

Standardization on Maturity Assessment of Data Spaces

Clara Pezuela

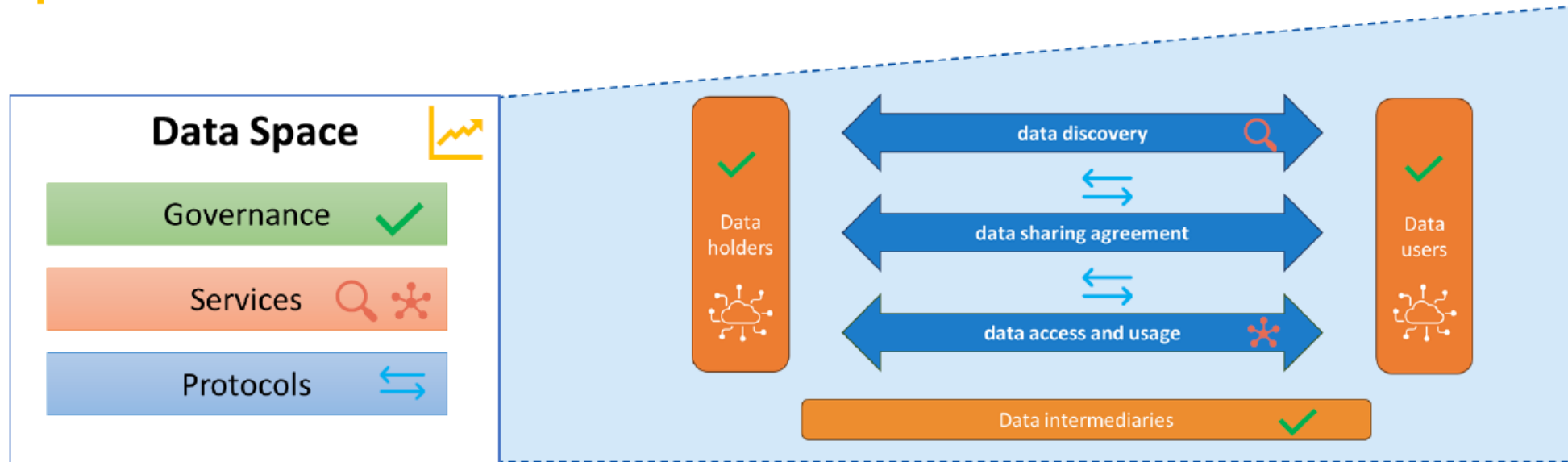
Expert in JTC25 – Project Lead for TS on Maturity Model


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Standardisation request


European Trusted Data Framework




 Trusted Data Transaction standard

 Data catalogue implementation framework

 Data governance standard for data space participants

 Semantic assets implementation framework








 Maturity model for Common European Data Spaces

EU Trusted Data Framework standardization request (2025-07-01)

EU Data Act | Article 33, Essential requirements regarding interoperability of data, of data sharing mechanisms and services, as well as of common European data spaces

*Participants in data spaces that offer data or data services to other participants shall comply with the following essential requirements to facilitate the interoperability of data, of data sharing mechanisms and services, as well as of common European data spaces which are purpose- or sector-specific or cross-sectoral **interoperable frameworks for common standards and practices** to share or jointly process data for, inter alia, the development of new products and services, scientific research or civil society initiatives(...)*

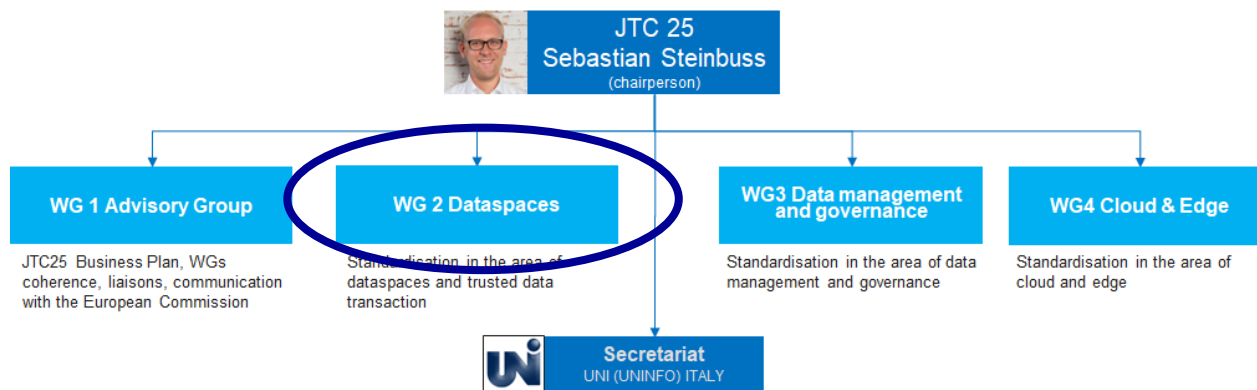
*The Commission shall, pursuant to Article 10 of Regulation (EU) No 1025/2012, **request one or more European standardisation organisations to draft harmonised standards** that satisfy the essential requirements laid down in paragraph 1 of this Article*

Ref.	Deliverable Title	Deadline	
1	Harmonised standards on Trusted Data Transactions — Part 1: Terminology, concepts and mechanisms	2026-06-01	
2	Harmonised standards on Trusted Data Transactions — Part 2: Trustworthiness requirements	2026-11-01	
3	Harmonised standards on Trusted Data Transactions — Part 3: Interoperability requirements	2027-05-01	
4	Technical specification(s) on a data catalogue implementation framework	2026-03-01	
5	Technical specification(s) on an implementation framework for semantic assets	2026-09-01	
6	European standard on a quality framework for internal data governance	2027-03-01	
7	Technical specification(s) on a maturity model for Common European Data Spaces	2026-09-01	

CEN/CENELEC JTC 25



- Launched on the 20th September 2024 in Brussels
- Scope on data management, dataspaces, cloud and edge
- More than 100 experts across EU
- Growing liaisons with projects and associations



Measuring the maturity of a data space is not a trivial task and required certain guidance



Which is the context of the Technical Specification (TS)?

- Data Spaces are key enablers for data sharing according to EU regulation (Data Act, Data Governance Act)
- European Trusted Data Framework standardization request to support the Article 33 of Data Act
- Includes a deliverable on Technical Specification(s) on a maturity model for Common European Data Spaces
- The Data Spaces Support Centre (DSSC) has produced a Maturity Model which has taken as baseline for the TS



Work in progress...



Which is the scope of the TS?

- Define a maturity model concept, structure, methodology and measurable criteria
- And related requirements and guidance for the assessment of data space maturity

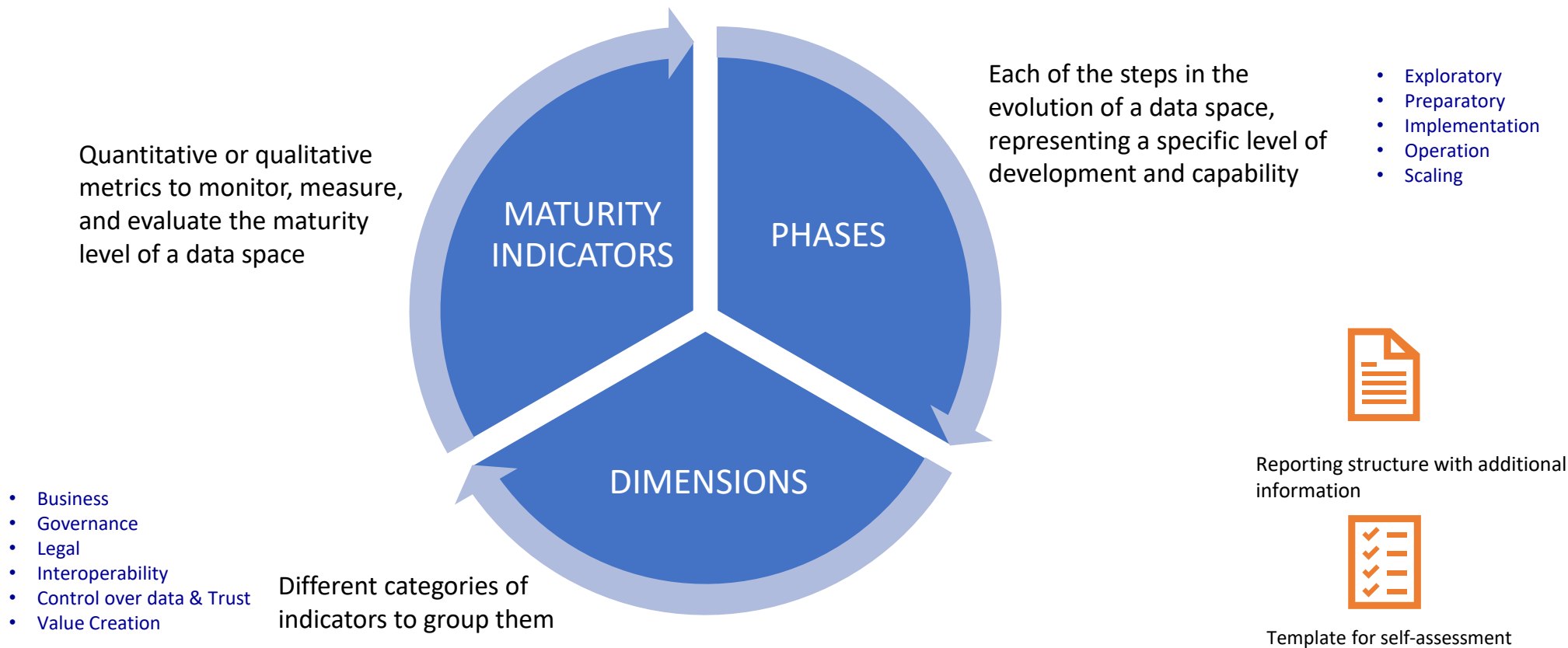


Which are the intended use of the TS?

- As a Data Space (or any other data sharing initiative), you can:
 - self-assess the evolution of your data space at any time
 - compare your data space with the others (if self-assessments are public)
 - identify your data space strengths and areas for improvement to evolve
- As candidate to join a Data Space, you can decide your engagement based on the published self-assessment
- As Policy Maker, you can get an overview of all data spaces maturity and take actions based on analysis
- As a Certification Provider, you can use the model for creating your certification offering



Elements in the maturity model



Data Space Maturity Indicators (DSMI)

Indicator description

- Which aspect of the data space do we want to assess?

Metrics (driven by capabilities)

- What do we want to measure? Which are the included capabilities? How do we ask it?

Measurable values

- Which are the possible values to measure?

Scoring per phase

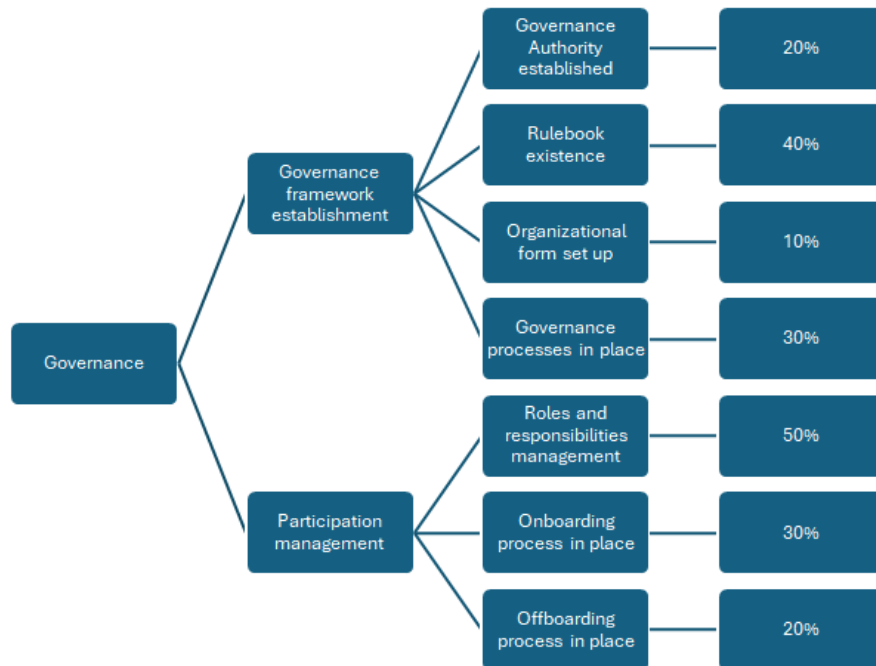
- How do we want to measure it?

Weight of relevance

- How relevant is every maturity indicator within the overall dimension? (the total must be 100%)



Example of Governance maturity assessment



Only Conceptual	Already Drafted	Established but still under validation	In continuous operation	Even enable to scale
Not exists	Exists with basic tailoring	Comprehensive, tailored, and covers all key topics	Used in daily operation at least in human-readable format	Fully operational, digital integrated, machine-readable format
Not defined yet	Drafted	Established	Enforced	Size-adapted structure
No formal processes yet	Drafted processes	Processes defined and communicated	In enforcement, regularly updated	Size-adapted processes
Not defined yet	Drafted	Established	Continuously running	Size-adapted
Not defined yet	Drafted	Established	Continuously running	Size-adapted
Not defined yet	Drafted	Established	Continuously running	Size-adapted

Template for self-assessment (example)

Maturity Assessment Self-Assessment template

* Indica que la pregunta es obligatoria

Governance dimension

What is the Governance Authority (GA) level of establishment in your data space? *

The GA is the body of a particular data space, responsible for developing, maintaining, operating and enforcing the governance framework. The expected capabilities are: Governance framework creation; governance model definition; ensure transparent decision making process; internal regulations in place.

- ☐ Only conceptual
- ☐ Already drafted
- ☒ Established but still under validation
- ☐ In continuous operation
- ☐ Even enable to scale

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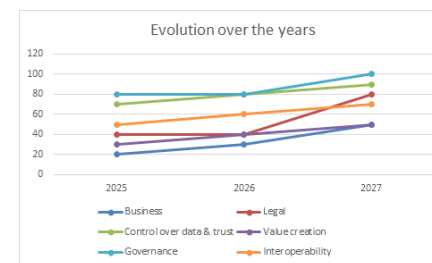
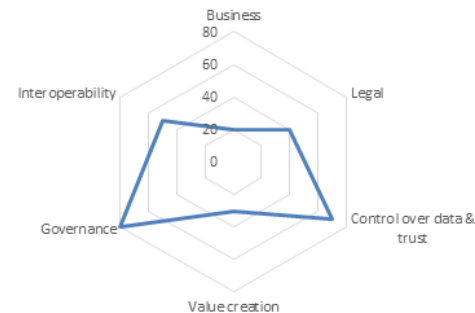
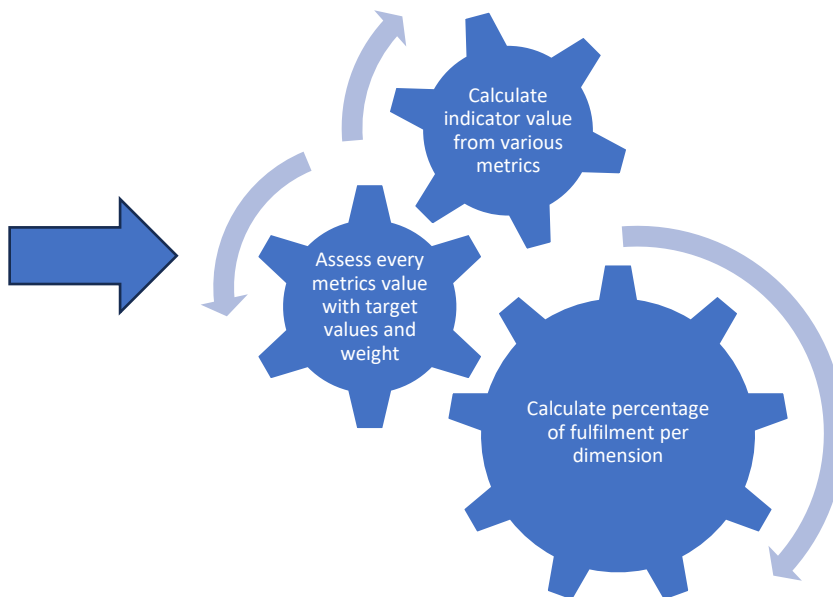
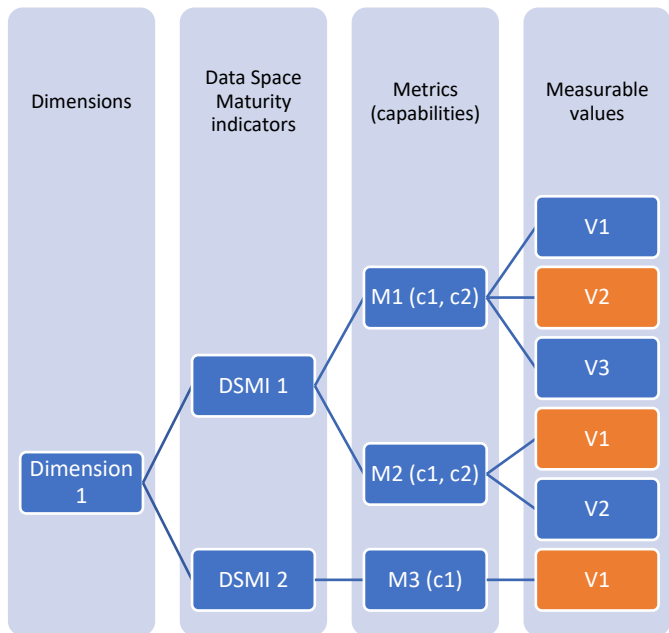
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Maturity assessment method (in progress)



Questionnaire

Analysis

Visualization



No matter your phase,
matter your continuous evolution

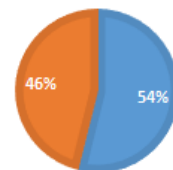


Workshops with community

- At EBDVF 2025 in Copenhagen and GAIA-X Summit in Porto
- 50 participants in total
- The dimension most relevant for measuring the maturity is Value Creation, followed by Governance
- Provided insights about what to measure: ROI, compliance, standards, use cases, transparency....

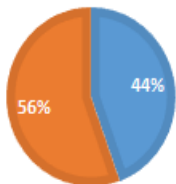
INVOLVEMENT IN DATA SPACES

■ Involved in data spaces ■ Not involved in data spaces



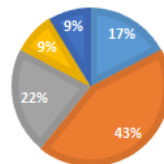
DSSC MM AWARENES

■ Aware of DSSC MM ■ Not aware of DSSC MM



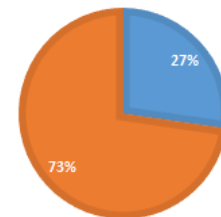
PHASES DISTRIBUTION

■ In exploratory phase ■ In Preparatory phase
■ In implementation phase ■ In operation phase
■ In scaling phase

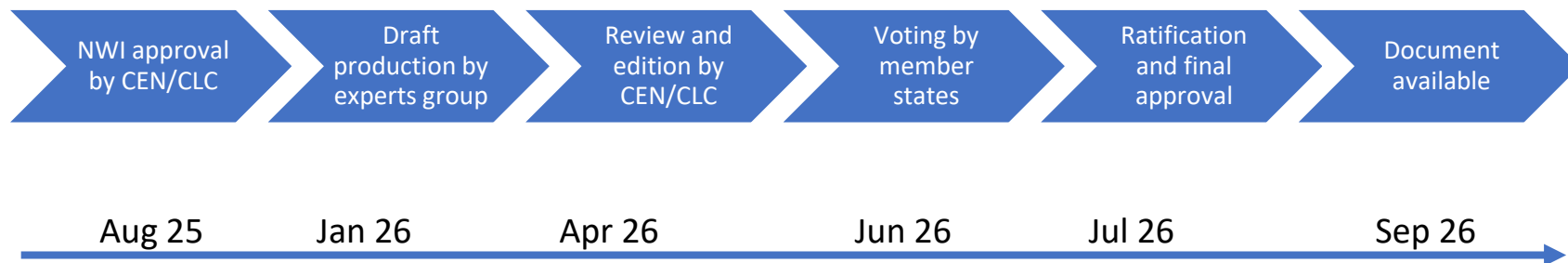


PREFERRED ASSESSMENT

■ Self-assessment ■ Third-party assessment



Timeline for TS production



STAY TUNED FOR NEXT STEPS!!





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Camino de Vera, s/n CPI-UPV
Ed/ Bldg. 8G Acc. B - Nivel 4 / 4th Floor
46022 Valencia - España/Spain
Telf.: +34 96 387 70 69

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