Guide to the Green Deal Data Space



Welcome to Data Space!

Data Spaces are the future of green data sharing.

Data providers control who gets to access their assets through automated processes, eliminating the need for active monitoring and management.

This means that researchers and others with a legitimate need for data gain access to more harmonised data than ever before. Leveraging open standards, such as INSPIRE, means that data is ready to use. The scientific implications of that alone are staggering.

By contributing to data spaces, you can:

- 1. Contribute to creating large pools of useable data
- 2. Use sensitive data in a clear legal and technical environment
- 3. Avoid lock-in to monolithic platforms

Because data spaces can be complex, we make it easy:

- ...to contribute existing harmonised INSPIRE data sets to data spaces
- ...to onboard non-harmonised data into a data space
- ...to create data sharing agreements
- ...to automate creation of the metadata for assets and endpoints
- ...to use central infrastructure (e.g. Identity Provider, Broker, Clearing House) if required
- ...to define vocabularies based on existing Re3gistry
- ...to access data using well-known APIs such as OGC API Features

We will make it easy to leverage your existing SDI and INSPIRE work to get to Data Space, fast and cost-effective.

You provide the datasets, we'll operate the infrastructure!



Opportunities of Data Space

Data spaces can enable hundreds of use cases.

Their unique approach to shared, yet secure, data allows you to:

1. Create large pools of useable data

"More data = More innovation" is a simplistic way of putting things, and one that does not hold true with the current unstructured approach to data collection.

However, because data spaces contain harmonised, well-structured data sets, it will soon become a lot easier to:

- Build better Al Models
- Build and scale standardized
- applications

2. Use sensitive data in a clear legal and technical environment

Not all data is to be shared with just everyone, that much is obvious.

Thanks to data spaces' approach to authorisation controls and data sovereignty, you will be able to:

- Process GDPR and other sensitive data under controlled conditions
- Share data without giving up control

3. Avoid lock-in to monolithic platforms

A few large platforms are threatening to become overly dominant when it comes to hosting and accessing data sets.

Through data spaces, you can seize the opportunity for true data sovereignty and:

- Build on "non-spatial" components
- Build on standardized platforms, e.g. GAIA-X



Transitioning to Data Space

wetransform allows you to join data space the easy way.

The pillars of our approach are:

1. Build on INSPIRE assets

INSPIRE has already allowed us to harmonise large pools of data.

This means that we can use existing INSPIRE metadata, APIs, Codelists, Concepts, and (cleaned) Data Models to make onboarding easier.



2. Convention at the core over configuration/flexibility

In order to make data interoperable and useful, standards need to be upheld across the board. Strict conventions for minimum sharing and data quality need to be implemented, alongside interoperability mechanisms and user profiles.

3. Process over top-level decisions

Data spaces thrive on automation. Rather than generate more work by forcing constant active decision-making, data spaces rely on effective governance structures. This also means data spaces will provide a Lean, data driven path to Minimum Viable Products.

4. Clear responsibilities and resources

Data Holders, Users, Intermediaries, and Governance Bodies need clearly defined responsibilities. In addition, we need to make effective use of resources through synergies wherever possible.

5. Build and deploy the tools early

wetransform is already working with Eclipse Dataspace Components and other open source software, on the bleeding edge of innovation. This means that we are perfectly positioned to not only make your entry into the data space possible, but also useful thanks to an ever-increasing arsenal of hypermodern tools.

Data Space Architecture

The control and data planes are the main layers of the data space.

We make it easy to set up your tools for both!

Control Plane

- We make it easy to create data sharing agreements
- We automate creation of the metadata for assets and endpoints
- We provide the central infrastructure if required

Shared

• We make it easy to define vocabularies based on existing Re3gistry

Data Plane

- We make it easy to contribute existing harmonised assets to data spaces
- We make it easy to onboard data into a data space



Entering Data Space - Your Tools

Are you ready to launch into data space?

This is how you'll get there!





hale»studio provides simplified data

onboarding and interoperability through automated data harmonisation based on Declarative Semantic Annotations.





hale»connect allows automated metadata generation for assets and endpoints,

provision of control plane infrastructure,

automated configuration and deployment of connectors.



Use cases, data gap identification, Risks





Governance and Sharing Rules Set-Up Operation of Software-as-a-Service and Private Cloud

Infrastructure Set-Up

and Integration





Any questions? Reach out to us!

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