

Economic Commission for Europe

United Nations Center for Trade Facilitation  
And Electronic Business (UN/CEFACT)

**Draft Recommendation No. 34**

**Recommendation On Data Rationalization and Standardization  
for International Trade**

**TBG15 Project Number:** XXXX

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## **1. Purpose**

The purpose of this Recommendation is to assist governments and trade in rationalizing and standardizing international trade data required to fulfil all import, export, and transit related regulatory requirements, and to encourage the use of international data exchange standards in this process.

The Recommendation explains the step-by-step process through which national data elements can be rationalized, standardized and linked to a reference data model. It further shows how the reference data model can be used to achieve regional and international agreements on rationalization, standardization and automation of cross border data exchange.

## **2. Background**

In many countries, companies are required to submit to government vast amount of data and documents to comply with international trade regulations. They must also exchange information with suppliers, customers, support agencies, financial institutions, etc. The definitions of the data elements required for these process are often made with little or no coordination among the various government agencies, or indeed among commercial agencies. As a result, companies<sup>1</sup> involved in trade and transport must comply with a variety of data requirements, documents and special forms, requiring the repetitive submission of similar or identical information.

This use of non-standard, country-specific, and agency-specific data is highly inefficient in terms of cost and accuracy for both government and trade. Governments need to maintain and develop agency-specific systems and trade and transport operators must develop and maintain multiple interfaces for these redundant and repetitive reporting requirements. This is also true in the case of non-automated paper-based systems, where traders are required to provide multiple and redundant forms.

The solution to this problem is the rationalization and standardization of data elements required for international trade. This is an iterative process of capturing, defining, analyzing, and reconciling government and business information requirements, and then mapping this rationalized data to international standards. The objective is to eliminate redundancies and duplication with the ultimate goal of defining one standard set of data and messages that traders and transport operators will provide to meet all governmental information requirements related to import, export, and transit. This use of international standards in trade data exchange supports the principles of standardization and transparency set out in Articles VIII and X of the GATT.

This Recommendation details the key elements and tools required to undertake the rationalization and standardization process on the basis of international standards developed by UN/CEFACT.

## **3. Scope**

This Recommendation applies to the national, regional and international rationalization and standardization of data requirements to facilitate the automated exchange of data between government agencies and between trade and government. It is especially relevant for the establishment of a Single Window, where coordination amongst government agencies and between government and trade is essential (see UN/CEFACT Recommendation Number 33, Recommendation and Guidelines on

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<sup>1</sup> Companies include importers, exporters, customs brokers, shipping agents, transport operators, carriers, freight forwarders, and other parties directly involved in the movement of goods.

Establishing a Single Window to enhance the efficient exchange of information between trade and government<sup>2</sup>).

The international standards fundamental to this Recommendation are the data element names, definitions, and codes detailed in the United Nations Trade Data Elements Directory (UNTDDED)<sup>3</sup> - ISO 7372, UN/EDIFACT Directories<sup>4</sup>, UN/CEFACT Core Component Library<sup>5</sup>, and in the respective UN/CEFACT Recommendations<sup>6</sup>.

This Recommendation defines the necessary tools, processes, and procedures based on best practices in countries where data rationalization and standardization have been successfully undertaken.

#### **4. Benefits**

The use of international data and messaging standards in the provision of necessary information to governmental agencies for import, export, and transit transactions will be a major benefit to international trade. It will ensure data compatibility among government reporting requirements and will enable governments to exchange and share information with each other, resulting in further facilitation of trade and transport procedures.

Further, the process of data rationalization generally leads to the discovery of redundancy and duplication of data. As a consequence, the standardization process often results in reduction of overall data requirements. Another benefit is the stability a standard data set provides.

The intent of the data rationalization and standardization process is to identify and define the known maximum set of data that a trader may have to provide. Governments should not require any information outside of the standard data set. It is important to note that most of the data presently required is conditional, based on the mode of transport, type of transaction, and type of cargo. Traders will never be required to submit the entire data set.

#### **5. Environment**

While the focus of this Recommendation is the automated exchange of trade data, the use of internationally harmonized, standardized data is not limited to advanced, electronic systems. The data standards are neutral in their application and use, either electronically or paper.

#### **6. Recommendation**

The United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT), being aware of the lack of rationalization and standardization in data submission to government agencies and between business entities, and the consequent risk of duplication; considering that this leads to increased costs and inefficiencies; being aware that the implementation of a Single Window for International trade is critically dependent on international harmonized and standardized data sets; **recommends that governments and those engaged in the international trade and the movement of goods should:**

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<sup>2</sup> UN/CEFACT Recommendation Number 33, [www.unece.org/cefact/recommendations/rec33/rec33\\_trd352e.pdf](http://www.unece.org/cefact/recommendations/rec33/rec33_trd352e.pdf)

<sup>3</sup> United Nations Trade Data Element Directory (UNTDDED): <http://www.unece.org/trade/untdid/UNTDDED2005.pdf>

<sup>4</sup> UN/EDIFACT Directories: <http://www.unece.org/trade/untdid/welcome.htm>

<sup>5</sup> UN/CEFACT Core Component Library: [http://www.unece.org/cefact/codesfortrade/codes\\_index.htm#ccl](http://www.unece.org/cefact/codesfortrade/codes_index.htm#ccl)

<sup>6</sup> UN/CEFACT list of Trade Facilitation Recommendations: [www.unece.org/cefact/recommendations/rec\\_index.htm](http://www.unece.org/cefact/recommendations/rec_index.htm)

- a) **Prepare a national trade data inventory** of current trade agency data and information requirements from automated systems and forms to cover all requirements for the international procedures related to import, export and transit.
- b) **Consolidate** the national trade data inventory into a **rationalized national data set** according to the principles defined in the accompanying Guidelines.
- c) **Standardize the rationalized national data** set by mapping it to the United Nations Trade Data Element Directory (UNTDDED, ISO 7374)<sup>7</sup>. The **standardized national data** set can be compared with other national data sets to reach regional or international agreements for the simplification of data requirements.
- d) **Map the standardized national data set to a UN/CEFACT Core Component based cross border reference data model** such as the WCO or the UNeDocs data models, thus creating a **national subset of the cross border reference data model**. This national subset can be used to provide harmonized national message specifications for electronic data interchange in UN/EDIFACT or XML format.
- e) **Combine national subsets** of two or more countries into a multilateral subset of the cross border reference data model. This can be used to provide harmonized multilateral message specifications for electronic data interchange in UN/EDIFACT or XML format<sup>8</sup>.

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<sup>7</sup> United Nations Trade Data Element Directory (UNTDDED): <http://www.unece.org/trade/untdid/UNTDDED2005.pdf>

<sup>8</sup> The UN/CEFACT Name and Design Rules provide a method to convert a Core Component Based Data Model into a message into XML syntax.

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**GUIDELINES ON DATA RATIONALIZATION AND STANDARDIZATION FOR  
NATIONAL AND INTERNATIONAL TRADE**

Issued as a complement to UN/CEFACT Recommendation No. 34