



European Innovation Partnership on Smart Cities & Communities

Future European Programming on Smart Cities & Communities

Open & Agile Smart Cities - Minimal Interoperability Mechanisms

Super City / Smart City Forum @ Osaka G20 Summit, June 2019

**Stefan Kramer
European Commission**

**Each city is
unique ...**

**... but there are common
challenges!**



The EIP-SCC

European Innovation Partnership for Smart Cities & Communities



EIP-SCC
European Innovation Partnership
on Smart Cities and Communities



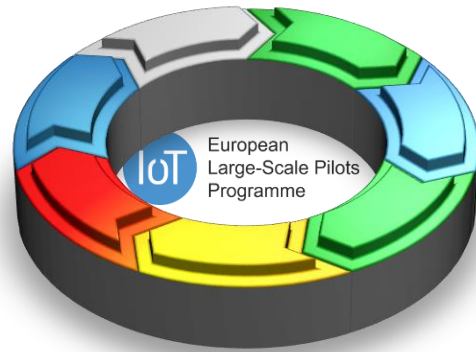
IoT Large Scale Pilots



MONICA - Management Of Networked IoT Wearables – Very Large Scale Demonstration of Cultural Societal: Wearable devices containing sensors and actuators for massive scale applications. Europe (EU contr: 15M€, 28 partners in 9 countries)

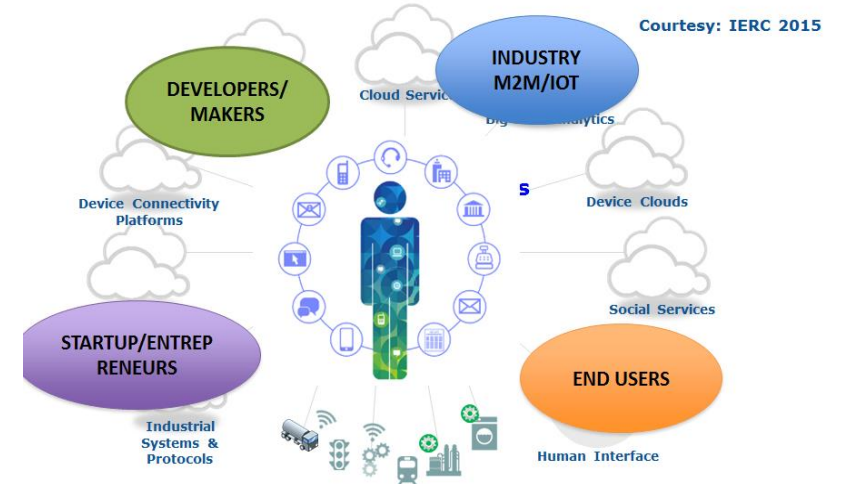


ACTIVAGE - ACTivating InnoVative IoT smart living environments for AGEing well: Active and healthy ageing. Europe (EU contr: 20M€, 48 partners in 9 countries)



IoF2020 - Internet of Food and Farm 2020: Strengthen competitiveness of farming and food chains in Europe. Europe (EU contr: 30M€, 70 partners in 16 countries)

european-iot-pilots.eu



AUTOPILOT - AUTOMated driving Progressed by Internet Of Things: Automated driving and infrastructure. Europe (EU contr: 20M€, 43 partners in 14 countries)



SYNCHRONICITY - Delivering an IoT enabled Digital Single Market for Europe and Beyond: Single digital city market for Europe (EU contr: 15M€, 33 partners in 9 countries)



From Smart Cities to Smart Communities

Roberto Viola, Director-General, DG CONNECT, at the Connected Smart Cities Conference 2019, stated that to be successful and deliver a smart city that works for local communities, the concept of smart city needs to undergo a radical shift, moving:

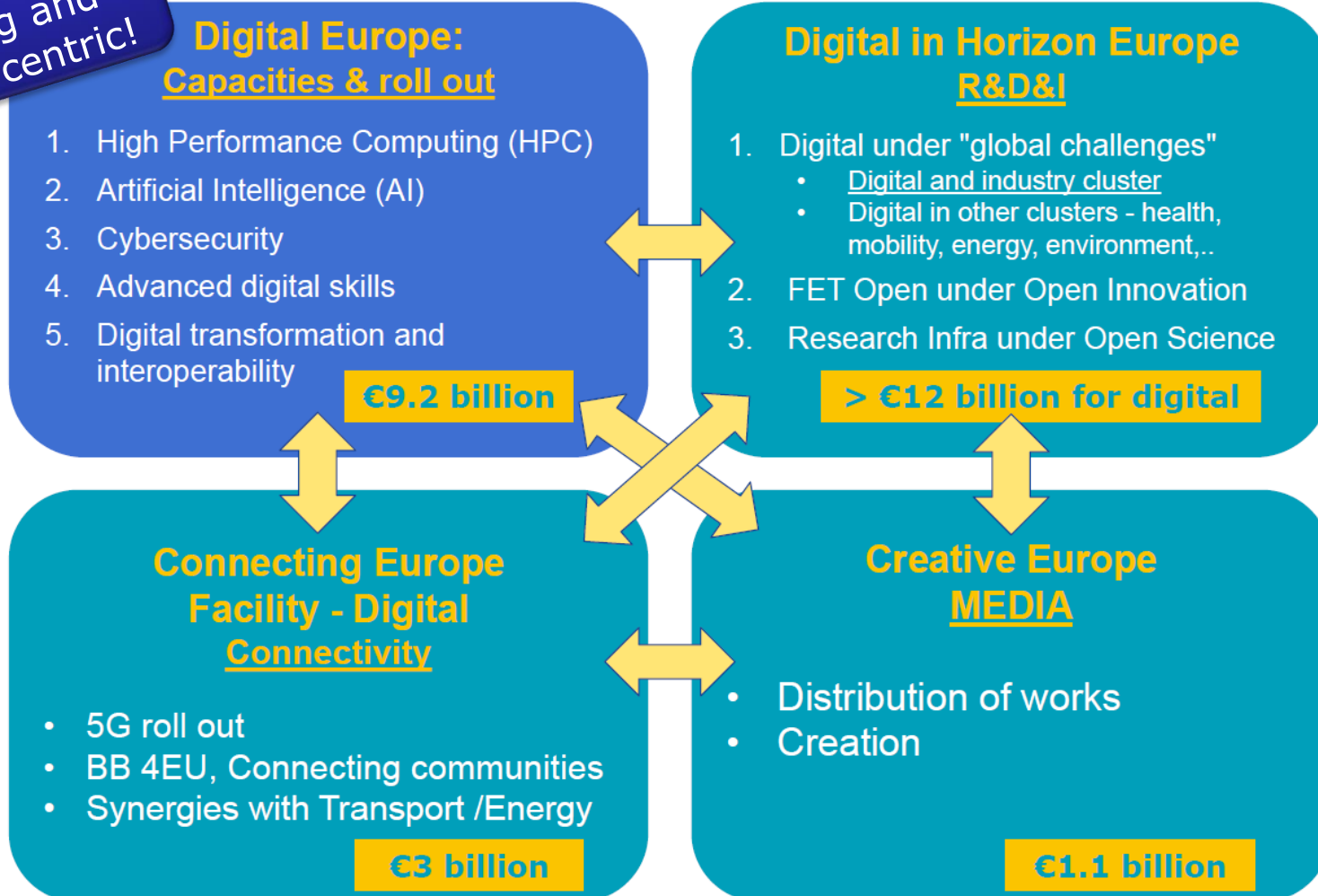
- o **from cities to communities**
- o **from systems to ecosystem**
- o **from design to citizen empowerment**

Cities & Communities will only succeed in the digital transformation, when citizens are actively included in the creation of new digital services.

(video at: <https://oascities.org/>)

DIGITAL IN THE NEXT MFF: OVERVIEW

Emphasis on
Scaling and
citizen centric!



NEXT STEPS (TENTATIVE PLANNING)

Horizon Europe/Digital Europe/CEF2 Formal Decisions (including budget)



Horizon Europe/Digital Europe/CEF2 Strategic Directions 2021-2024



“Climate-neutral and Smart Cities” Mission

Strategically, Horizon Europe will result in ‘Missions’ across a variety of vexing cross-cutting societal challenges in Europe, and a “Climate-neutral and Smart Cities” Mission is presently being shaped for the new programming period.

Khalil Rouhana, Deputy Director-General, DG CONNECT “noted that the Mission is still being defined, and a Board being set up ... still early days, and right now is an ideal opportunity to shape the mission. It offers scope for breakthrough technologies, crosstopic, and thus cross-Directorate. And the impact on Industry?: it requires cooperation and investment, which Industry is more cautious about. So the Mission can help build confidence, through projects, stimulus funds, working together and collaboration ...”

(EIP-SCC General Assembly: https://eu-smartcities.eu/sites/default/files/2019-05/EIP-SCC_GA_2019.pdf)

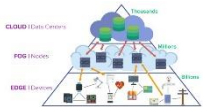
Mission Board call for applications for the selection of members now closed.

(<http://ec.europa.eu/transparency/regexpert/index.cfm?do=groupDetail.groupDetail&groupID=3667>)



Next Generation Internet in Horizon Europe

Broad lines:



- Future network and service infrastructures, including beyond 5G, Internet of Things, distributed clouds, blockchains



- Human-centric Internet applications, including trust and privacy, inclusive multi-modal interaction concepts, language independency and trustworthy social connectivity and media

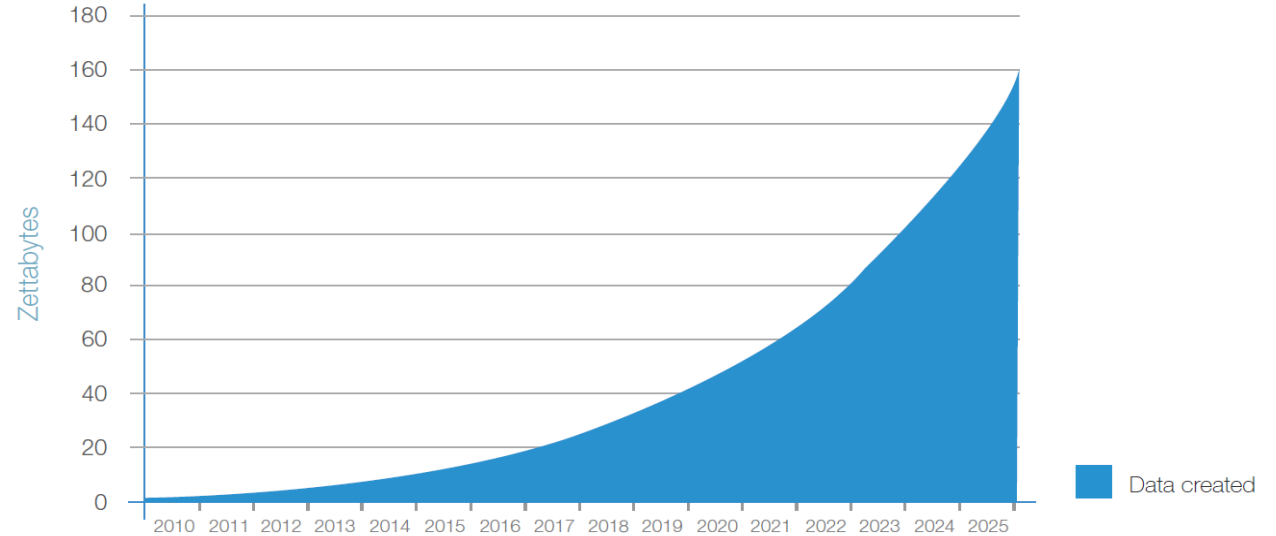


- Distributed processing and data analytics, incl. distributed ledger technologies, embedded Artificial Intelligence

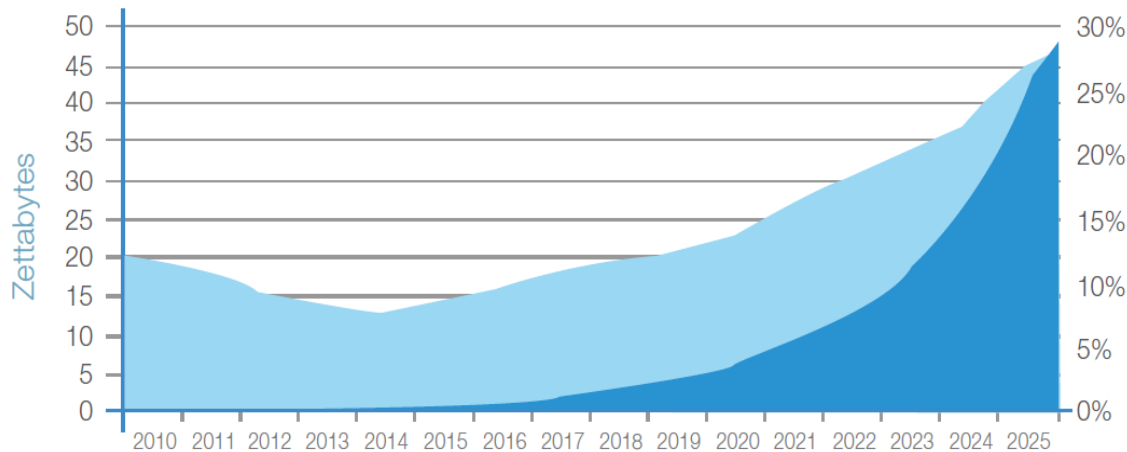
Next Generation Internet

Data is driving change

- Exploding Volume
- Increasing Real-Time requirements, e.g.
 - Autonomous Driving
 - Industry 4.0
- Needs ultra fast communication, distributed processing and analytics

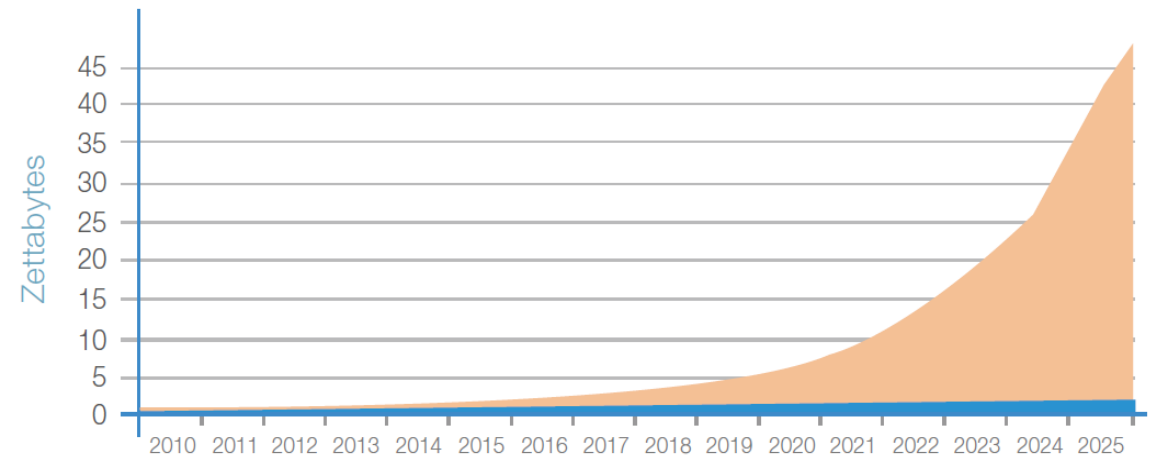


Source: IDC's Data Age 2025 study,



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■ % of Total Global Datasphere ■ Real-Time Data



Source: IDC's Data Age 2025 study,

■ IoT ■ Other

Digital Europe Programme

As part of the next long-term EU budget (MFF 2021-2027), the European Commission proposed a new funding programme entitled Digital Europe Programme (DEP), which is part of the "Single Market, Innovation and Digital" chapter of the EU's long-term budget proposal. It builds on the Digital Single Market strategy and its main objective is to boost Europe's digital transformation to the benefit of citizens and businesses. The Commission's proposal foresees €9.1 billion over the period 2021-2027 to be spent on five areas:

- Supercomputers: €2.7 billion
- Artificial intelligence (AI): €2.5 billion
- Cybersecurity and trust: €2 billion
- Digital skills: €700 million
- Digital transformation of public administration and interoperability : €1.3 billion

(<http://www.europarl.europa.eu/legislative-train/theme-new-boost-for-jobs-growth-and-investment/file-mff-digital-europe-programme>)

CEF DIGITAL 2021-2027 - €3 billion

- Alignment with Gigabit Society Strategy objectives: supporting MS in addressing the overall funding gap (€155 bn) with strategic projects
- Complementarity with Digital Europe, structural funds & InvestEU

- **Cross-border 5G automotive corridors (but also railways, inland waterways)**
- **Gigabit connected hospitals, schools, business parks, public Wi-Fi & coverage of surrounding areas (5G communities)**
- **Key international/ cross-border connectivity**

For scale-up, cooperate in/with the networks

To join forces and share learnings, consider joining in or cooperating with the relevant networks for scaling up digital solutions in smart cities and communities, such as:

EU Committee of the Regions, see e.g. <https://cor.europa.eu/en/news/Pages/digital-europe-for-all-smart-digital-solutions.aspx>

EUROCITIES, see: <http://www.eurocities.eu/eurocities/forums/knowledge-society&tpl=home>

Open & Agile Smart Cities (OASC), see: <https://oascities.org/>

European Network of Living Labs (ENoLL), see: <https://enoll.org/>

Digital Transition Partnership Urban Agenda for Europe, see: <https://ec.europa.eu/futurium/en/digital-transition>

Role of global partnerships: the OASC example



140 cities in 29 countries

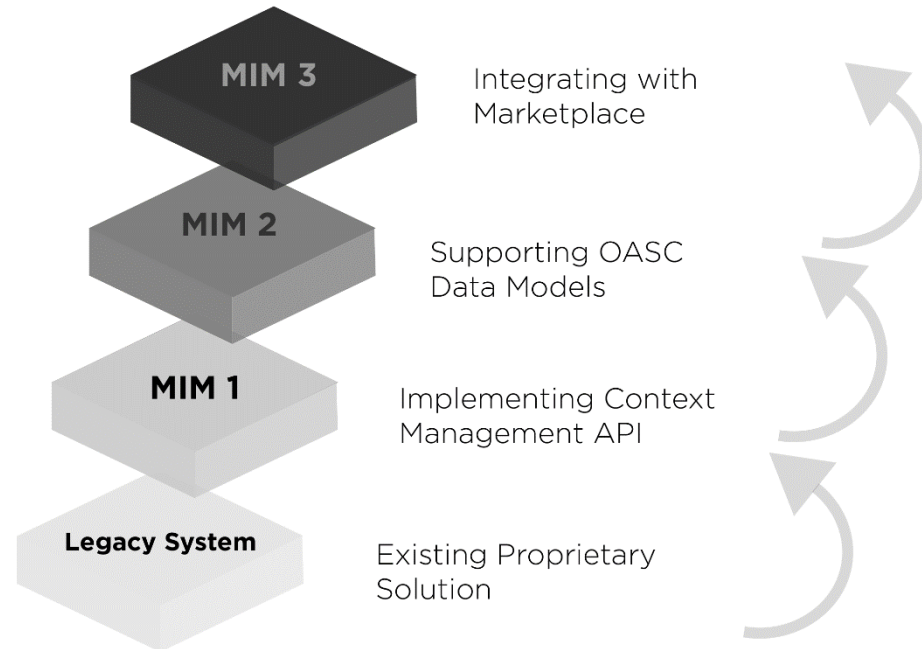
Global network of local networks of cities and communities

Standards-based innovation and procurement across sectors.



MINIMAL INTEROPERABILITY MECHANISMS (MIMs)

A roadmap based on existing standards and mechanisms, governed by cities, supported by suppliers and infrastructure providers.



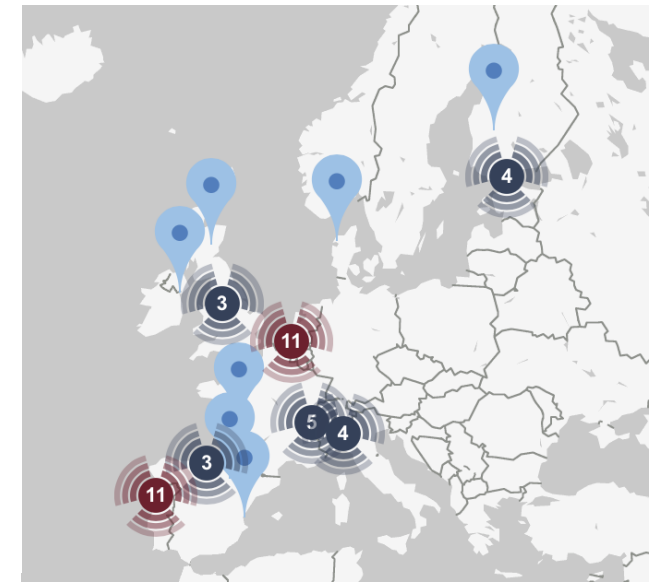
SYNCHRONICITY

IoT Large-Scale Pilot on Smart Cities & Communities (15/20m€)

Set up to validate and mature the OASC MIMs at scale.

20 cities, 50 services – running on the same common technical ground.

Catalogue of validated services based on standards.





OASC is set to grow beyond the original frontrunners, and inviting all cities and countries to join.

Key events and moments include:

- **IoT Week 2019**, Aarhus, Denmark, June 17-21
- **World Economic Forum Super Cities, G20**, Osaka, Japan, June
- **SynchroniCity scale-up conference**, Milan, October 2-3
- **Smart City Expo**, Barcelona, November 19-21
- **Finnish EU Presidency**, Oulu, December 10-11 *
- **Connected Smart Cities & Communities**, Brussels, January 23, 2020
- **Cities Forum**, Porto, January 31, 2020

A TRUSTED ROADMAP FOR CITIES & COMMUNITIES

The OASC Council of Cities oversees the core elements needed for interoperability across sectors.

It can be easily integrated in procurement for daily operations, as well as for innovation and even early-stage experimentation.

Gives the municipality stability and independence, which unlocks financing as well as innovation capacity.

Shares the risk of moving ahead in the digital transformation of cities & communities with peers in Europe and beyond.

SYNCHRONICITY

SynchroniCity becomes part of the OASC family.

Building a growing catalogue of services and suppliers.

Ensuring try-before-you-buy-style deployment.

Based on the OASC MIM framework, and supported by mixed funding models.

(* <https://oascities.org/wp-content/uploads/2019/06/Announcement-FI-Presidency-on-Urban-and-Territorial-Matters-Final.pdf>)



Thank you for your attention!

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