

# **AIOTI**

ALLIANCE FOR INTERNET OF THINGS INNOVATION

IoT week Geneva, 8 June 2017

## **IoT STANDARDS ECOSYSTEM, WHAT'S NEW?**

**[www.aioti.eu](http://www.aioti.eu)**

Patrick Guillemin AIOTI WG3 (IoT Standardisation) Chair and AIOTI Steering Board member

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# The development of the AIOTI



The **Alliance for Internet of Things Innovation** (AIOTI) was initiated by the European Commission in 2015, with the aim to strengthen the dialogue and interaction among IoT players in Europe, and to contribute to the creation of a dynamic European IoT ecosystem to speed up the take up of IoT.

Launch in 2015  
by Commissioner  
Günther Oettinger



In context of the  
preparation of Large Scale  
IoT Projects under EC's  
Horizon 2020 initiative



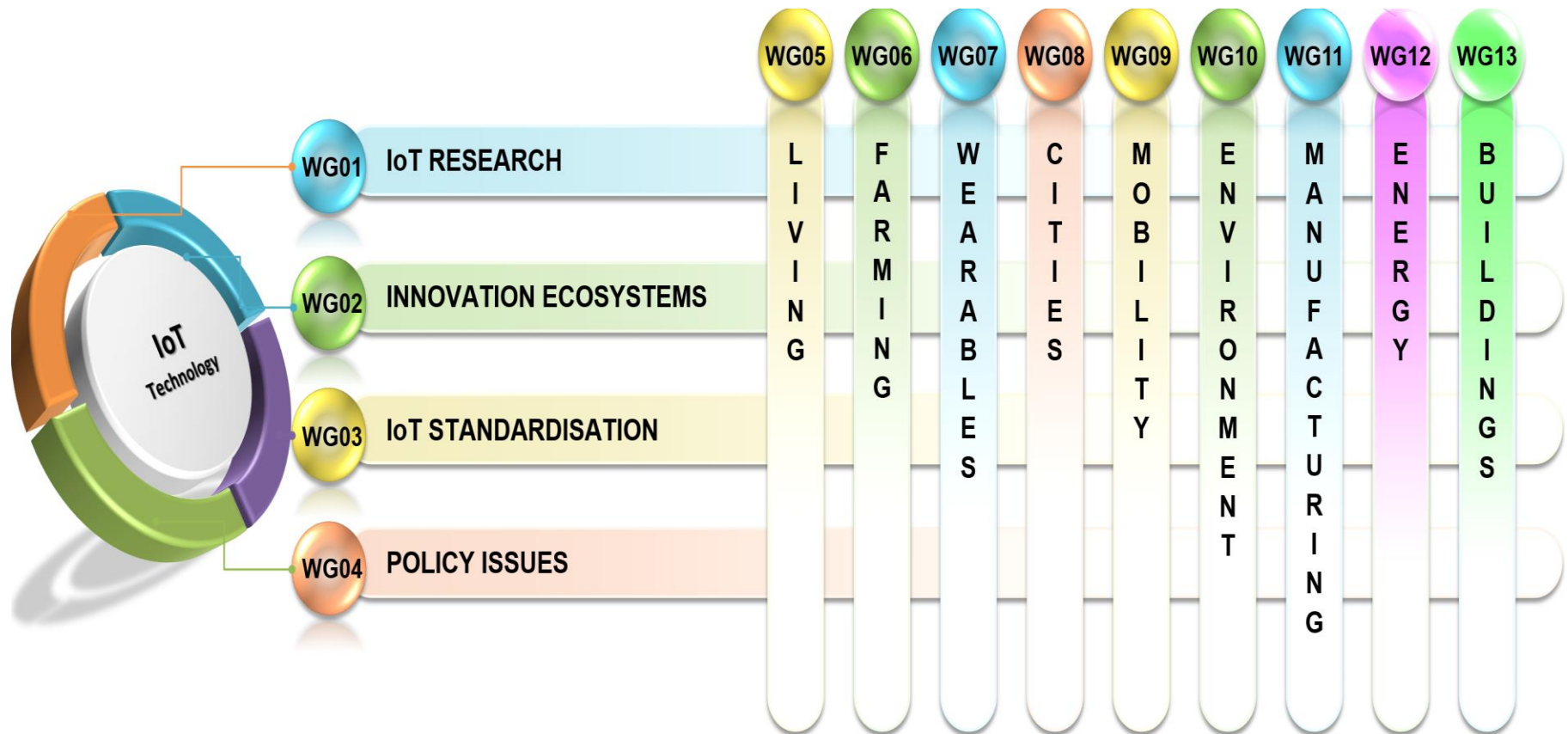
From 2016 one-stop-  
shop for IoT in  
Europe and globally



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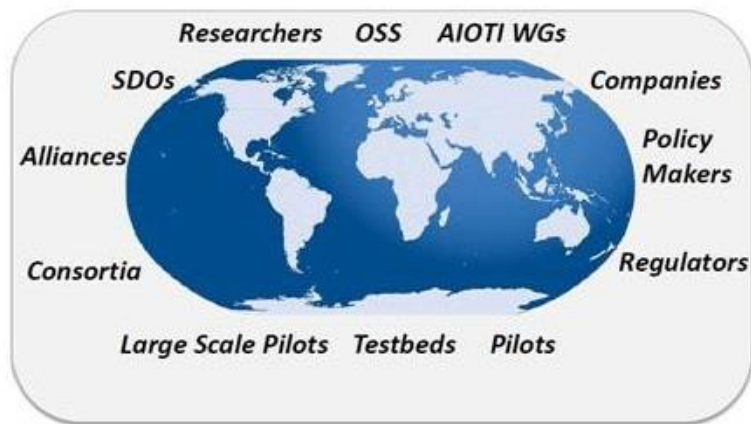
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# AIOTI Working Group Structure

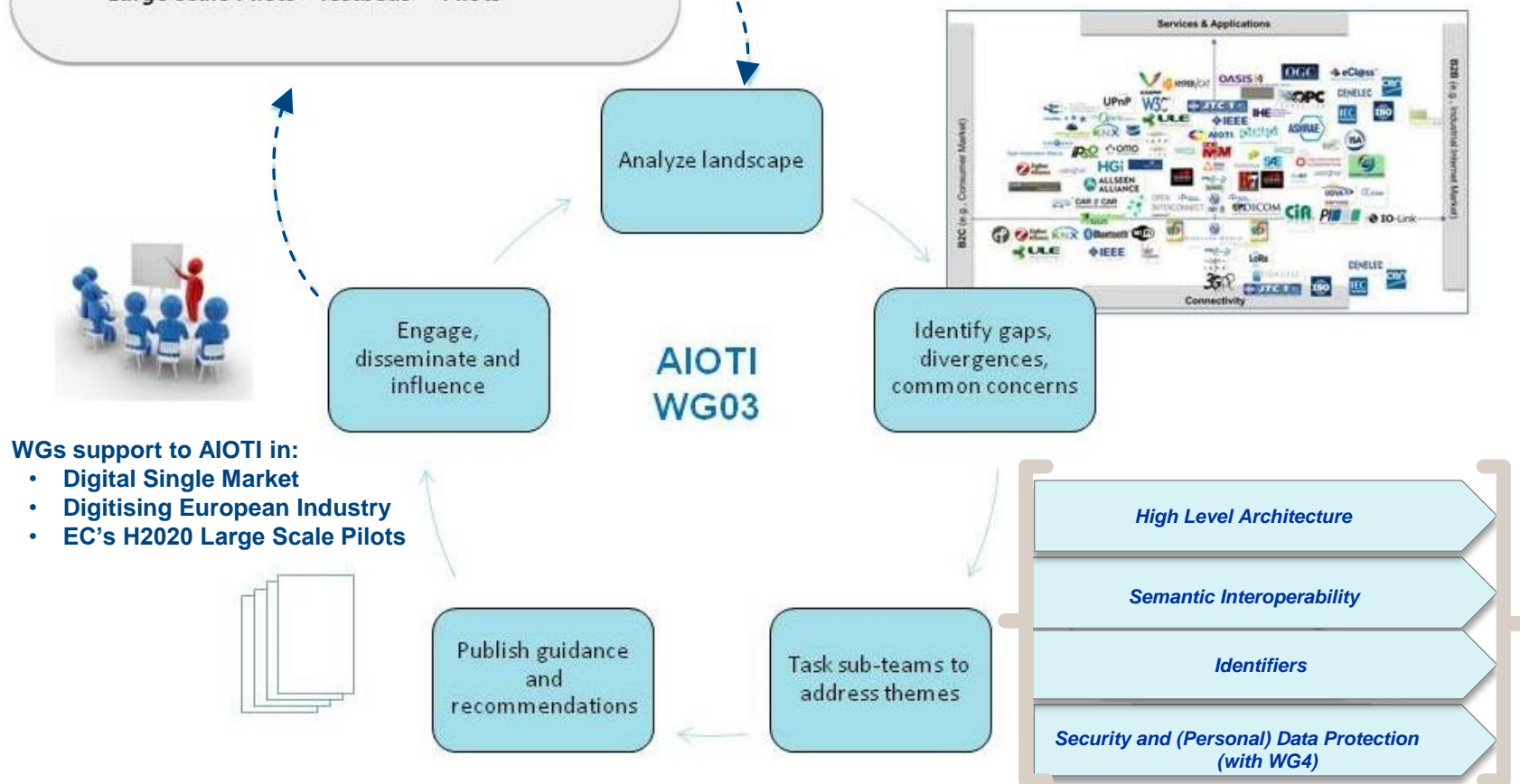


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# AIOTI WG03 (Standardisation Group) engagement model



WGs support to AIOTI in:

- Digital Single Market
- Digitising European Industry
- EC's H2020 Large Scale Pilots



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# AIOTI WG03

- ❖ Identifies and, where appropriate, makes recommendations to address existing IoT standards, analyses gaps in standardisation, and develops strategies and use cases aiming for (1) consolidation of architectural frameworks, reference architectures, and architectural styles in the IoT space, (2) (semantic) interoperability, (3) security by design support and (4) personal data & personal data protection to the various categories of stakeholders in the IoT space
  
- ❖ IoT Landscape / [georgios.karagiannis@huawei.com](mailto:georgios.karagiannis@huawei.com)
  - IoT Landscape maintenance is key to keep the liaisons alive and maintain dialogue on how to foster collaboration to improve interoperability & security
  - IoT-EPI IoT Platforms analysis improvement / H2020 UNIFY-IoT Ph. Moretto (ETSI STF)
  - Gap Analysis and recommendations / EC funded STF 505 E Darmois (ETSI STF)
  - Cooperation with SDOs/Alliances to foster co-creation and interworking (Patrick Guillemin)
  
- ❖ HLA / High Level Architecture / [omar.elloumi@nokia.com](mailto:omar.elloumi@nokia.com)
  - IoT Reference Architecture and its mapping with existing IoT Reference Architectures
  - IoT identification [juergen.heiles@siemens.com](mailto:juergen.heiles@siemens.com) ; [henri.barthel@gs1.org](mailto:henri.barthel@gs1.org)
  
- ❖ IoT Semantic Interoperability [Paul.Murdock@landisgyr.com](mailto:Paul.Murdock@landisgyr.com)
  - Important topic of the moment that created a great international collaboration
  
- ❖ IoT Privacy (with WG04) [vanderwees@arthurslegal.com](mailto:vanderwees@arthurslegal.com)
  - IoT Platform, experimentation, LSPs need concrete standard framework & references to enable "IoT Trust" and IoT "Privacy by design"
  
- ❖ IoT Security (with WG04) [vanderwees@arthurslegal.com](mailto:vanderwees@arthurslegal.com),  
[jacques.kruse-brandao@nxp.com](mailto:jacques.kruse-brandao@nxp.com), [harm.arendshorst@nl.verizon.com](mailto:harm.arendshorst@nl.verizon.com)
  - IoT Security Architecture for Trusted IoT Devices; Baseline Requirements for Security & Privacy up to segment requirements; experimentation, LSPs need concrete standard framework & references to enable "IoT Trust" based on IoT "Security by design"



## 8 Feb 2017 EC/AIOTI WG03 Panel on Converging IoT standards

<https://ec.europa.eu/digital-single-market/en/news/internet-things-platforms-and-standardisation-workshop>

- **3GPP** has been introduced by ETSI Director General Luis Jorge Romero
- **oneM2M**, Omar Elloumi Nokia, oneM2M TP Chairman
- **ETSI TC SmartM2M**, Enrico Scarrone Telecom Italia, SmartM2M Chairman
- **ITU-T SG20**, Marco Carugi, NEC Corporation, ITU-T SG20 Rapporteur and Mentor
- **IEEE P2413**, Paul Murdock Landis+Gyr
- **ISO/IEC JTC1 WG10 (IoT)** now JTC 1/SC 41 since May'17, Henri Barthel GS1
- **CEN/CENELEC** Bernhard Thies, CENELEC President
- **IIC** Jean-Pierre Desbenoit, Schneider-Electric
- **OPC and Platform I4.0**, Thomas Hahn, Siemens (Juergen Heiles)
- **IETF** Georgios Karagiannis, Huawei Technologies (Patrick Wetterwald)
- **W3C** (Dave Raggett regrets)



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**[www.aioti.eu](http://www.aioti.eu)**    **Thank you!**    **#AIOTI**

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<more background slides FYI>



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# AIOTI WG03 Reports: we do not develop standards

- ❖ <https://ec.europa.eu/digital-single-market/en/news/aioti-recommendations-future-collaborative-work-context-internet-things-focus-area-horizon-2020> since 26/10/2015 before the H2020 IoT LSPs selection
- ❖ <http://www.aioti.org/resources/> and <https://docbox.etsi.org/SmartM2M/Open/AIOTI/> with latest WG03 Reports
  - AIOTI WG03 IoT Landscape [V2.7](#) (IoT Reference Architecture mappings)
  - [IoT-EPI](#) UNIFY-IoT D3.1 [IoT Platforms analysis](#) improvement from AIOTI WG03
  - STF505 [IoT Landscape](#) (ETSI TR 103 375) and [Gap Analysis and recommendations](#) (ETSI TR 103 376) + 7 February report on latest recommendations (to come)
- ❖ AIOTI WG03 High Level Architecture [V2.1](#) (V3 under preparation)
  - IoT identification (WG03 survey on going, broader survey to come soon)
- ❖ IoT Semantic Interoperability
  - First report AIOTI WG03 [SemIoP report 2.0](#) (aioti.org) - 2015
  - Join (\*) AIOTI, oneM2M, W3C and IEEE P2413 [SemIoP White Paper](#)
  - ETSI IoT Security Week, AIOTI WG03 [IoT Privacy report](#) (with WG04) - June 2016
- ❖ WG03 contributions on IoT in AIOTI inputs to [EC DSM/DEI](#)



# ..and more in AIOTI WG03 cooperation in the developments of these recommendations / reports

**AIOTI Liaisons** with SDOs, Alliances, Open Source Initiatives, IoT Platforms and EU IoT initiatives: supporting role of ETSI/SmartM2M, oneM2M, 3GPP and formalising IIC, ITU-T, W3C, JTC1, IEEE P2413, OPC-UA, Platform I4.0, AEF, CEMA, CEN, CENELEC, ISO, IEC, etc... **Collaboration with** WG04 IoT Policy and complimentary Technical expertise in IoT Security and Privacy. **Horizontal, cross-cutting collaboration** with AIOTI WGs

❖ **Faciliator of the active and early AIOTI cooperation with**

- European Commission, DG CONNECT E.4 (IoT) supporting Member of AIOTI
- IERC, the EU Cluster of IoT Research projects, IoT Platforms (IoT-EPI) and H2020 IoT LSPs + 2 CSAs (CREATE-IoT + U4IoT)

Smart Living for aging well : **ACTIVAGE**

Smart Farming and Food Security: **IoF2020**

Wearables for Smart Ecosystems: **MONICA**

Reference zones in EU Cities: **SYNCHRONICITY**

Autonomous vehicles in a connected environment: **AUTOPILOT**

**And** inclusion of all IoT Stakeholders / testbeds / EU Initiatives



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# More AIOTI cooperation

- ❖ CEN/CENELEC/ETSI Smart Meter-CG, Smart Grid-CG, Smart Cities (SF-SSCC)
- ❖ ISO, IEC (TC57, TC65), OMA, GSMA, BBF, TM Forum, OGC, NIST, NGMN, OASIS, OCF (absorbed AllSeen), AIM, ZigBee, Bluetooth, ULE Alliance, IPSO Alliance, IPv6 Forum, LoRa Alliance..
  - Based on existing AIOTI participation and contribution levels
    1. Light = IoT Landscape input & update, email exchanged
    2. Participation = conf calls, meetings, surveys, reporting, inputs
    3. Cooperation = liaison, work program sharing, join paper/release
    4. Commitment = task/group/deliverable leader or co-author
  - Reaching consensus on recommendations, facilitating exchanges
- ❖ FoF/EFFRA, 5G-PPP, BigData, CyberSecurity-PPP, EIP-SCC (Urban Platforms), Eurocities, IoT Forum, BSI, Hyper/CAT...



# Professionalising AIOTI's organisation for the next phase

- Transformation into a legally recognised Association
- 21 Founding Members
  - Drafted AoA and particularly by-laws
  - Provided startup capital
  - Critical engagement
- Principles going forward
  - Same vision, mission, goals
  - Low fee (750 euros)
  - Member driven
  - Equal rights, equal obligations (IoT style)
  - Budget
  - Empowerment of Working Groups and Steering Board
  - Participative membership
  - Enabling by Management Board
- Towards ETP status with the EC

