

# Presentation to ITAC IoT International Symposium, Tokyo, Mar 29<sup>th</sup> 2017

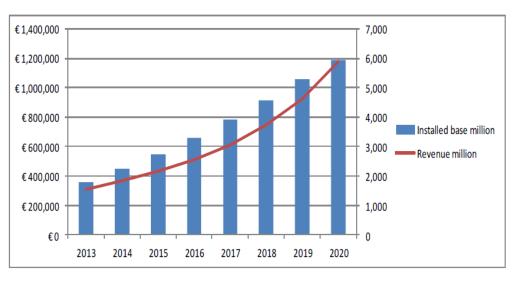
Thomas Walloschke, Fujitsu – AIOTI WG11 Interim Chair

### **Agenda - IoT International Symposium 2017**

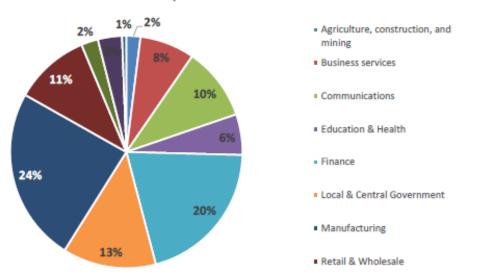
- AIOTI Presentation overview
  - Europe IoT market: opportunities and challenges
  - Key Policy initiatives
  - AIOTI presentation
- Potential areas for collaboration with ITAC

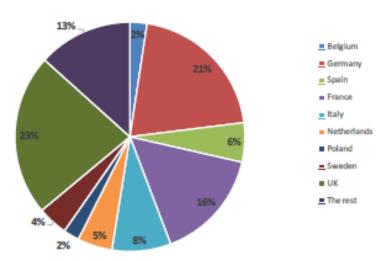
### **Europe's IoT Market: Opportunities for Growth**

IoT by Country 2020









#### The Technology Push

- Enhanced connectivity infrastructure.
- Cloud computing. With access to scalable virtualized resources over the Internet.
- Big Data.
- The increasing role of smart devices.
- Horizontal Platforms.

#### **The Demand Pull**

- Demographic trends.
- Environmental consciousness.
- Public Sector driving role.
- Business demand.
- Consumers demand.

**Source IDC report 2014** 



### **Europe's IoT Market: key challenges**



#### Rapid technological development



**Users' take up and acceptability** 



**Need to move into deployment** 



**Risk of fragmentation** 



**International competition** 

#### What has the European Commission done until now?

- Alliance for Internet of Things Innovation (AIOTI)
- <u>Digital Single Market (DSM) Strategy</u>
  to avoid fragmentation and to foster interoperability for IoT



- Advancing the Internet of Things in Europe
   as part of the "Digitising European Industry (DEI)"
- 2016 review of the EU telecoms rules to promote an interoperable IoT numbering
- <u>European data economy</u>
  contributes the creation of a European single market for IoT
- <u>IoT research and innovation objectives</u>
  in Horizon 2020 programme

#### **History of AIOTI**



## March 25, 2015: Launch of AIOTI as an informal Group

- Oct 2015: Recommendations for the H2020 call for Large Scale Pilots
- Dec 2015: Decision to create a legal structure for AIOTI
- Sept 2016:

#### AIOTI established as an Association under Belgium law

- Nov 11, 2016: first General Assembly of the new association
- March 2017: 170 members have already joined the association

#### **AIOTI Publications**

 Recommendation reports for H2020 LSPs in Sept/Oct 2015

https://ec.europa.eu/digital-agenda/en/news/aiotirecommendations-future-collaborative-work-contextinternet-things-focus-area-horizon-2020

Updates and other reports since then available on the AIOTI web site

https://www.aioti.eu/

- IoT semantic interoperability paper
  Joint work with W3C, oneM2M, IEEE P2413
- Digitization of Industry Policy recommendations
- Workshops reports



#### **AIOTI Mission**

- Contribute to Large Scale Pilots
   to foster experimentation, replication and deployment and to
   support convergence & interoperability of loT standards
- Develop IoT ecosystem across vertical silos including start-ups and SMEs
- Identify, communicate and champion EU spearheads to speed up the take up of IoT
- Gather evidence on market obstacles for IoT deployment in a Digital Single Market context
- Mapping & Bridging global, EU and Members States' IoT innovation activities.

**AIOTI is NOT a Standard Development Organization** 

#### **AIOTI Mission Areas**

#### **Deployment**

- Identify barriers
- Gather evidence
- Contribute to the Digital Single Market









#### **IoT Uptake**

- Identify spearhead players
- Communicate
- Champion

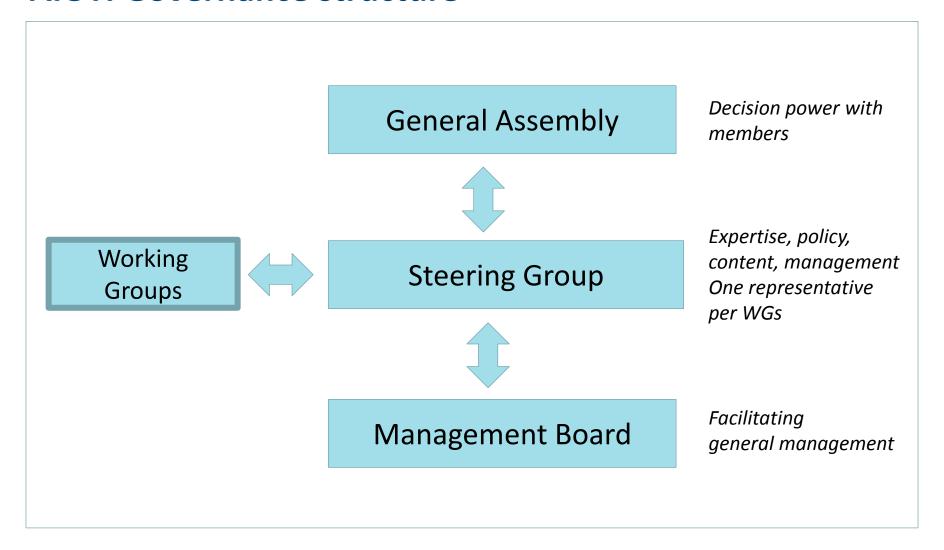
#### **IoT Ecosystem**

- Build across different application areas
- Mapping and bridging of IoT innovation activities
- Encourage the growth of start-ups in IoT

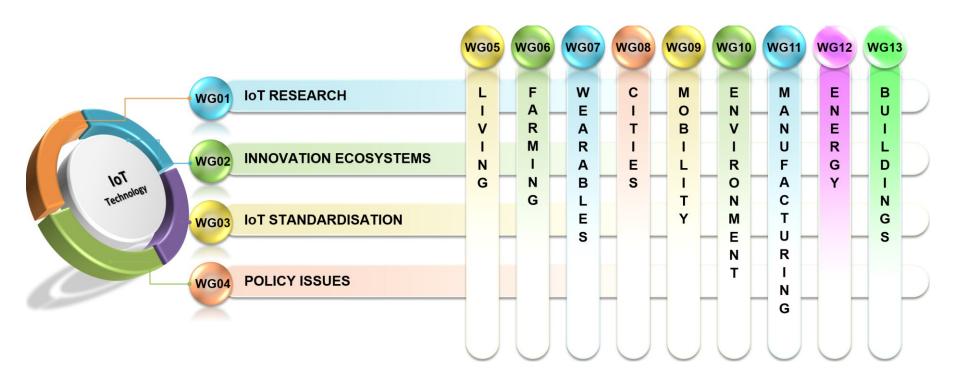
#### **H2020 Large Scale Pilots**

- Experimentation, replication, deployment
- Convergence
- Interoperability

#### **AIOTI Governance structure**



#### **AIOTI Working Groups**



#### Positioning AIOTI for the next phase

- Transformed into a legally recognized Association
- 21 Founding Members
  - Drafted Articles of Association and By-Laws
  - Providing startup capital
  - Critical engagement
- Principles going forward
  - Same vision, mission, goals
  - Low fee, established budget
  - Member driven
  - Equal rights, equal obligations (IoT style)
  - Empowerment of Working Groups and Steering Board
  - Participative membership
  - Enabling by Management Board
- Elections for all key positions











































#### **AIOTI and Large Scale Pilots (LSPs)**

- Five EC H2020 IoT LSPs kick-off January 2017 with total Budget 100 Mio EUR:
  - 1. Smart Living for aging well: ACTIVAGE (20 MilE)
  - 2. Smart Farming and Food Security: IoF2020 (30MilE)
  - 3. Wearables for Smart Ecosystems: MONICA (15 MilE)
  - Reference zones in EU Cities: SYNCHRONICITY (15MilE)
    (kicked off during 12 January OASC connected-smart-cities-conference-2017)
  - 5. Autonomous vehicles in a connected environment: AUTOPILOT (20MilE)
- EC H2020 CSA (Coordination and Support Actions)
  - CREATE-IoT
  - U4IoT (4MilE)
- Five IoT LPS Pilots, two IoT LSP CSA, AIOTI and IoT research cluster (IERC/IoT-EPI) are well connected and are ready for collaboration
- All H2020 IoT LSP coordinators met at EC on 11 January
   horizontal IoT Research Cluster IoT-LSP Activity Groups to facilitate IoT LSP cooperation

#### **AIOTI Plans ahead...**

Access to Funding Matchmaking Shape Research (for e.g. LSP's, Agenda, ETP innovation hubs) Building International Ecosystems Collaboration and Leadership Leverage standards Be involved in political and platforms agenda setting

Informational and educational support to members

... and more!

#### **AIOTI Events (2017)**

#### Workshops

- IoT Security and Privacy Jan 13, 2017 (EC/AIOTI)
- IoT Platforms & Standardization Feb 7-8, 2017 (EC/AIOTI)

#### **MatchMaking**

Matchmaking event – Feb 15, 2017

#### Workshop

IoT Strategy Workshop – May 3-5, 2017

#### **General Assembly**

Second General Assembly – Jun 29, 2017

## AIOTI International Collaboration

- Memorandum of Understanding with Brazilian Camara de IoT signed on 28 February 2017 during MWC in Barcelona
- Memorandum of Understanding with Japanese IoT Accelerator Consortium signed on 20 March 2017 during CeBIT in Hannover



https://m.youtube.com/watch?v=1 pJ8vRjTok

#### Potential areas for collaboration with ITAC (Proposal)

#### **Learn from JP Society 5.0 Insights**

- What scenarios have to be proposed to society and to people?
- What does Digitalization mean in terms of moving to digital business?
- What messages are addressed to SMEs and SME clusters?
- What will be proposed to industry and markets?
- What IoT use-cases and deployment scenarios are essential?

#### Create a holistic and global IoT approach

- Determine IoT DNA of Security & Privacy (By-Design-Concept)
- Develop multi-view reference architecture cross verticals
- Ensure cross-domain interoperability (including semantics)

#### Potential areas for collaboration with ITAC (Cont'd)

#### **Achieve global Investment goals**

- Use common IoT Standards & Global IoT vocabulary (WG3/WG4)
- Understand SME + Industry economic needs and gaps
- Setup interoperability to ensure global adoption and scaling of IoT
- Comprehensive understanding of key moving parts of economy
- Driving key figures AI, Security, IoT and Analytics

#### **Understand & Act!**

- Research, innovate and collaborate in H2020 LSPs
- Build JTGs to push Japanese and European SME global collaboration
- Setup Industrial Internet security, interoperability and collaboration
- Catalyze SME's IoT innovation
- Educate and reskill people, create new jobs

#### Let's work together

## Thank you!

https://www.aioti.eu/

#AIOTI