



01 March  
2023

# Personal Data Spaces Workshop 2 – Technology Landscape

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interoperable  
europe



# Welcome!

Viivi Lähteenoja, University of Helsinki & MyData Global



# Meet our hosts

Alex Kotsev & Sven Schade, JRC Digital Economy (JRC.T.1)

# Greetings from SEMIC action

Seth van Hooland, DG DIGIT Interoperability (DIGIT.B.2)

# Agenda

	Time
<b>Welcome &amp; introduction</b>	10:00 – 10:30
<b>Breakout workshop sessions – A. Identity &amp; B. Data models</b>	10:40 – 12:40
Lunch	12:40 – 13:30
<b>Fishbowl discussion: Growing Personal Data Space Services</b>	13:30 – 14:30
<b>Breakout workshop sessions – C. Data Access Control &amp; D. Governance</b>	14:30 – 16:30
Break	16:30 – 17:00
<b>Synthesis of the results of the day</b>	17:00 – 17:45
<b>Thank you and closing</b>	17:45 – 18:00
Networking drinks	18:00 – 18:45

Transport to hotels

# Today's workshop in context

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The **policy and business landscape** of interoperable personal data spaces adoption and implementation: what are the key challenges for different stakeholders, public & private?

*Held January 12, 2023 in Brussels, Belgium*



The **technical landscape** of personal data spaces: how can existing and potential technical approaches support addressing identified challenges in an interoperable way?

*Today March 1, 2023 in Ispra, Italy*



The co-creation of a **roadmap of future actions** as a joint work plan for the coming 2 years: what do we need to do next to promote interoperable personal data spaces?

*To be held March 31, 2023 in Ghent, Belgium*

# Getting ready for today's work

Max Leonard, Inrupt; Joss Langford, Coelition

# Today's objectives

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Bringing together **Solid** and **MyData** experts around a **concrete use case** to:

- Identify the **key building blocks** which will show how personal data space technologies can be used to create an architecture that is conformant to MyData principles.
- Looking at the areas of:
  - Identity
  - Data Modelling
  - Access Control
  - Governance



# Today's Outcomes

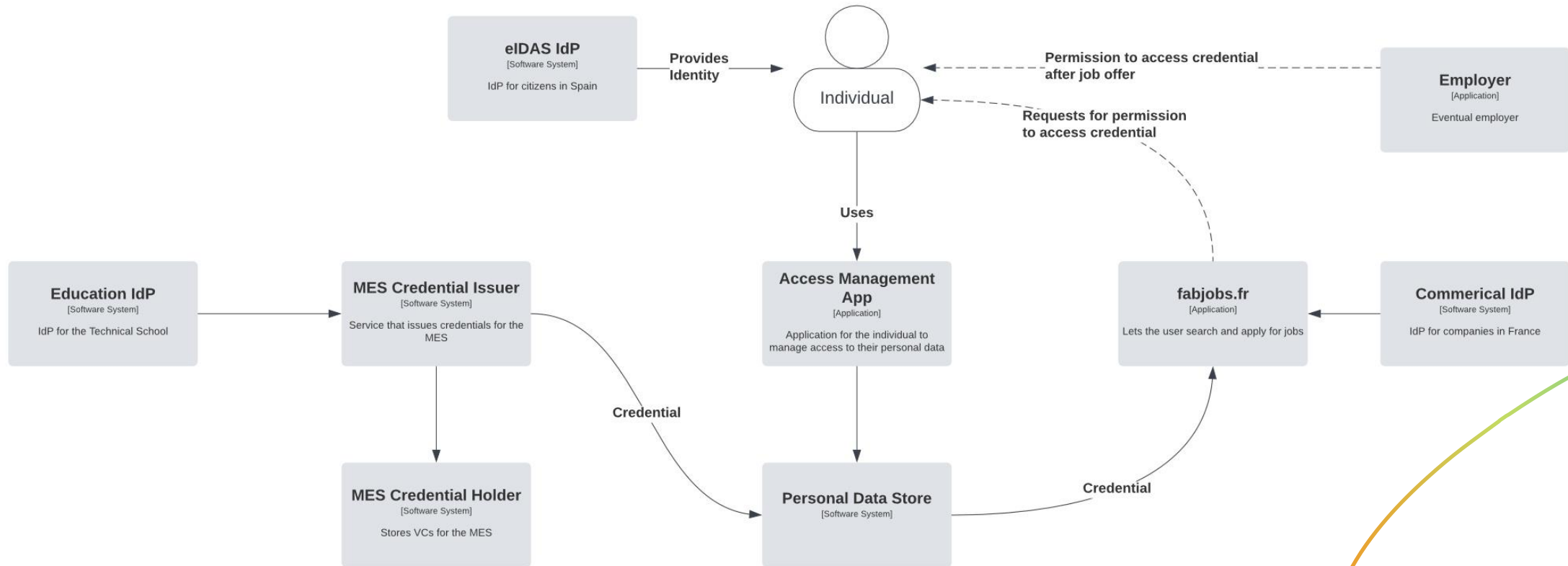
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By the end of the day we will have:

- A set of **annotated architectures diagrams** which shows a candidate approach to building the use case
- A summary of:
  - Some of the big problems to solve
  - Integration points
  - Technologies
  - Things we agree on!

To inform a EC recommendation whitepaper on personal data spaces and interoperability

# Use case



# Use case

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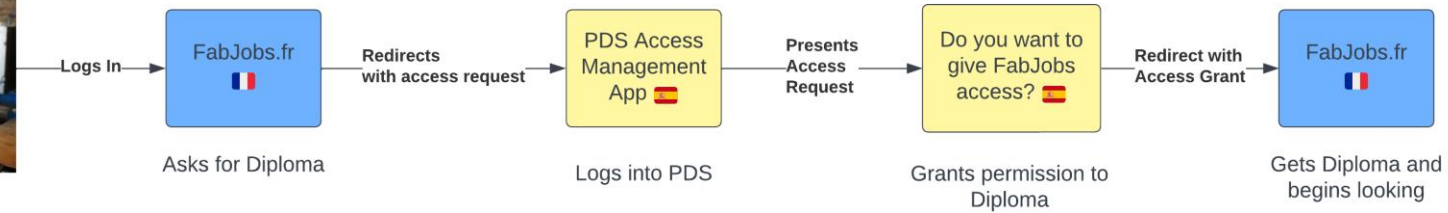
David

- Qualified welder from the Madrid Technical School
- Living in Madrid
- Moving to France
  
- Needs to prove his qualifications and right to work to apply for welding jobs in France
  
- Has a personal data store, issued by the Spanish government, used to store his diploma & right to work as Verifiable Credentials

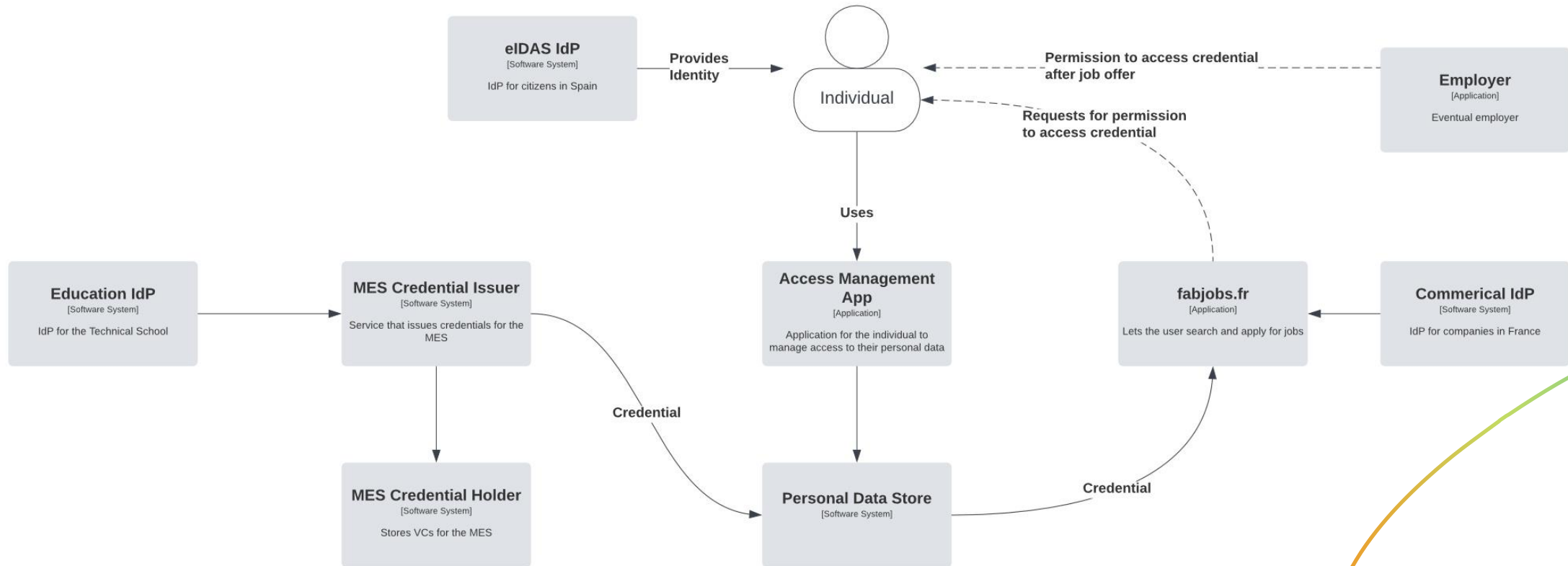
# Use case



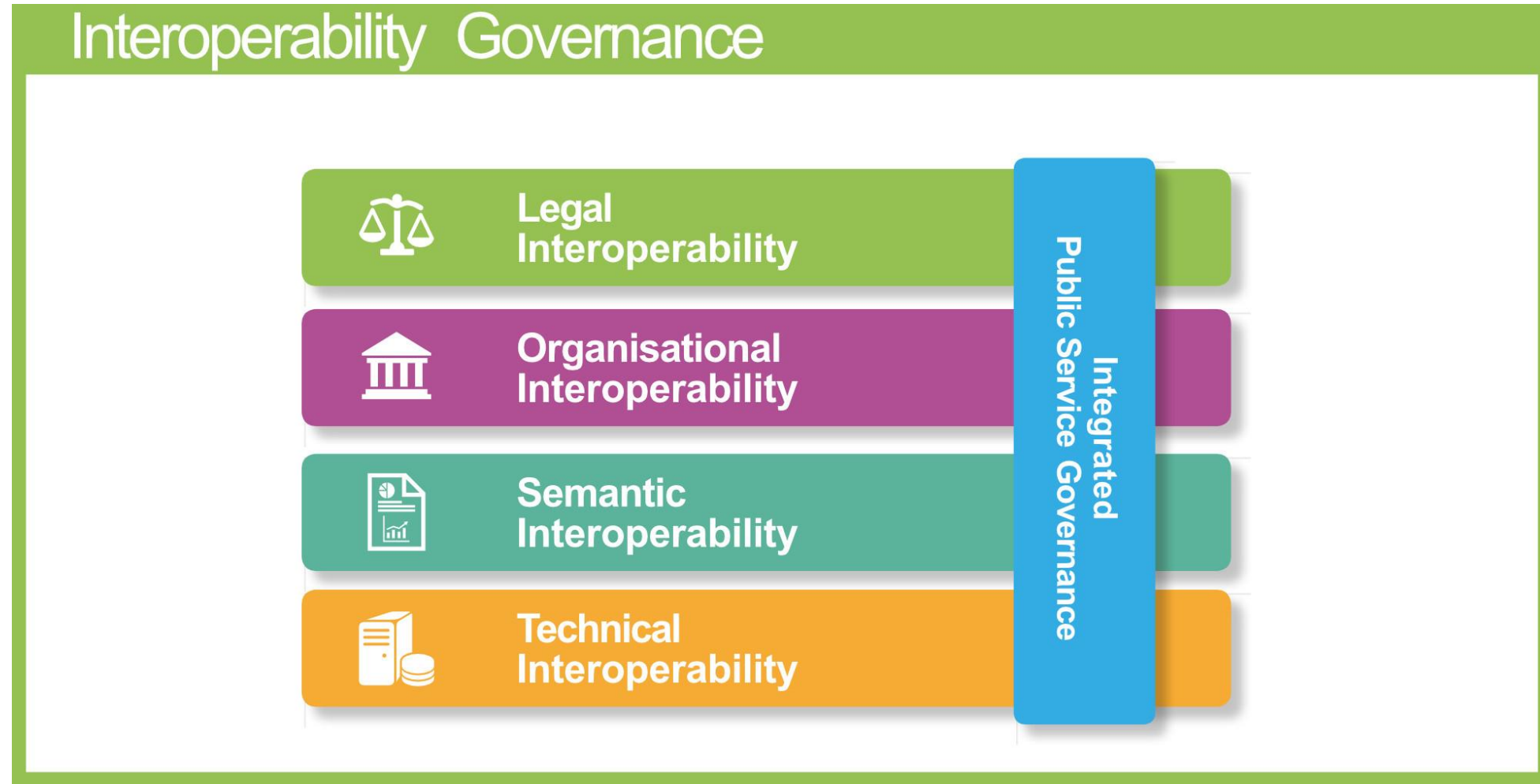
David wants to apply for a Job



# Use case



# European Interoperability Framework (EIF)



# European Interoperability Framework (EIF) Principles

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- Subsidiarity & Proportionality
- Openness
- Transparency
- Reusability
- Technological Neutrality & Data Portability
- User-Centricity
- Inclusion & Accessibility
- Security & Privacy
- Multilingualism
- Administrative Simplification
- Preservation of Information
- Assessment of Effectiveness & Efficiency

# Interoperability for Engineers

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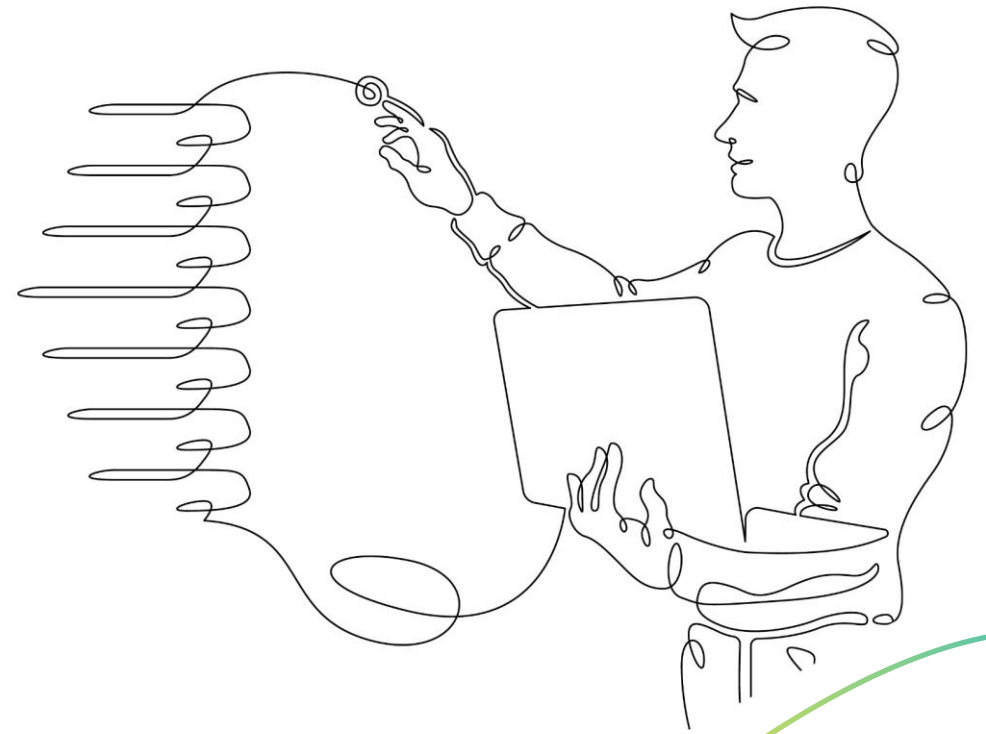
## Sometimes easier or lower risk:

- Using tools & approaches developed by others

## Sometimes more difficult:

- Ensuring tools & approaches can be used by others

**Always** requires an understanding of the evolving landscape of technologies.





# Morning workshops

## A. Identity

**Facilitator: Max Leonard**

Florian Barthelemy  
Matthias De Bièvre  
Harri Honko  
Anton Wiklund  
Mika Leivo  
Huw Diprose  
Jan Lindquist  
Bart Buelens  
Mika Huhtamäki  
Gaber Terseglav  
Alexander Kotsev

Space: 306A

## B. Data Models

**Facilitator: Joss Langford**

Arne Van Der Stuyft  
Esther De Loof  
Melanie Verstraete  
Michiel de Jong  
Katryna Dow  
David Van den Brande  
Pierre-Antoine Champin  
Marcello Grita  
Paul Knowles  
Michael Mulquin  
Sven Schade

Space: 305

# A. Identity (space X)

Max Leonard, Inrupt





# B. Data Models (space Y)

Joss Langford, Coelition

Lunch  
*12:30-13:30*



# Fishbowl discussion: Growing Interoperable Personal Data Spaces

# Growing Interoperable Personal Data Space Services

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## **1. More services:**

Better use & more re-use of personal data requires more services to be available to individuals and those services need to be findable.

## **2. More individuals using services more often:**

Personal Data Spaces will need to be valuable to all the participants of ecosystem – individuals as consumers of services, efficiencies for infrastructure providers, compliance & evidencing for those with regulatory requirements etc.

## **3. More data to build services on:**

Bringing together more data sources: working across data spaces.

## **4. More dynamic, efficient and larger markets:**

Cross-border within EU and third country considerations.

# Afternoon workshops

## C. Data Access Control

**Facilitator: Max Leonard**

Florian Barthelemy

Michiel de Jong

Katryna Dow

Harri Honko

Anton Wiklund

Michael Mulquin

Pierre-Antoine Champin

Huw Diprose

Jan Lindquist

Bart Buelens

Sven Schade

Space: 306A

## D. Governance

**Facilitator: Joss Langford**

Arne Van Der Stuyft

Esther De Loof

Melanie Verstraete

Matthias De Bièvre

Paula Kolenko

David Van den Brande

Mika Leivo

Paul Knowles

Mika Huhtamäki

Gaber Terseglav

Alexander Kotsev

Space: 305

# C. Data Access Control

Max Leonard, Inrupt



# D. Governance

Joss Langford, Coalition

# Governance

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"Governance is the framework of authority and accountability that defines and controls the outputs, outcomes and benefits"

*- Murray-Webster, Ruth ; Dalcher, Darren. / APM Body of Knowledge. 7th ed ed. Princes Risborough : Association for Project Management, 2019. 230 p.*

"It is done by the government of a state, by a market, or by a network. It is the process of choosing the right course among the actors involved in a collective problem that leads to the creation, reinforcement, or reproduction of acceptable conduct and social order."

*- Hufty, Marc (2011). "Investigating Policy Processes: The Governance Analytical Framework (GAF). In: Wiesmann, U., Hurni, H., et al. eds. Research for Sustainable Development: Foundations, Experiences, and Perspectives". Bern: Geographica Bernensia: 403–24.*

Break  
*16:30-17:00*

# Synthesis of the results of the day

Viivi Lähteenoja, University of Helsinki & MyData Global

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# Workshop series



Another event upcoming, the [First International Workshop on Semantics in Dataspaces](#) on April 30 / May 01, 2023.



Thank you



# interoperable europe

innovation ∞ govtech ∞ community

Stay in touch



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<https://joinup.ec.europa.eu/collection/interoperable-europe/interoperable-europe>