

Data harmonization and modelling using UN/CEFACT standards and reference data models

UNECE-EEC brainstorming, 18 June 2020
09:00 – 12:00 CET / 10:00 – 13:00 MSK

Report

The UNECE Economic Cooperation and Trade Division (ECTD) and the Eurasian Economic Commission (EEC) co-organized a brainstorming session to exchange experiences and information on latest trends in data harmonization and modelling. Ms. Sue Probert, Chairperson of UN/CEFACT, Mr. Michael Dill, Expert on International Standards, Mr. Lance Thompson, Economic Affairs Officer of the UNECE ECTD, Mr. Mario Apostolov, Regional Adviser of the UNECE ECTD, Mr. Alexander Khotko, Deputy Director of the EEC Department of Information Technologies, Ms. Elena Suslina, Adviser of the EEC Department of Information Technologies, Mr. Serzhan Duisebayev, Chief of the Division of Innovative Customs Technologies of the EEC Department of Customs Regulations and Law Enforcement Practices, as well as by other specialists from both organizations attended the webinar. A total of 20 experts (50% women) took part in the brainstorming from the EEC Departments of Information Technologies; Customs Regulations and Law Enforcement Practices; the EEC advance information section; UNECE secretariat and UN/CEFACT experts.

Mr. Mario Apostolov presented the agenda and goals of the brainstorming session, which followed up on a similar brainstorming in Moscow in April 2020; as well as the role of data standardization in the COVID19 era; data and document standards in transport and logistics. Mr. Lance Thompson, UNECE's secretary of UN/CEFACT, presented the new UN/CEFACT tools for data harmonization and modelling. Ms. Sue Probert, Chair, UN/CEFACT presented UN/CEFACT's Reference Data Models and standards used for electronic document equivalents. Mr. Michael Dill presented the current trends in data and document harmonization and standardization and the work on a set of logistics and transport documents under a UN Development Account (UNDA) project on the UN response to the COVID19 crisis in the area of connectivity, transport and trade. Ms. Elena Suslina from the EEC IT Department presented the current work on data harmonization and modelling in the EAEU. These presentations were followed by a brainstorming discussion to review common challenges and synergies for work on data harmonization and standardization and use of the UN standards

The participants noted that the activities of the EEC, UNECE and UN/CEFACT related to the data modelling and harmonization have much in common. The EEC expressed interest in aligning trade and transport data models developed for the countries of the Eurasian Economic Union with the UN/CEFACT reference data models (RDMs) to ensure interoperability. The EEC's Data Model covers not only foreign trade, but also information in the areas of health, finance and social policies. Ms. Sue Probert noted that in the process of data harmonization it is important to harmonize models of interaction and implementation rules.

Mr. Michael Dill noted the importance of aligning data models, such as the one of the EEC to international standards and reference data models, and UN/CEFACT's semantic standards and RDMs offered the best common denominator for such work. He noted that the EEC could gain substantial benefits from working on the alignment of its DM to the international standards. He even offered to help with the data mapping of the EEC DM to the UN/CEFACT RDMs. The EEC representatives noted that their data model is developed in the Russian language (only class names are in English). To achieve better alignment between those data models, UNECE may explore possibilities for translating the UNECE CCL and RDMs into Russian. To further the work on alignment, UN/CEFACT proposed to organize a presentation of its mapping methodology for illustrative purposes to be discussed at the next brainstorming session. Ms Probert and Ms Suslina noted that their methods of data mapping and alignment were very close.

Mr. Lance Thompson explained that UN/CEFACT aims to make a global end-to-end data model covering all sectors and covering the needs of all countries. He invited the experts from the EEC to join the development work within UN/CEFACT in order to ensure that all of their needs are fully covered in the international standard. This will help to make the UN/CEFACT models more robust and assist all stakeholders in adopting an international standard that can comply with the requirements of the EEC.

Participants from both organizations unanimously confirmed that the expansion of COVID-19 and consecutive lockdowns have paradoxically offered a window of opportunity to advance the harmonization of data standards across countries and regions and promote their further alignment to international standards developed in such fora as UN/CEFACT.

Mr. Serzhan Duisebayev noted that the EEC Customs regulation department is working on a standard data set for use in the Single Window projects around the EAEU. Mr. Alexey Gavrichev, working on advance information in the EEC noted that his team works on the implementation of UN/CEFACT and other international standards in the development of electronic data and document exchange

Mr. Alexander Khotko, Ms. Sue Probert and Mr. Mario Apostolov summarized the results of the session as follows, noting areas where synergies can be developed:

- Continue cooperation in the form of similar brainstorming sessions on data harmonization and modelling and further standardization (timing and topics to be determined); It will be necessary to know the participants and their level of technicality well in advance, in order to adapt the presentations depending on this information;
- Other sections in the EEC, dealing with Customs regulation and advance information, stated their request for similar brainstorming sessions on their topics;
- Explore possibilities for cooperation between UN/CEFACT and EEC on (a) participation of EEC experts in the UN/CEFACT development work (in compliance with WTO TFA art.10.3) and (b) mapping the EEC Data Model to the UN/CEFACT standards and RDMs;
- Explore possibilities to translate the CCL into Russian.
- Cooperate with EEC on the new standards for electronic document-equivalents (for transport, logistics and trade) under the UNDA COVID-19 response project. Mr. Alexander Khotko expressed willingness to review and analyse these standards. UNECE can provide reference materials to the eCMR standards as a first project within this cooperation. EEC may cooperate in this project and the development of aligned electronic document equivalents for transport and logistics documents.