

DATA TALKS DECEMBER 2017: STANDARDISATION & HARMONISATION

The session on standardisation and harmonisation started with opening remarks by Barbara Rosen Jacobson, Programme Manager at DiploFoundation and the Geneva Internet Platform (GIP), who reminded the audience about the growing relevance of harmonisation and standardisation for the global demand of data at a global stage, particularly in relation to monitoring the sustainable development goals (SDGs).

Ms Helen Ross, Associate Information Management Officer at the United Nations Economic Commission for Europe (UNECE), explained that data harmonisation is central to the work of the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT). She stated that the current objective of standardisation is to develop standards that are simple and transparent, and to develop effective processes for global business through public-private partnerships.

She illustrated the characteristics of the current semantic model used by UNECE. Based on the principles of harmonisation, standardisation, and simplification, this model aims at synchronising the syntax of data exchanges. The benefits of this model include standardised syntax-neutral data exchange structures, the presence of a common 'master' for a data exchange structure of the semantic model, and the possibility for the efficient reuse of data within the 'buy-ship-pay' domain model. Such a supply chain reference model comprises five stages: preparation for the export, export, transport, preparation for the import, and import. The process that includes these stages takes into consideration four steps: capturing the entries, their definition, their analysis, and last, reconciliation. She concluded by pointing out that efforts to achieve the standardisation and harmonisation of syntaxes encounter not only technical obstacles, but that they are also highly dependent on political will.

Mr Tommaso Abrate, Scientific Officer at the World Meteorological Organisation (WMO) stressed the importance of ensuring the quality and the availability of data in the work of the organisation, as well as the compatibility and comparability of data. That is why, for example, the WMO has set standard times for surface synoptic observation. He then noted that standards are beneficial for different purposes. For example, through standardisation and harmonisation, it is easier to ensure the quality of data, to favour data exchange, to allow for comparability, and to better understand uncertainty.

As an organisation, the WMO has a standard-setting mandate. Standards are developed through the consensus of global experts, resulting in standards that are easy to use, complete, and unambiguous. The WMO develops two kinds of regulations: on the one hand, it creates mandatory standards that member states must need to implement, while on the other hand, it produces guidelines on recommended practices and procedures whose implementation is deemed desirable but not mandatory. In addition, Abrate mentioned that there are opportunities related to assimilating citizen observation – collaborating with the general public on data collection and interpretation – into traditional water management practices. He pointed out that there will be a need to elaborate relevant standards to ensure the quality of the resulting products.

Dr Joy Kim, Programme Officer at the United Nations Environmental Programme (UNEP), addressed the challenges of data harmonisation in relation to the 2030 Sustainable Development Agenda. UNEP's approach to data collection and comparability is three-fold. First, UNEP is developing the methodology for 26 SDG indicators (mainly related to water, sustainable consumption and production, oceans, and biodiversity) and is responsible for compiling and reporting data to the UN Secretary General's SDG report. This data is first collected at a national level and then reported to the UN agencies that are responsible for the indicator in question. These agencies then take care of the harmonisation and international comparability of the indicator data. After its harmonisation, the data is stored in the SDG global database, which is maintained by United Nations Statistics Division (UNSD).

Second, UNEP is working to ensure that the SDG indicator and information are properly analysed and easily readable by the public, using the Environment Live platform. Data visualisation tools, including maps, charts, and other graphics, help users to understand and use the environmental data. Third, UNEP attempts to build and strengthen environmental statistical capacity at the national level in relevant institutions such as ministries of environment and national statistics offices.

Ms Anna Zinecker, Policy Advisor at the International Institute for Sustainable Development (IISD), zoomed in on the challenge of data standardisation and harmonisation for monitoring goal 12, which tackles the use of fossil fuel subsidies. The main challenge is to coherently measure progress on this goal, as there

are different approaches to the evaluation of fossil fuel subsidies. In addition, there is often a lack of transparency about how each country calculates the subsidies.

She also explained the existing challenges related to comparability of results among countries and the replicability of data. In particular, she drew the attention to existing challenges such as the need for the adoption of a widely accepted definition of fossil fuel subsidies; the difficulty of providing guidance and monitoring; the lack of availability of some data at the national level; and, finally, and the challenge that results are often calculated by a combination of different methods.

Ms Olta Ndoja, Data Analyst at the International Federation of the Red Cross (IFRC), illustrated the Federation's Data Bank and Reporting System. She outlined the challenges characterising the data collection process in a context where data is disseminated both locally and nationally. In particular, she drew attention to the difficulty of dealing with the heterogeneity of data among the different Red Cross national societies. The operational context and structure in which data is collected are important for ensuring its quality – good data collection is highly dependent on the different sections' access to technology, on their size, and on the resources available. The framework regulating the collection of data (and its improvement) is characterised by different factors including the availability of data, the adjustment of this data, the development of data capacity, and assistance with handling data.

The discussion then developed around common elements that can be shared among organisations, in particular on the mechanisms that can be implemented to relieve the burden of reporting from small developing countries.

First, the distinction between data and information was considered. Analysis of quality and contextual information play a crucial role in the interplay between developing recommendations and setting standards. All of the speakers agreed that when more data is requested and resources are lacking, the solution is to implement a regional approach. Abrate reaffirmed that information provides the essential contextual element that contributes to make data easily and quickly understandable to policymakers. Although there is a realistic concern regarding capacity of small state islands (for example) to carry out data collection and reporting, this could be solved with a regional approach, e.g. taking advantage of regional centres of excellence. Moreover, Dr Joy Kim highlighted that 'silo-thinking' is one of the biggest obstacles to achieving timely capacity building efforts. For example, as a commonly-agreed definition of subsidies does not exist, it is difficult to conceive and implement standardised solutions.

