Why We Need Data Product Specifications (DPS)

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(JICA Expert)

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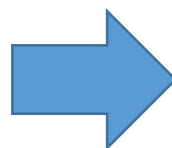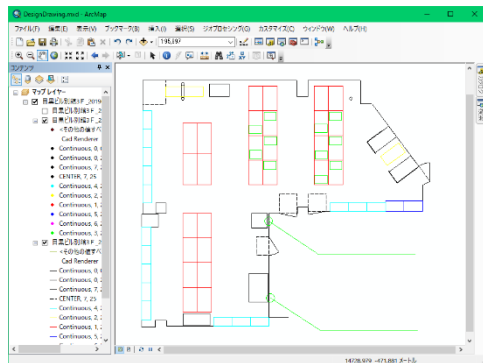
Data Product Specification

detailed description of a dataset or dataset series together with additional information that will enable it to be **created**, **supplied to** and **used by another party**.

Role of DPS 1: Design drawing of the data

Design drawing of building
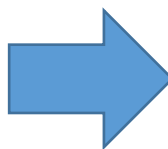(by Architect)

Construction of building
(by Constructor)

Data Product Specifications
(by Responsible Organization)

Descriptions on;
Theme / purpose of the data,
Data content and structure,
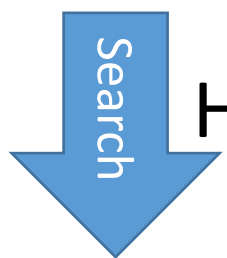Required quality criteria,
Rules of metadata,
etc.

How the data should be

Creation of data
(by Data creator)

Role of DPS 2: Guide for another party

User's Request
  Theme, Area, Features, Attributes, Scale, Data quality, …

Search ⬇ How to Identify

Refer ⬇ How to Use

Metadata

Data Product Specifications
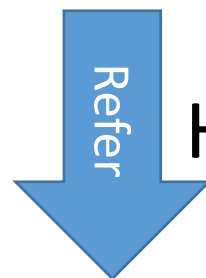
Items on;
  Theme / purpose of the data,
  Responsible organization,
  Spatial / temporal Extent,
  Results of data quality evaluations,
  etc.

⬅ Connected ➡

Descriptions on;
  Theme / purpose of the data,
  Data content and structure,
  Required quality criteria,
  Rules of metadata,
  etc.

**Brief information on
how the data actually is**

**More detail information
with informal descriptions**

DPS Creation for the Existing Data

Role of DPS 1: Design drawing of the data
You can use the DPS as an **instruction document** when the data is **updated**.

Role of DPS 2: Guide for another party
User's manual for data utilization

Role of DPS 3: Facilitate the coordination
Easy to compare the same thematic data created by multiple organizations (extent, contents, quality, additional information, etc.)

Patterns of DPS Creation

1. Creation of a new DPS based on the guidelines
   Create a new DPS in accordance with the guidelines for DPS.

2. Creation of a new DPS based on the standard / similar DPS
   Partially modify a standardized or similar category's DPS. Also refer the guidelines for DPS.

3. Creation of the DPS and data simultaneously
   Prepare a set of geographic data and the DPS simultaneously. Also refer the guidelines for DPS.
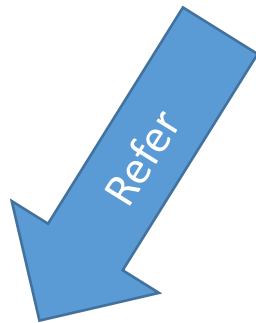
General Structure of DPS (ISO 19131)

1. Overview (including informal descriptions)
2. Specification scopes
3. Data product identification
4. Data content and structure (Data Catalogue)
5. Reference systems (Spatial / Temporal)
6. <u>Data quality</u>
7. Data product delivery
8. <u>Metadata</u>
9. Others (additional information)

Refer the **<u>Guidelines for Data Product Specifications (DRAFT)</u>** for each content.
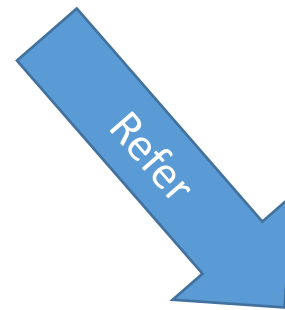
Guidelines for Data Product Specifications
Rules of how to develop the DPS

Refer

Refer

Guidelines for Metadata
Mandatory items,
Optional Items,
etc.

Guidelines for Data Quality
Categories of data quality,
How to evaluate the data
quality, etc.

(DRAFT) Work Schedule of DPS Preparation

As of June 2020 — Need to be updated

Year/Month / Items		Expected effects	Original period (2 years: from August 2019)															Extended period (6 months)					2022
			2020							2021													2022
			6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1
Events	WGMs Meeting	Consensus building on the project among WGMs.			★4th (Web)		★5th		★6th		★7th		★8th		★9th		★10th		★11th			★12th
	Training / In-country WS	Confirm the importance on standardizations for NSDI						★Half-day 2nd				★ 5 days WS			★WS for Standardization							
	Open Seminar	Appeal the NSDI to all stakeholders																★NSDI Open Seminar				
MoD	NSDI Policy	All stakeholders can promote and utilize the NSDI based on the policy.																				
	Planning (short, mid & long-term)	Share the necessary steps to promote and utilize the NSDI.							Prepare draft plan with SoB	Discussion, authorization & revision by JCC/PSC												
SoB	Review the draft guidelines for DPS, Data quality and Metadata	SoB understands the standardization for NSDI.																				
	Support WGMs' DPS preparation with the consultant and J/E	SoB takes the leadership to promote the preparation of WGMs' DPS with the consultant and J/E.																				
WGMs	Prepare DPS by each WGM based on the guidelines	WGMs can share each other the detail information of the data through their DPS.																				
	Update the draft guidelines based on the preparation of the DPS	WGMs understands the guidelines. WGMs appeal the guidelines at the Open Seminar.																				
JPN Expert	Prepare the DRAFT Guidelines for DPS, Data quality and Metadata	WGMs can prepare their DPS based on the guidelines.																				
	Support SoB and WGMs' activities	SoB and WGMs obtain the support from the J/E for their activities.	Remote work in Japan				J/E are dispatched periodically to support activities of SoB, WGMs with the consultant.															
	Prepare and implement the bid for the consultant	Assign the consultant to support the WGMs for preparation of their DPS.																				
Consultant	Support the preparation of DPS by WGMs	WGMs obtain the support from the consultant for preparation of their DPS.																				