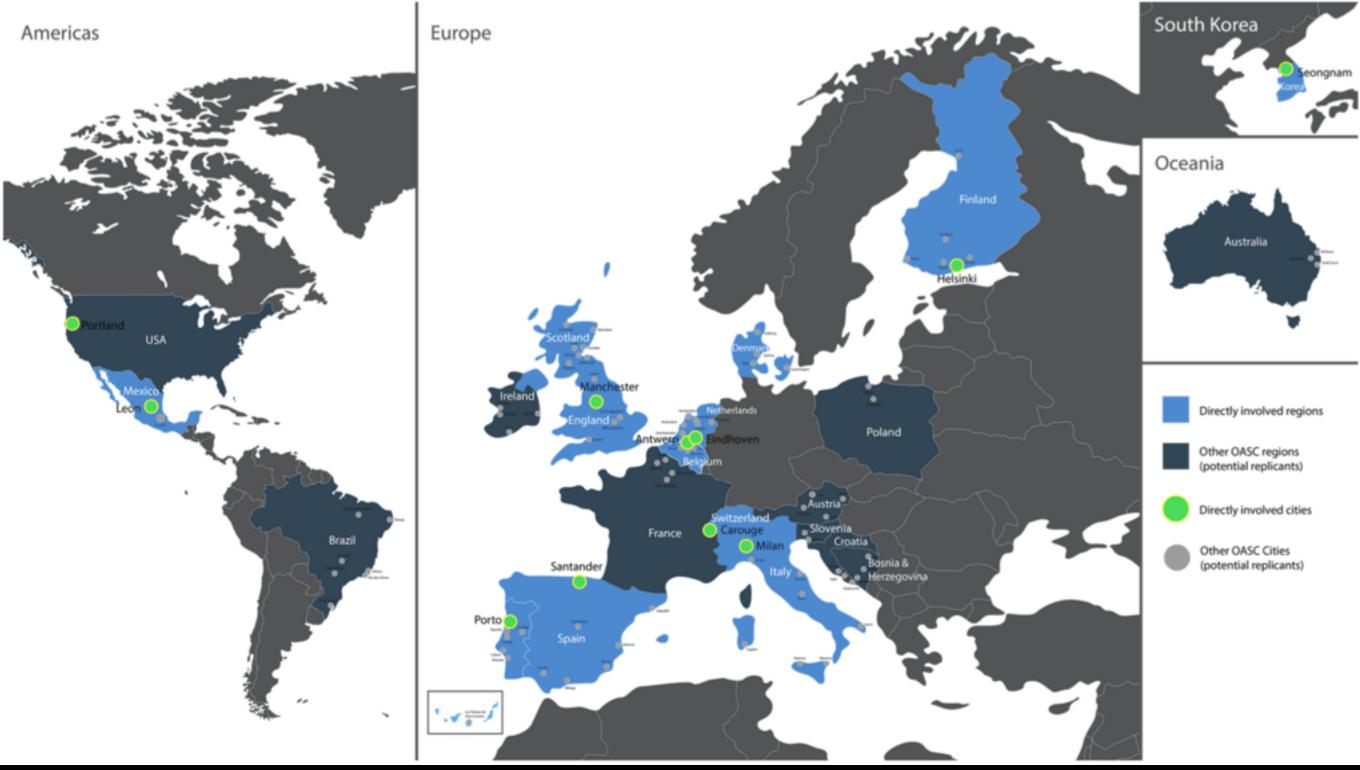
Kick-off Brussels, 9-10 January, 2017

A Global Market for IoT-enabled Urban Services



8 cities in Europe + 3 global + 0ASC (89)



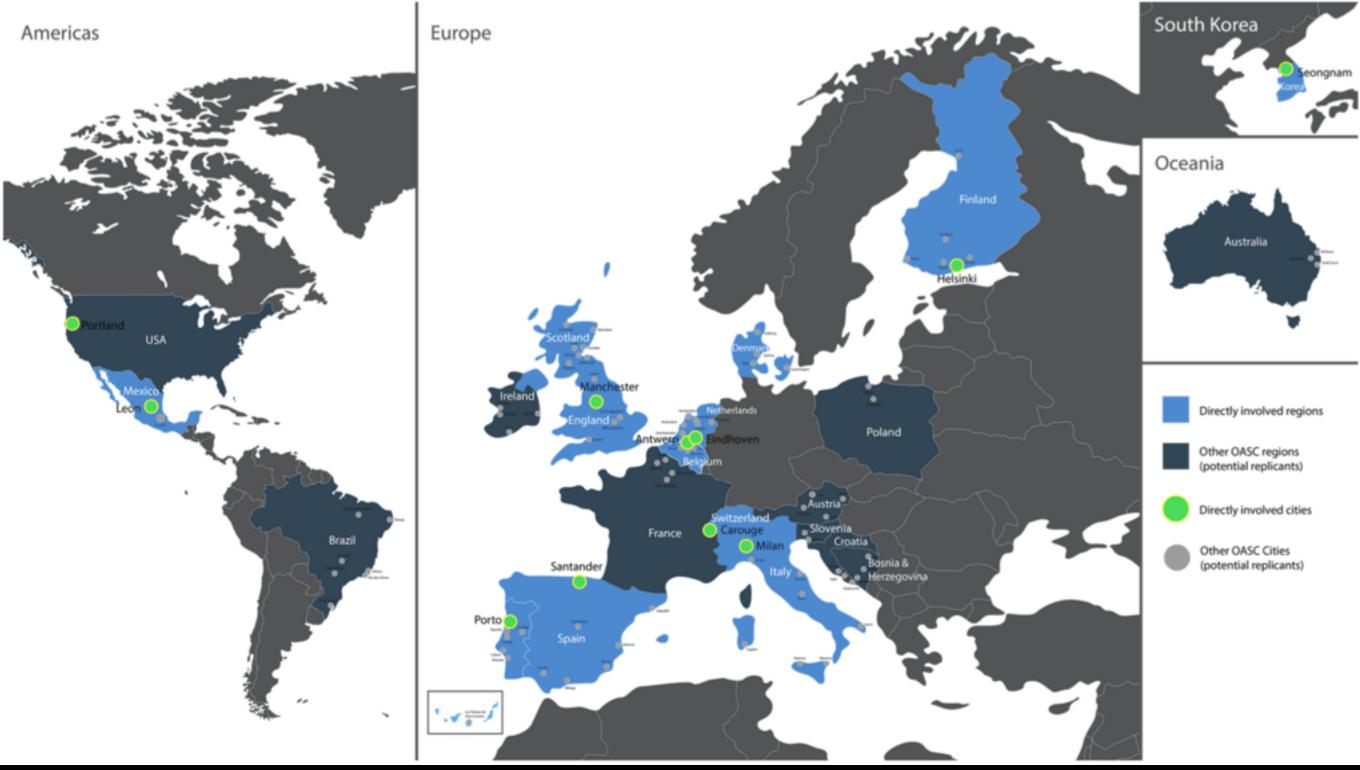
- 34 partners, 11 countries, 33 months.
- Budget: 20m€ (15m€ EC) / 3m€ for open calls.
- Core cities: Antwerp (BE), Eindhoven (NL), Helsinki (FI), Manchester (UK), Milan (IT), Porto (PT), Santander (ES), Carouge (CH).
- Linked cities: Léon (Mexico), Seongnam (Korea), Portland (USA).
- Leveraging: OASC, AIOTI, EIP-SCC, FIWARE, FIRE.

SynchroniCity Consortium

#	Participant organisation name	Short name	Country					
1	Aarhus University (Coordinator)	AU	DK					
2	Aalto University	AALTO	FI					
3	Alexandra Institute	AI	DK					
4	Atos	Atos	ES					
5	BronzeLabs	BL	UK					
6	City of Antwerp	ANT	BE					
7	City of Eindhoven	EIN	NL					
8	Forum Virium Helsinki	FVH	FI					
9	City of Manchester	MAN	UK					
10	City of Milan	MIL	IT					
11	City of Porto	POR	PT					
12	City of Santander	SAN	ES					
13	Digital Catapult	DigiCat	UK					
14	Engineering Ingegneria Informatica SpA	ENG	IT					
15	Future Cities Catapult	FCC	UK					
16	European Network of Living Labs	ENoLL	BE					
17	Heijmans Wegen BV	HW	NL					

18	Imec	Imec	BE
19	Manchester Metropolitan	MMU	UK
	University		
20	Philips Lighting	Philips	NL
21	Rombit	ROM	BE
22	Telefónica	TID	ES
23	TST Sistemas	TST	ES
24	Ubiwhere	UBI	PT
25	University of Cantabria	UC	ES
26	HOP Ubiquitous	HOPU	ES
27	City of Carouge*	CAR	СН
28	Mandat International*	МІ	СН
29	UDG Alliance*	UDG	СН
30	City of Léon*	LEO	MX
31	INFOTEC*	INFOTEC	MX
32	Tecnológico de Monterrey*	ITESM	MX
33	AMIO*	AMIO	MX
34	Korea Electronics	KETI	KR
	Technology Institute*		
—	Telefónica México**	TEFMX	MX

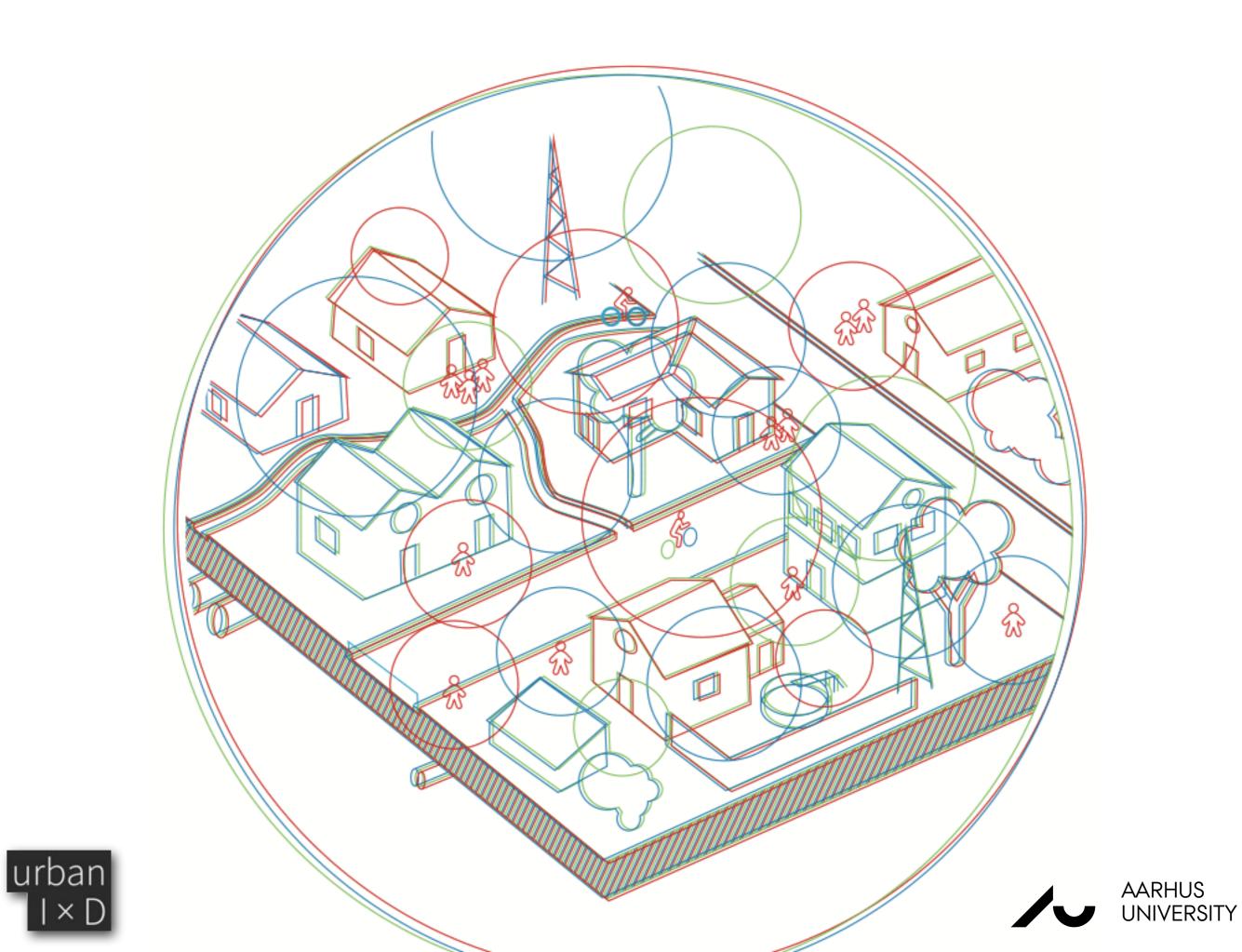
A Global Market for IoT-enabled Urban Services



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SYNCHRONICITY Kick-off Brussels, 9-10 January, 2017

Project overview

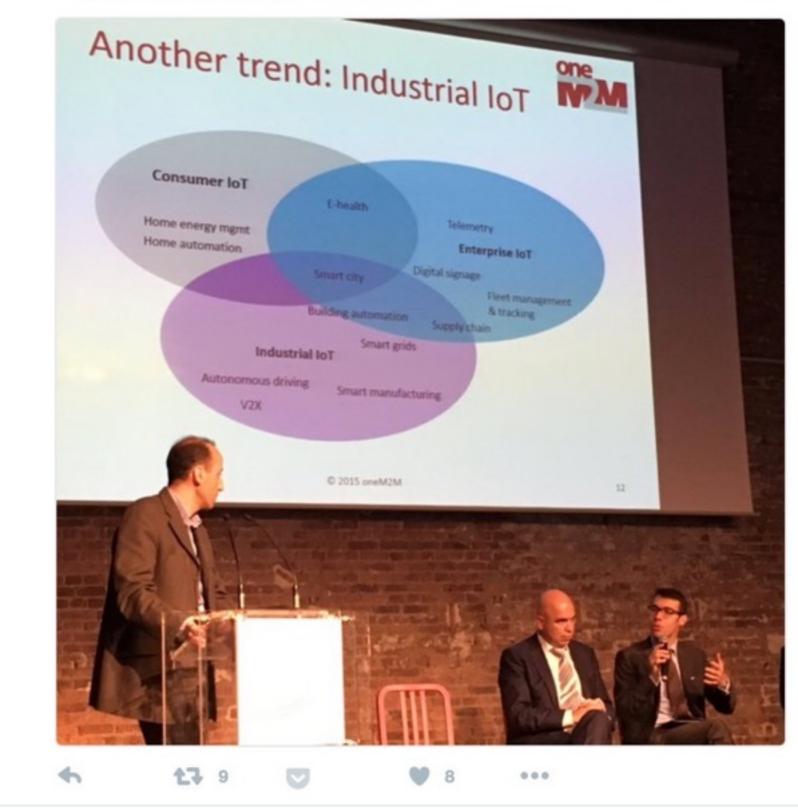




Martin Brynskov @brynskov · Apr 21 Smart Cities — where all the IoT complexities meet. So, cities need a strong voice when standards are formed

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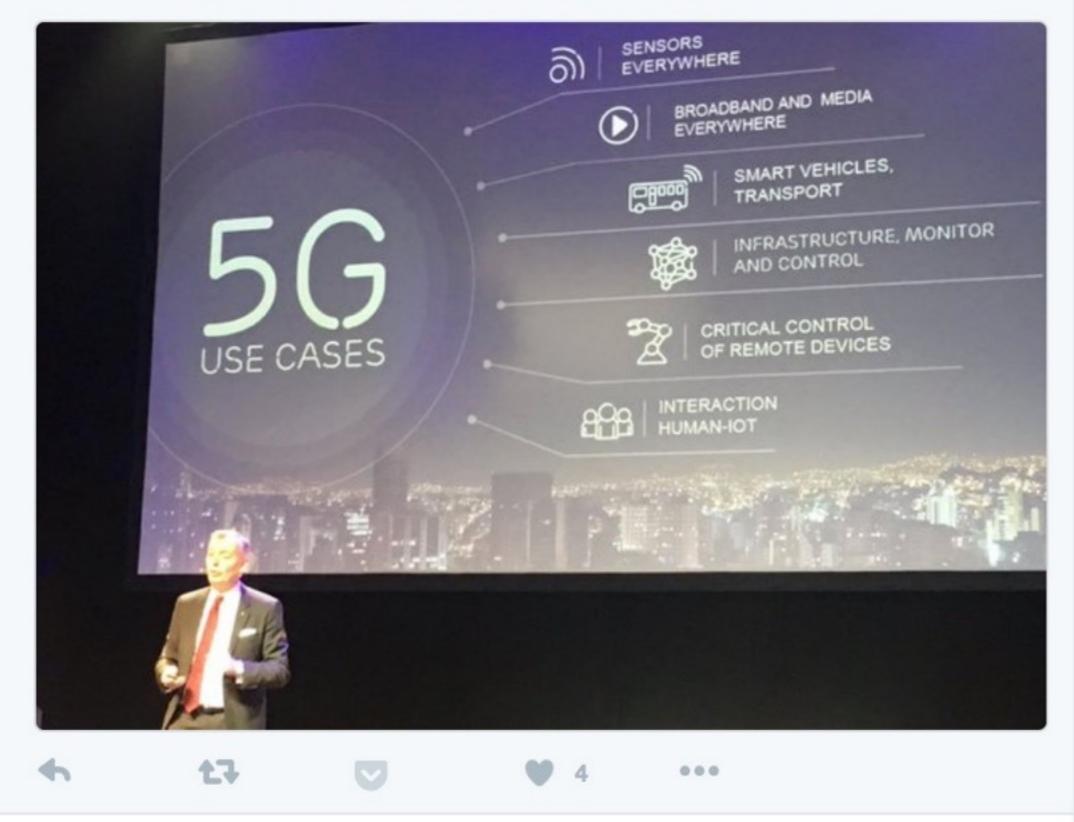




Martin Brynskov @brynskov · Apr 21

How do you envision the totality of connectedness that 5G brings? Ericsson shows—a city #netfutures16

Ericsson, digitalEU, DigitalSingleMarket and Digital Agenda EU



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Martin Brynskov @brynskov · Apr 21 "We want cities to remain cities" — an ambitious priority by EIT #netfutures16

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LIT, DigitalSingleMarket, digitalEU and 3 others



SMART CITY DILEMMAS

- 1. Flexibility, precision, productivity—for whom?
- 2. We don't experience the same city
- 3. Resilient or vulnerable?
- 4. Democratic proximity—or buzz?
- 5. No-one left behind?
- 6. Overview—or surveillance?
- 7. New public spaces without government?
- 8. Is it possible to plan at all?
- 9. Public organization and competences
- 10. Public service 2.0

Source: The think tank "Future digital cities – for and with people"



SynchroniCity represents the first attempt to deliver a Single Digital City Market for Europe by piloting its foundations at scale in reference zones across 8 European cities, involving also other cities globally. It addresses how to incentivise and build trust for companies and citizens to actively participate, in finding common co-created loT solutions for cities that meet citizen needs and to create an environment of evidence-based solutions that can easily be replicated in other regions.



SynchroniCity will deliver a <u>harmonized ecosystem</u> for IoT-enabled smart city solutions where IoT device manufacturers, system integrators and solution providers can innovate and openly compete.

SynchroniCity will establish a <u>reference architecture</u> for the envisioned IoT-enabled city market place with <u>identified interoperability points</u> and <u>interfaces and</u> <u>data models</u> for different verticals, including tools for co-creation & integration of legacy platforms.

- **1. BASE IOT APPLICATIONS**
- Context-adaptive traffic management
- Multi-modal transportation
- Community Policy Suite
- 2. ECOSYSTEM ENRICHMENT (€3m)
- New services
- SME focus

KPIs

Beyond

- zone
- vertical
- Europe

Building on

- CITYKeys
- ESPRESSO
- ETSI CIM
- ICT RPS
- SDOs

	Citizen Centred	Number of users of the services (in all the pilots)	#	350000
	Awareness impact	been reached and/or are activated by the arginat	% of people	75%
Social inno- vation	Perceived value from the citizens	been reached and/or are activated by the project Perceived value for the end users and citizens involved	Surveys based in Likert scale (% of surveys with average to good results)	>= 70%
	Quality of life	Perceived increment of the quality of life of the citizens involved	Surveys based in Likert scale (% of surveys with average to good results)	>= 70%
Access to services	Service implementa- tion	Number of services implemented during the pro- ject lifecycle.	#	20
Governance	Involvement of the city administration	The extent to which the local authority is involved in the development of the project, other than finan- cial, and how many departments are contributing (number of departments involved in each city)	#	4
	Perceived value from the decision makers	Perceived value for the local government and de- cision makers involved	Surveys based in Likert scale (% of surveys with average to good results)	>= 75%
	IoT connected de-	Number of IoT connected devices implemented during the project lifecycle in all the pilots	#	10000
	vices	Total number of IoT connected devices by the end of the project, including previously installed	#	100000
	Open data sets	Number open data sets in use, in all the pilots	#	70
Innovation	Quality of open data	The extent to which the quality of the open data produced by the project was increased	Surveys based in Likert scale (% of surveys with average to good results)	>= 65%
	Anns developed	Number of developed apps, in all the pilots	#	30
	Improved interoper- ability	The extent to which the project has increased interoperability between infrastructures, in all the pilots	Surveys based in Likert scale (% of surveys with average to good results)	10
	ernance	Share of population participating in the service definition	% of people	>= 0,3%
Local eco-	SME involved	Number of SME involved in all the process in all the pilots	#	100
system in- volvement	Partners engage- ment	Number of local ecosystem partners involved in the project during its lifecycle, in all the pilots (SMEs, creative hubs, citizen organisations, etc.)	#	200
Safety	Data Privacy	The level of data protection by the city - users perception on security levels. Alternatively - PIA approach – privacy by design.	Surveys based in Likert scale (% of surveys with average to good results)	>= 90%
Replication	Replication potential	Number of replicated services during the project	#	4
and Scala- bility	New follower city members/interested	Number of new follower cities or interested deci- sion makers	#	8

Workplan

GANTT Chart IoT-1-2016 LSP Synchronicity	Leaders	M01	M02	M03	M04	M05	M06	M07	M08	M09	M10 N	/11	M12	M13 M	14 M1	5 M16	6 M17	M18	M19	M20	M21	M22	M23 N	A24 I	M25	M26	M27 N	28 M29	M30	M31 M	32 M33
WP1 Tools, guidelines and support	iMinds														· · ·			1													
T1.1 Ecosystem support and enrichment	AU																									[01.1.1			D.1.	1.2
1.2 SynchroniCity architecture guidelines	DIGICAT				D1.2.1	D1.2.2									D1.2																
1.3 Monitoring and synchronization of the reference zones	FCC				D1.3.1					1.3.2						D1.3.3													1.3.5		
F1.4 Multi-stakeholder, citizen-centred methodology	iMinds						D1.4.1					D1	.4.2																		
VP2: IoT-Enabled Framework Component Provisioning and Integration	1 TID)			
2.1 IoT Enabled Smart City Reference Architecture	TID						D2.1.1																								
T2.2 Enablement of a DSM for IoT enabled Smart City Applications	ENG									2.2.1																					D2.2.2
T2.3:Advanced data marketplace mechanisms	DIGICAT									2.2.1 2.3.1										D2.3.2											
2.4 Enablement of a DSM for IoT devices manufacturing for Smart Cities	UDG											D2	.4.1													_					D2.4.2
2.5 Reference Zone platforms deployment and operation	ATOS														D2.5.								2.5.2								
NP3:Base Applications and Services	PHI																														
3.1: IoT service design and co-creation	PHI							D	03.1.1																						
T3.2: Implementation of baseline IoT services and customization tooling	BL										D 3,	2.1											3. 0								
3.3: Customised city services implementation	ENG													D3.3	.1									D3							
3.4: Deployment and Operation	FVH												D3	.4.1																D3.4	.2
VP4: Pilot Validation	UC										$\mathbf{\overline{U}}$																				
4.1 Validation methodology	FCC											D4	.1.1																		
F4.2 Technical validation	UC																D4.2.1							D4							
4.3: User. Stakeholder and market validation	POR																													D4.3	3.1
F4.4: Validation of integration and replication	TID																						\mathbf{O}							D4.4	
VP5: Open Calls	FCC																														
5.1 Validation of the open call mechanism	FCC										()	D5	.1.1																		
5.2 Dissemination of the open calls	ENOLL												.2.1					D5.2.2													
5.3 Selection of SME projects	FCC															D5.3.1				D5.3.2											
5.4 Support the delivery of the SME projects	FCC										\mathbf{O}																S			D5.4	l.1
WP6: Impact and Sustainability	Aalto																														
6.1: Smart City IoT Exploitation and sustainability plan	Atos									6.1	n							D6.1.2											6.1.3		
6.2: Standardisation of IoT and Service Eco-system	MI																						Di						6.2.1		
6.3: Marketing communications	ENoLL			D6.3.1/2								D6	.3.3										D	3.4							D6.3.5
6.4: Impact evaluation	Aalto												5.4.1					D6.4.2													D6.4.3
/P7 Coordination and Management	AU																														
7.1 Overall management of the project and risk contingency planning	AU			D7.1.1			(x)							X																	
7.2 Formal responsibilities of the Coordinator within the project	AU																D7.2.1														D7.2.2
7.3 Administrative responsibilities of the Coordinator within the project	AU																														
7.4 General tasks for the Coordinator during the project	AU						D7.4.1																								
		MS1:RZ	liaison off	ficers app	ointed															NO 10. OI	ynng or y	jiani ayice		30100100	ome pi	0,000					
				MS2: RZ	Engagem	ent plans	readv												MS17:	IoT pilot op	erational	in ALL refe	rence zone	s (basic)							

33 months Staged DevOps

Linking and contributing to:

- Open & Agile Smart Cities (OASC)
- EIP-SCC: High Level Group, Sherpa groups, action clusters
- AIOTI: WG3 (standards) and WG8 (smart cities)
- Standards development: ESPRESSO, ETSI (ISG), ITU, IEEE, OMA, ISO, SSCC-CG
- FIWARE
- FIRE: Fed4FIRE, OrganiCity, IoT Lab, F-Interop

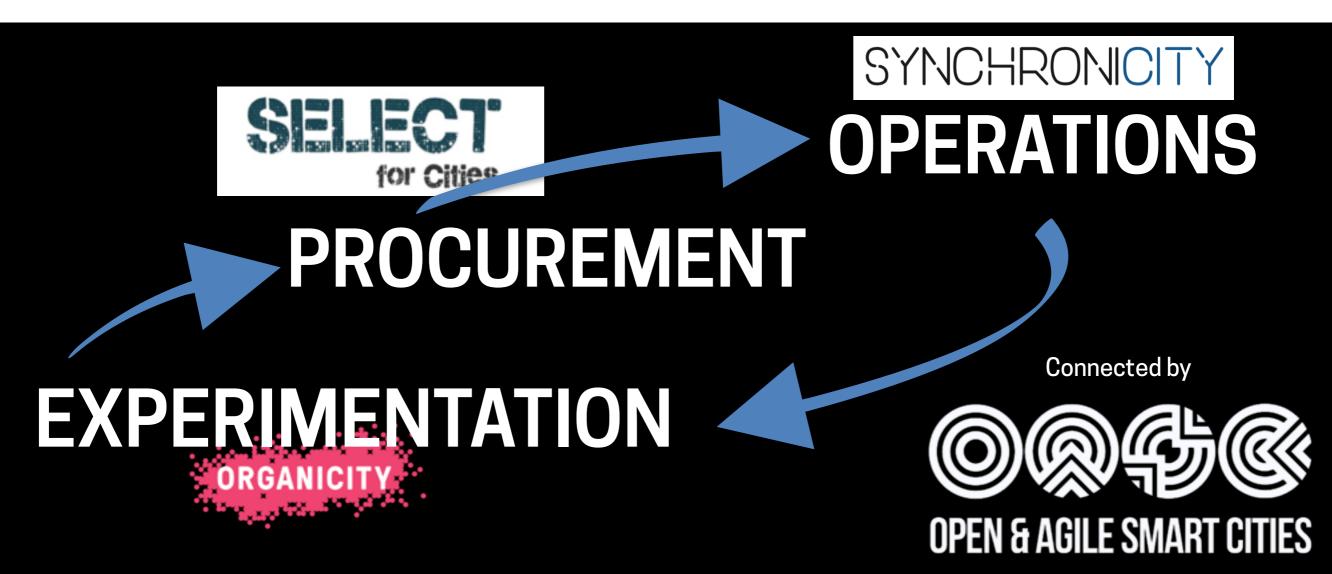
IoT Large Scale Pilots

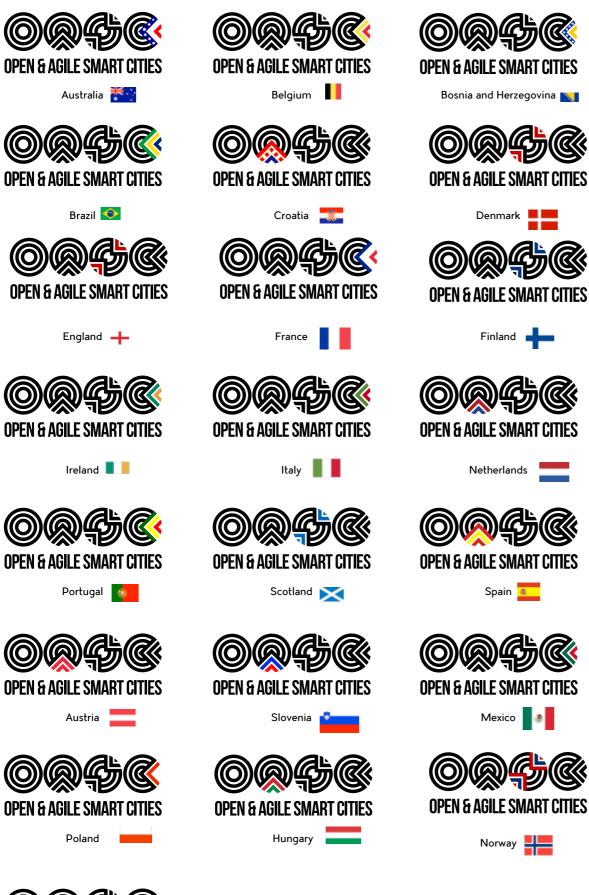
- Smart Cities = SynchroniCity
- Automotive
- Active Aging
- Wearables
- Agro
- CSAs (tech + co-creation)

WORLD

NATION

CITY





Denmark

Finland

Netherlands

Spain 🔹

Mexico

Norway



104 cities **22** countries Europe, Latin America, **Asia-Pacific**

www.oascities.org info@oascities.org



CONFERENCE 2017

"Making IoT work for cities and citizens" January 12, 2017, Brussels Committee of the Regions

CONFERENCE 2017

Opening plenary											
Cross-cutting themes and domain-specific sessions Tech tra											
Innovation ecosystemsMarket creation & policy issuesMobilityPlatforms & data models											
Lunch											
Cities by and for people Assisted living & aging Environment & water management Standards for real-time urban services											
Closing plenary											