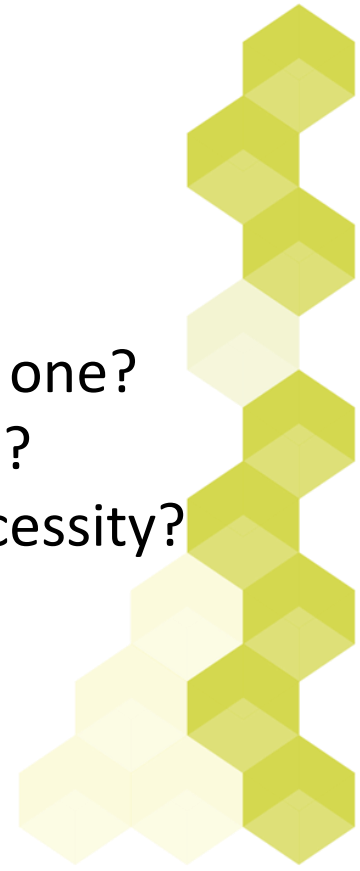Harris Moysiadis, Business Development Manager, Future Intelligence

comments welcome at *tmoysiadis@f-in.gr*

- Establishing an IoT association: Does Greece need one?
  - How does the global IoT environment operate?
- Would that be a marketing activity or a business necessity?

IERC Meeting Agenda –AIOTI WG1-27 January 2016: IERC Meeting

09:00	Welcome and Introduction	*Peter Friess*, EC,
09:15	IoT Focus Area	*Rolf Riemenschneider* EC
09:30	IoT Activities 2016	*Jerome Dethier, Peter Friess*, EC,
09:30	Presentation ICT30 projects under the European IoT Focus Area. IoT-EPP (IoT European Platforms Programme) task forces: TF01 Innovation, TF02 Platforms Interoperability, TF03 IoT Accelerators, TF04 IoT Business Models, TF5 Educational Platforms, TF6 International Collaboration. Synergies and complementarity with IERC activity chains and AIOTI WGs. Definition, objectives and responsibilities. Identify the RIAs and involvement. Cooperation with the other projects.	*Ovidiu Vermesan*, IERC
10:30	Coffee/Tea Break	
11:00	AC01: IoT Architecture approaches and open platforms	*Levent Gurgen, CEA*
11:15	AC02: IoT Emerging Technologies and Applications	*Ovidiu Vermesan*, IERC
11:30	AC03: IoT Results Exploitation	*Maurizio Spirito, ISMB*
11:45	AC04: IoT Hyper-connected Society. IoT in Creative Arts	*Luis Miguel Girao*, ARTSHARE
12:00	AC05: Trusted IoT	*Adam Kapovits, EURESCOM, Elias Tragos FORTH*
12:15	IoT Week 2016	*Srdjan Krco, DUNAVNET,*
12:30	Dissemination and Exploitation Strategy – Increase the impact of the project outcomes. International Cooperation. Recommendations after SiDO 2015 and IoT Week 2015.	*Philippe Cousin, eglobalmark, Pedro Malo UNINOVA*
12:45	IoT in Manufacturing	*Sergio Gusmeroli*
	IERC Events	*All*
13:00	Lunch	
14:00	Alliance for IoT Innovation (AIOTI). IERC new objectives, role, structure, plans and deliverables of the new activity chains align with the AIOTI structure. LSPs 2016 Call.	
14:30	Discussions.	*All*
15:00	IERC Events. Communication activities: Platform, Corporate Identity, Common meetings and events. Projects cooperation. Alignment with IoT-EPP TFs and AIOTI WGs.	*All*
15:30	Coffee/Tea Break	
16:00	2016 SRIA, Cluster Book Schedule, Open Days. National Clusters. IoT group of national projects. Dissemination and transfer of results to AIOTI workgroups. Involvement of new projects in the activity chains and proposal for ACs coordinators.	*All*
16:40	Action Plan. Next meetings, major events in 2016	*All*
18:00	Closing	

16:00	2016 SRIA, Cluster Book Schedule, Open Days. National Clusters. IoT group of national projects. Dissemination and transfer of results to AIOTI workgroups. Involvement of new projects in the activity chains and proposal for ACs coordinators.	*All*

EU Member States examples- GERMANY

The Internet of Things is a main focus of Germany's "Industry 4.0" plan to modernize its manufacturing sector. Germany has devoted **$221 million** to support industry, academic, and government research and development efforts to advance "smart factory" technologies ranging from sensor-embedded systems to artificial intelligence platforms that can help operate Internet-connected machinery.

Sources:
http://www2.datainnovation.org/2015-national-iot-strategies.pdf
http://www.zdnet.com/article/germanys-vision-for-industrie-4-0-the-revolution-will-be-digitised/
http://www.gtai.de/GTAI/Content/EN/Invest/_SharedDocs/Downloads/GTAI/Brochures/Industries/industrie4.0-smart-manufacturing-for-the-future-en.pdf

HyperCat Consortium Partners

- Aim: to create an inclusive one-stop shop of best practice IoT **implementation**
- through the sharing of **knowledge of processes and applications**.

- four (4) categories of partners with varying levels of commitment.
- Partners are encouraged to **understand other partners capabilities** and **identify opportunities** for **collaborative business development**.
- Founding Members: Technology Strategy Board's (now InnovateUK) IoT Demonstrator Phase I Clusters as HyperCat.

(check: **The list of 8 Internet of Things Clusters at**

https://connect.innovateuk.org/web/internet-of-things-ecosystem-demonstrator/article-view/-/blogs/the-list-of-8-internet-of-things-clusters?p_p_auth=Fnjp08FK&_33_redirect=https%3A%2F%2Fconnect.innovateuk.org%2Fweb%2Finternet-of-things-ecosystem-demonstrator%2Foverview%3Fp_p_id%3D101_INSTANCE_AuQUon4D9Vuz%26p_p_lifecycle%3D0%26p_p_state%3Dnormal%26p_p_mode%3Dview%26p_p_col_id%3Dcolumn-2%26p_p_col_pos%3D1%26p_p_col_count%3D4)

UK: Government's Office for Science Vision recommendations **are about leadership**.

Recommendation 1: Government needs to foster and promote **a clear aspiration**

- the UK will be a world leader in the development and implementation of the Internet of Things

and **vision for the Internet of Things**.

- IoT will enable goods to be produced more imaginatively, services to be provided more effectively and scarce resources to be used more sparingly.

Recommendation 2: delivering the vision and setting high ambitions. **Government should remove barriers and provide catalysis**.

• Commissioning

• Spectrum and networks

• Standards

• Skills and research

• Data

• Regulation and legislation

• Trust

• Co-ordination

Source: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/409774/14-1230-internet-of-things-review.pdf

EU Member States examples: IoTUK

- a national programme designed to accelerate the UK's Internet of Things (IoT) capability, launched as part of the Government's £40m investment in IoT.
- Aim: to advance the UK's global leadership in the Internet of Things (IoT) and increase the adoption of high quality IoT technologies and services throughout businesses and the public sector
- IoTUK will play a central role in enabling IoT entrepreneurship and will collaborate with organisations in a wide range of fields including cities, health and industrial applications
- Priorities: security and trust, data interoperability, investment justification and design development

- Powered by the Digital Catapult and the Future Cities Catapult

Source: http://iotuk.org.uk/

Market information for the horticulture sector: Big Data challenges

- A Dutch public-private partnership

- To develop an infrastructure for market information

- Access a diversity of data sources

- Collect and structure data from Social Media

- Provide mappings between classifications of products etc.

- Offer a uniform interface with standard classifications

- Boost applications of market data

- Enhance market orientation & data based supply planning

- Minimize investment cost for individual SMEs

Consortium

- Knowledge institutions: fundamental and applied research (Agriculture, IT, Data Analytics)

- Organizations and companies from horticulture and IT sectors

- Cooperation between fruit/vegetables and flowers/ornamental plants subsectors

- Participation of government and public data suppliers

INRA, Paris, 22 September 2015, Tim Verwaart

"Lightning talk" in the workshop on "Big data for food, agriculture and forestry: opportunities and challenges"

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International examples: SOUTH KOREA

- South Korea has $5 billion in planned investments in the Internet of Things through 2020
- industries ranging from wearables to smart cars.
- the South Korean Ministry of Science, Information Communications Technology, and Future Planning released a roadmap for the Internet of Things to guide **government actions to develop cybersecurity standards and best practices** (October 2014).
- South Korea has also built **the Songdo International Business District,** the world's first purpose-built smart city, **with the help of government funding.**

Sources: http://www.zdnet.com/article/hsbc-fights-off-denial-of-service-attack-on-its-internet-banking-systems/
http://www.bna.com/south-korea-plans-n17179911433/
http://www.worldbank.org/en/news/feature/2012/05/09/Korea-s-Global-Commitment-to-Green-Growth

International examples: USA

- **In September** The White House **launched its Smart Cities Initiative**, which encapsulates the majority of the U.S. government's efforts to support the IoT (**$160 million). Priorities include: smart city applications, Internet-connected vehicle pilots, and IoT research test beds (through NIST engagement)**
- **In October 2015, the White House released its Strategy for American Innovation**, which highlights the value of the Internet of Things for applications ranging from **environmental monitoring to supply chain management**.
- **in December 2015, the Department of Transportation launched the Smart City Challenge**, which will award $40 million in March 2016 to a mid-sized city to implement connected technologies to reduce congestion, improve transportation safety, protect the environment, and support economic growth.
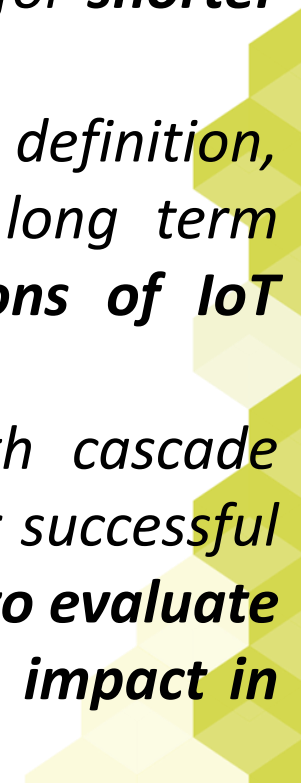
WHY DO NATIONS NEED A NATIONAL INTERNET OF THINGS STRATEGY?

While the private sector can successfully develop many valuable technologies on its own, particularly those technologies with few network effects, the Internet of Things is different**. To be sure, the private sector will be the primary driver** of the Internet of Things as its potential benefits create enormous incentives to invest and deploy the technology. **However, the Internet of Things is subject to an array of market failures that could limit these incentives and thus slow progress toward a fully connected world.** Additionally, **if poorly designed, government regulations can make deploying IoT technologies more expensive and less valuable**. Furthermore, **governments can help bridge the divide between those communities and individuals who are able to fully benefit from the Internet of Things and those who cannot based on market forces alone**. Because of these three factors—market failures, the need for an innovation-friendly regulatory environment, and the need to promote equity—governments should develop comprehensive national strategies that remove obstacles and support development and widespread adoption of the technology.

Source: http://www2.datainnovation.org/2015-national-iot-strategies.pdf

AIOTI Response to the European Commission's Digitising European Industry consultation

- *Perhaps the most powerful of all measures to stimulate establishment of and cooperation in Internet of Things innovation eco-systems for Europe is **the funding of projects**.*
- *Funding mechanisms need to be reformed to account for **shorter development timelines and faster deployment.***
- *The current R&D funding models require upfront definition, specification and partners for what is generally a long term project, **which is not compatible with the ambitions of IoT Innovation.***
- *Besides introducing more frequent assessments with cascade funding mechanisms and fewer resource diversions for successful project teams, **new approaches need to be developed to evaluate proposals based on the innovation potential and the impact in the innovation ecosystem**.*
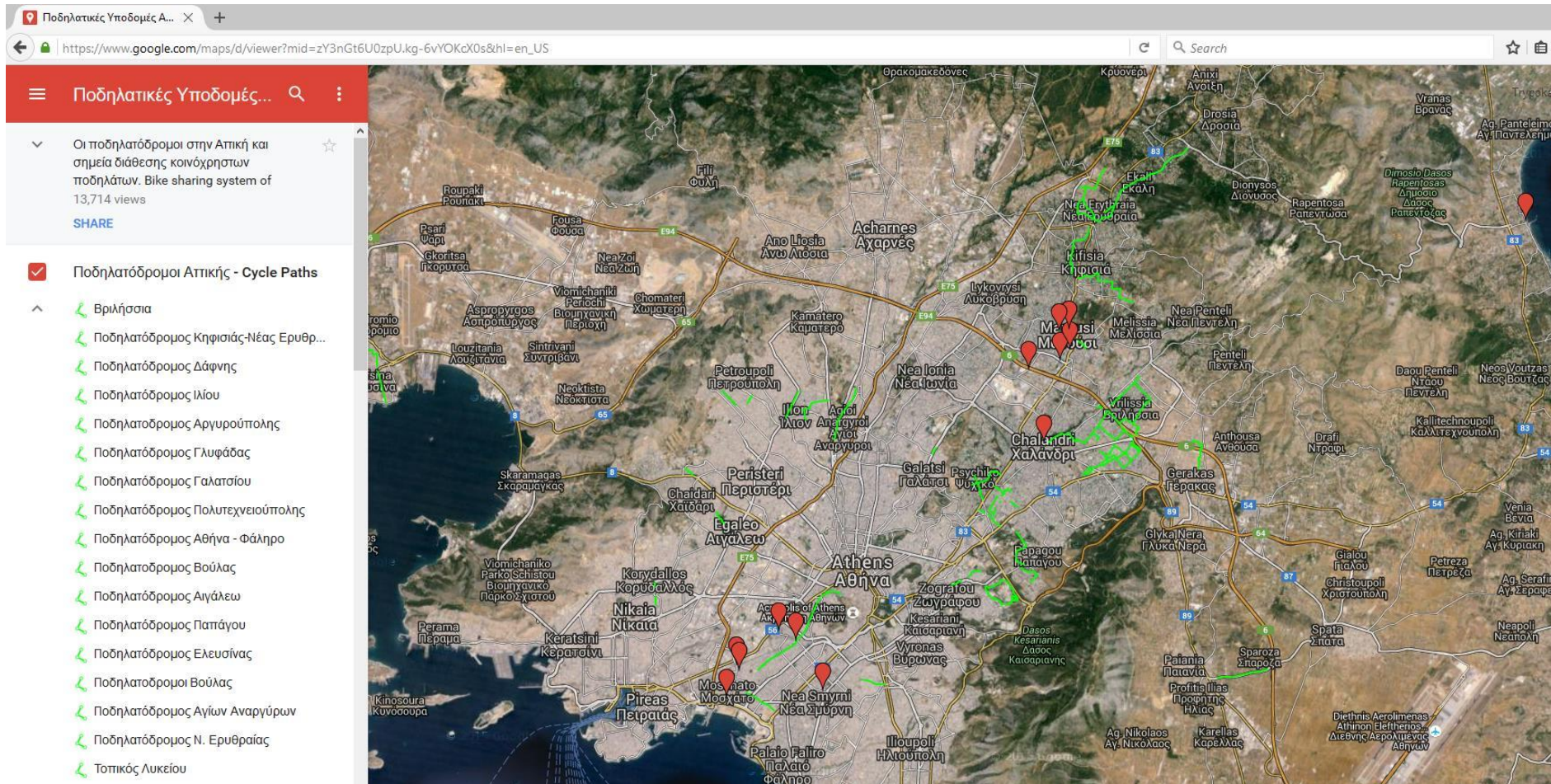
In addition, in the case of the farming sector, significant digital take-up will be happening in parallel to LSPs under national or regional initiatives (and thus in a smaller, more fragmented scale).

Examples of implementation tools in the agri-food sector,
- **EAFRD (European Agricultural Fund for Rural Development):** as a tool for co-financing innovation activities and technology take-up **managed by regional or national authorities**
- Other types of structural funds, **such as ERDF (European Regional Development Fund)** can be used for similar objectives, **at least in those regions that have identified such priorities in their Smart Specialization Strategies (RIS3 plans).**
- **Hence, proper coordination of the authorities managing structural funds in the different Member States for bringing additional public investments.**

https://ec.europa.eu/digital-agenda/sites/digital-agenda/files/discussions/aioti_response_to_digitisation_of_industry_consultation_final.pdf

5 ΧΡΟΝΙΑ ΑΡΓΟΤΕΡΑ…

KEY TAKE-OUTS

- We need to keep on cycling

- We need to invest knowledge and time

- We need to engage non-tech people

- We need to share best practices and contacts

- We need to be fast and responsive to our environments' requirements (EU wide)

- We need orchestration instruments to provide short-term objectives and appropriate implementation tools (including funding)

Ευχαριστώ για την προσοχή σας!!

Harris Moysiadis, Business Development Manager, Future Intelligence

comments welcome at tmoysiadis@f-in.gr