

New version of the DSSC Blueprint

The Building Blocks you need

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Why a Blueprint for Data Spaces?

Take-off &
get to a higher flight level



Faster

Protect your investment



Future proof

Achieve synergies between
data spaces



Federations

Evolution



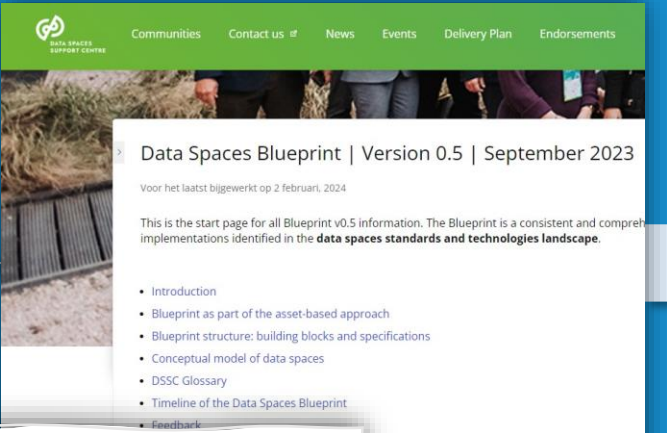
DESIGN PRINCIPLES FOR DATA SPACES




DATA SPACES SUPPORT CENTRE

Version 1.0 | March 2023

Starter Kit for Data Space Designers

DATA SPACES SUPPORT CENTRE

Communities Contact us News Events Delivery Plan Endorsements

Data Spaces Blueprint | Version 0.5 | September 2023

Voor het laatst bijgewerkt op 2 februari, 2024

This is the start page for all Blueprint v0.5 information. The Blueprint is a consistent and comprehensive set of implementations identified in the **data spaces standards and technologies landscape**.

- Introduction
- Blueprint as part of the asset-based approach
- Blueprint structure: building blocks and specifications
- Conceptual model of data spaces
- DSSC Glossary
- Timeline of the Data Spaces Blueprint
- Feedback



Organisational and Business Building Blocks

Business	Governance	Legal
Business Model Development	Organisational Governance	Regulatory Compliance
Use Case Development	Data Sharing Governance	Contractual Framework
Data Product Development		
Data Space Intermediary		

Technical Building Blocks

Data Interoperability	Data Sovereignty & Trust	Data Value Creation
Data Models	Access & usage policies and control	Data, Services and Offerings descriptions
Data Exchange	Identity Management	Publication and Discovery
Provenance & traceability	Trust	Marketplaces



INTEROPERABILITY	TRUST	DATA VALUE	GOVERNANCE
Data Models & Formats	Identity management	Metadata & Discovery Protocol	Overarching cooperation agreement
Data Exchange APIs	Access & usage control / policies	Data Usage Accounting	Operational (e.g. SLA)
Provenance and traceability	Trusted Exchange	Publication & Marketplace Services	Continuity model



Contents of Blueprint 1.0



Building blocks

Business & Organisational

Technical

- ✓ Required capabilities
- ✓ Core design decisions
- ✓ Specifications & common standards
- ✓ Further reading



What's new?

1.0



Business and organisational building blocks



Business

- ✓ Visual overview of business model ingredients
- ✓ Guidelines & templates to take business decisions



Governance

- ✓ **Organisational governance authority** →
Organisational form and governance authority
- ✓ **Data-sharing governance** →
Participation management
- ✓ Decision tree to organise and establish a data space
- ✓ Guidelines on/offboarding of participants



Legal

- ✓ Regulatory compliance checklist for data spaces
- ✓ Contractual framework for agreements:
 - Among participants
 - On data transactions

+ More details & practical guidelines!

What's new?

1.0



Technical building blocks



Data interoperability

- ✓ **Vocabulary Hub** for common data models
- ✓ Approaches for **provenance & traceability**



Data sovereignty and trust

- ✓ Attestation & Identity Management based on **W3C Verifiable Credentials (SSI)**
- ✓ Role of Trust Frameworks
- ✓ Access and usage policies based on **W3C ODRL**



Data value creation enablers

- ✓ Usage of **DCAT** for specifying data products & services
- ✓ Role of **Value Added Services** in a data space (not only marketplaces!)

Whats new? 1.0

Functional overview of software components



Participant Agent

- ✓ Control plane vs. Data plane
- ✓ Participant Wallet
- ✓ Data, Services & Offerings Catalogue
- ✓ Contract Negotiation
- ✓ Transfer Process

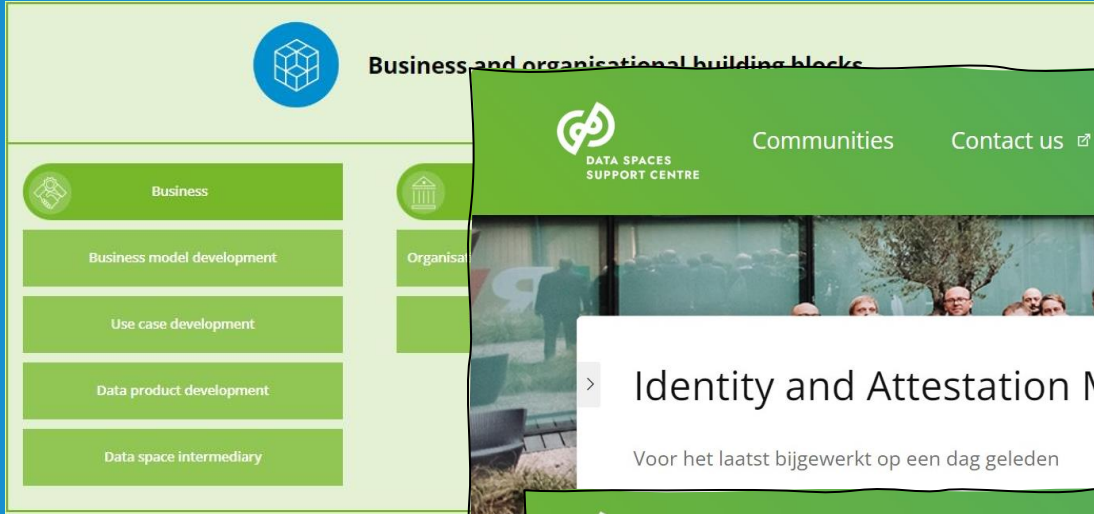


Shared Services

- ✓ Data Space Wallet (participants registry)
- ✓ Catalogue
- ✓ Vocabulary Hub
- ✓ Notarization Service
- ✓ Value Added Services

Simpl, isn't it? ;-)

Design Choices for your Data Space



Business and organisational building blocks

Business

- Business model development
- Use case development
- Data product development
- Data space intermediary

Organisational

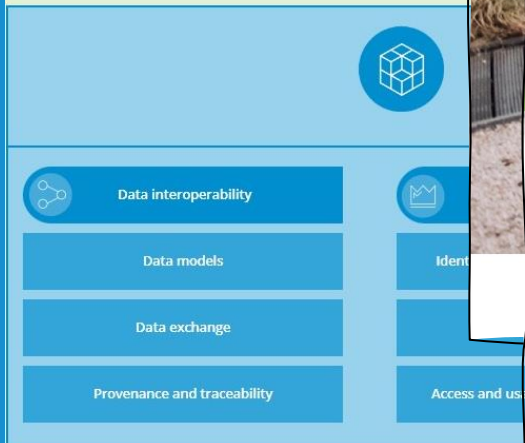


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Identity and Attestation Management

Voor het laatst bijgewerkt op een dag geleden

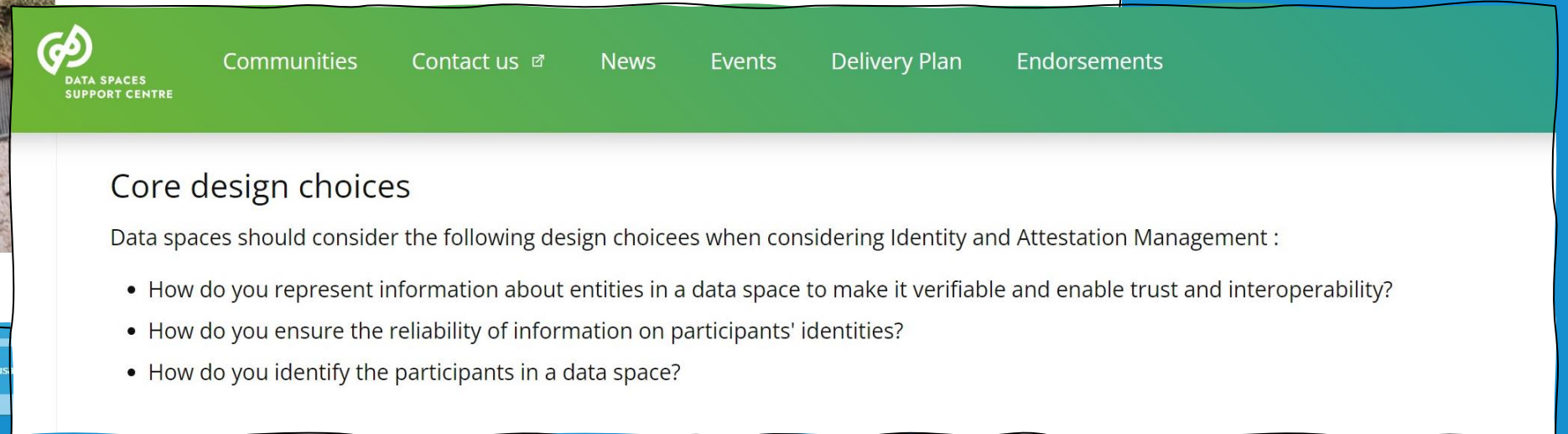


Data interoperability

- Data models
- Data exchange
- Provenance and traceability

Identity and Attestation Management

Access and usage



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Core design choices

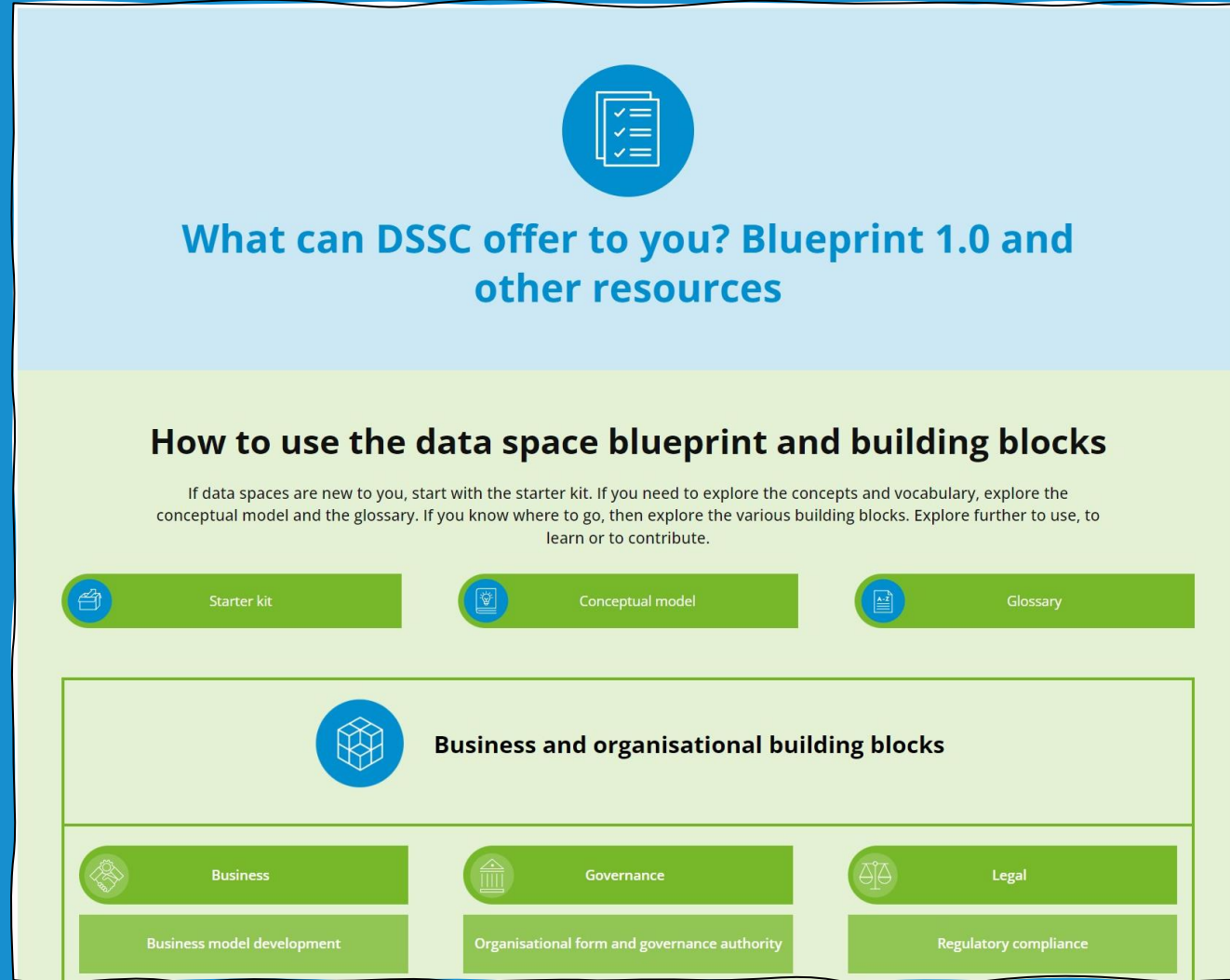
Data spaces should consider the following design choices when considering Identity and Attestation Management :


- How do you represent information about entities in a data space to make it verifiable and enable trust and interoperability?
- How do you ensure the reliability of information on participants' identities?
- How do you identify the participants in a data space?

Connect, use and contribute

Use the DSSC Blueprint to develop or enhance the rulebook of your own dataspace

“Comply or explain” +
Contribute!











What can DSSC offer to you? Blueprint 1.0 and other resources

How to use the data space blueprint and building blocks

If data spaces are new to you, start with the starter kit. If you need to explore the concepts and vocabulary, explore the conceptual model and the glossary. If you know where to go, then explore the various building blocks. Explore further to use, to learn or to contribute.

 Starter kit  Conceptual model  Glossary

Business and organisational building blocks

 Business  Governance  Legal

Business model development Organisational form and governance authority Regulatory compliance

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