IoT - driving Europe's technology sovereignty and leadership

Where and when

Date: 29 September 2020
Venue: Fraunhofer FOKUS, Kaiserin-Augusta-Allee 31 10589 Berlin
Exhibitors: Space is available for interested exhibitors

Agenda

08:00   **Registration**

09:00   **Welcome** by Prof. Dr. Manfred Hauswirth, Executive Director, Fraunhofer FOKUS and Jürgen Sturm, Chairman of the AIOTI Management Board

09:30   **Keynote address** Khalil Rouhana, deputy Director General, European Commission, DG Connect

10:30   **Break and networking**

11:00   **Corporate sponsor presentation**

11:30   **Session One: Data sovereignty and the role of IoT**

12:30   **Lunch**

14:30   **Session Two: Beyond 5G and application in cross-vertical industry domains**

15:30   **Break and networking**

16:00   **Presentation of IoT DIH Network**, Pierre-Yves Danet, Orange

16:30   **Session Three**: IoT/IIoT research priorities in Horizon Europe, sustainability and climate change

17:30   **Wrap up** and announcing the AIOTI Signature Event 2021

18:00   **Cocktails and dinner** until 20:00

Content

Session One: Data sovereignty and the role of IoT

Digital and IoT platforms play an important role in data sovereignty, since they are able to provide access to products, services, digital content, information, and data for everybody. At the same time, data sovereignty developments will have a big impact on the deployment of IoT/IIoT applications and use cases, data sharing and exchange.

In many cases, IoT and IIoT applications are increasingly implemented cross-border; data sovereignty is the concept that data may be subject to the laws of multiple countries and trading blocs. It becomes an issue when data is stored internationally and locally and a business or application uses local and overseas service providers that are subject to different laws and regulations.

According to the International Data Space Association (ISDA), data sovereignty can be achieved by establishing a concept and components for a secure and trusted data infrastructure, one that binds usage restrictions to data. Enforcing data sovereignty requires an appropriate technical infrastructure that facilitates contractual agreements on the use of data.

This session explores these issues, including how Germany's federal government, business and science communities have initiated the GAIA-X project. This aims to establish a high performance, competitive, secure and trustworthy data infrastructure for Europe - a federated open platform based on:

1. Stating the specific technical and economic conceptual work required to build such an infrastructure.
2. Creating a common ecosystem of users and providers from public administration, the health sector, enterprises and scientific institutions.
3. Establishing framework conditions and structures.

This session includes a panel discussion focused on:

Technology: how IoT applications and use cases will be affected by data sovereignty developments; addressing the scalability, replicability and interoperability of IoT applications; and how IoT can support data sovereignty and privacy e.g. the IoT-enabled data marketplaces, data lakes etc.
Governance: for platforms facilitating sharing services; use cases and domain examples; will data sovereignty developments like GAIA-X project and IDS require modifications in EU governance, rules and regulations, and what are the differences with US and Chinese solutions?
Standards: can existing IoT standards accommodate the data sovereignty developments or are modifications needed in areas such as of data ontologies and platform interoperability, especially considering developments such as GAIA-X as a federated and open data infrastructure platform?

Panel includes:
   Moderator
   Introductory speech
   Alban Schmutz, Chairman CISPE
   Friedrich Gröteke, Federal Ministry of Economic Affairs and Energy
   AIOTI representative

Session Two: Beyond 5G and applications in cross-vertical industry domains

With consumer and personal communication commercial 5G networks rolling out in ever-more countries, the next wave of 5G expansion will allow organizations to digitalize with greater mobility, flexibility, reliability and security than ever before.

Focusing on vertical and cross-vertical use cases, this session explores how converging 5G, IoT/IIoT, Artificial Intelligence (AI), security tech, robotics, cloud and edge computing plus automation are bringing unparalleled technology-led transformations across all industries, meaning new opportunities, benefits and risks.

This converged world promises applications that better support the welfare and wellbeing of citizens while driving the digital transformation of industries, companies and public services. However, technology development and user-centric application development have not been strongly linked in the past, and the ever-increasing scope of digitization makes this disconnect more acute. A holistic end-to-end approach is critical for the socio-economic success of digitization, drawing on expertise in, among other areas, sensing hardware, systems integration, communications, data storage and processing, AI and its applications.

The session includes a panel discussion focused on:

Technology: how will converging tech including 5G, IoT/IIoT, AI, robotics, automation and cloud support vertical and cross-vertical applications?
Research: how research in the context of the Horizon Europe SNS (Smart Networks and Service) partnership and Horizon Europe programme contribute to this technology convergence.
Governance: does this converged world require changes in EU governance, rules and regulations?
Standards: can existing IoT standards accommodate using these converged approaches in vertical and cross-vertical applications?

Panel includes:
> Moderator: Colin Wilcock, 5G IA Chairman
> Introductory speech: Alexander Bentkus, 5G ACIA
> Representative of verticals (ZVEI member, from the side of implementors)
> Peter Stuckman, Head of Unit Future Connectivity Systems, European Commission, DG Connect
> AIOTI representative

Session Three: IoT/IIoT research priorities in Horizon Europe, sustainability and climate change

The era of converging technologies is already here with the "intelligent connectivity" that is defined by the global association of mobile network operators (GSMA) as "the fusion of 5G, AI and IoT". Is this new world aligned with priorities in the European Commission's Horizon Europe, the ambitious €100 billion research and innovation programme that succeeds Horizon 2020?

While 5G networks offer clear improvements, recent findings suggest that research in this area should be widened, continue at an increased pace and address the convergence with IoT/IIoT, edge computing, AI, etc. to address future integration challenges and applications requirements. The digitization of industry, the necessity to integrate technological and business enablers, and the need to address European and global challenges across the value chain are creating a strong basis for new research and innovation proposals.

At the same time, it's recognized that "intelligent connectivity" is essential to achieve the United Nations Broadband Commission agenda for 17 Sustainable Development Goals (SDGs). Deployment targets have been set for 2025, underlining the importance of communication systems and networks in addressing economic growth, multiple social challenges, and other critical issues around climate change and sustainability.

This session covers European autonomy in IoT-related technology sectors, research priorities, new EU partnership, European Commission vision, and a Q&A.

The discussion will explore areas including:

- Policies and priorities.
- How IoT technologies can contribute.
- What can and should be done to:
  - Help secure Europe's digital sovereignty.
  - Boost research and innovation.
  - Retain Europe's global leadership in next generation intelligent connectivity.
  - Achieve the United Nations SDGs.

Panel includes:
Moderator
Introductory speech: Nikolaos Isaris, European Commission, DG Connect, IoT Unit
Dušan Chrenek, Principal Advisor, European Commission, DG Climate Action
Werner Mohr, 5G IA
AIOTI representative