Alionce for Internet of Things Innovation

AIOTI SIGNATURE EVENT

IoT and Edge computing: Societal Impact and Opportunities for the Green Digital Twin Transition

27 Sep | Brussels | 2022

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AIOTI Testbeds Methodology and Catalogue

Georgios Karagiannis
Chairman of AIOTI WG Standardisation (Huawei)
AIOTI Testbed Methodology

Source: AIOTI Testbed Methodology, AIOTI Testbed Group, November 2021
Testbeds and Standardisation process

Towards Agile Standardization: Testbeds in Support of Standardization for the IIoT
Recommendations

- Consider that there is a relation between Innovation, Testbeds and Standardisation
- Several methodologies are available to guide the initiation and the realization of testbeds, where the AIOTI testbed methodology is one of them
- When testbeds become part of a standardisation and innovation ecosystem, e.g., being incorporated an EU funded project or in an association such as AIOTI:
  - can accelerate the standardisation and technology deployment processes
  - supports the provision of validated solutions to standards development process allowing for a faster specification of standards with no decrease of quality
- Example: for Step A of AIOTI testbed methodology (strategic considerations) consider the standardisation gaps that have been identified by the AIOTI IoT and Edge computing stand. Gap Analysis taskforce
Considerable (high priority) standardisation gaps related to AIOTI identified edge computing challenges of (red color):

- Digital Twins (and Green Deal) (Sections 2.4, 2.5, 2.9);
- ICT/IoT and policies description and languages supporting the Environmental, Social and Governance (ESG) monitoring (Sections 2.6, 2.15.11, 2.15.12);
- Federated Learning and AI (Sections 2.7, 2.15.7, 2.15.19);
- Devices and IoT swarm systems management (Sections 2.15.13, 2.15.17).

Activities could be initiated for creation of standardization specifications covering challenges of (brown color):

- IoT and edge computing coexistence/integration/interoperability and continuum across several sectors and platforms (Sections 2.14, 2.15.6, 2.15.5, 2.15.6, 2.15.15, 2.15.16, 2.15.20, 2.15.21, 2.15.22, 2.15.23);
- Services discovery and authentication – in the context of multiple edges (Sections 2.15.8, 2.15.9).
Thank you for listening

Any questions?

You can find us at @AIOTI EU or email sg@aioti.eu