OPEN DEI TASK FORCE 1 ITERATION 2. BUILDING BLOCKS ASSESSMENT

OPEN DEI BB survey introduction

This building blocks survey aims to evaluate building blocks of data spaces and their harmonization.

To achieve this, we created a questionnaire in Google forms to allow projects, companies and data spaces to identify and describe their implementations. Which technologies and solutions were used or instantiated? Can you briefly explain how this technology was implemented (we call it reference implementation)? If you have implemented a business use case, then we would appreciate it if you could explain it. Furthermore, we would like to know the best practices and recommendations that you acquired by implementing this technology and if there is anything that is missing or needs further development that we should know. If you are part of a data space project or initiative and would like to contribute to the harmonization of data spaces, please provide your feedback in the appropriate questionnaire.

All this information will be part of three workshops we will organize.

We invite you to attend the following meetings:

- **OPEN DEI TF1-IT2 KOM – 30th June 14:00 – 15:00** (GMT+2) – Registration on this link
- BB assessment 1st meeting – 21st July 14:00 – 15:30 (GMT+2) – Registration on this link
- BB assessment 2nd meeting – 1st September 14:00 – 15:30 – Registration on this link
- OPEN DEI TF1-IT2 Webinar – 16th September (*tbc*)

During these workshops experts and contributors will review the building blocks based on their experience and the information from the survey to redefine the building blocks, identify technologies and solutions for them and explain reference implementations.

All of these findings from the workshops will be incorporated into an OPEN DEI BB assessment report that will be public available. Additionally, all the contributions from the survey participants will be published in a building blocks catalogue on GitHub under the International Data Space GitHub (https://github.com/International-Data-Spaces-Association/idsa).

Guidelines to fulfil the survey

Go to OPEN DEI TF1 – IT2 building blocks assessment survey: https://forms.office.com/r/Et9EL4FQyw

Please, first identify your project, company or data space.

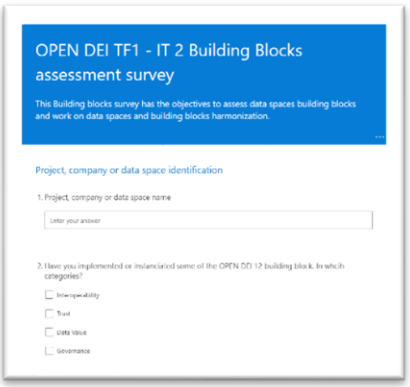
Per each building block that your project has contributed with a technology or solution development or a reference implementation. Please, provide the following feedback:

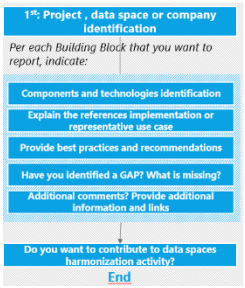
1. Identify the building block.
2. Components and technologies identification.
3. Explain the references implementation or representative business use case.
4. Provide best practices and recommendations.
5. Have you identified a GAP? What is missing?
6. Additional comments? Provide additional information and links.

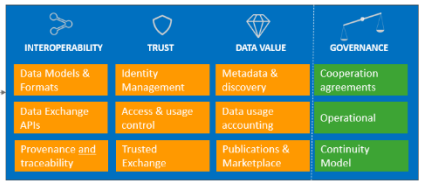
Finally, you can contribute to the harmonization of data spaces activity contributing to fulfil the corresponding questionnaire.

If you have comments or questions, please contact silvia.castellvi@internationaldataspaces.org

NOTE: finalize the building blocks reporting before you fulfil the harmonization of data space activity survey.



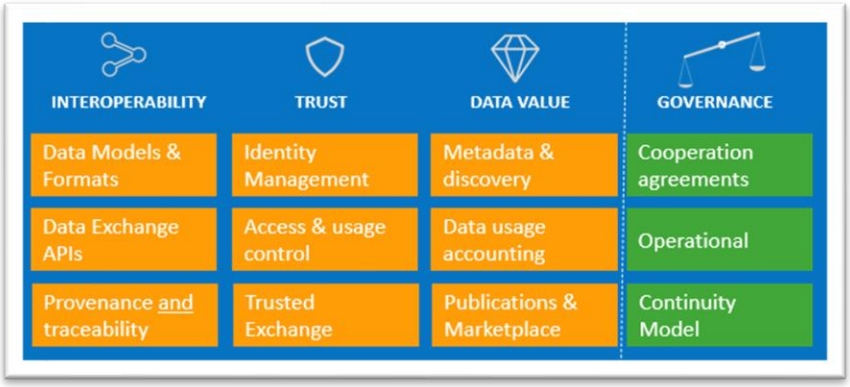




Do you want to know more about OPEN DEI building blocks?

Building blocks introduction based on design principles position paper, if you want to read the complete description of building blocks go to the https://design-principles-for-data-spaces.org/ webpage to download the position paper and read chapter2. Building blocks.

Chapter 2 defines common building blocks of data spaces from multiple angles. This includes technical/technological, business, and organisational/operational building blocks.



The different building blocks can be specified and developed independently of each other. When doing so, existing norms, standards, and best practices should be used to ensure cohesion of building blocks. Each data space solution can integrate multiple building blocks, as long as they are in line with data space reference architectures (e.g., the IDS Reference Architecture Model). The building blocks presented in this chapter are core elements of any data space. As such, they can be considered sector-agnostic. Hence, the building blocks presented in this chapter are not exhaustive, but rather indicative of the elements of a data space. In general, each building block consists of reusable, generic components (i.e. which can be used across domains and industries) and more specific components (i.e. to meet requirements and regulations that are specific for certain industries, domains, or even concrete use cases). This allows individual participants to join different data spaces, use data in multiple contexts and scenarios, and be part of multiple data value chains.

Interoperability building blocks

These building blocks should be deployed by all data providers and data consumers participating in a data space. This way, each data provider can be sure that any data published can be technically consumed by any data consumer entitled to do so, while each data consumer can be sure they are able to technically access and use any data made available by any data provider selected. The following building blocks belong to this category:

- Data Models and Formats
- Data Exchange APIs
- Data Provenance and Traceability

Data sovereignty and trust Building Blocks

These building blocks regaining control over their data, and as data becomes portable between providers on a user-controlled consent basis. Users can switch between providers without losing their data and vendor lock-in will become a phenomenon of the past. For participants in data spaces, data sovereignty means two things: 1) benefit from enhanced possibilities to view, process, manage, and secure their data, and 2) stay in control over their data when making it accessible to other parties. The building blocks that provides data sovereignty and trust are:

- Identity Management (IM)
- Access and Usage Control/Policies
- Trusted Exchange

Data Value Building Blocks

These building blocks cover aspects such as publication of data offerings, discovery of such offerings based on metadata, and data access/usage accounting, which are essential to handle data as an economic asset. The building blocks that provide data value are:

- Metadata and Discovery Protocol
- Data usage accounting
- Publications & Marketplace

Governance Building Blocks

The building blocks subsumed under this category refer to business, operational and organisational agreements among data spaces participants. These agreements are enforced through legal frameworks participants have to adhere to, or via technical building blocks.

Business agreements comprise operational service level agreement (SLA), accounting scheme, smart contract, data usage and access control policies. The **operational building blocks** regulate policies that need to be enforced during data space operation. Finally, the **organisational agreements** comprise terms and conditions regarding governance bodies and procedures established for a data space. IDSA rulebook provides a guideline for implementing operational and organizational agreements on IDSA based data space.