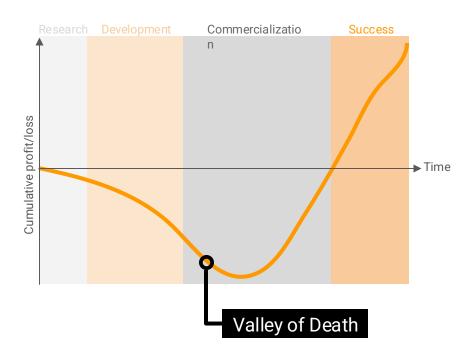


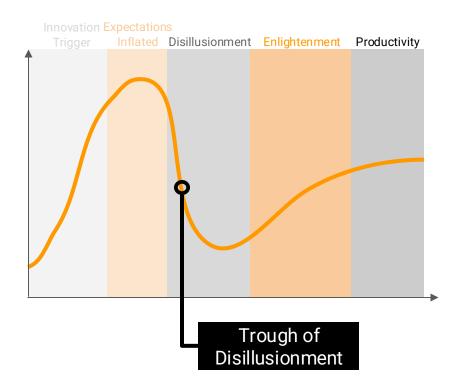
What is next? Towards Dataspace Interoperability: Open standardisation & implementation

Javier Valiño — Program Manger, Data Spaces October 22, 2024

What is the current status?









Good news: It is up to us!

We stay and we become a Walking Dead



We make it through and we become the new big thing!



The Dataspace road so far



Data Sharing technologies Data lakes, platforms and sharing hubs



EU strategy for Data Data Governance Act EU Data Act Single Digital Market



Identification of relevant use cases Definition of base requirements Reference Architectures



Sectorial Data Spaces



The questions ahead of us

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

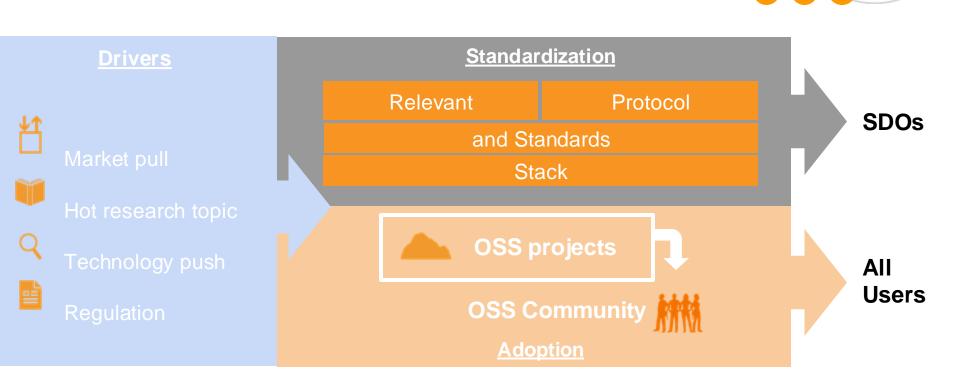


How can we guarantee interoperability among the different dataspaces?

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



From inception to adoption







How can we structure this for Dataspaces?

Interoperability - Article 33

Find, access & use

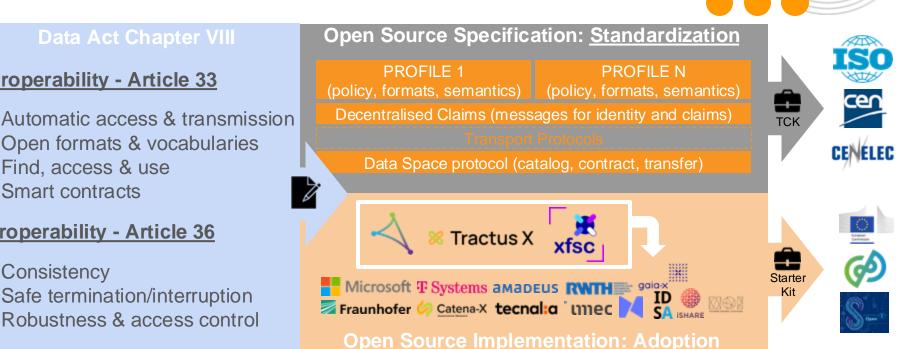
Interoperability - Article 36

Smart contracts

Consistency

Open formats & vocabularies

Safe termination/interruption Robustness & access control



MISSION: "Build and promote open-source software, specifications, and open collaboration models needed to create scalable, modular, extensible, industry-ready open-source components based on open standards for dataspaces"



Protocols and Standards



> Minimum interoperability protocol stack for dataspaces

PROFILE 1 (policy, formats, semantics)

PROFILE 2 (policy, formats, semantics)

PROFILE N (policy, formats, semantics)

Claims protocol (messages for identity and claims)

Transport Protocols

BASE Protocol (catalog, contract, transfer)



Certifications

How do these protocols fit into the full stack?



Dataspaces & Enabling Service Provider: Member Management, Observability, Connector as a Service, Marketplaces

Gaia-X Trust Framework

iSHARE Trust Framework

Other Trust Framework

Conformity Assessment and Credential Profile (CAP)

Data Rights Policy Profile (DRP)

Dataspace Connector Implementations: Data Discovery, Claims Management, Contract Negotiation, Data Planes

Dataspace Decentralized Claims Protocol (DCP)

DCP

TCK

Dataspace Protocol (DSP): Data Discovery (Catalog), Contract Negotiation, Transfer Orchestration

DSP TCK



Why do we need standards? The Tennis analogy





Tennis game rules include the scoring, court size, net height, how to serve...

Base protocol



Tennis players
need to be
identified by the
ITF so they can
prove their ranking
and identity

Claims protocol



Every tennis club can also include additional rules, such as using clay or grass courts, dressing code, club fees...

Profile



Tennis players can choose the club that is best for them, but they could join any as they know how to play tennis

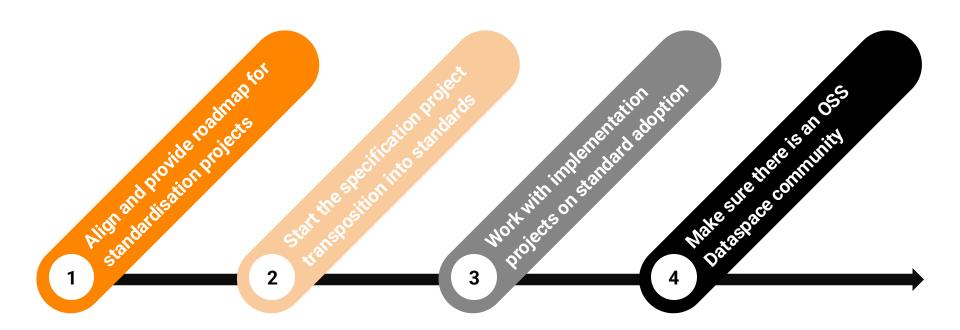
Participants



Credit for the analogy: Gianfranco Cecconi (IDSA)



Short term goals





Where are we doing this? The EDWG in 2024



#1604

Commits

#6

Projects

#74

Contributors

#13

Member Organizations

#10

#2 **Participation** Community in events calls

#35933

LinkedIN impressions









... we need to work on technical standards?

... Open Source adoption is key to the success of Dataspaces?

... an Open Dataspace community will benefit the ecosystem?

... collaboration is the only way forward?

Join us!

































Contact membership.coordination@eclipse-foundation.org



Curious about dataspace standards?



You Too Can Be a Standards Expert!

×

October 23, 2024 4:00 PM-4:45 PM CET



Breakout 2 Main Hall

Did you know the Eclipse Foundation is involved in international standards? The Sparkplug specification, which defines a protocol relevant to industrial automation, became the Foundation's first international standard in October 2023 and is now known as ISO/IEC 20237. This is a significant achievement for the Foundation and the Sparkplug specification project.

Every Eclipse specification project holds the potential to evolve into an international standard. Whether you're already involved in one or considering starting a new project, this is your chance to become a standards expert! But what does this journey entail, and what opportunities does it present?

In this presentation, you will learn about the major organisations shaping international standards, such as ISO, IEC, ISO/IEC JTC 1, IEEE, and W3C. You will understand how they work and relate to the Foundation and how you can participate as an Eclipse contributor or as an individual. You will also gain an understanding of the Eclipse Specification Process and how it ties into the Publicly Available Specification (PAS) process offered by ISO/IEC JTC 1.



Frédéric Desbiens Senior Manager, Embedded and... Eclipse Foundation



Javier Valiño
Program Manager
Eclipse Foundation



Bottomline...



"We've solved every technical problem. Now we just have to solve the problem of someone actually buying it!"







