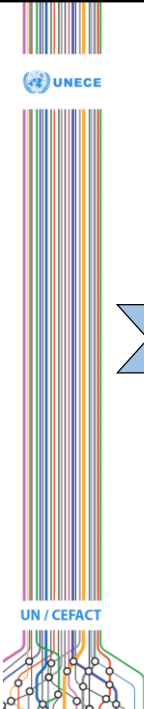
- A Consignment can only have one Transport Service Buyer
- A Consignment can only have one Transport Service Provider
- A Consignment can only have one Consignor
- A Consignment can only have one Consignee
- The Transport Service Buyer can be either the Consignor or the Consignee
- A Consignment is made up of one or more Consignment Items
- A Consignment can be made up of some or all Trade Items (aggregated into Consignment Items) from one or more Shipments
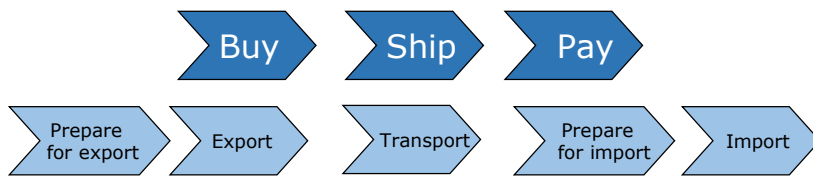
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UN/CEFACT
and UN/EDIFACT

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- UN/EDIFACT Conference
  - Still very much a widely used standard
  - One maritime carrier counts a **double in usage** over the past ten years (100 Million messages in 2008 – 250 Million messages in 2017)
  - Usage in transport of UN/EDIFACT is roughly:
    - 90% of carriers and their agents
    - 95% of terminal operators
    - 80% of port authorities
    - 97% of customs administrations (for maritime arrivals)
    - 40% of road / barge / rail planning
  - The BAPLIE message represents all by itself **35 UN/EDIFACT messages per second** and replaces around 1000 sheets of paper for each container
  - Some freight forwards who were using XML are even adopting UN/EDIFACT in order to have stable, standard messages.

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Buy-Ship-Pay Model

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Buy → Ship → Pay

Prepare for export → Export → Transport → Prepare for import → Import

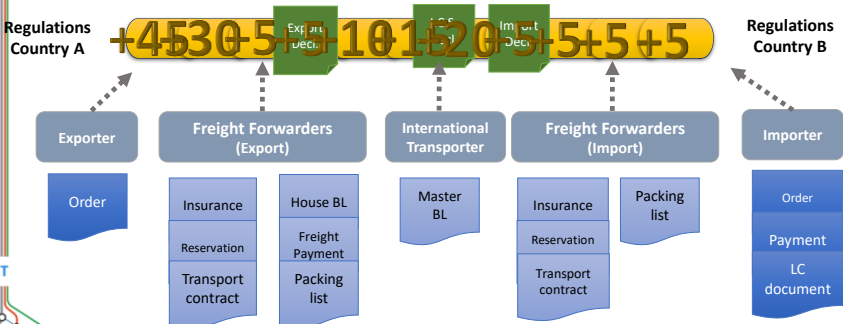| Commercial Procedures	Transport Procedures	Regulatory Procedures	Financial Procedures
•Establish sales contract •Order goods •Advise on delivery •Request payment	•Establish transport contract •Collect, transport and deliver goods •Provide waybills, •Goods receipts, etc.	•Obtain im/export licenses etc. •Provide Customs Declarations •Provide cargo Declarations •Apply security measures •Clear goods	•Provide credit rating •Insurance •Execute payment •Issue statements

What has changed over the last four years?

"In this session you will have the opportunity to hear the views of e-commerce providers, logistics providers, and regulators on how the positive trend in e-commerce has revolutionized their world over the last four years."

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Authorities want better quality data

- Data Pipeline
  - Results from three EU projects (Cassandra, CORE & SELIS).
  - Innovative methodology to recuperate data at the source and thus improve data quality.

Smart Devices are interacting

- **Smart Containers** offer an end-to-end visibility of shipment execution
- Smart containers are capable of sensing and communicating real time information for multimodal transport and logistics improvement.
- Smart containers recording and communicating significant events such as:
    - Arrival at warehouse
    - >1 hour stop on truck
    - Door open
    - >8° C
    - Running late

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**UN/CEFACT
Process driven approach**

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UN/CEFACT evolution

- From Document centric to Process driven artefacts *(Contextualized Business Artefacts)*

- Supports Document centric & Process driven workflows

- Standardized syntax-neutral data exchange structures, based on common Master data exchange structure
(from which complete documents and/or snippets of documents can be created in any chosen syntax e.g. XML, JSON or UN/EDIFACT etc.)

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Reference Data Models

- We did not try to fix the 400 year old road infrastructure in our cities
- We created super highways to support physical movement

- Similarly we have now developed Reference Data Models for defining required Process Driven information flows to be exchanged along super highways for information

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Traditional standards still necessary

- Semantics and predefined code lists are still very important in eCommerce transactions
- The transaction may start on a platform, but will almost always trigger automated transactions which require traditional e-business standards
- Further standards are still required. Proof is in recently developed standards such as
  - **eCMR**
  - **VERMAS**

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Brief conclusion

- Yes, the last four years have brought major evolutions – but not all linked to just eCommerce
  - Blockchain, IoT, Big Data, AI have also contributed
- Even with the growing presence of eCommerce platforms, traditional standards are required
- UN/CEFACT aims to be the semantic hub for standardization in international trade

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UN/CEFACT upcoming meetings

- **31st UN/CEFACT Forum**
  - 23-27 April 2018, Geneva CH
- **Single Window and Electronic Documents conference**
  - 23 April 2018, from 14:00 Salle XXIII
- **Traceability for Sustainable Value Chains conference**
  - 24 April 2018 from 10:00, Salle XXIII
- **Internet of Things conference**
  - 24 April 2018 from 09:30, Salle XXII
- **Blockchain Conference/Workshop**
  - 26 April 2018, from 09:30, Salle XXIII
- **24th UN/CEFACT Plenary**
  - 30 April + 01 May 2018, Geneva CH
- **32nd UN/CEFACT Forum**
  - 15-19 October 2018, Hangzhou, China

Thank you

For more information: http://www.unece.org/cefact

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