Internet of Things
and
Smart Cities & Communities
Convergence

Bilbao, IoT Week, 6 June 2018

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HORIZON 2020

Together you can make a difference!

key lessons learnt:

Joining, Sharing, Co-creation for win-win with 'big ears'

"… my main message is about joining and sharing. The European Commission supports the common approaches across the EU aiming at ensuring the cooperation between private and public actors at EU level for a joint development and joint implementation in relation to smart cities." (Commissioner Mariya Gabriel, Connected Smart Cities Conference, 11.1.2018)

Find out together how to let the cities & citizens needs lead the way

Five examples: European Network of Living Labs, Creative Ring, Open & Agile Smart Cities, ETSI ISG on Context Information Management, ITU-T Focus Group on Data Processing and Management to support IoT and Smart Cities & Communities

Make your communications come alive

One way: Meaningful names, such as: City Service Development Kit CitySDK, 5GCITY, SynchroniCity, SharingCities, … Global System of Mobile Communications GSM

Co-create cities & citizens history of tomorrow!

25 years ago in Manchester:

In 1993, Dave Carter, Artur Serra et al launched Telecities "science fiction", predecessor of EUROCITIES Knowledge Society Forum.

10 years ago in Finland:

In 2008, Timo Ojala, University of Oulu professor, presented "urban computing", at an ENoLL workshop, sparking the introduction into the EU Competitiveness & Innovation Programme of the first Smart Cities objective, launched with its first EU projects at the first Connected Smart Cities Conference in Helsinki in 2010.

Now in Bilbao:

Launching of the open call of the IoT Large Scale Pilot "SynchroniCity: Delivering an IoT enabled Digital Single Market for Europe and Beyond", together with IoT Large Scale Pilots Internet of Food and Farm IoF2020, and ActivAge. Could you join in and contribute to creating the global market? Could you concretely contribute to interoperability, replicability and reuse to make the common market work on a common technical ground?

European Commission

SYNCHRONICITY

Synchronicity opens up a global IoT market where cities and businesses develop shared digital services to improve the lives of citizens and grow local economies.

TARGET

- SMEs & LARGE BUSINESSES
- NEW CITIES
- PILOT GROUPS

IoT SOLUTIONS

OPEN CALL

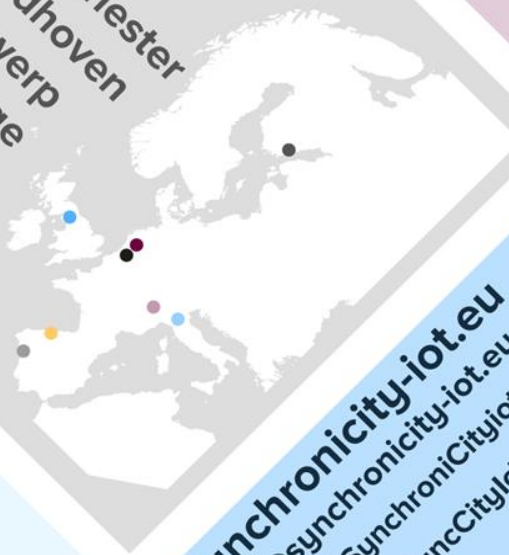
1st JUNE 2018

FUND

3M€

CITIES

- Helsinki
- Manchester
- Eindhoven
- Antwerp
- Carouge
- Milan
- Santander
- Porto



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Common technical ground

- Neutral branding (OASC – based on standards and consensus specifications)
- Minimal Interoperability Mechanisms (MIMs)
  - Open APIs
  - Common data models
  - Objective: interoperability, replicability, reuse
- Reference implementation (standards-based)
- Hosted cloud option

Using the SynchroniCity Framework for standards-based innovation and procurement

1. Identify assets

- First, a city needs to **identify the assets** that can and should be integrated with the SynchroniCity framework. These can include, e.g., data, (micro)services and IoT devices

2. Implement access API

- Second, the **access API** can be implemented progressively, in different steps, depending on the technical infrastructure of the city. Security and Context Management API are the basic ones.

3. Align data models

- Third, SynchroniCity curates a set of **standard data models** for different sectors/application domains, and supports a city in the adaptation of their own data models to the SynchroniCity ones with guidelines and dedicated tools

4. Set your terms

- Finally, SynchroniCity offers a fundamental asset access and management framework, partly to ensure proper handling of ownership, terms and licenses, which is an essential element, partly because SynchroniCity has the aim to foster a market for IoT-Enabled urban services, including data. Towards these two objectives, SynchroniCity provides a **common "marketplace"** in which digital assets can be offered to public and private stakeholders, with or without monetisation.

Strategy for IoT Leadership

2014-15 Building the IoT- EPI cluster (**E**uropean **P**latforms **I**nitiative)

2016-17 Building the IoT **F**ocus **A**rea

2016-17 Security and Privacy in IoT

2018-20 FA DEI Strategy

EU Markets

EPI: *Building the eco-system, breaking silos CPS-IoT, Using architectures integrating devices, systems and networks for a multiplicity of novel applications*

http://iot-epi.eu

55 Mill €

LSPs: Focus Area on Internet of Things will focus on experimentation with real-life solutions being tested at large scale with users

+ ODI, FI-ware accelerators, IERC, standardisation etc.

https://european-iot-pilots.eu/projects/

100 Mill €

Security and Privacy in IoT:

Addressing security, trust and privacy in IoT platforms, services and applications

A particular emphasis is on Blockchain and Distributed Ledger tecthnology as an enabler

37 Mill €

DEI Platforms: Focus Area Digitising European Industry will focus on integrating digital innovation across societal challenges

+ ***DEI Policy support****, e.g. security, privacy, ownership, liability, GDPR .*

300 Mill €

FA Digitisation Topics – WP 2018-2020

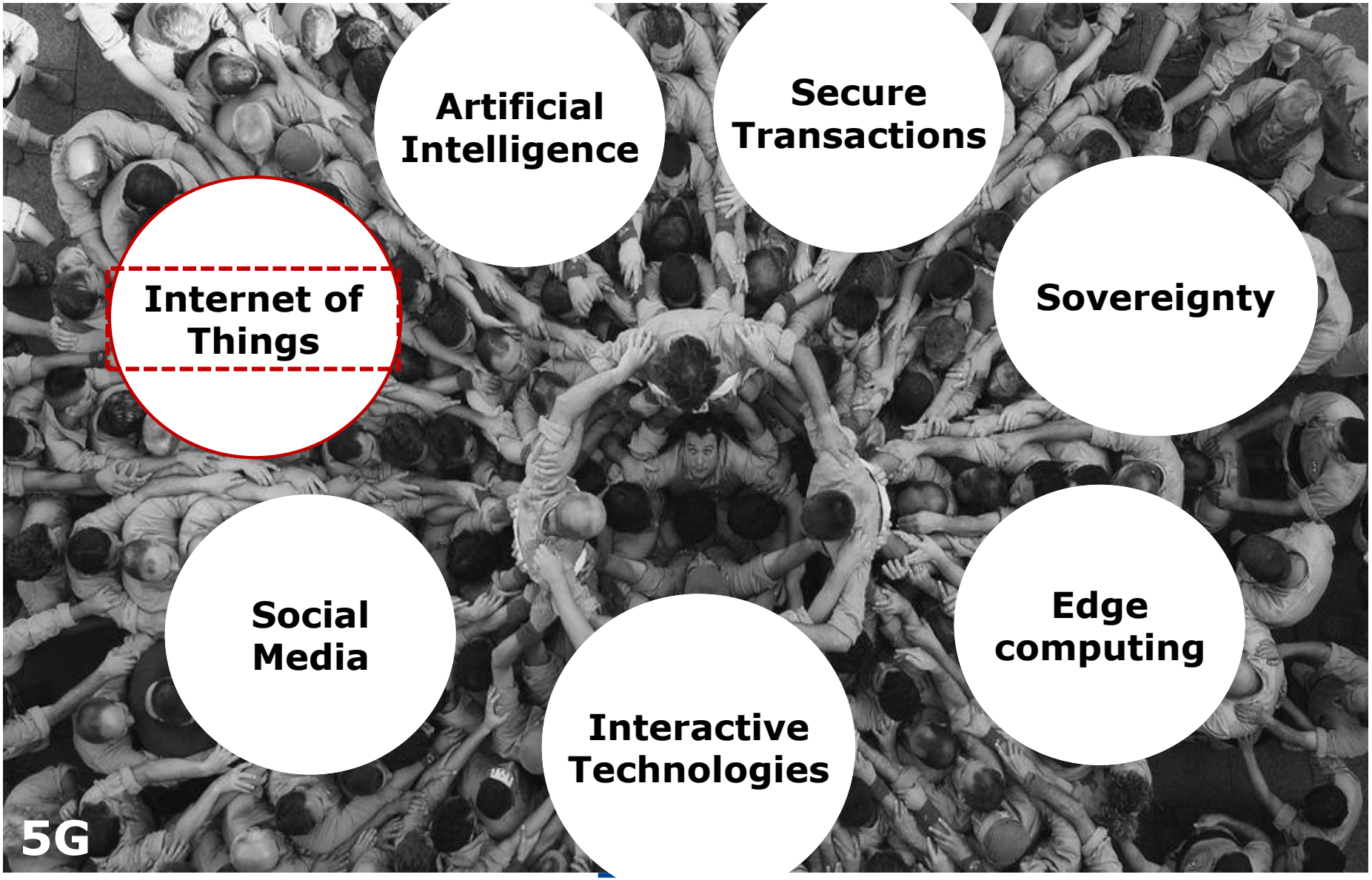
Focus Area 'Digitising and transforming European industry and services', Platforms and Pilots

LEIT-ICT	*Budget*		
• **DT-ICT-07-2018-2019: Digital Manufacturing Platforms for Connected Smart Factories**	**95 M€**		
• **DT-ICT-08-2019: Agricultural digital integration platforms**	**30 M€**		
• **DT-ICT-09-2020: Digital service platforms for rural economies**	**30 M€**		
• **DT-ICT-10-2018-2019: Interoperable and smart homes and grids**	**30 M€**		
• **DT-ICT-11-2019: Big data solutions for energy**	**30 M€**		
• **DT-ICT-12-2020: The smart hospital of the future**	**25 M€**		
• **DT-ICT-13-2019: Digital Platforms/Pilots Horizontal Activities**	**4 M€**		
SC1			
• **DT-TDS-01-2019: Smart and healthy living at home**	**60 M€**	H3/E4	H3

(LEIT-NMBP:

- **DT-NMBP-20-2018: A digital 'plug and produce' online equipment platform for manufacturing** **20 M€)**

Next Generation Internet – NGI



What's next in the open call, concrete focus of today?

- SynchroniCity open call webinar June 12
- Local "Clinics" in each core city – meet up
- Online documentation, forum and helpdesk
- Live framework environment and reference implementation

www.synchronicity-iot.eu