

WEBINAR

Data transmission and regional reporting

Task Team on Data Transmission (TTDT)

Miriam Blumers (Destatis, Germany)



Data transmission and regional reporting



TTDT Work and Output to support SDG reporting




D Set up an **information portal on Data Transmission technologies and tools on UNECE Wiki to share what we learn**

statswiki.unece.org/display/SFSDG/ -> SG -> TTDT



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Task Team on Data Transmission

Angelegt von Stela Derivolcov, zuletzt geändert vor etwa 14 Stunden

Aim and scope

The task team will aim to facilitate SDG data transmission through exchanging knowledge and experiences on the application of transmission standards (such as SDMX) and transmission methods and similar tools (such as APIs) that make automatization of data transmission possible.

The task team will focus on data transmission techniques and tools. It will take into account the context of data transmission (national reporting platforms or data flow relationships between countries and agencies ie the 'nodes' of data flow) if necessary, but will not focus on it.

TASK TEAM OUTPUTS AND RESOURCES

[i Case Studies](#)
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EXTERNAL RESOURCES

[IAEG-SDG Working Group on SDMX](#)

[SDMX-SDGs Working Group 2019 Progress and Plans for 2020](#)

[SDMX Global Conference 2019](#)

[SDMX implementation-status OECD countries](#)

[SDMX IT building blocks](#)

[Eurostat's SDMX Converter](#)

[ILO's SMART tool](#)

[Eurostat's SDMX Reference Infrastructure](#)

[OpenAPI Specification](#)


[González Morales & Orrell \(2018\): Data Interoperability: a Practitioner's Guide to Joining to joining up data in the development sector](#)

TTDT ADMIN

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[WEBEX meeting - 11 November](#)

HIGHLIGHTING



Using SDMX or APIs?
Share your experience by writing a case study.
If you wish to contribute please contact
Ann Corp ann.corp@ons.gov.uk or Miriam Blumers
miriam.blumers@destatis.de

Stela Derivolcov gefällt das.

[sdmx](#) [apis](#) [data-transmission](#) [sdgs](#)

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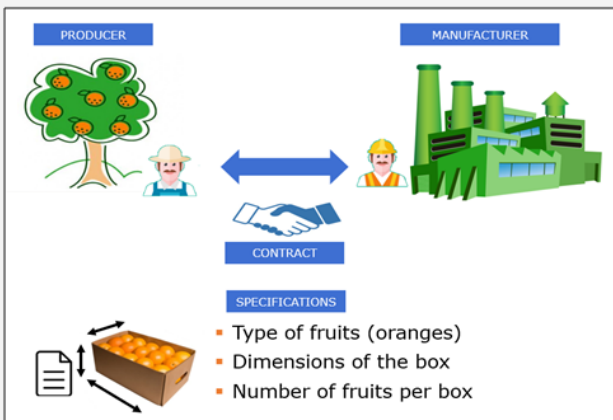
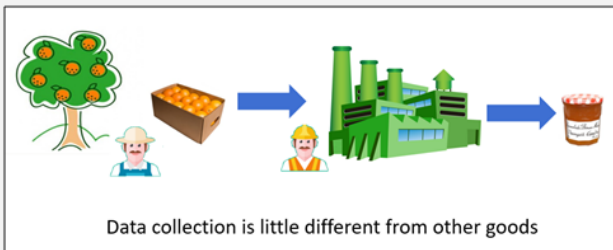
2. 2. 2. 2. 1. 1. FAQ

Erstellt von Stela Derivolcov, zuletzt geändert von Miriam Blumers am 01 Apr, 2020

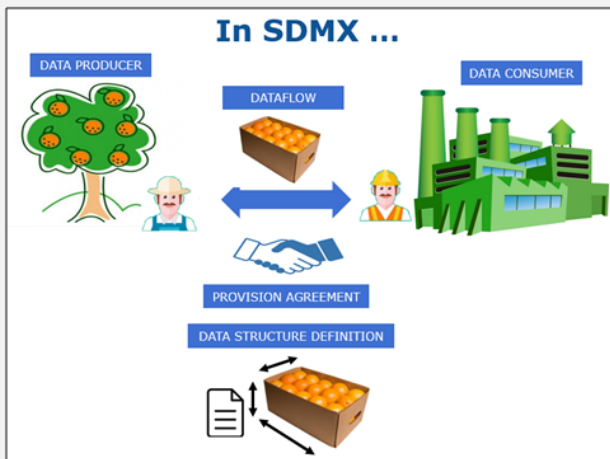
What is SDMX?

Statistical Data and Metadata eXchange (SDMX) is a set of technical standards and statistical guidelines which aim to standardise data and metadata exchange. Like other similar standards, SDMX allows for data to be exchanged consistently between different software and systems. SDMX is sponsored by seven international organisations.

EXPLAINER: Data collection via SDMX



In SDMX ...



Source: based on Eurostat's SDMX Basics course, PPT by Edward Cook, own adations

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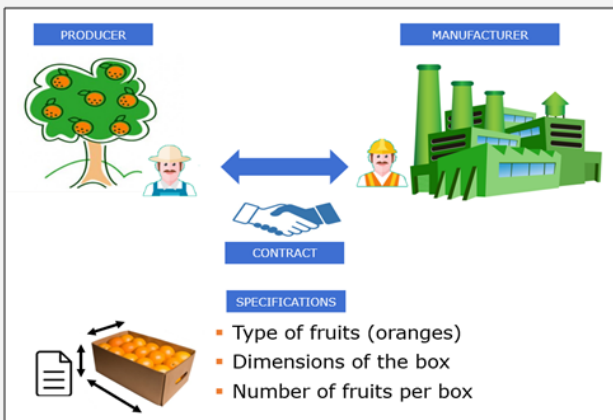
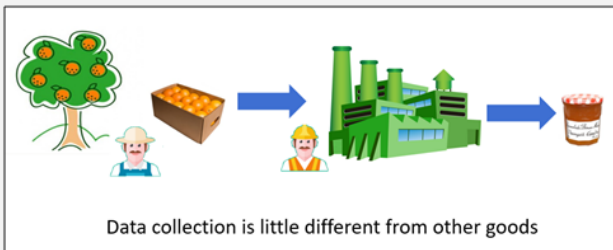
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EXPLAINER: Data collection via SDMX



> What is a DSD?

> What is a MSD?

> How can I convert my SDG data into SDMX format?

> What is an API?

> What are potential applications and benefits of APIs for reporting on SDG indicators?

> What can be gained from data interoperability in general?

> What are requirements for data interoperability?

> What are potential trade-offs of data interoperability?

> How does the data exchange take place?

Source: based on Eurostat's SDMX Basics course, PPT by Edward Cook, own adations

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- D Set up an **information portal** on Data Transmission technologies and tools on UNECE Wiki to share what we learn**
- D Gather experiences on data transmission technologies through **case studies****

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Case Studies

Angelegt von Stela Derivolkov, zuletzt geändert vor etwa 14 Stunden



miriam.blumers@destatis.de

UK SDMX Case Study

Case Studies currently in preparation by Belarus and Kyrgyzstan

An application of APIs can also be found in IRELANDs using python example

If you wish to contribute a case study please contact Ann Corp ann.corp@ons.gov.uk or Miriam Blumers

▼ What is this section for?

The case studies offer various examples of application of transmission standards (such as SDMX) and transmission methods and similar tools (such as APIs) that make automatization of data transmission possible at global, regional and national levels.

▼ What is a "case study"?

- Presentation of different types of standards and tools and implementation of such standards and tools for automating SDG data transfer and retrieval;
- Presentation of different types of business architecture solutions depending on the use of standard/tool;

[sdmx](#) [apis](#) [sdgs](#) [data-transmission](#)

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Case Studies

Angelegt von Stela Derivolcov, zuletzt geändert von



miriam.blumers@destatis.de

UK SDMX Case Study

Erstellt von Lucy William, zuletzt geändert von Ann Corp am 22 Nov, 2019

Why are you implementing SDMX?

Part of the SDMX-SDGs project is to establish data exchange between countries and the global SDG platform.

In order for our data to be exchanged with the global SDG platform we need to prepare the data so that it's in the correct format.

Implementing SDMX also means that our data can be exchanged with other potential users such as custodian agencies who have SDMX functionality.

What process did you follow to implement SDMX?

One of the first steps we took was to prepare our SDG indicator data files so that they can be converted in to SDMX format:

- The first thing we noticed is that our data was missing some attribute fields required by the SDG-DSD: unit multiplier, unit measure and observation status. These attributes can be set during the conversion process but in order to convert the files in an automated process, this data needed to be available in the files.
- After going through just a few of our indicator files, it was apparent that the same disaggregation names and breakdown names hadn't been used throughout all indicators. For example, in some indicators there may have been an 'Age' column while in other indicators there may have been an 'Age group' column. Similarly, in some indicators within that column there may have been a breakdown called '17 and under' while in other indicators the same breakdown may have been called 'Under 18'. Even though, having our breakdowns named differently from what they are called in the DSD, it is important that the same names are used throughout indicators in order to be able to create a 1:1 mapping to the DSD. Therefore, the next step we took was to standardise names throughout indicators.

What resources were needed?

What guidance did you use?

Some of the documentation used included the tutorials provided by Eurostat which are more user friendly for non-technical users.

What tools did you use?

The thing that helped most with understanding how SDMX works was ILOSTAT's SMART tool and their DSD Constructor. Using these tools along with the DSD provided by UNSD and one of the UK's indicator CSV files, it was possible to see how to create SDMX files. Going forward, we will use the DSD Constructor to customise the DSD for our national needs, but we hope to automate the conversion process within the Open SDG platform. For this automation, we have considered using Eurostat's SDMX Converter Web Service.

What skills were required?

As no one in our UK ONS SDG team had any previous experience of SDMX, we spent some time learning about SDMX in general and how the different artefacts e.g. DSD, code lists, concepts, etc. worked together. As more information about the data was required, we needed someone who knew about the different datasets to populate some of the extra columns. Some technical skills were also required as there are a variety of tools available which have slightly complex processes, and as we have been trying to automate some of the processes which involves the use of programming languages.

What lessons did you learn?

When we started implementing SDMX, we were already reporting data for about 70% of the indicators so adding new columns, populating these new columns and standardising disaggregations and breakdowns was time-consuming. As the new columns are required by the SDG-DSD, we couldn't avoid adding them whereas we could have avoided having to standardise names. This emphasises the importance of using some sort of standardisation right from the beginning when reporting data, even if it isn't a formal standard such as SDMX.

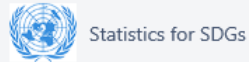
We have carried out some comparisons between our data and the global SDG-DSD and found that we have some breakdowns that don't map exactly. Even though the global SDG-DSD will be customised for our national needs, we need to have further discussions with data providers and topic experts to explore how we map our data. For example if the definition of a breakdown differs slightly from the breakdown which is asked for, we need to explore whether we should create a new breakdown in our customised DSD or make this difference clear in the metadata.

TTDT Work and Output to support SDG reporting



- D Set up an **information portal** on Data Transmission technologies and tools on UNECE Wiki to share what we learn**
- D Gather experiences on data transmission technologies through **case studies****
- D Analysis of user needs via **user stories** to identify prerequisites of data transmission**

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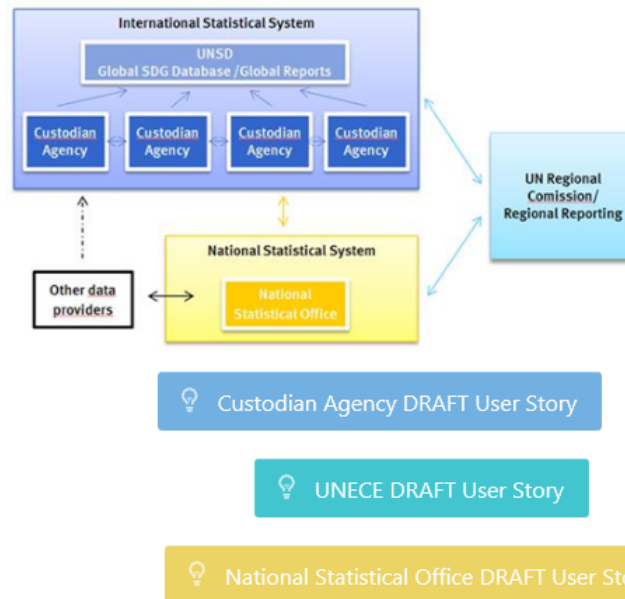
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User Stories

Angelegt von Miriam Blumers, zuletzt geändert am 21 Apr, 2020

User stories can help to better understand the needs of the actors involved in data transmission and hence better understand tools and their configurations needed for data transmission.



▼ What are user stories?

A user story is a short description of specific requirements of a service by a certain user. They are used for example in agile software development. They're usually written in the format:

As a... [who is the user?]

I need/want/expect to... [what does the user want to do?]

So that... [why does the user want to do this?]

▼ How do I write a user stories?

Writing a user story is an iterative process. It starts with writing a general user story which is then split into smaller stories.

More information can be found in the manual on [Writing user stories](#).

If you wish to contribute please contact Ann Corp ann.corp@ons.gov.uk or Miriam Blumers miriam.blumers@destatis.de

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```
graph TD
    subgraph ISS [International Statistical System]
        subgraph UNSD [UNSD Global SDG Database / Global Reports]
            direction LR
            C1[Custodian Agency]
            C2[Custodian Agency]
            C3[Custodian Agency]
            C4[Custodian Agency]
        end
    end
    OP[Other data providers] --> NSO[National Statistical Office]
    NSO <--> C1
    NSO <--> C2
    NSO <--> C3
    NSO <--> C4
    C1 <--> C2
    C2 <--> C3
    C3 <--> C4
    C1 <--> UNRC[UN Regional Commission / Regional Reporting]
    C2 <--> UNRC
    C3 <--> UNRC
    C4 <--> UNRC
```

💡 Custodian Agency DRAFT User Story

💡 UNECE DRAFT User Story

💡 National Statistical Office DRAFT User Story

If you wish to contribute please contact Ann Corp ann.corp@ons.gov.uk or Miriam Blumers miriam.blumers@destatis.de

National Statistical Office user story – DRAFT iteration 1

This user story is an early draft. Feedback is very welcome!

Please see .gov.uk service standard user manual on [Writing user stories](#) for more information on this approach.

Epic level user story

As a National Statistics Office (NSO)

I need obtain country SDG global indicator data

So that I can provide and/or coordinate data flows of country SDG indicator data to Custodian Agencies

Detailed user stories

Country data specifications

As a National Statistics Office (NSO)

I need clear, stable, concise and comprehensive specifications on what country data is needed

So that I can provide the right data to Custodian Agencies

Any specification must contain: Metadata template

As a National Statistics Office (NSO)

I need easily accessible country data specifications

So that I can quickly find information on what data is required

As a National Statistics Office (NSO)

I need the country data specification available in official UN languages

So that I do not have to spend time interpreting its content

As a National Statistics Office (NSO)

I need country data specifications to be in machine-readable format

So that I can easily access and automate obtaining this information

WILLING TO CONTRIBUTE ?



D Using SDMX or APIs?
Share your experience by writing a case study.

D Want to refine user needs and goals?
Don't agree with them?
Contribute by commenting.

Please contact:

Ann Corp ann.corp@ons.gov.uk

Miriam Blumers miriam.blumers@destatis.de

Thank you!

28.04.2020



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