



Context

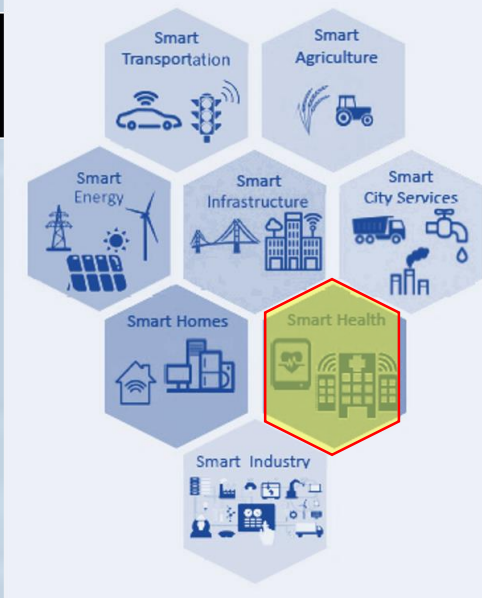
AI and Data Governance and Standards

In a rapidly developing and global process of **Digital Transformation**

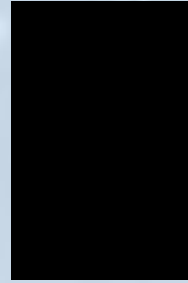
Data is the Oxygen that is fuelling AI, IoT, Cloud and Smart Cities products, services and tool.

To facilitate scalability, interoperability and trade on an international scale, **STANDARDISATION** became a priority of the European Commission to enhance the Digital Single Market.

SMART



=



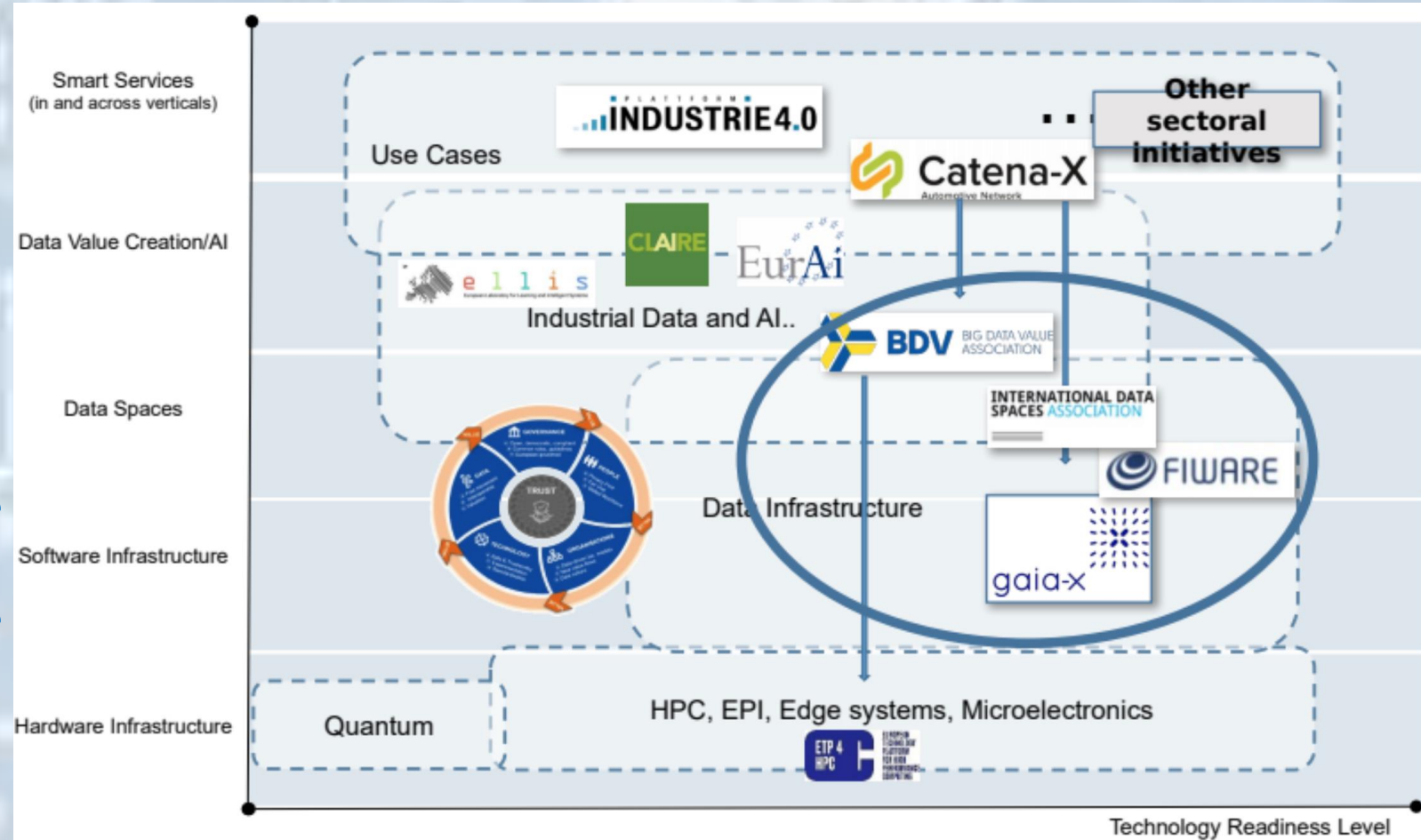
- AI is a horizontal Technology –
 - Cloud, Edge, Big Data, IoT, Digital Twin, 5G, Blockchain, Quantum Technologies, Cybersecurity
- AI is cross cutting sectors
 - Verticals – **Health**, Agriculture, Manufacturing, Finance, ...
- Logistics, Control, Prediction, Analysis, Classification, Identification
- AI is pervasive
 - Phones, Websites, Social Media..

DATA Spaces



BDV BIG DATA VALUE
ASSOCIATION

- Data spaces initiative
 - IDSA | Gaia-X | European commission
- References
 - IDSA reference architecture
 - Gaia-X technical architecture
 - BDVA position papers - v1 and v2
 - Towards a European-Governed Data Sharing Space. Enabling data exchange and unlocking AI potential. April 2019
 - Towards a European-Governed Data Sharing Space. Enabling data exchange and unlocking AI potential. November 2020.
 - AIOTI strategic foresight
 - H2020 OpenDei support action: design principles for data spaces



EU Strategy

- The European Commission, EU PPP Partners, European Industry Consortia, EU Member States and EU Standards Development Organizations
 - have prioritised ICT Standardization as a key enabler of the European Digital Single Market.
- Global Trade requires **interoperability and collaboration**.
- Big Data, AI, IoT and other ICT standards development is “**interoperability by consensus**”, it’s what we put into our innovative products and services so that our citizens get out confidence, quality and trust.

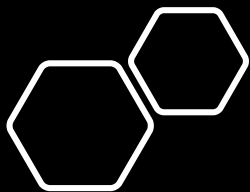
Standards

..a standard is an agreed way of doing something..

[best practice by consensus]







StandICT.eu
and the EUOS

StandICT.eu

ICT STANDARDISATION OBSERVATORY AND SUPPORT FACILITY IN EUROPE



euos

EU Observatory for
ICT Standardisation

StandICT.eu and the EUOS



SUBMITTED
82
Applications for
a total amount of
925k €

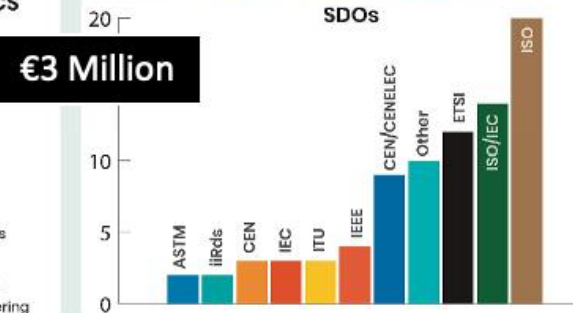
DURATION

- 165 Long Term
- 18 Short Term
- 5 One Shot



GENDER

	
27	118
FEMALE	MALE

[illegible]

AI, Data and Interoperability

Data Sharing Platforms

Standards Supports and Innovation

Key-Achievements of StandICT.eu 2023 so far



6 Open calls Completed

Open Call #7 now launched & running until 06 July

Functional Grants Platform for applications & evaluation process (58 contractualised EPEs)

8 Webinars on topical subjects (AI, Cybersecurity, EU ICT Policies, Trusted Information, Education in Standardisation, Blockchain)

Participation to **31** third-party events + **9** SDOs meetings

16 Memorandum of Understanding signed with relevant players
Synergies with **56** Stakeholders



EUOS Release (March 2021) + *Publication of AI Landscape Report + Smart City Landscape Report + Trusted Information Report*

11 EUOS TWGs on key ICT domains to work on dedicated Landscape & Gap Analysis
3 Landscape Report already completed!

More Landscape Analysis reports in release pipeline for 2022 (**Digital twin, Blockchain, Ontology**)



COMMUNITY
1479 registered users
3112 LinkedIn Followers
776 Twitter Followers

Active Expert Advisory Group (EAG) with members from SDOs, European Commission & Industry (**20 members** contributing also to keep the topic's eligibility list freshly updated)

3 Impact Reports released to disseminate the concrete outputs of fellows funded under Open Call #1 e #2
-
The fourth will be issued in June 2022!

1° to 5° Open Calls – Facts, Figures & Major Accomplishments

1st to 5th Open Call RESULTS & POPULAR TOPICS

FUNDED

177

Applications for a
total amount of
1.517.636,04 €

GRANT TYPE

161 Long term
15 Short term
1 One Shot

ORGANISATION TYPE



71 SMEs 33 Academia / Research
47 IT Consultancy / Development
3 Government / Public Services
6 Large Enterprise 7 SDO
10 Other

GENDER



34

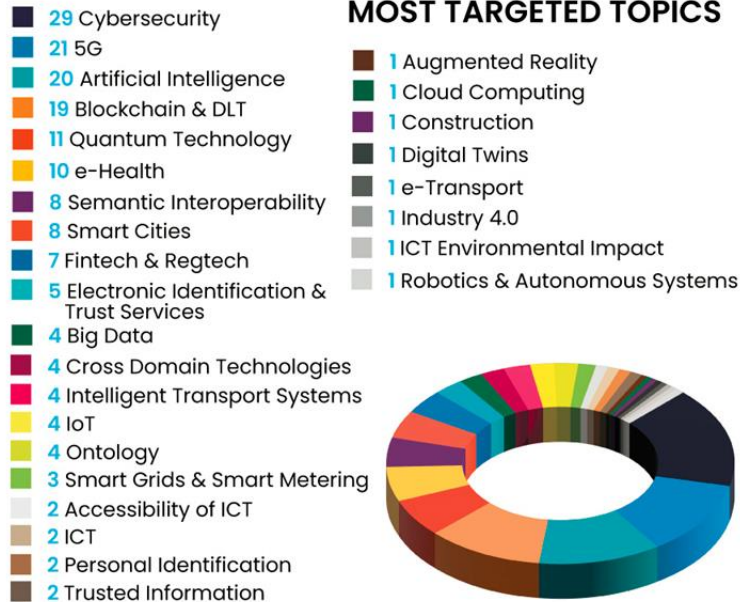
FEMALE



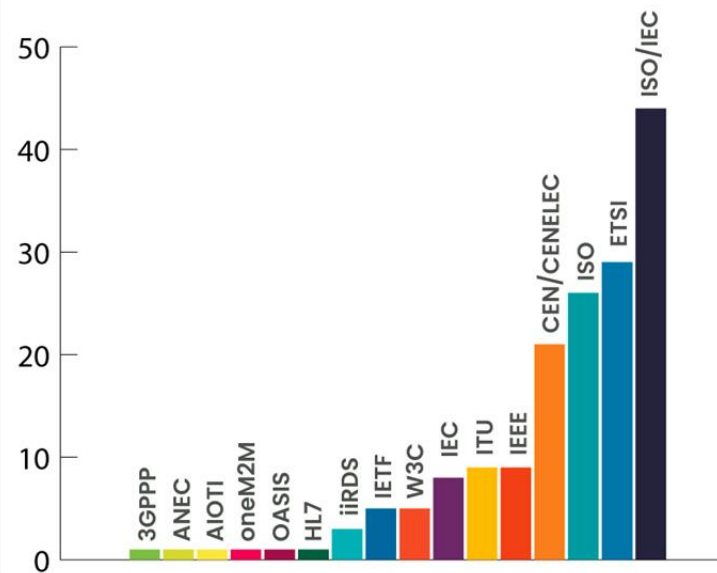
143

MALE

MOST TARGETED TOPICS



SDOs



Consistent number of proposals coming from applicants coming from SMEs and/or IT field as well as from Academia/Research

Cybersecurity, 5G, Artificial Intelligence, Blockchain & DLT proved to be yet the most popular topics.

A wide range of different topics tackled: e-Health; Semantics; Smart Grids; Smart Cities and more.


11 Applications funded under Quantum Technology!

Upcoming Landscape Reports in 2022



Upcoming reports → DIGITAL TWIN, ONTOLOGIES, IoT & Cloud Edge

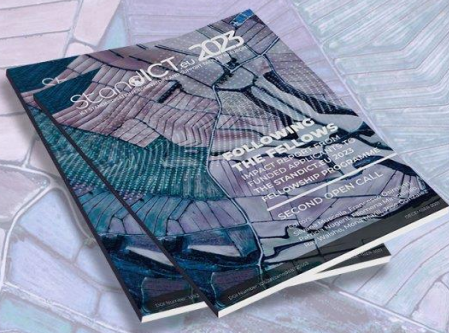
Open Call Impact Report - *Following The Fellows*



FOLLOWING THE FELLOWS
1st Open Call

1,558	570
👁 views	📄 downloads


[Download](#)



FOLLOWING THE FELLOWS
2nd OPEN CALL
IMPACT REPORT

1,159	479
👁 views	📄 downloads

[Download](#)



FOLLOWING THE FELLOWS
3rd OPEN CALL
IMPACT REPORT

252	122
👁 views	📄 downloads

[Download](#)

StandICT.eu 2023 is publishing a tailored Impact Report for each corresponding Open Call. Their primary goals are to:

- ***Provide a thorough Impact assessment on funded applicants in terms of target outcomes for EU priorities, gaps, and challenges;***
 - ***Share the results attained through the work carried out by the funded expert.***

THE #4 OPEN CALL REPORT WILL BE ISSUED IN JUNE!

EUOS - Standards Academy

The EUOS Academy is a stand-alone expert group of Education about Standardisation leaders that runs for the duration of the project and is responsible for collecting, documenting, analysing and evaluating existing Standards Education material from ESOs and indeed any SDOs that create training collateral about standardisation.

EUOS Academy Leadership



EUOS Academy Expert Ecosystem



Name/Org	Expertise/Affiliation
Brian McAuliffe (Chair)	Member of StandICT EAG; ISO/IEC JTC 1 Liaison Officer to EC
Ray Walshe	Chair, StandICT EAG
Paul Killeen	Research & Innovation Leader, NSAI
David Filip	ISO/IEC JTC 1 PAS Mentor and Systems Integration Facilitator
Chiara Giovannini	Deputy General Secretary, ANEC
Jan-Henrik Tiedemann	Head, IEC Academy & Capacity Building
Cyrill Dirscherl	DG GROW, European Commission
Ivana Mijatovic	Education Lead, EURAS
Nikolaos Myriounis	Chair, NATO Standardization Management Group/Education
Martin Chapman	Director, Technology & Standards Policy, DigitalEurope
Andriana Prentza	OASIS Open Europe
Signe Annette Bøgh	Consultant, Danish Standards
Natalia Giorgi	Standardisation Consultant, European Trade Union Confederation
Pam Tariff	Head of Global Engagement, ECOS
Amelie Leipprand	Senior Project Manager, DIN

Key-Objectives

- *Creation of education modules for students (particularly on non-technical aspects & benefits of Standardisation)*
- *Set-up a **repository of teaching material** for newcomers in Standardisation*
- *Showcase the strategic importance of Standardisation for business and Europe's competitiveness*

“Walk & Talk” StandICT.eu 2023 Webinar Series



#1 Walk & Talk Webinar (24th November 2020)
88 participants



#2 Walk & Talk Webinar (22nd December 2020)
98 participants



#3 Walk & Talk Webinar (11th May 2021)
46 participants



#4 Walk & Talk Webinar (6th July 2021)
48 participants



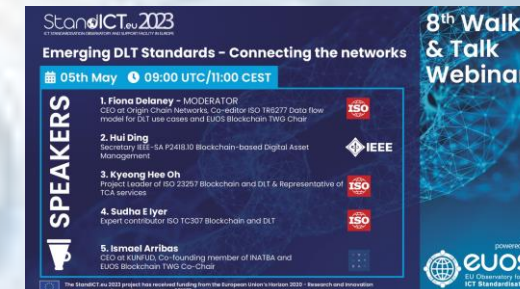
#5 Walk & Talk Webinar (27th October 2021)
71 participants



#6 Walk & Talk Webinar (16th December 2021)
74 participants



#7 Walk & Talk Webinar (25th January 2022)
64 participants



#8 Walk & Talk Webinar (05th May 2022)
88 participants

The “Walk & Talk” Webinar is a series of virtual events (8 so far) that tackles each of the corresponding TWGs topics to put their outcomes into the spotlight and features esteemed ICT experts in the related domain coming from the EC, SDOs, or Research environments.

Watch all the past webinars: <https://www.standict.eu/events/past-events>

#7 Open Call (until 07th of July)

StandICT.eu 2023
ICT STANDARDISATION OBSERVATORY AND SUPPORT FACILITY IN EUROPE

Looking for funds to support
your work on **ICT standards**?

Submit your proposal to the
7th Open Call

Open Date: 5th May 2022

Closure: 6th July 2022

APPLY NOW!

"Artificial intelligence is a global "game changer". It will transform our lives and our societies. It is sometimes said that the best way to meet the future is to create it. Let us not leave that to others."

**[Morten Irgens, Vice-Rector,
Oslo Metropolitan University, Norway]**

*The #7 OC launched and
will run until the **06th of July**.*

*The leading theme will be
"AI, Data & Robotics" and
the list of eligible topics has
been augmented with the
introduction of new topics of
the recently released ICT
Rolling Plan and more (i.e.
**Data Economy, 6G, U-
Space**)*

<https://www.standict.eu/standict.eu-2023-7th-open-call>

HSbooster.eu is the “Standardisation Booster”

Key mission of the Hsbooster.eu

- A platform to help R&I H2020 and Horizon Europe beneficiaries whose research results are likely to lead to the revision or creation of a standard and to test the relevance of their results for standardization
- Engage the R&I community early on in standards development
- Raise strategic awareness of standardisation
- Build expertise and skills in standardisation
- Promote EU interests and values through standards
- Address standardisation urgencies in green and digital technologies



HSbooster.eu
Horizon Standardisation Booster



@HSbooster.eu



company/hsbooster-eu/



www.hsbooster.eu

Services

If your project, ongoing or concluded, is funded under Horizon 2020 or Horizon Europe and involves standardisation activities, it can receive support via the following services



Helpdesk

H2020 and HE projects receive practical guidance and support to steer the research results towards the most promising standardisation pathway(s).



Consultancy

Through 5 open calls, H2020 and HE projects are selected to receive dedicated, specialised assistance in their standardisation efforts.



Main beneficiaries of the project



H2020 &
HE Projects



Research
Organisations



Organisations
involved in standard
development
activities



SDOs



Policy Makers



Standardisation
Experts

GAIA-X

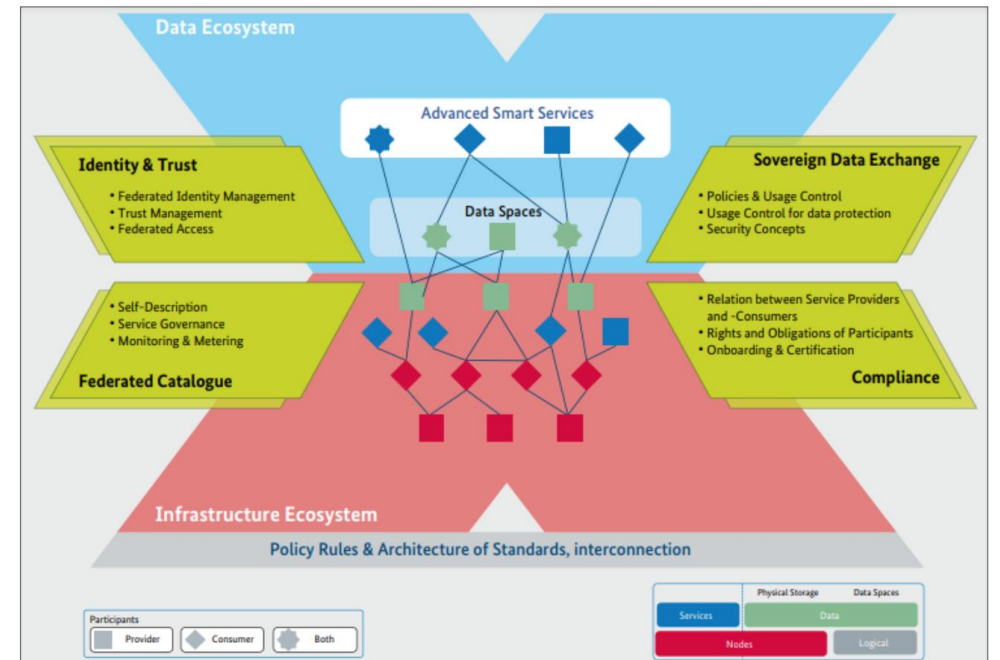


FIGURE 1. High-level view of the GAIA-X architecture.

What is Gaia-X?

- **Next generation of data infrastructure:** an open, transparent and secure digital ecosystem, where data and services can be made available, collated and shared in an environment of trust.
- **Federated and Secure** data infrastructure. Companies and citizens will collate and **share data** – in such a way that they **keep control** over their data. Decide where it is stored, and always retain data sovereignty.
- **Decentralisation.** A multitude of individual platforms all following a **common standard** – the Gaia-X standard. Based on the values of **openness, transparency, and trust**. Not a cloud, but a networked system that links many cloud services providers together.

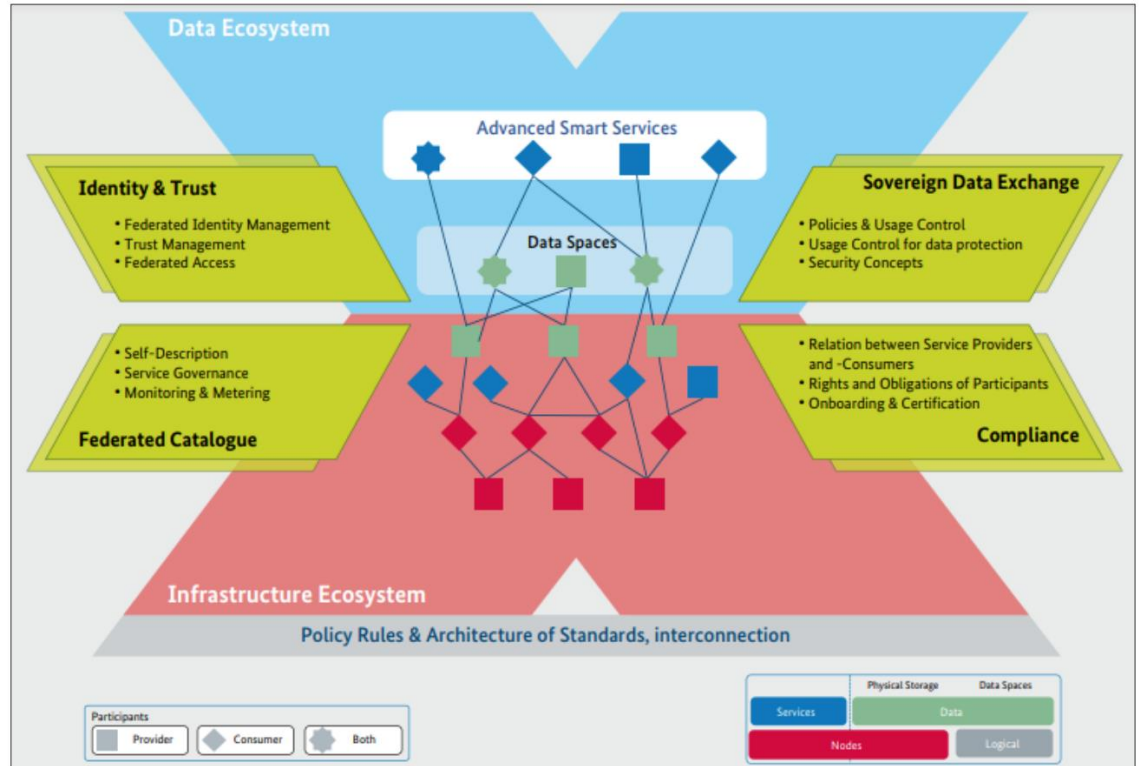


FIGURE 1. High-level view of the GAIA-X architecture.

The organisational pillars of Gaia-X

Gaia-X brings people from different **companies, research institutions, associations, administrations, and politics** together to work towards a **common goal**. Build on the widest spectrum of expertise to co-create the future of the digital infrastructure for Europe - across dedicated data spaces serving the most critical industries.

Gaia-X is built on **three pillars**: the **Gaia-X Association**, the national **Gaia-X Hubs**, and the **Gaia-X Community**. Within these, there are various working groups and committees. The exchange within, between and beyond these pillars towards other stakeholders (e.g. EU Commission, international initiatives) is ensured.

Gaia-X will **foster and support an open-source Community** in which all contributors are invited to participate..

Data spaces

- Term “**data space**” refers to a type of **data relationship between trusted partners**, each of whom apply the same **high standards and rules** to the storage and sharing of their data.
- **Data is not stored centrally** but at source and are therefore only shared (via semantic interoperability) when necessary. In the Gaia-X context, the **data in the data spaces** is held exclusively by the **members** of the Association.

Data spaces (Cont'd)

- A data space is **the sum of contributors** like data providers, users and intermediaries. A data provider, for example, can participate in several data spaces all at once.
- **Data sovereignty and trust** are essential for data spaces **The International Data Spaces Association (IDSA)**, a **founding member of the Gaia-X AISBL**, has proposed a **reference architecture** model for participants. Each data space provides specific data and thereby forms a solid ground for each ecosystem. The software required to implement **data spaces runs on cloud/edge cloud infrastructures**.

Relationship between Governance and Standards

- **Data Governance** is inextricably linked to **Data Standardization**
- “**Standardization = Interoperability**”
- AI Data, Big Data , IoT Data, **Just DATA**
- Manufacturing Data, Medical Data, Agri-Data ... **just DATA**
- **Data Usage, Data Sharing, Data Security ...**

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on European data governance (Data Governance Act)

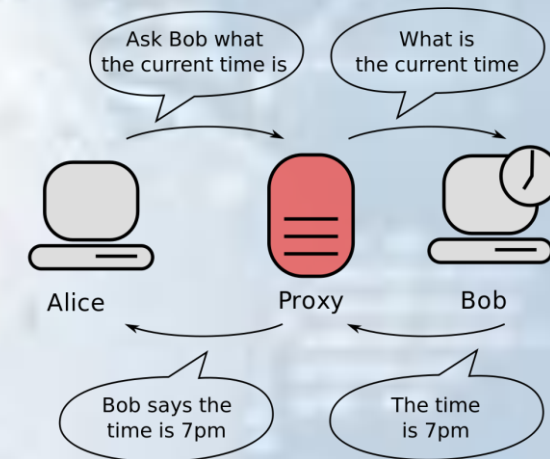
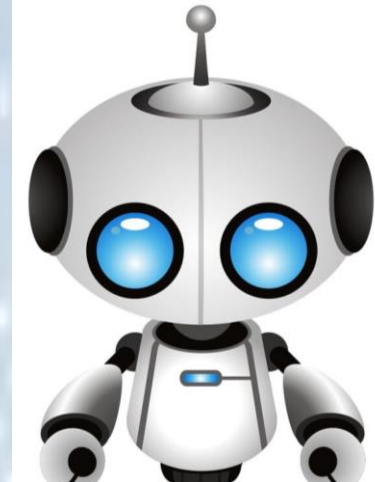
- From the Act-
- high level of support for the **prioritisation of standards** as well as **the data altruism** concept.
- management of the **consent**, including consent to certain areas of scientific research when in keeping with **recognised ethical standards** for scientific research
- a set of **technical and legal standards** for **transmitting data** between two processing environments that **allows data spaces to be organised** without making recourse to an intermediary

REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on European data governance (Data Governance Act) cont'd

- From the Act-
- Data Sharing - ensure **harmonisation with international or European data standards**
- European Data Innovation Board - formal expert group will support and advise the Commission on the **governance of cross-sectoral standardisation** and the preparation of strategic cross-sector standardisation requests
- European Data Innovation Board- **prioritisation of cross-sector standards** to be used and developed for **data use and cross-sector data sharing**, cross-sectoral comparison and exchange of best practices with regards to sectoral requirements for security, access procedures, while taking into account **sector-specific standardisations activities**;

'..data intermediaries' from the DGA

- Proxy
- Power of Attorney
- Delegate
- Robot
 - Actor
 - Program
- Contract
 - Authorised Signature
 - Blockchain



Ray Walshe

Director

EU Observatory for ICT Standards

Asst Professor of Emerging Technologies
Standardization **Dublin City University**

 ie.linkedin.com/in/raywalshe

