Single Window Data Harmonization and Standardization

in the Republic of Macedonia

One of the starting points for the Project Team for the establishment of the Macedonian single window for export/import licenses and quotas - EXIM was to carefully study the UN/CEFACT Recommendation no. 33, *Recommendation and Guidelines on Establishing a Single Window* and the draft Recommendation no. 34, *Recommendations and Guidelines on Single Window Data Harmonization and Standardization*. These two documents were extremely useful for the future activities in this field because they clearly set out the key stages in the process of data harmonization and standardization, as well as the activities necessary for the establishment of a single window.

The first stage in the process of implementation of EXIM was the preparation of a Feasibility Study – a document aimed at capturing the current structure of the processes of issuing of licenses in all participating government institutions (PGIs). Significant part of the Study was devoted to emphasizing the need for harmonization and standardization of data and processes and to recommending the basic steps that should be undertaken in this regard by each individual PGI.

The overall objective of the initiated process of data harmonization was to eliminate the unnecessary overlapping of data that are being exchanged in the licensing process and the cross border trade. The ultimate goal of the process was to define a standardized data set that would in the future be submitted by the businesses to PGIs and that would subsequently be subject to the B2G and G2G data exchange.

The harmonization was carried out by a working group established by the Customs Administration in close cooperation with the coordinators appointed by all PGIs. An expert advice was used by the World Customs Organization and UN/CEFACT.

The process of data harmonization and standardization in Macedonia went through the following stages:

1. **Identification of data from each PGI**

   The working group prepared an Excel questionnaire with around 20 questions aimed at collecting the following information from the PGIs: number of different licenses issued by the respective PGI, type and name of each license, form of the license, legal grounds for the issuing

---

1 United Nations Centre for Trade Facilitation and Electronic Business
of the license, cross-border procedure in which the license is used (import/export/transit), manner of applying for and issuing of the license, who applies for the license, the amount of applicable administrative taxes, etc.

Data was collected through several sessions of interviews with representatives of PGIs. In addition, the working group sought and collected paper copies of all applications for licenses and the actual licenses.

2. Creation of a PGI Data File

All data identified by studying the applications for licenses and the actual licenses were gathered and displayed in a separate Excel sheet in an organized and structured order that clearly indicated which data corresponds to which license and PGI.

3. First-stage harmonization

Next step was a creation of a Draft Data Set based on the data contained in licenses issued by four pilot PGIs that have offices at the border. This set included groups of identified data elements mapped according to the names, description and format provided in the WCO\textsuperscript{2} Data Model (Version 2). In cases of data elements that were matched with more than one term (synonyms), all synonyms were listed and one of them was extracted as an ultimate name for each respective datum. Once completed, this first harmonized data set included 36 harmonized data.

4. Government approval and inclusion of PGIs in the process

The concept followed by the working group during the first-stage harmonization and its results were presented to the Government of Macedonia in the Feasibility Study. The Study also contained a recommendation to proceed with the harmonization process for the remaining PGIs, as well as the steps that should be undertaken in this regard by each PGI. The Government endorsed the continuation of the process.

---

\textsuperscript{2} World Customs Organization
5. Data harmonization in all PGIs

Harmonization was carried out individually for every PGI following the concept applied for the first four PGIs. Data were mostly collected analyzing the license applications and the actual licenses. The final list of data elements for every PGI was finally agreed by the working group and the PGI representatives after a series of consultation meetings. During the process, some data were added and some were eliminated.

6. Standardization

Concurrently to the process of harmonization, all harmonized data elements were mapped in terms of name, description and format with the corresponding standard data in the WCO Data Model, as well as UNTDED³.

7. Standardized Data Set

The harmonization and standardization incorporated 66 export, import and transit licenses issued by 15 PGIs. The final result of the process was the creation of a Standardized Data Set that currently contains 80 harmonized and standardized data elements that are most frequently used in the B2G interaction provided with the currently operative EXIM modules.

The Standardized Data Set is expected to enable more comprehensive data exchange in all future stages of development of EXIM and its integration with other systems. Any new data that will be additionally included in EXIM as result of development of new modules will also be harmonized and standardized.

For all future inquiries, please contact:

Ms. Slavica Kutirov
Project Manager
Customs Administration
of the Republic of Macedonia
slavica.kutirov@customs.gov.mk

---

³ United Nations Trade Data Elements Directory