

# Developing open standards, specifications, and technologies

# Dataspaces, where are we?



### Where we are?





### The questions ahead of us

How can we collaborate to make sure we draft relevant standards taking all the views/needs of the ecosystem? 3

How can we guarantee interoperability among the different dataspaces?

How can we make sure, if we standardize, that those specifications will be adopted?



# Why do we need to standardise?



## Great Baltimore Fire (February 7-8, 1904)

> 1,500 buildings destroyed
 > 1,000 severely damaged
 > Estimated \$100 million of property damage
 > Much of central Baltimore razed, covering an area of 57 ha

### Why We Need Standards





Why did the blaze burn for two days?

Manpower?
 No! 1231 firefighters

### > Equipment?

- No! Washington D..C., Philadelphia, New York, Atlantic City and several other cities sent equipment
- > No equipment or procedure standards



## **Checklist of questions**

- Do I really **need** a standard?
- What will I do with it **once it is accepted**?
- ISO/IEC does not automatically bring **adoption**. Am I looking just for this?
- Do I need this or rather building a user **community** to drive innovation and adoption?
- Is it something no others are doing? Pay attention to existing standardisation activities
- Am I ready to **collaborate** with others in the topic?
- Do I have the **time and resources** to make a good job in the slowly-moving world of standards?



## **ISO/IEC Technical Standard timeline**



### 24-36 months depending on complexity



## **ISO/IEC Technical Standard PAS Submission**





# **Working Group Overview**





## **Overview Current Specifications under EDWG**

**Policy and Credential Profiles** Eclipse Conformity Assessment Policy and Credential Profile (CAP) Define an ODRL policy model, subject format for verifiable credentials, and semantics associated with the former Eclipse Data Rights Policy Profile (DRP) **Claims Protocols** Eclipse Dataspace Decentralized Claims Message protocols for proving the identity of, and claims about, Protocol (DCP) dataspace participants Bindings Application of abstract message protocols to wire protocols such as HTTP Eclipse Dataspace Protocol (**DSP**) **Base Protocols** Abstract message protocols for catalog, contract negotiation, and data transfer

### Why do we need standards? The Tennis analogy

Tennis game rules include the scoring, court size, net height, how to serve... Tennis players need to be identified by the ITF so they can prove their ranking and identity Every **tennis club** can also include additional **rules**, such as using clay or grass courts, dressing code, club fees... Tennis players can choose the club that is best for them, but they could join any as they know how to play tennis

Base protocol

**Claims protocol** 

Profile

Participants



Credit for the analogy: Gianfranco Cecconi (IDSA)



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## **Milestone Planning EDWG 2025**



## How do these protocols fit into the full stack?

Dataspaces & Enabling Service Provider: Member Management, Observability, Connector-aaS, Marketplace

Gaia-X Trust Framework	iSHARE Trust Framework		Other Trust Framework		
Conformity Assessment and Credential Profile (CAP) Data Rights Policy Profile (DRP)					Certifications
Dataspace Connector Implementations: Data Discovery, Claims Mgmt, Contract Negotiation, Data Planes					
Dataspace Decentralized Claims Protocol (DCP)			DCP TCK		
Dataspace Protocol (DSP)				DSP TCK	



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## **Workflow & Architecture: Specification Projects**

### Data Act Chapter VIII

### Interoperability - Article 33

Automatic access & transmission Open formats & vocabularies Find, access & use

Smart contracts

### Interoperability - Article 36





Safe termination/interruption Robustness & access control



### The value of EDWG membership

### Standard supervisor



Be part of the <u>decision</u> <u>making</u> process regarding the <u>specifications</u> and eventual <u>standardisation</u> of Dataspace protocols

#### Interoperability master



Contribute on the way specifications/standards are <u>globally harmonised</u> for Dataspaces

#### First to know



Be <u>well informed</u> <u>strategically</u> about what is happening on OSS projects for Dataspaces and evaluate <u>potential impact</u>

### My work matters



Be recognised as a <u>thought</u> <u>leader</u> in Dataspace implementation/specification <u>Contact</u> other thought leaders

#### **Trusted developer**



<u>Certify</u> your Dataspace modules to prove its <u>compatibility</u> with OSS specifications/standards

#### Giving back to the community



Support the coordination of the Dataspace OSS projects <u>financially</u> because you rely on them

#### Implementation business advisor



Be part of the <u>strategy</u> facilitation for OSS <u>implementation</u> projects in Dataspaces



# **Useful material and references**



## Summary

Be at the forefront of the Dataspace **standardization** 

Help us build the **strategy** for the Dataspace ecosystem

Join the **adopter community** of Dataspace OSS solutions

### Resources:

- <u>Charter</u>
- <u>Working Group</u>
  <u>Participation Agreement</u>
- Working Group Process
- Working Group Operations
- Working Group Mailing List
  (open to public)
- Working Group Web page

### Contact us!

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# Thank you!

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