

Horizon 2020 IoT

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The Internet of Things has enormous potential to transform our lives



Internet of Things

Benefits:

increased efficiency in processes

- reduced consumption of resources and energy
- better health monitoring

IoT will generate growth and Europe has the capacity to lead









Internet of Things

nightmare / threats / risks / challenges :

- fragmentation between national markets
- fragmentation of industrial silos / applications

INTERNET OF THINGS — THE Space Junk Challenge



- trickartt/Flickr
- lack of investment and of rapid adoption of IoT solutions

• lack of take up by consumers





lack of take up by consumers due to:

- security
- privacy
- liability
- user-friendly
- etc...



Connected device



generated => transfered => stored => processed => service

obstacles: network coverage, secure authentication, data ownership, ...



stakeholders: "Commission should work on a "single space for data" approach"

- generation (norms, standards, protocols)
- transfer (as free as possible)
- storage (not under fragmented rules)
- value of data





Commission

Motivation for an IoT Focus

IOT Focus Area in WP2016/17

Alliance for Internet of Things Innovation (AIOTI)



- **in FP7** 3 FP7 calls with a direct budget of **100 M€** for conceptional R&D and piloting
- **50 M€** EC direct support in 2015 for the creation of IoT Innovation **Ecosystems**
- over 100 M€ EC direct funding in 2016 for IoT Large Scale Pilots and the future IoT Focus Area



IoT – Large Scale Pilots in 2016 *IoT-01-2016 Innovative action (single-stage)*

- targeted to goal driven initiatives that will propose IoT approaches to specific real-life industrial/societal challenges
- focus is not research, but to bring something close to the market
- address business model validation, standardisation, user validation and acceptability
- deadline: 12 April 2016



5 Pilot areas:

- •Smart living environments for ageing well (EU contr. up to 30 M€)
- •Smart Farming and Food Security (EU contr. up to 20 M€)
- •Wearables for smart ecosystems (EU contr. up to 15M€)
- •Reference zones in EU cities (EU contr. up to 15M€)
- •Autonomous vehicles in a connected environment (EU contr. up to 20 M€)













Expected impact:

- Pilots are expected to have a high impact on citizens, both in the public and private spheres, industry, businesses and public services. Key performance indicators should be identified to measure progress on citizen benefits, economic growth, jobs creation, environment protection, productivity gains, etc.
- User acceptance validation addressing privacy, security, vulnerability, liability, identification of user needs, concerns and expectations of the IoT solutions
- Significant and measureable contribution to standards or pre-normative activities in the pilots' areas of action via the implementation of open platforms





IoT – Coordination and Support *IoT-02-2016 CSA action (single-stage)*

- to ensure a sound coherence and exchanges between the various activities of the Focus Area, and notably cross fertilisation of the various pilots for technological and validation issues of common interest across the various use cases
- Co-ordination of and support to the IoT Focus Area (3M€)
- RRI-SSH support to IoT (1M€) (Responsible Research and Innovation – Social Science and Humanities)
- deadline: 12 April 2016



IoT – Research and Innovation *IoT-03-2016 R&I action (single-stage)*

• opening: 8 December 2016





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www.aioti.eu



- build an IoT innovation ecosystems across the value chain / silos
- put IoT on the map and link to PPPs, JTI, and national initiatives
- prepare Large Scale Pilots for 2016

 discuss with industry to provide guidance for IoT in the Digital Single Market



European Commission





European Commission

300+ members..







•Internet of Things in DAE:

http://ec.europa.eu/digital-agenda/en/internet-things

•Horizon 2020 – The EU Framework Frogramme for research and Innovation:

http://ec.europa.eu/research/horizon2020/index_en.cfm

•The Alliance of Internet of Things Innovation AIOTI <u>http://www.aioti.eu</u>

•IERC – Internet of Things European Research Cluster <u>http://www.internet-of-things-research.eu/</u>

•twitter: @NetTechEU



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events:

http://ec.europa.eu/digital-agenda/en/internet-things

IOT Info Day on 25 January 2015 in Brussels