# IERC Coordination Work Programme Year 2

## D3.3

| | | |
|---|---|---|
| **Editor:** | Ovidiu Vermesan, SINTEF | |
| **Deliverable nature:** | Report (R) | |
| **Dissemination level:** | Public (PU) | |
| **Contractual/actual delivery date:** | M15 | M20 |
| **Suggested readers:** | IERC project partners | |
| **Version:** | 1.0 | |
| **Keywords:** | IERC, coordination work programme, Internet of Things | |

**Abstract**

The deliverable defines the IoT European Research Cluster - European Research Cluster on the Internet of Things (IERC) coordination and management activities, in order to coordinate the IoT research activities, to promote the innovation and deployment. The aim is to support the research coordination and policy activities of the Internet of Things European activities.

## Disclaimer



The research leading to these results has received funding from the European Union's Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 609024

## Copyright notice

## Revision History

| Revision | Date | Description | Author (Organisation) |
|---|---|---|---|
| V0.1 | 15.12.2014 | First version | Ovidiu Vermesan (SINTEF) |
| V0.2 | 08.01.2015 | Update the IERC activities | Hanne Grindvoll (SINTEF) |
| V0.3 | 05.02.2015 | Include AIOTI | Ovidiu Vermesan (SINTEF) |
| V0.4 | 15.03.2015 | Activity Chains | Hanne Grindvoll (SINTEF) |
| V0.5 | 26.03.2015 | IERC Activities Update | Hanne Grindvoll (SINTEF) |
| V0.6 | 27.04.2015 | TRL Analysis | Ovidiu Vermesan (SINTEF) |
| V0.7 | 29.04.2015 | Pilots and Ecosystems | Ovidiu Vermesan (SINTEF) |
| V0.8 | 15.15.2015 | Support Thematic Workshops | Ovidiu Vermesan (SINTEF) |
| V0.9 | 05.06.2015 | IERC Cluster Book. Pre-final | Ovidiu Vermesan (SINTEF) |
| V1.0 | 16.06.2015 | Rework after review, final version | Ovidiu Vermesan (SINTEF) |

## Peer review

| Reviewer name: | Organisation: | Date of review: |
|---|---|---|
| Daniel Minder | UDE | 30.06.2015 |

| Delivery approval | |
|---|---|
| This deliverable is (tick as applicable) | approved without corrections. |
| | [x] approved subject to corrections as annotated. |
| | not approved. |

| General change requests not included in the annotations: |
|---|
| |

| General comments on structure of deliverable, clarity and consistency of content, and presentation: |
|---|
| |

# Table of Contents

# List of Figures



# List of Tables

# 1 Background

The IoT European Research Cluster - European Research Cluster on the Internet of Things (IERC) aims at defining the IoT technology and development research challenges at the European level in the view of global development.

Based on the new scope of the ICT work program in Horizon 2020, the IoT Cluster will adapt to the new challenges created by technology and market developments. The improved cost performance of computing, storage, and bandwidth has enabled devices of all kinds, including smartphones, wearables, appliances, medical equipment, and vehicles, to connect dynamically with the Internet and each other to create, share, and analyse information, all without human intervention. These will be reflected in the current trends, where 5G infrastructures will also need to involve vertical markets such as automotive, energy, food and agriculture, city management, government, healthcare, manufacturing or public transportation. These efforts will also boost networks and Internet architectures for IoT. In the next years IoT will be a strategic element to enable and drive the Digital Single Market (DSM) through new products and services.

IoT technologies fundamentally change the way products and services are conceived and created. Both driven and empowered by rapidly developing technological tools, companies are developing new practices and models that seek to decentralize innovation and invite participation from beyond the organization's walls.

IoT technology developments push for the creation of business ecosystems. IoT ecosystems are divided into two broad categories: static and dynamic.

- Static ecosystems aggregate and coordinate a fixed set of resources, typically delivering the greatest benefit to the ecosystem organizer.
- Dynamic ecosystems explicitly seek to create environments and relationships where diverse participants can learn and advance more rapidly by collaborating.

IoT technology development and the widespread digital technology advancement can rapidly widen the gap between the exponential improvement in core digital technologies and the rate of labour productivity improvement.

EU is trying to lay out concrete plans for IoT applications deployment. Standard-based IoT solutions and applications that are adopted across industries will help make Europe competitive in the sectors responsible for equipping the global sectors for the Internet of Things, and they will better position European players to meet the demands of consumers and the business world. They will also make possible higher levels of interoperability, assuring, among other things, the safety and security of consumers' data as it flows from device to device, environment to environment. Standardization can help steer the development of new technologies such as 5G wireless communications, digitization of manufacturing (Industry 4.0) and construction processes, data driven services, cloud services, cybersecurity, smart energy, mobility, cites and mobile payments,

The IERC will focus on the creation of Internet of Things ecosystems in the context of smart environments and applications with links to other disciplines that provide the enabling

technologies for IoT applications. In this context IERC will take measures for supporting the development of ecosystems around the platforms and support the Alliance for Internet of Things Innovation (AIOTI). The alliance was initiated by the European Commission in order to develop and support the dialogue and interaction among the various IoT players. The overall goal of the establishment of the AIOTI is the creation of a dynamic European IoT ecosystem to unleash the potentials of the IoT.

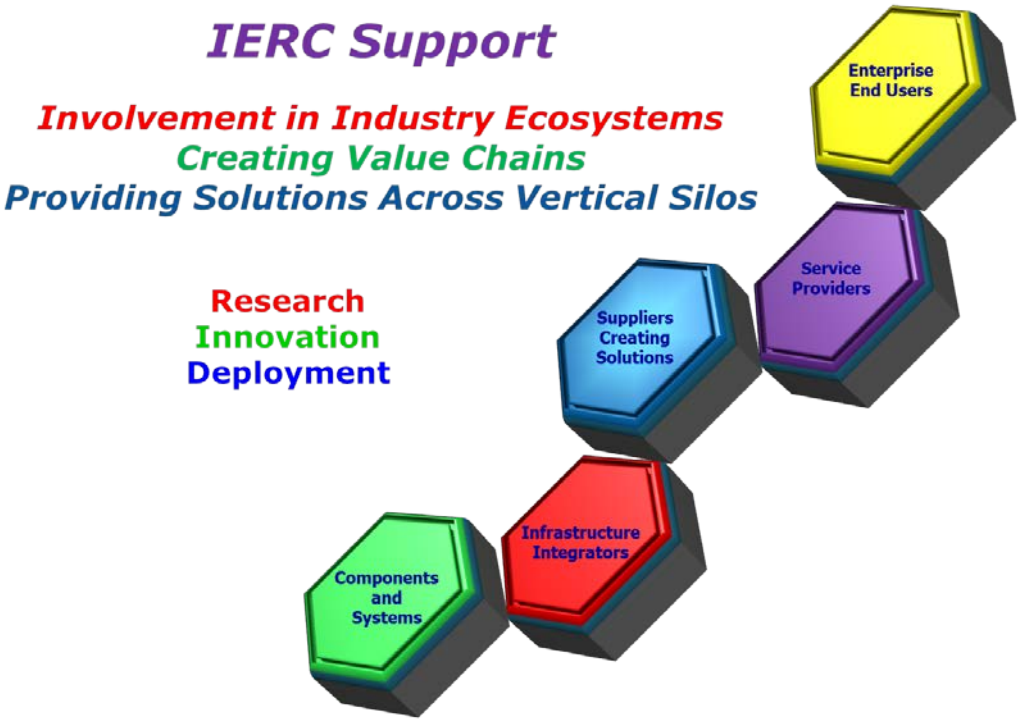


*Figure 1: IoT Support AIOTI activities*

The AIOTI will assist the European Commission in the preparation of future IoT research as well as innovation and standardisation policies. It is also going to play an essential role in the design of IoT Large Scale Pilots, which will be funded by the Horizon 2020 Research and Innovation Programme. The members of AIOTI will jointly work on the creation of a dynamic European IoT ecosystem. This ecosystem is going to build on the work of the IoT Research Cluster (IERC) and spill over innovation across industries and business sectors of IoT transforming ideas to solutions.

The IERC focus in 2015 is on the following elements:

- Create and start-up together with the EC the Alliance for Internet of Things Innovation (AIOTI), the IERC being one of the Working Groups of the Alliance
- Promote innovative solutions of IoT applications and their business uptake
- Identify specific barriers for deployment of IoT applications and provide solutions
- Contribute to the evolution of Research and Innovation work in the IoT and support

The IoT is identified as a cross cutting activity and the IERC will be engaged in collaborations across different sectors in order to create applications for smart environments. In this context the cooperation with the different WGs of the Alliance is a very important element.

The IERC is working actively to enlarge the IoT community in the scope of the new cross-objective IoT/Connected Smart Objects and use the synergies with the national states' initiatives. At the same time the focus will be to emphasise the innovation highlighting the technology development, industrial scale pilots and demonstrators, prototyping and validation.

The important investments on Internet of Things technologies, which have already been taken at EU and Member States levels, reveals the next big step towards implementation of large scale pilots. The European Commission will launch a series of IoT large scale pilots in the areas of wearables, assisted living, connected vehicles, smart cities, smart agriculture and water management supported by Horizon 2020. The pilots will deliver IoT practical solutions in terms of applicable technology and standards, privacy and security, business models as well as usability. The pilots should also serve to deduce methodologies to assess privacy and security impacts of IoT. In this context the IERC will work actively to provide the support for the implementation of the preparatory work for network building among the cluster projects and the European IoT stakeholders.

# 2 Objectives

The deliverable defines the IERC coordination and management activities in order to coordinate the IoT research activities and to promote innovation and deployment. The aim is to support the research coordination and policy activities of the European IoT activities with the following goals:

- Build on the strengths and comparative advantage of IERC partners in addressing different enabling technologies supporting IoT.
- Provide a platform of exchanging ideas through activity chains for dividing responsibilities, coverage of needs, while providing a mechanism for joint strategic thinking, road mapping and planning in the area of IoT.
- Implement mechanisms to avoid multiplication of effort, gaps, overlap in IoT research activities and maximise the use of available resources in the IERC for addressing the stakeholders' needs in the area of IoT. Highlight common goals, interests and interdependencies among the IERC Partners in the different IoT technologies
- Facilitate the use of shared approaches, tools and activities, consistent integration of cross-cutting IoT issues and facilitate mutual experience sharing of research results and promote innovation.
- Engage and involve national and local public authorities for accessing IoT local networks and for using the local research community for implementing efficient solutions in different application areas (Smart Cities, Smart Buildings, Smart Energy, Smart Transport/Mobility, Smart Health, etc.)
- International cooperation in order to liaise with other international IoT research groups and cooperate for promoting a global IoT vision.

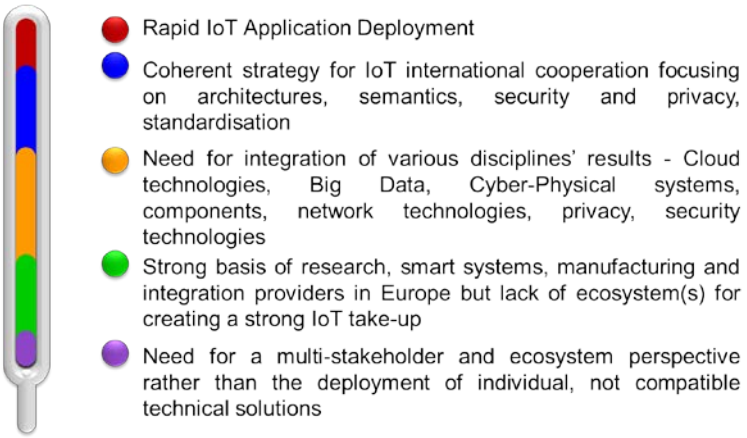


*Figure 2: IERC Motivation*

# 3 Alliance for Internet of Things Innovation (AIOTI)

IoT will be pivotal in enabling the digital single market, through new products and services. The IoT, big data, cloud computing and their related business models will be the three most important drivers of our digital economy, and in this context it is fundamental for a fully functional single market in Europe to address aspects of ownership, access, privacy and data flow - the new production factor.

In this context the Alliance for Internet of Things Innovation - AIOTI (http://www.aioti.eu/) was initiated by the European Commission together with the Internet of Things European Research Cluster (IERC), to boost Europe's potential in the Internet of Things field. The initiative cuts across several technological areas such as smart systems integration, cyber-physical systems, smart networks, and Big Data; and targets SME and IoT innovators to create an open IoT environment.

Günther H. Oettinger, European Commissioner for the Digital Economy and Society, officially launches the Alliance for Internet of Things Innovation in Brussels during the Net Futures 2015 conference in March 2015. He highlighted that: "Europe has today a unique opportunity to use the Internet of Things, invigorate its industry, deal with its ageing population, and transform its cities into bustling innovation hubs. Europe can become a leader in this field, and European players can emerge as winners in the Internet of Things industrial revolution. I am committed to support this process and tackle remaining obstacles in the Digital Single Market. The Internet of Things must be a key element of the Digital Single Market. To make this happen, the Commission has proposed to create together with industry the Alliance for Internet of Things Innovation, which I will have the pleasure to launch tomorrow. This initiative will help build synergies between the actors in the European Internet of Things ecosystem, both public and private. It will support convergence around common platforms and common standards."

The Alliance brings together different industries, sectors and some of Europe's largest technology and digital companies. Its main remit, through various working groups, will be to promote interoperability and convergence between standards, facilitate policy debates and prepare a Commission's initiative for large scale testing and experimentation, tabled for 2016.

The IERC played a major role in the preparation of the Alliance. The work started in 2014 followed by a high-level meeting on 4th February 2015 (Brussels) in order to explore the creation of the Alliance for IoT Innovation. The meeting targeted C-level representatives from the whole value chain of IoT (nanoelectronics/semiconductor companies, Telecom companies, Network operators, Platform Providers (IoT/Cloud), Security, Service providers, representatives from different sectors: energy, utilities, automotive, mobility, lighting, buildings, manufacturing, healthcare, supply chains, cities etc.).

The AIOTI will help build constructive synergies between the actors of the European IoT ecosystem (public and private) in order to ensure a large scale deployment of IoT, notably in relation to specific policy requirements and in light of the EC Large Scale Pilots to be funded in

2016-17 under the H2020 Work Programme for IoT. The alliance represents thus an important tool for supporting the policy and dialogue on IoT within the IoT ecosystem.

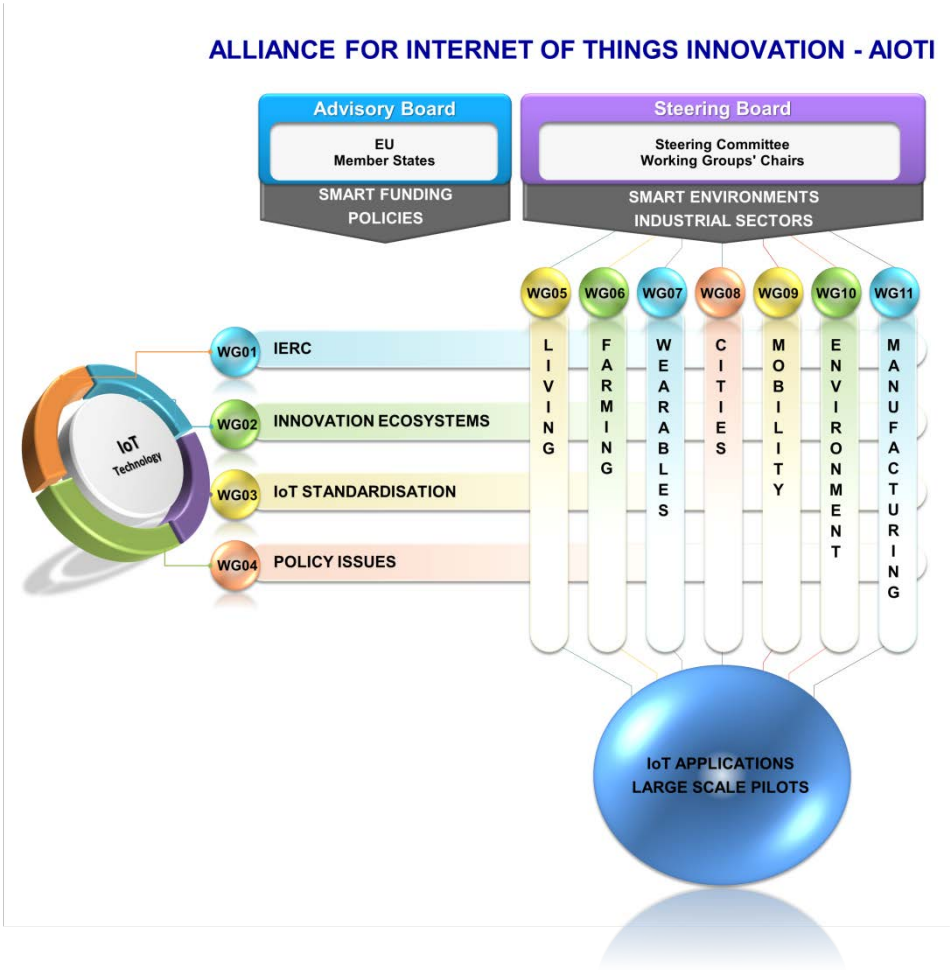


*Figure 3: AIOTI Structure*

AIOTI is organised as a lean structure with 2 layers: the Board (Steering Committee) and the Working Groups (WGs).

The WGs are structured as presented in Figure 3 and reflect the current prominent areas of Internet of Things technology and applications:

- WG 01: Internet of Things European Research Cluster - IERC
- WG 02: Innovation Ecosystems
- WG 03: IoT Standardisation
- WG 04: Policy issues (trust, security, liability, privacy)
- WG 05: Smart living environments for ageing well (e.g. smart house)
- WG 06: Smart farming and food security
- WG 07: Wearables

- WG 08: Smart cities
- WG 09: Smart mobility (smart transport/smart vehicles/connected cars)
- WG 10: Smart environment (smart water management)
- WG 11: Smart manufacturing

# 4 IoT Joint Research Coordination

The IERC is analysing the relevance of activity chains and evaluates their performance during June/September every year. This allows defining quantifiable targets for each year and deciding if some activity chains will finalize their activities during that year and new activity chains are needed to address the new IoT technological and societal challenges.

The IERC will focus on the support of the AIOTI's Thematic Workshops and on providing a coherent analysis of the demonstrators produced by the Cluster projects and evaluate their Technology Readiness Level. In addition the IERC will focus on introducing the IoT in smart manufacturing and bridging with the Industrial Internet of Things technologies and applications. The Industrial Internet of Things business challenges will be considered in the activity chains and in the support activities for the AIOTI WG11. These challenges are summarized as:

- Growth - Capex to Opex shift. Increase production with same staff
- Market transitions - Flexibility to migrate production. React to shifting markets
- Innovation - New business models based on servicing field and production assets and processes
- Risks - Remote Connectivity to operations in harsh environmental conditions
- Governance - Ensuring security, safety, and compliance

## 4.1 IERC Activity Chains

The Cluster organisational structure and operational procedures are defined around the activity chains. In this context the activity chains are created to favour close cooperation between the IoT Cluster projects and to form an arena for exchange of ideas and open dialog on important research challenges. The activity chains are defined as work streams that group together partners or specific participants from partners around well-defined technical activities that will result into at least one output or delivery that will be used in addressing the IERC objectives.

The Cluster coordinator in cooperation with the EC coordinator has defined 8 activity chains for 2015 that are grouped under 4 main areas:

1. Architecture approaches, open platforms, naming, search, discovery
2. Governance issues, privacy and security
3. Interoperability, standardisation
4. IoT Technologies

These activity chains will be updated at the end of the year 2015 in order to align the activities with the new projects that are emerging from the ICT30 call. The activities to support the IERC will be aligned with the DoW of the respective projects. The IERC work will focus on the collaboration across the IoT ecosystems created by the new projects that bring together the range of expertise and abilities required to create the IoT value chains for different applications.

The value chains include components, such as sensors/actuators, processors, communication modules, operating systems, security software that are integrated into sub-systems. The value chains involve systems integrators to provide industry-specific solutions with application and data analytics software. Network services are used to connect edge devices and cloud services, which take advantage of that analytics and application software to turn raw data into useful information.

The activity chains active in 2015 are presented in Table 1 below:

| # | Activity Chain | Responsible project | Co-coordinators |
|---|---|---|---|
| **1** | Architecture approaches and open platforms | BUTLER | Bertrand Copigneaux (BUTLER), Gurgen Levent (CEA-LETI), |
| **2** | Naming and addressing schemes. Means of search and discovery | OpenIoT | John Soldatos (OpenIoT), Gregor Schiele (DERI) |
| **3** | Application scenarios, Pilots and Innovation | ALMANAC | Maurizio Spirito (ALMANAC), Vera Stavroulaki (iCore), Raffaele Giaffreda (iCore) |
| **4** | Service openness and interoperability issues/semantic interoperability | OpenIoT | Philippe Cousin, (SMART-ACTION), Martin Serrano (OpenIoT) |
| **5** | Governance, Privacy and Security issues | iCore | Gianmarco Baldini (iCore), Maarten Botterman (SMART-ACTION) |
| **6** | Standardisation and pre-regulatory research | BUTLER | Patrick Guillemin (ETSI), Marco Carugi (ZTE), |
| **7** | Cognitive Technologies for IoT | iCore | Gurgen Levent (CEA-LETI) Abdur Rahim Biswas (iCore), |
| **8** | Societal Impact and Responsibility in the Context of IoT Applications | SOCIOTAL | Rob van Kranenburg (SOCIOTAL), Francesca Bria (Nesta) |

*Table 1: IERC Activity Chains 2015*

The projects/persons responsible for each specific activity chain will work actively for attracting other projects to get involved in the activity chains.

## 4.2 National Projects, the Link with the IERC, and national Clusters

The IERC will expand its contact net in 2015 by accepting national projects covering the area of IoT. This activity is done in cooperation with AIOTI.

*Implementation timeline*: October 2015 – IERC Meeting Lisbon.

## 4.3 Web Space

The Web of the Cluster is formed by:

- The internal information exchange space covered by eRoom. eRoom provides shared, secure workplaces on the Web for distributed project teams to do their work. eRoom enables the team to discuss ideas, share information, and make decisions, all within a central location. eRoom also offers built-in enterprise content management, thus enabling the integration of content and collaboration in the work process. The future versions of eRoom are developed under EMC Documentum CenterStage.
- External Web page
- Cluster projects Web pages

The IERC external web site is http://www.internet-of-things-research.eu/.

The web site transactions are being logged in order to track any kind off attack, wrong usage or similar situations.

### 4.3.1 External Web site

The sections are the following ones:

- **Home**. This section is the home page and contains a general and brief description of the IERC.
- **About IERC**. Presents the IERC and the main objectives.
- **News**. This section will allow the publication of existing news directly related to IoT technologies and applications.
- **Events**. This section will contain all the events internal and external to the project that will keep a tight relation with EU and IERC, including workshops, conferences. Relevant global events are listed as well.
- **Documents**. This section makes available all public documents produced by the IERC or relevant to IoT topics.
- **Contacts**. Contact details for the Project Coordinator
- **Members**. A list of the projects participating in IERC activities.
- **Newsletters**. Links to the IERC newsletters (1-2 issues per year).

Feedback and suggestions from all the members to improve the web pages are sent to the IERC coordinator.

All projects that are members of the Cluster are required to have a link to the Cluster web page and have the logo of the IERC visible on their home pages. The Cluster will have as well a link to the projects' home pages.

### 4.3.2 Access to the eRoom

Each project coordinator updates the list available on the eRoom (https://project.sintef.no/eRoom/ikt2/IERC/0_84f) with the persons that are involved in the cluster activities (access to the eRoom).

## 4.4 Meetings planning

The IERC meetings will be scheduled 3-4 times per year and synchronised with other major events/conferences (ICT, etc.). The venues of meetings have to be selected very carefully considering the project budgets and the busy schedule of the Cluster members.

The IERC meetings will be organised alongside other events as well as separate meetings that could be extended to 2 days and having several workshops covering different areas of expertise on day one. These could look at architecture, international co-operation, future internet assembly etc. This will enable the Cluster members to join a full cluster meeting on day two with specific ideas and recommendations that have come, not just from one partner, but from a number of partners participating in the workshops. At the IERC meetings the participation of at least one representative for each project is required. The coordinator of the projects members of the IERC will nominate a delegate that will participate to the Cluster meetings.

This year IoT Week 2015 devoted to creation of ecosystems, partnerships and value chains across the domains to ensure rapid deployment of interoperable and replicable IoT solutions. IoT Week 2015 contributed to understanding of the future of the Internet of Things in large scale deployments considering the technological dimension but also user acceptance, security and privacy, business models, etc. The IERC was involved actively in supporting the event and in this context the activity chain on Application scenarios, Pilots and Innovation organised a set of demonstrations from the IERC projects promoting the latest IoT research and innovations. The IERC has supported the organisation of the AIOTI Thematic Workshops during IoT Week 2015 by the AIOTI WG03 IoT Standardisation, WG06 Smart farming and food security, WG07 Thematic Workshop – Wearables, and WG08 Smart Cities. The AIOTI Thematic Workshops allowed the members of the working groups to align their views on the priorities to be addressed for deploying the IoT technologies in specific applications and across the various domains.

### 4.4.1 Meetings - Plan for 2015

- IERC Meeting, Brussels, Belgium, 24 March 2015
- IoT Week 2015, Lisbon, Portugal 15-18 June 2015
- IERC Meeting, Lisbon, Portugal, October 2015

## 4.5 Position Papers

Release the IERC position papers

- IoT Semantic Interoperability: Research Challenges, Best Practices, Recommendations and Next Steps
- IoT Governance, Privacy and Security Issues
- Position Paper on Standardization for IoT technologies
- EU-China Joint White Paper on Internet-of-Things Identification
- Cluster portfolio presentation and international collaboration overview

## 4.6 Work Plans of Activity Chains

### 4.6.1 Activity chain AC1 - Architecture approaches and open platforms

- Focus on open platforms and propose the repository and the working methods and structure to collect and maintain the results (open source software, documents, etc.).
- Drive results and cooperation with FI-PPP on generic enablers in Q1 2015 (25th of March 2015, Brussels).
- The IERC considers that there is a need to make a particular effort on the IoT Architectures, define what are the future developments on Architecture Reference Model (ARM), revisit the existing IoT Architectures activities and provide an overview and estimation of the current IoT Architecture discussions. The work will be linked with activities of the WG03 of AIOTI in order to provide recommendations with regard to gaps, issues facing IoT architectures and challenges for IoT technology deployment.
- The IERC will work for providing the framework for the convergence of the IoT architecture approaches considering the vertical definition of the architectural layers end to end security and horizontal interoperability. IoT technology is deployed globally, and supporting the activities for common unified reference architecture would increase the coherence between various IoT platforms. A common architectural approach will require focusing on the reference model, specifications, requirements, features and functionality. In particular this issue would be important in preparation of the future large-scale pilots, although time schedule might be difficult to synchronise.
- The IERC will cooperate with AIOTI WG03 to imitate a discussion with the SDOs working groups addressing the IoT reference architecture in order to provide a common framework convergence towards a common approach. This should be scheduled for September-October 2015.

### 4.6.2 Activity chain AC2 - Naming and addressing schemes. Means of search and discovery

- Position paper on identification, naming, addressing schemes and discovery taking into account the exchange of ideas with international partners.

### 4.6.3 Activity chain AC3 - Application scenarios, Pilots and Innovation.

- Chapter in the 2015 Cluster Book.
- Identify and collect information on the applications and pilots developed by different projects.
- Cluster analysis to evaluate the possibilities for rapid deployment of research results around IoT.
- Organisation of a Session at IoT Week 2015.

### 4.6.4 Activity chain AC4 - Service openness and inter-operability issues/semantic interoperability

- Release of the position paper.
- Organisation of a Technical Session at IoT Week 2015.

### 4.6.5 Activity chain AC5 - Governance, Privacy and Security issues

- Release the position paper.
- Define the specific IoT elements and liaise with the AIOTI WG04 in order to align the activities in the two groups.
- Propose solutions for eliminating the barriers to IoT applications deployment.

### 4.6.6 Activity chain AC06 - Standardisation and pre-regulatory research

- Release the position paper on IoT standardisation
- Contribute to the organisation of an ETSI workshop on standards for IoT.
- Organisation of a Technical Session at IoT Week 2015 and support of WG03 of AIOTI.

### 4.6.7 Activity chain AC07 - Cognitive Technologies for IoT

- Provide the work plan that defines the plan of activities for 2015.
- Organisation of a Workshop in 2015.

### 4.6.8 Activity chain AC08 - Societal Impact and Responsibility in the Context of IoT Applications

- Provide the work plan that defines the plan of activities for 2015.
- Papers and ideas for debate and organisation of a session at the IoT Week 2015.

## 4.7 Standardisation

On the issues on standardisation for IoT technologies the Cluster will support the AIOTI's WG03. IoT standardisation is viewed as a critical element to support innovation and deployment of IoT technology. In this context, the IERC together with AIOTI WG03 organised a standardisation workshop on 18th of May, 20015, Brussels together with ISO JTC1 WG10 to discuss the cooperation and future developments. The overall objective of the workshop was to facilitate and encourage cooperation between the IoT stakeholders including the Standard Development organisations. The IERC will provide the view on the IoT interoperability and on the architecture framework and support the AIOTI on the adoption of unified reference architecture to increase the coherence between various IoT platforms. In order to come to a common architectural approach the focus will be on the reference model, specifications, requirements, features and functionality. This issue is important in preparation of the future large-scale pilots. The IERC will support the discussions with SDOs working groups (ISO, IIC, IEEE, ITU-T, OneM2M, IPSP Alliance, W3C, OASIS, OGC, etc.), addressing the IoT reference architecture in order to provide a common framework converge towards a common approach (September-October 2015). The IERC will follow and support the work to provide the standardisation framework under which the large scale pilots will operate. The activities of the activity chain will be aligned with the activities of the AIOTI WG03 in order to avoid overlaps and duplication of efforts. The IERC will continue to focus on the pre-normative standardisation research.

## 4.8 IERC IoT SRIA and Cluster Book 2015

IERC Cluster 2015 book focuses on Innovation in IoT Applications and include the IERC SRIA as a chapter.

The title of the book is "Building the Hyperconnected Society - IoT Research and Innovation, Value Chains, Ecosystem and Markets"'. The IoT SRIA and the IERC Cluster Book 2015 look at the IoT value chains, ecosystems, state-of-the art research, innovation and impact. The contribution to the different chapters was discussed at the last IERC meeting. The SRIA chapter was reviewed and finalized by Cluster Coordinators and released for publication.

The schedule for the IERC Cluster Book 2015 and IERC SRIA is as follows:

- IERC Cluster Book 2015 and IERC SRIA content and schedule presentation: 24st of March 2015
- IERC SRIA feedback from projects (The PCs requested the project partners to provide input to the various subsections and will collect and integrate the inputs (Track Changes ON). Integration and release of second version): April 2015
- IERC pre-final version (Comments, modifications from PCs): 28th of May 2015

- IERC SRIA final version: 05th of June 2015
- IERC Cluster Book 2015 release: 16th of June 2015

The IERC SRIA looks at the IoT perspective and AIOTI priorities. The IERC Strategic Research and Innovation Agenda (SRIA) (Chapter 3 of the book) is available in electronic format at the IERC web site: Internet of Things beyond the Hype: Research, Innovation and Deployment

The Cluster book 2015 "Building the Hyperconnected Society - IoT Research and Innovation Value Chains, Ecosystems and Markets" is available online at IERC Web Site: Building the Hyperconnected Society - IoT Research and Innovation Value Chains, Ecosystems and Markets.

# 5 List of Acronyms

| Acronyms | Full Name |
|---|---|
| AC | Activity Chain |
| EC | European Commission |
| ETSI | European Telecommunications Standards Institute |
| EU | European Union |
| FIA | Future Internet Assembly |
| FI-PPP | Future Internet Public Private Partnership |
| FP | Framework Programme |
| ICT | Information and Communications Technologies |
| IERC | Internet of Things European Research Cluster |
| IoT | Internet of Things |
| ITU | International Telecommunication Union |
| M2M | Machine to Machine |
| MGM | Management |
| PC | Project Coordinator |
| RFID | Radio Frequency Identification |
| RTD | Research and Technological Development |
| SME | Small and Medium-Sized Enterprises |
| SRA | Strategic Research Agenda |
| SRIA | Strategic Research and Innovation Agenda |
| WP | Work Package |
| WPL | Work Package Leader |

*Table 2: Acronyms*