



CREATE the Next Generation IoT eXperience for the Future

European Industry Partnerships Collaborative Event

17 April 2019, Steigenberger Airport Hotel Amsterdam - Amsterdam, The Netherlands

Developing and enlarging the European IoT ecosystems requires collaboration and coordination among various European Partnerships and strong links between communities of IoT users and providers, to discuss, align and plan research and innovation agendas for development and deployment of IoT technologies and applications across various industrial sectors as part of the next Framework Programme for research and Innovation.

The aim of this workshop is to:

- Present the state-of-play and developments of European research and innovation landscape related to IoT
- Present the IoT Large-Scale Pilots Programme projects outcomes, the value proposition, the gaps identified and highlight the next steps for sustainability and scaling up the results
- Discuss and provide recommendations for the future strategic directions for EU Research and Innovation from across the different European partnerships
- Explore the role of European partnerships with industry in the future and analyse the concept for future European partnerships under the "Horizon Europe" EU Framework Programme for Research and Innovation (2021-2027)
- Focus on European industry-driven priorities for converging technologies such as IoT/IIoT, 5G, AI, DLTs, edge computing in manufacturing, processing, construction, ICT and automotive.

The event is organised by the CREATE-IoT as part of the IoT Large-Scale Pilots Programme with support from DG Connect and several European partnerships.

Speakers from industry, research and academia representing different European partnership initiatives, the IoT Large-Scale Pilots Programme projects and the EC will analyse, and discuss the strategic directions, align the research priorities, identify the gaps and present their expectations for future research and innovation, and the impact of converging technologies such as IoT/IIoT, 5G, AI, DLTs, edge computing on low carbon and circular economy on manufacturing and processing to be addressed in the new European partnerships. Different European partnership initiatives will present their position on specific themes (e.g. IoT intelligent connectivity - infrastructure considerations/computing continuum edge-cloud-data centre; data space-deployment strategies; open HW/SW platforms - Raspberry PI/ARDUINO/ARM; open IoT platforms; edge computing; distributed ledger technologies; security/trustworthiness; reference architectures/standardisation; IoT/IIoT/CPS innovation hubs, etc.) focusing on their activities and research, innovation and deployment plans. IoT Large-Scale Pilots Programme projects will present their achievements, elaborate on future work, potential for sustainability and scaling-up.

The panel discussions will go along three areas of interest:

- European perspective in a global market (issues related to sovereignty, autonomy, value chains, role of new partnerships)
- Innovation, deployment and emerging technologies
- A research and innovation perspective on converging technologies (5G, IoT/IIoT, AI, edge computing, DLTs, big data, etc.)



Workshops Program 17 April 2019

08:30-09:00	Registration – Hotel Lobby - Steigenberger Airport Hotel Amsterdam
Meeting Room: Lime-Olive, Steigenberger Airport Hotel Amsterdam, The Netherlands	
European State of Play: Achievements, Research Gaps and Future Priorities	
09:00-09:05	<i>Welcome</i> - EC and CREATE-IoT/U4IoT
09:05-09:15	<i>Research and Innovation Context</i> Rolf Riemenschneider, EC, Belgium
09:15-10:20	<i>IoT Large-Scale Pilots Programme – highlights, achievements, sustainability, scale-up, cooperation with regional/national initiatives, value proposition, identified gaps and next steps.</i> <ul style="list-style-type: none"> • ACTIVAGE - Sergio Guillén, mySphera, Spain • IoF2020 - George Beers, WUR University, Netherlands • SYNCHRONICITY - Nuria de Lama, Atos, Spain / Rick Schager, Eindhoven Council, Netherlands • MONICA – Roberto Gavazzi, Telecomitalia, Italy Moderator: Rolf Riemenschneider, EC Belgium
10:20-11:00	<i>European partnerships strategic directions and research priorities in a global context.</i> <ul style="list-style-type: none"> • ARTEMISI-IA: Jan Lohstroh, Netherlands • 5G PPP IA /NetWorld2020 – Rui L. Aguiar, Aveiro University, Portugal/Karl Andersson, Luleå University of Technology, Sweden • AIOTI – Luis Perez-Freire Gradiant, Spain/Ovidiu Vermesan, SINTEF, Norway Moderator: Rolf Riemenschneider, EC Belgium
11:00-11:20	Coffee/Tea Break
11:20-13:15	<i>European partnerships strategic directions and research priorities in a global context. Digital autonomy. Future standardisation and regulatory landscape.</i> <ul style="list-style-type: none"> • ECSEL - Yves Gigase, ECSEL, Belgium • NEREID- Nanoelectronics Roadmap for Europe – Francis Balestra, IMEP-LAHC, France • ETP4HPC - Michael Malms, IBM Research, Switzerland • BDVA – Edward Curry, The Insight Centre, Ireland • ECSO – Roberto Cascella, ECSO Secretariat, Belgium • EFFRA / FoF - Sergio Gusmeroli, Politecnico di Milano, Italy • EIP-AGRI - Willemine Brinkman, Netherlands • Synchronisation Model for Standardisation Activities in Europe - Haydn Thompson, THHINK Wireless Technologies Ltd, UK Moderator: Franck Boissiere, EC Belgium
13:15-14:00	Buffet Lunch Break and Networking
Meeting Room: Lime-Olive, Steigenberger Airport Hotel Amsterdam, The Netherlands	
Future technologies, impact for society -The horizon landscape in Europe	
14:00-15:15	<i>Future research, innovation and deployment agenda. Contributions from European partnerships and future developments. Priority themes. Key takeaways.</i> Panel discussions: ECSEL, 5G, AIOTI, ECSO, HPC Moderator: Franck Boissiere, EC Belgium
15:15-15:30	Coffee/Tea Break
15:30-16:30	<i>Industry-driven priorities for converging technologies such as IoT/IIoT, 5G, AI, DLTs, edge computing in manufacturing, processing, construction, ICT and automotive – Impact of new European partnerships. New value chains.</i> Panel discussions: NEREID, BDVA, EIP-SCC, EIP-AGRI, ENERG Moderator: Francisco Ibanez, EC / Rolf Riemenschneider
16:30-17:00	<i>Wrap-up and what next. Horizon Europe perspective – IoT/IIoT as part of the Next Generation Internet, Connectivity and Intelligence at the Edge.</i> <i>Concluding remarks</i> - Rolf Riemenschneider, EC Belgium
17:00	Closing

IoT European Large-Scale Pilots Programme Projects



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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

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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.



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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.



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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.



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[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

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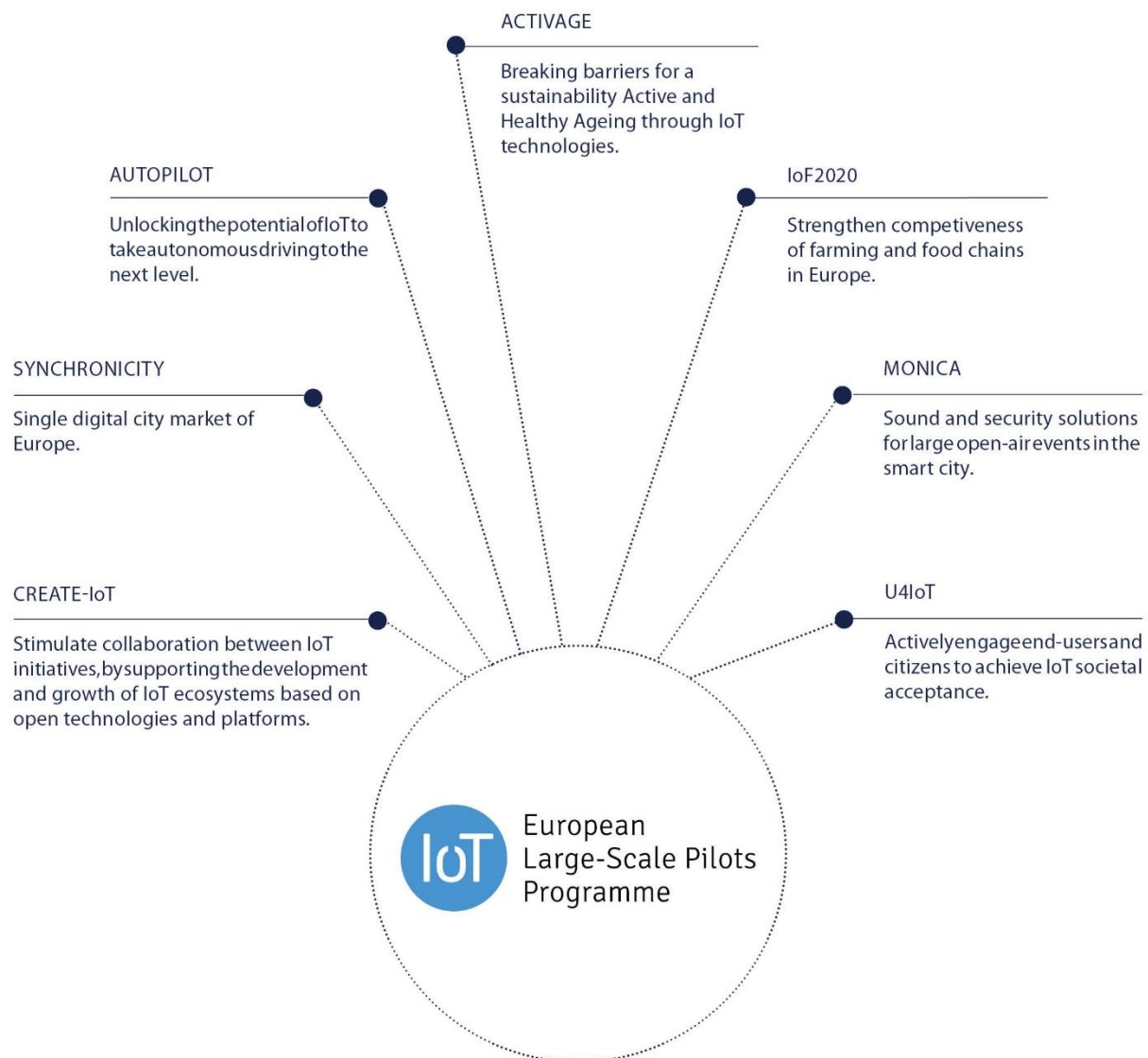
[SynchroniCity](#) - DELIVERING AN IoT-ENABLED DIGITAL SINGLE MARKET FOR EUROPE AND BEYOND - brings together partners with worldwide outreach. The project represents the first attempt to deliver a digital single market for IoT-enabled urban services in Europe and beyond. With an already emerging foundation,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



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[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.

We are looking forward to seeing you in Amsterdam!



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!