



Alliance for  
Internet of Things  
Innovation

# IoT and Edge Computing II: The Far Edge

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# AIOTI Mission and Vision

## Mission

To drive on behalf of our members business, policy, research and innovation development in the IoT & Edge Computing and other converging technologies across the Digital Value Chain to support digitization in Europe, and competitiveness of Europe.

## Vision

Together we aim to lead, promote, bridge and collaborate in IoT & Edge Computing and other converging technologies research and innovation, standardisation and ecosystem building providing IoT deployment for European businesses creating benefits for European society. We co-operate with other global regions to ensure removal of barriers to development of the IoT & Edge Computing market, while preserving the European values, including privacy and consumer protection.

- IoT/IIoT applications in verticals
- Vision on IoT/IIoT/edge computing for the future
- IoT/IIoT - engine for converging technologies

## LEADERSHIP

## CONTRIBUTION

- Providing input on EU policies and strategies
- Providing input to standardization bodies

- Contribution in relevant EU funding programmes and partnerships
- European and International dimension

## COLLABORATION

## SHARING

- DLT's applied to industrial sectors
- Computing continuum (data-connectivity-computing)



# Strategic Research & Innovation Agenda (SRIA)

- The vision of the future is **IoT and Edge Computing** self-organizing system to allow the implementation of de-centralized and distributed computing connectivity processing and collective and federated learning
- AIOTI SRIA will expand further on the findings of the IoT and Edge paper and build on AIOTI's extensive experience in the verticals, propose contribution with test beds, large scale piloting and other EU funded projects such as DIH's.

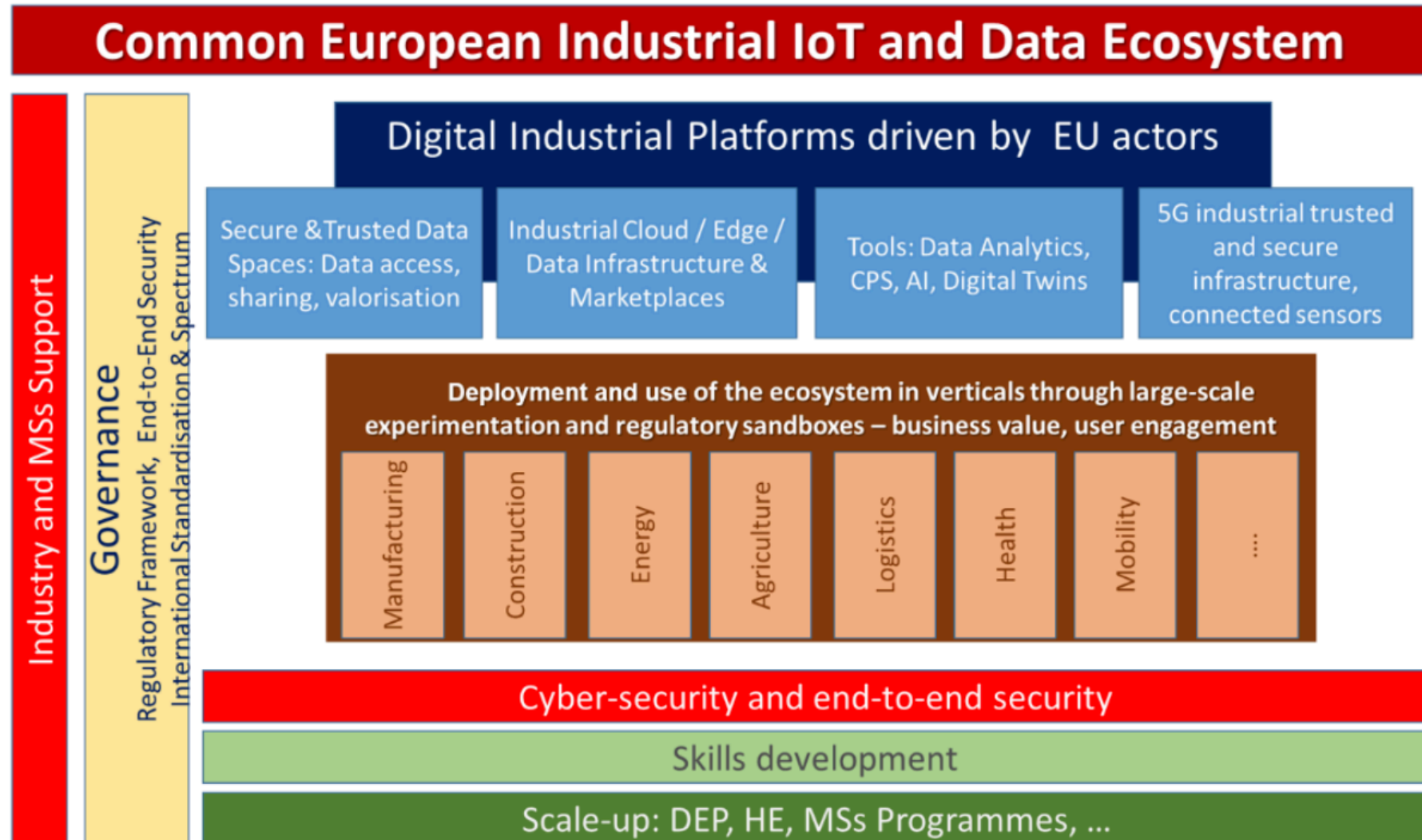
# SRIA – SME Perspective

- The measures to align EU and national funding and to simplify co-funding are also warmly welcomed by AIOTI. The effect will be to increase the funding available, for large firms and SMEs alike, and to complement national-level funding, rather than merely replace it
- A particular point of interest is the funding of activities that create collaborative platforms for IoT innovation, providing access to multiple actors that include SMEs and start-ups and creating a multiplier for further innovation and economic development
- These funding mechanisms need to support measures to strengthen cross-border, interdisciplinary cooperation that brings together the best European players from science, industry and society and drives European added value
- The integration of IoT/IIoT into IPCEI as part of connectivity infrastructure to give access for public authorities and businesses, (i.e, SMEs, start-ups), to IoT/IIoT testing and experimentation facilities in Member States, while increased investments in research and innovation under Horizon Europe to ensure that the EU stays at the forefront of scientific and technological developments in IoT


# Game Changer

- Highly decentralized IoT computing environment
- Interconnected by dynamic resource allocation optimized on the edge needs and location
- Self-assembling Mesh network with IoT location aware services and Edge Computing processing capabilities

# Strategic Value Chains - IIoT



# New opportunities

- The vision of the future is **IoT and Edge Computing** self-organizing system to allow the implementation of de-centralized and distributed computing connectivity processing and collective and federated learning
- Opportunities to directly engage and offer AIOTI's innovation in paradigm shift towards decentralized processing and **value creation at the edge**
- **IPCEI on IIoT**: presented last year, reinforced in Council Conclusions
- **Green IoT**: IoT applications and monitoring of applications in other sectors to achieve decarbonisation goals
-  **Example**: IIoT - Electro-Mobility Task Force



# Solid Base - Overcome Siloes

Connectivity	Big Data / AI	IoT/Edge	HPC	Components
<p>SNS Partnership</p> <p>SRIA: Provided contribution via SRIA Editorial Teams</p> <p>Work Programme: Task Force launched on 4 December</p>	<p>BDVA</p> <p>Providing direct input to SRIA, participating in editorial team</p>	<p>AIOTI</p> <p><a href="#">Paper on IoT and Edge Computing</a></p> <p>AIOTI SRIA</p>	<p>HiPEAC / ETP4HPC</p> <p>Providing use cases for SRIA</p>	<p>KDT Partnership</p> <p>KDT SRIA and IoT Paper</p>



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