



Standardisation: gaps, citiverse and digital twins, dataspaces, continuum

**Antonio Kung, Trialog, AIOTI WG Standardisatio
Chairman**

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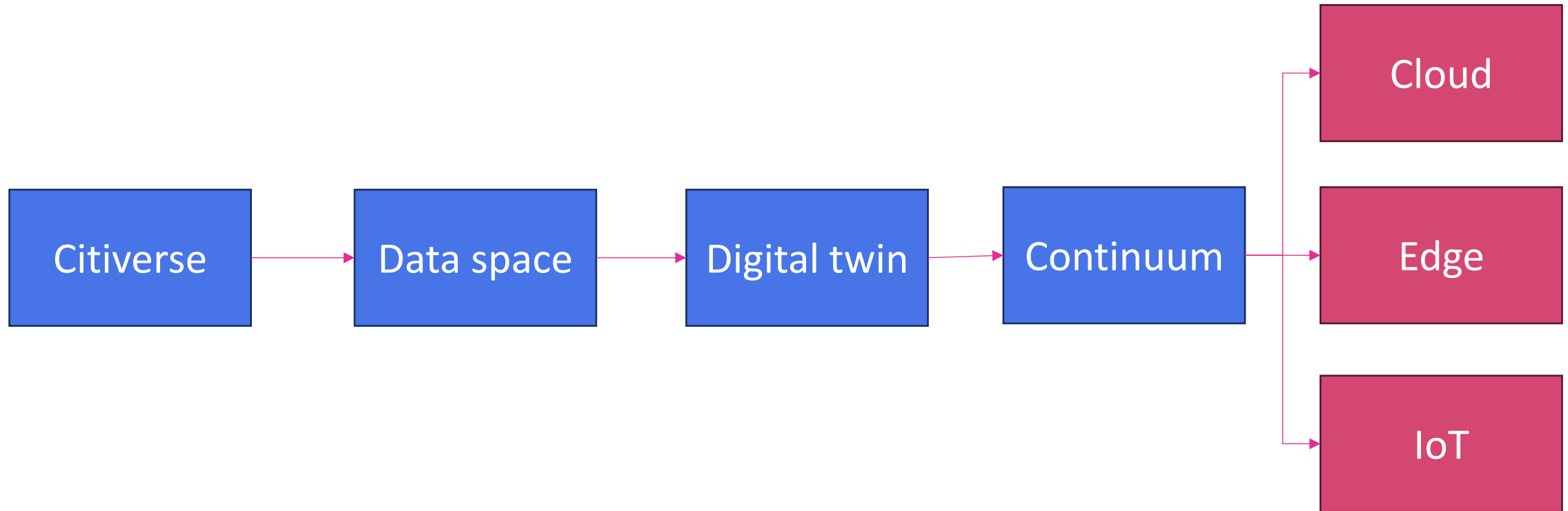
Participants

- Moderator
 - Antonio Kung, Trialog, Chair AIOTI WG standardisation
- Speakers
 - Francois Fischer, FSCOM, AIOTI WG Mobility Chair
 - Pierre Gronlier, CTO, Gaia-X
 - Svet Mihaylov, European Commission, DG Connect, IoT Unit, Policy Officer

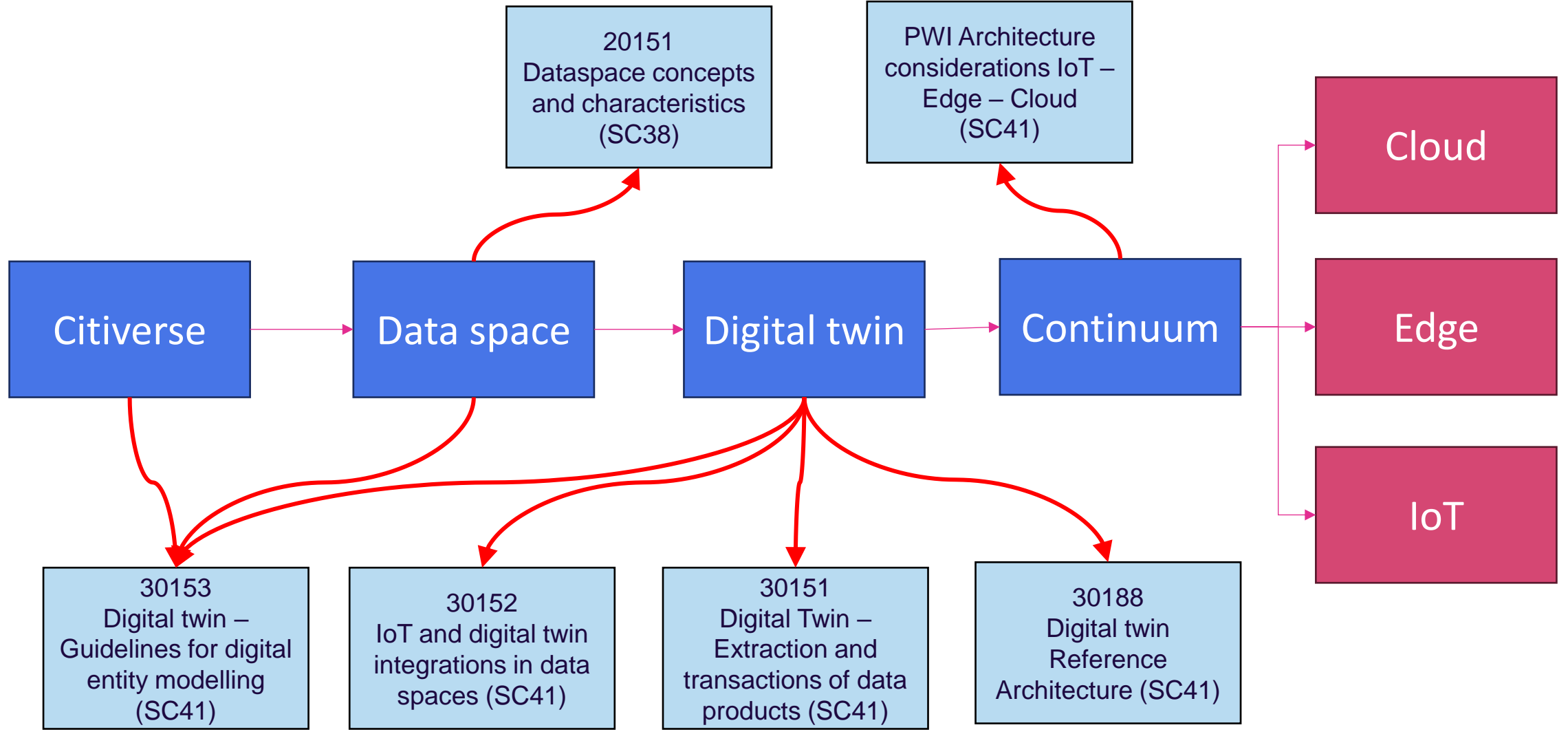
Standardisation: gaps, citiverse and digital twins, dataspaces, continuum

- Expansion of IoT and/or edge computing landscape
 - Opportunities and challenges
 - Role of standardization
 - Support various implementations
 - Guidance on interoperability
- Context
 - Citiverse and digital twins
 - digital representation of real-world entities or processes.
 - Data spaces
 - environment for data sharing.
 - Continuum paradigm
 - From IoT to cloud

An architecture and interoperability issue



Related standards



CEN/CLC/JTC 25 - Data management, Dataspaces, Cloud and Edge

- Standardisation in the area of data management, dataspaces, cloud and edge, including:
 - data governance, data quality and data lifecycle management;
 - interoperability, portability and switch ability;
 - organizational frameworks and methodologies, including IT management systems;
 - processes and products evaluation schemes;
 - smart technology, objects, distributed computing devices, data services.

https://standards.cencenelec.eu/dyn/www/f?p=205:7:0::::FSP_ORG_ID:3485479&cs=1EF27AE97B5DBDA9B990D3DAF8BD63366

Paper on the evolution of interoperability standards

Multiple authors (EU, US, Asia). Edited by INT:NET, AIOTI and then ISO/IEC

- Historical perspective

- ICT standards ----- OSI → Open Distributed Processing Reference Model → Cloud → IoT → AI
- Application domain standards ----- Health + Energy + Smart Cities ...
- Conformance ----- Interaction → Behavior → Policy

- Changing context

- Complex ecosystems
- Policies and regulations
- New interoperability frameworks

- Next generation of interoperability standards

- Standard interoperability (SMART) ----- Horizontal standards + Vertical standards
- Concept and architecture interoperability
- System interoperability

Paper on the Evolution of Interoperability Standards

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Paper on the Evolution of Cybersecurity Standards

Antonio Kung, Trialog - François Zamora, Orange - Jean Caire, RATP

August 2024

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Questions to speakers

24 September 2024

Questions

- François Fischer, FSCOM, AIOTI WG Mobility Chair
 - How can we ensure cross-SDO interoperability? SDO + Alliance?
- Pierre Gronlier, Gaia-X
 - How can Gaia-X and data spaces support the integration of the virtual world?
 - How can Gaia-X and data spaces support the integration of the IoT/Edge/Cloud
- Svet Mihaylov EC, IoT Unit
 - Roadmap to integrate data spaces with the continuum
 - Relationship with CEN CENELEC JTC 25 DDCE
 - Liaison from EC to ISO/IEC JTC 1/SC32 (data exchange) and ISO/IEC JTC 1/SC41 (IoT and digital twin)