Digital technologies have proven instrumental in enabling innovations across all sectors of the economy. The combination of an open human-centric Internet of Things allowing for new data-driven business models will create opportunities for data marketplaces.

The safeguarding of Digital Sovereignty is instrumental to enable an IoT platform economy, shaping European industrial policies to avoid "The Winner takes it All", setting the standards for fair level playing field, therefore, allowing consumers and businesses to exercise control over their data assets without having to keep the data in silos.

In response to the changing market dynamics, both governments and the industry has taken action by putting forward appropriate instruments. With legislation such as the General Data Protection Regulation (GDPR) and the Free Flow of Non-Personal Data Regulation, as well as by updating sector specific regulations such as the Payment Service Directive 2 (PSD2) relevant for the finance sector governments have taken first steps to foster a vibrant data economy that provides for equal opportunities for all market players. Also, certain markets have demonstrated interest by taking sector specific initiatives, such as the adoption of a Code of Conduct on agricultural data sharing.

The Workshop on Data Sharing in IoT Ecosystems (‘Workshop’) will tackle opportunities for data-driven services in sectors like mobility, farming and energy. It exploit use cases from the IoT Large Scale Pilots funded under Horizon 2020 and extract key elements of a striving data economy in those sectors, most important to present the underlying architecture design and setting the standards for fair level playing field whilst supporting innovative business models.

The discussions will identify the main challenges for IoT data value chain, regarding data-driven services, data flows including data classification, data sharing, data lifecycle, digital rights management, personal data protection and present best practices from different IoT Large-Scale Pilot projects and sectors.

Special attention will be paid to building consensus among stakeholders in vertical and horizontal value chains on principles of data sharing, possibly paving the way for the establishment of a code of conduct applicable across all sectors. Regulatory issues across different domains (digital, energy, mobility) with links to national initiatives will, also, be addressed.

This Workshop is part of a series of IoT events related to data marketplaces. The event is organised by the CREATE-IoT project as part of the IoT Large-Scale Pilots Programme with support from DG Connect and Alliance for IoT Innovation (AIOTI) as the co-hosts of this event.

The Workshop will take place on 29 January 2020 back-to-back to the Data Sharing Days, 27-28 January 2020, in The Hague, Netherlands, for which a special discount arrangement is available for the attendees of this Workshop.

For this Workshop a registration link will be provided. For more information about this Workshop please revert to: events@create-iot.eu.
## Workshop Program 29 January 2020

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
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<tbody>
<tr>
<td>08:30-09:00</td>
<td>Registration</td>
</tr>
<tr>
<td>09:00-09:10</td>
<td>Welcome and Introductions. Rolf Riemenschneider, DG CONNECT, Ovidiu Vermeersch, AIOTI/CREATE-IoT</td>
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<tr>
<td>10:00-11:00</td>
<td>Market views on data sharing and data-driven services from different sectors - Q&amp;A - Discussions Session</td>
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<tr>
<td>11:00-11:30</td>
<td>Coffee/Tea Break</td>
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<tr>
<td>11:30-12:15</td>
<td>Elements of a data framework - Q&amp;A - Discussions Session</td>
</tr>
<tr>
<td>12:15-13:00</td>
<td>World Café: The panel will be followed by 30’ round table discussions and 15’ plenary reporting based on the World Café method. Moderators: Witte Wijmuller, Franck Boissiere, Rolf Riemenschneider DG CONNECT, Tiana Ramahandry, CREATE-IoT</td>
</tr>
<tr>
<td>13:00-14:00</td>
<td>Networking Lunch</td>
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What needs for smart policy making? - Q&A - Discussions Session

Questions:
- What are challenges for market design?
- How to achieve coherence across different policy domains
- What measures are planned at national level (if there are)
- Need to act at National / European level

Panellists:
1. Friedrich Gröteke, BMWI, Germany
2. Lars Meindert, Dutch Ministry of Economic Affairs
3. Maria Rautavirta, Finnish Ministry of Transport & Communications
4. Lisbeth Münik, BMVIT - Austrian Federal Ministry for Transport, Innovation and Technology
5. Diederik van Leeuwen, New Trust Foundation

Moderators: Rolf Riemenschneider DG CONNECT, Arthur van der Wees AIOTI/CREATE-IoT

15:00-15:15 Coffee/Tea Break

Architecture and Use Cases - Q&A - Discussions Session

Experiences and best practices from IoT Large-Scale Pilots
Questions:
- Benefits of an open architecture design for an easy-to-access market?
- What type of data exchange is needed?
- What is the level of interoperability, level of harmonisation, level of access needed?
- Standardisation achievements/gaps

World Café: Round table discussions and 20’ plenary reporting based on the World Café method.

Henrik Madsen, DTU (Energy)
Laura Daniele, TNO / Interconnect (Energy)
Felix Grohman, Greencom (Energy)
Juanjo Hiero FIWARE, Olaf-Gerd Gemein, Smart City Lab (Water, Mobility)
Prokop Jehlicka, HERE (Automotive)
Gurkan Salman, (Mobility)
Panos Ilias, ILVO Vlaanderen (Farming)
Alexander Berlin (Farming)

Moderators: Jan Komarek, Franck Boissiere, DG CONNECT, Tiana Ramabhandry, CREATE-IoT

16:45-17:15 Summary/Wrap-up and closing. Rolf Riemenschneider, IoT Unit DG CONNECT

Co-organised and supported by:
Alliance for Internet of Things Innovation (AIOTI) is the multi-stakeholder platform for stimulating IoT Innovation in Europe, bringing together small and large companies, start-ups and scale-ups, academia, policy makers and end-users and representatives of society in an end-to-end approach. We work with partners in a global context. We strive to leverage, share and promote best practices in the IoT ecosystems, be a one-stop point of information on all relevant aspects of IoT Innovation to its members while proactively addressing key issues and roadblocks for economic growth, acceptance and adoption of IoT Innovation in society.
IoT European Large-Scale Pilots Programme Projects

**ACTIVAGE** - ACTIVATING INNOVATIVE IoT SMART LIVING ENVIRONMENTS FOR AGEING WELL - is building the first European interoperable and open IoT ecosystem enabling the deployment, at large scale, of a wide range of Active and Healthy Ageing IoT based solutions and services. To achieve this, ACTIVAGE is integrating thousands of devices to collect and analyse older adults’ environmental and lifestyle information, identify their needs, and provide customized solutions, ensuring users’ data privacy and security.

**AUTOPilot** - AUTOMATED DRIVING PROGRESSED BY INTERNET OF THINGS – is developing an IoT connected vehicle platform and IoT architecture based on the existing and forthcoming standards, as well as open source and vendor solutions. The IoT ecosystem accommodates vehicles, road infrastructure and connected IoT objects, with particular attention to safety critical aspects of automated driving. The project develops a range of services combining autonomous driving and IoT, such as car sharing, autonomous valet parking, and better digital maps for autonomous vehicles.

**CREATE-IoT** - CROSS FERTILISATION THROUGH ALIGNMENT, SYNCHRONISATION AND EXCHANGES FOR IoT - CREATE-IoT’s stimulate collaboration between IoT initiatives, foster the take up of IoT in Europe and support the development and growth of IoT ecosystems based on open technologies and platforms. The work focuses on synchronisation and alignment on strategic and operational terms through frequent, multi-directional exchanges between the various activities under the IoT Focus Areas and the road-mapping with international initiatives.

**IoF2020** - INTERNET OF FOOD AND FARM 2020 - is dedicated to accelerating the uptake of IoT technologies in the European farming and food chains and ultimately strengthening their competitiveness and sustainability. How? By demonstrating, together with end-users, the use of IoT in different use-cases spread throughout Europe, and focusing on 5 areas: dairy, meat, arable crops, fruits and vegetables. IoF2020 is designed to generate maximum impact right from the outset and in the long-run, bringing closer together and integrating the supply and demand sides of IoT technologies in the agri-food sector.
**MONICA** - MANAGEMENT OF NETWORKED IoT WEARABLES – VERY LARGE-SCALE DEMONSTRATION OF CULTURAL AND SOCIETAL APPLICATIONS - is a large-scale demonstration of how cities can use existing and new IoT solutions to meet sound, noise and security challenges at big open-air cultural and sports events, which attract and affect many people. Innovations include the establishment of sound zones at outdoor concerts for noise mitigation as well as security measures improving crowd information and management.

**SynchroniCity** - DELIVERING AN IoT-ENABLED DIGITAL SINGLE MARKET FOR EUROPE AND BEYOND - brings together partners with worldwide outreach. The project represents the first attempt to deliver a digital single market for IoT-enabled urban services in Europe and beyond. With an already emerging foundation, based on OASC Minimal Interoperability Mechanism (MIMs), SynchroniCity will establish a reference architecture model for the envisioned IoT-enabled city marketplace with identified interoperability points and interfaces and data models for different verticals.

**U4IoT** - USER ENGAGEMENT FOR LARGE SCALE PILOTS IN THE INTERNET OF THINGS - combines complementary Responsible Research and Innovation – Social Sciences and Humanities (RRI-SSH) expertise encompassing social and economic sciences, communication, crowdsourcing, living labs, co-creative workshops, meetups, and personal data protection to actively engage end-users and citizens in the large-scale pilots. U4IoT encompasses the whole lifecycle of end-user engagement in LSPs. Privacy-friendly crowdsourcing and survey tools enable to monitor the end-user perception and acceptance of IoT applications.
To promote and foster the take-up of IoT in Europe and to enable the emergence of an economically sustainable IoT ecosystem, the IoT European Large-Scale Pilots Programme projects are seeking to involve the IoT community across the value chain, from supply side to demand side.

Welcome to the IoT European Large-Scale Pilots Programme

A vibrant research, innovation, development and deployment IoT ecosystem across Europe!