Data Spaces Symposium



Trust Framework and Trust Protocol for Data Exchange

#nonprofit #live #trustedbygovernments

Gerard van der Hoeven Chief Executive Officer iSHARE Foundation

In close collaboration with production data spaces like:

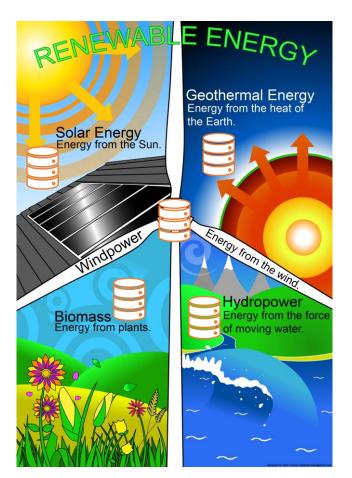








Data silos everywhere?



Energy => Data sharing => Smart Energy



City => Data sharing => Smart City



tv log

Logistics => Data sharing => Smart Logistics

iSHARE

Research shows

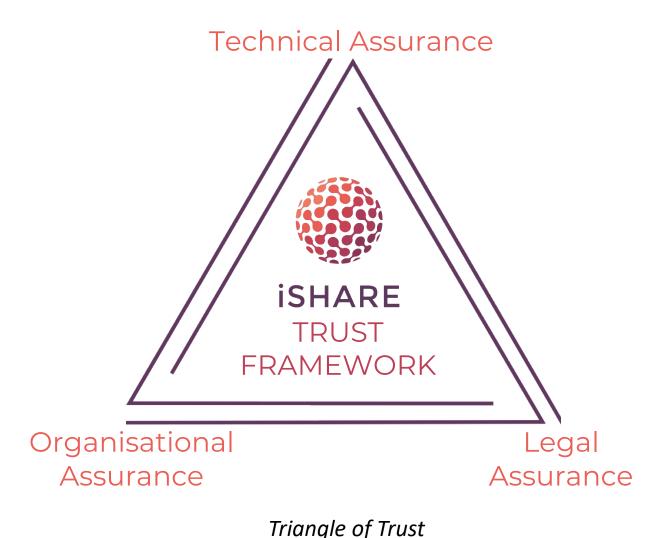
TRUST may

break data silos

Mobility => Data sharing => Smart Mobility

iSHARE Trust Framework - Triangle of Trust





 Technical Assurance via specifications and compliancy checks

 Organisational Assurance via proven frameworks and validations

 Legal Assurance via iSHARE framework agreements





Signed MoU between IDSA and iSHARE to bring IDSA Data Space Protocol and iSHARE Trust Protocol & Framework together to accelerate production Data Spaces

Distributed and Federated onboarding



Enable organisations to enrol themselves in a dataspace



Compliancy checks

- Technical compliance
- Non-technical compliance

Legal cover

- Terms of use
- Accede to comply

Technical Assurance

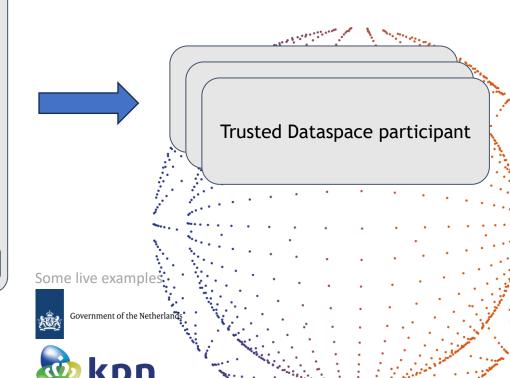


Organisational Assurances



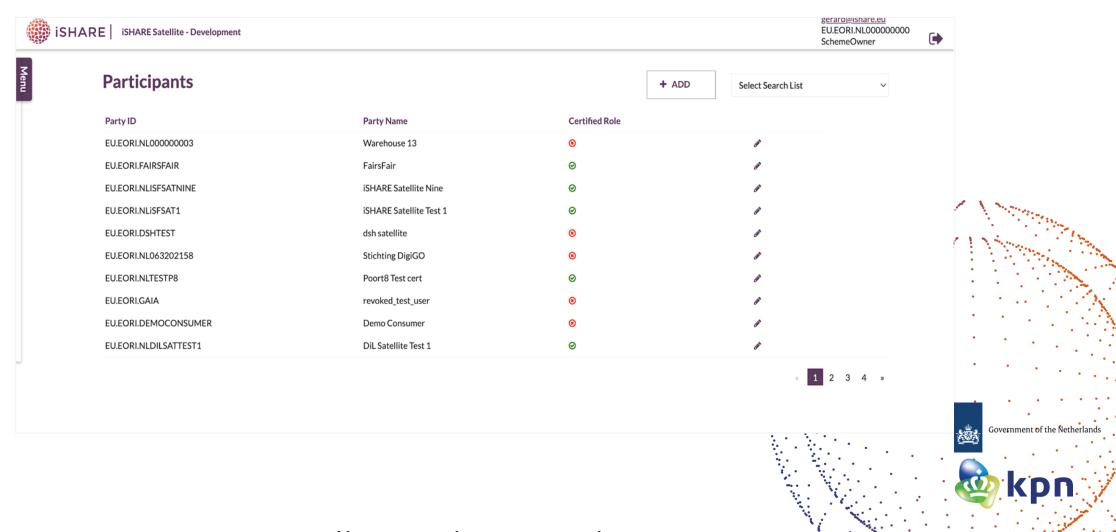
Legal Assurance

Organisation chosen Certification body / Participant Register



Trusted list of participants in the network operated by dataspace governance authorities or CAB's .





Distributed and Federated Access and Usage Control



Enable Data Owners to control access and use of their data across an open network



Attribute Based Access Control

- Energy data of Building X
- For period of 1 hour

Usage control

- Legal Licence (Library)
- Policy (ODRL)

Technical Assurance

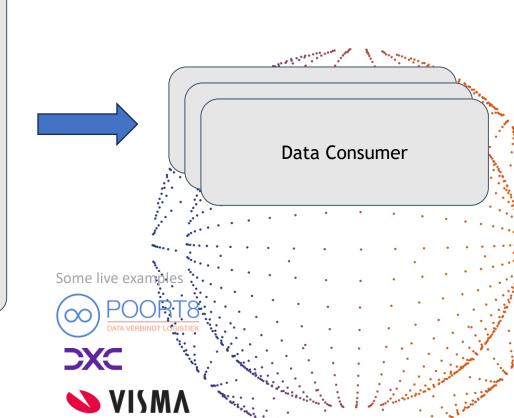


Organisational Assurances



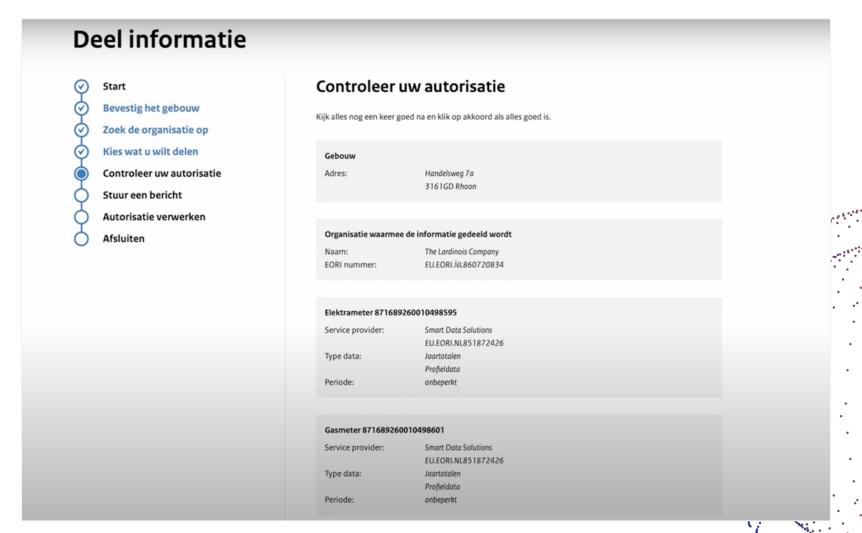
Legal Assurance

Data Owner Controlled Authorisation Registry



These components form the foundation for Data Authorization, Access Policies, and Usage Licenses





Distributed and Federated data sharing







- Check for compliance to dataspace
- Check for claims about the participant

Access and Usage control

- Check for access and usage rights at dataowner's AR
- Data Usage conditions

ID SA Technical Assurance Organisational Assurances Legal Assurance

Data Consumer

portbase Schiphol Netbeheer Nederland

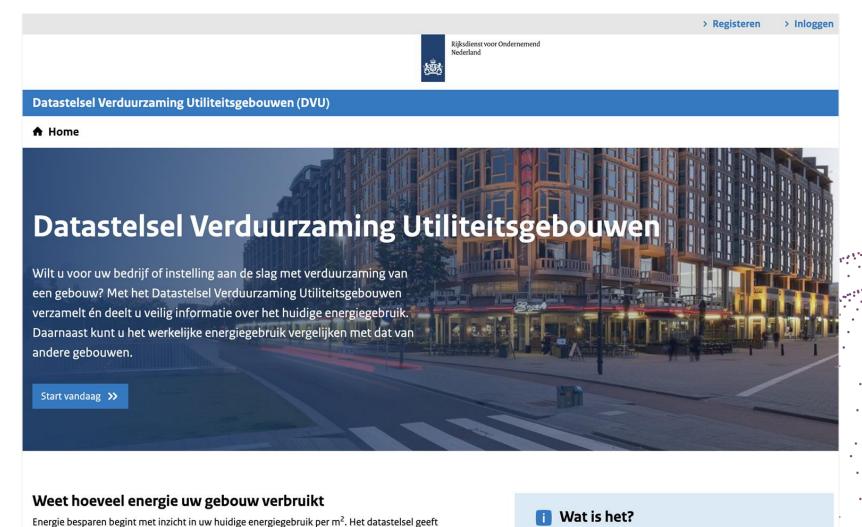
Some live examples

Peer to Peer trusted data sharing



Dataspace Green Deal NL





Bekijk in 1 minuut wat DVU voor u kan betekenen.

direct een duidelijk overzicht per gebouw. Het datastelsel is specifiek genoeg om het gebruik af te

Interoperable with other dataspaces through the Trust Framework on Trust & Data Sovereignty











Ready building blocks for dataspaces



Existing network of service providers, connectors and data holders



Technical Specifications for Federated Data Sovereignty



Federated and Open Source
Consent Policy Registry

issuer of credentials

Trust Framework for onboarding of participants

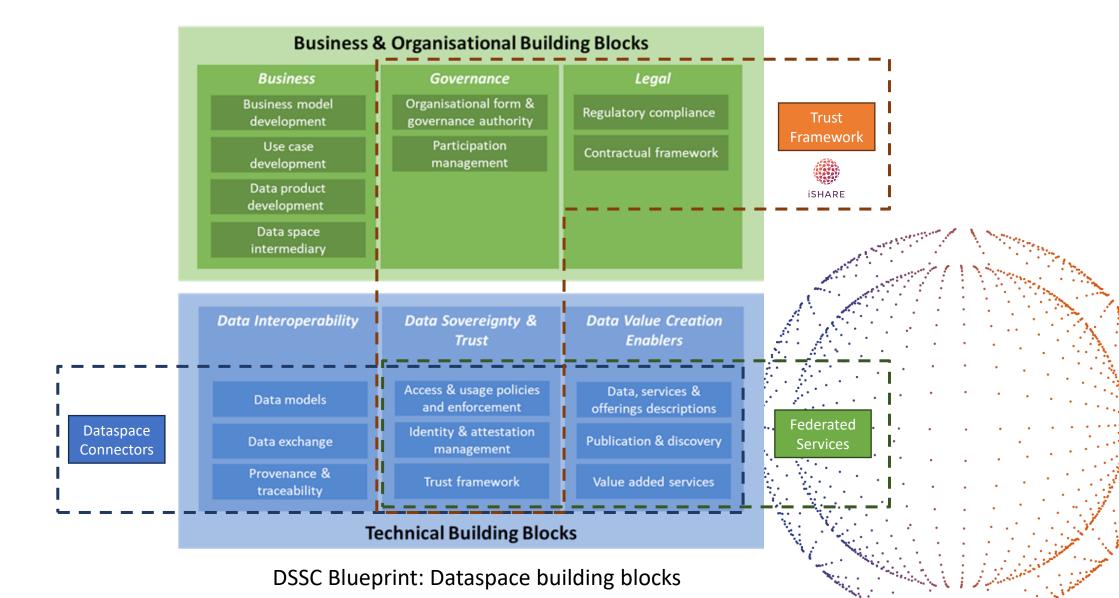
Open Source
Certification Tooling

Federated and
Open Source
Participant Registry

Legal coverage for Data Exchange + Dynamic Terms for every exchange

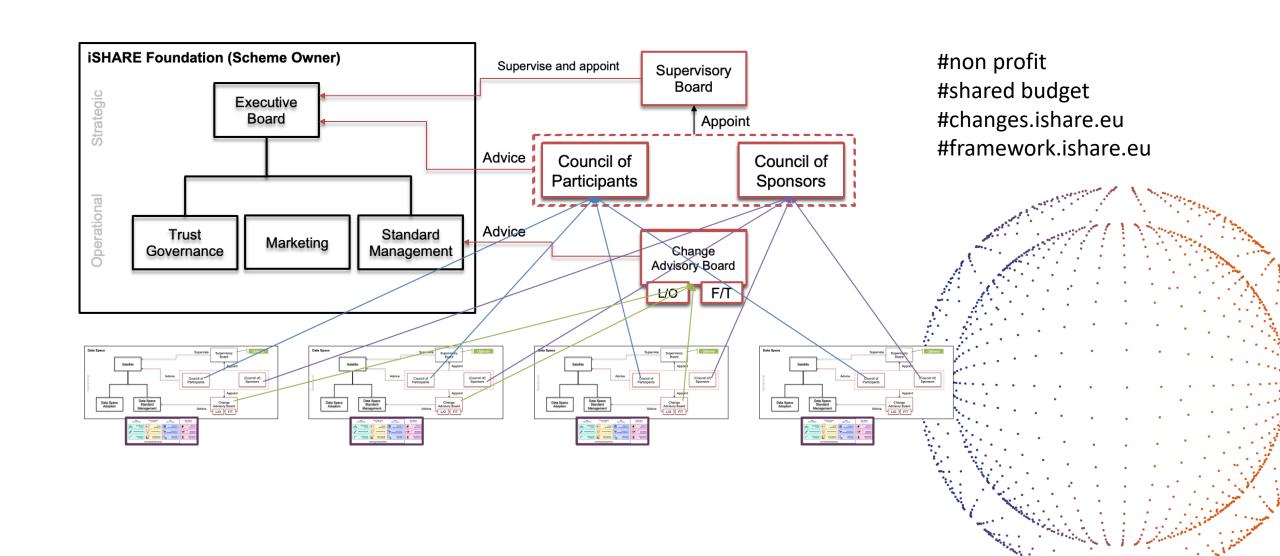
Dataspace building blocks





Data Spaces are in Control of the iSHARE Trust Framework







COOKBOOK FOR DATA SPACES.

Quick Start Guide for Data Spaces

Gerard van der Hoeven & iSHARE Team

Version 1.3 | August 1, 2023 | © iSHARE Foundation 2023





TRUST
FRAMEWORK
FOUNDED
PROVEN
UTILISED
DAILY BY

30+

GOVERNMENTS

OPEN SOURCE COMPONENTS

FRAMEWORK

NO TRUST -----

S

GERARD VAN DER HOEVEN



MONTSE CALDERON N.



COST

SAVINGS

AUTONOMY

GOVERNANCE

RAJIV



GERARD HUIS IN T VELD

NO NEED OF NEW:

OPERATIONAL PROCEDURES

---- **LEGAL** ----PROCESSES

SERVER LEVELS

TECHNOLOGY

FEDERATED

AUTHORIZATION

PARTIČIPANT

REGISTRY

iSHARE.eu

ISO 27001 CERTIFIED

NON-PROFIT

COOKBOOK FOR DATA SPACES





VINITH BHANDARI

> JOS EIKHOUT