

# Summary CSSC January 12 2017

## Making the IoT work for cities and citizens

Links to slides and videos can be found in the [Full Connected Smart Cities Conference Programme](#)

9:00–9:15 Plenary: Welcome from the Chair, [Dr. Martin Brynskov](#), Open & Agile Smart Cities

The opening starts with a special thanks to the CoR for their cooperation in the congress and hosting the event. With around 400 people registered it is a full house.

The OASC initiative was launched in March 2015 at Cebit (Germany). After almost 2 years of existence there are now +100 cities in 22 countries associated to OASC, from Europe, Latin America and Asia-Pacific. During the conference as well presence from the US.

You need a collaborative effort to create a smart city and to go forward (Sarajevo as an example).

Key to success of a smart city:

Healthy cities, jobs, dignity (cultural heritage) and more jobs

**Key to success is connecting (citizens, government, universities, companies)**

**It's extremely important to collaborate and you need tools to succeed**

There is no smart city market based on city needs, but the use of a shared set of methods to develop systems and make them interoperable and opening up data can fill this gap.

Minimal requirements of a smart city:

- City collaboration
- Interoperability mechanisms
- Systematic experimentation
- Tools for co-creation

Minimal Viable Interoperability Mechanisms to create a true global market for smart city services: the **four de facto standards**.

The first mechanism is a driven-by-implementation approach: This implies, among other things, that communities and developers can co-create their services. The other three mechanisms are technical: an API, a set of data models, and an open data platform,

Movement from solution focus to dilemma focus: How to move forward by solving the dilemmas?

Digital dilemmas to solve:

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

**OASC will be the coordinator of Synchronicity, a European project of using IoT in cities.  
Synchronicity: A Global Smart City Market for IoT-enabled urban services**

Cities are already including IoT, but Synchronicity will be doing it at a very large scale, trying to find a common ground how to actually to make IoT work for cities and citizens. .

8 European cities will participate in the project and cities of Korea, Mexico, Brazil, US (and experimentation possibilities at the 104 cities of OASC).

Concrete topics in the project: mobility issues, community policy support and cross pollination between front runner cities.

Cities are catalysts: create a market by bringing citizens and cities together.

After almost 2 years of existence and the successful development of OASC and interest in the initiative, OASC heads to becoming an official organization in April 2017.

OASC Partners and participating actions overview: Eurocities, ENoLL, CoR, EC, OISPG, OrganiCity, SynchroniCity, Select for cities, AIOTI, ETSI, IoT-EPI, Smart City Expo World Congress, Creative Ring, FIWARE Foundation, BDV, Future Catapult Cities, Metrolab Network, Seoul Digital Foundation.

9:15–10:00 Plenary: High-level keynotes

- [Markku Markkula](#), President of the European Committee of the Regions

M. Markkula expresses special thanks for the cooperating with the CoR which in his opinion is crucial for European development.

The innovation performance declined in Europe (2008-2010, 2014-2016) due to the recession. In times where more focus on innovation is needed, the reality showed the contrary in last 2 years. Cities & regions need though the latest knowledge/innovation because of certain trends: Global ageing, increasing energy demand, expected water scarcity, globalisation.

The role of cities is changing in systems innovators.

Understand how to create ecosystems, review the systems and integrate this, permits regional innovation orchestration.

Key elements in strengthening the ecosystem:

Network engagement, user centricity, innovation processus, concept development

Scaling up is crucial, ecosystemic orchestration is necessary to scale-up, to encourage.

European cities are moving from talking and planning towards **concrete measures**.

The LSP are there to have concrete measures and projects to real needs and challenges.

In order to overcome its current challenges, Europe must establish a culture of co-creation and break its boundaries by moving towards entrepreneurial discovery, open innovation, experimentation and action. The [CoR guide](#), a free downloadable book, seeks to stimulate bench-learning between regions and cities, sparking new ideas and fundamentally stirring economic development. This books presents the inspiring projects across the EU for benchmarking purposes.

**Europe needs pioneers: digitalisation instruments are crucial for the entrepreneurial climate. The focus should lay on smart cities and foremost human (focus on role of citizens)**

**More bottom up movements are needed!**

- [Günther H. Oettinger](#), Member of the European Commission (video)

**Smart cities are a focal point and catalyzer for digital innovation and important application domain for upcoming technologies.**

The CSCC theme of this year 'Making the IoT work for cities and citizens' is a crucial and timely topic to discuss, not only for economic reasons but for long term cohesion and prosperity in Europe and in the world

Main message today of M. Oettinger is about joining and investing.

There are many smart cities initiatives on the go and they are not always joined up: together we can make a difference.

We should not only talk about Smarter Cities but also **deliver** for our citizens.

The EC supports and helps to find common approaches to joint development and joint investment. At EU level, 100M€ funding is available through H2020 for smart cities. And there are as well billions available for ICT investment through structural funds.

There is as well the European Union innovation partnership on Smart Cities and Communities, M. Oettinger invites to join the different working groups of the EIP. They serve to insure cooperation between private and public stakeholders at EU level.

One concrete example of opportunity for direct involvement is the work of cities working group on urban platforms. Which is working to thrive future EU and global standards for procurement of smart city ICT. Together they have developed 'Smart Cities Needs' specifications.

Through H2020 the EU directly brings together cities, interoperability and standards that makes the foundation of an EU smart city market. This is the goal of Lighthouse Projects and Large Scale Pilots which aims at supporting cooperation, joint development and application of successful solutions and approaches

EC is strongly supporting the developments of standards, within IoT and Smart Cities. ETSI, the European Telecommunications Standards Institute, has announced the creation of a new Industry Specification Group on cross-sector Context Information Management (ISG CIM) for IoT-enabled Smart Cities and also other verticals including Smart Industry and Smart Agriculture. The starting members of the new Industry Specification Group (ISG) are Easy Global Market, IMEC, NEC, Orange and Telefonica. ETSI has initiated this new group together with the organisation Open & Agile Smart Cities (OASC) to define and develop interoperability needed by cities.

This year, various IoT LSP were launched for a couple of 100M€. These pilots aim at creating markets around IoT solutions which are leaving experimental phases and tackle challenges of interoperability and comparability. Expectations are that it will be leveraged by industry to speed up deployment.

**Especially the LSP Synchronicity aims to kickstart and scale up the market for IoT enabled urban services based on the needs of cities and communities backed by industry and built on common standards for interoperability, but taking also in account security and privacy.**

M. Oettinger encourages strong collaboration beyond these projects to empower an IoT global market for smart cities. **Now is a time to invest in smart cities** and show citizens how their lives can change by technology.

- [Mary-Ann Schreurs](#), Vice-Mayor of innovation, culture, design and sustainability for the City of Eindhoven, and Chair of EURO CITIES Knowledge Society Forum

**"Do you want to be data driven or make your own decisions?"**

When we are creating new solutions for lives in cities we should always consider the following: What is important, do we do it in the right way, are we taking the right measures?

First the focus was data driven, now it switched to human driven data (humans in control). Data should be privately owned by the creator of the data. This also avoids vendor lock-in. The Business model of Philips is not based on data ownership, but on open innovation, being open. In the end the solutions are created together.

Cities must be restructured (data tech place and people: together we create solutions) to become real smart cities. Doing this alone, without involvement from other relevant parties is not possible.

Mary-Ann Schreurs wants to enable cities to do the right things, to share design thinking solutions.

She will contribute to the creation of common standards, driven by experienced cities.

- [Anna-Kaisa Ikonen](#), Mayor of Tampere, Finland

Tampere is a growing city, the city of Nokia

Digitalisation changed the lives in the city dramatically. Smart Tampere concerns the whole city and turned projects in cooperation platforms. Digitalisation is not done by governing but more by creating an innovation platform

Six Finnish cities joined forces to become better and smarter: 6AIKA. The cities put their data open to everybody (openness of public data). Focus on open innovation platforms, open participation and customership.

Solutions created based on the open data are used for other cities as well: what works for one city, works for other cities as well.

The vision of 6AIKA: API driven city services.

The creation of applications for services, permits innovation useful for citizens. The open data platform is mostly used by startups.

Some examples of realisations:

- Outdoor lights as an IoT Platform: looking for new digital services by using outdoor lights (eg reading of electricity & water meters, supporting homecare, measurement for maintenance, waste management, ..). With use of eg LoRa.
- Smart Mobility: public transport and traffic monitoring, enable new kinds of mobility (changes)

IoT doesn't stand for technical projects only, IoT enables innovations for and by citizens and allows cities to provide better services in a smart way. Interfaces are needed, as well as open data for innovation. To have a sustainable solution the projects must be scalable.

- [Kees van der Klauw](#), Chair of the Alliance for IoT Innovation, Philips Lighting

IoT challenges:

**Smart cities are not build in a day (ongoing topic for at least 25 year) and require a fundamentally different innovation approach.**

Many future big city and urban development challenges are well anticipated, but not yet concrete. Treating with these challenges well requires developing:

- A long term vision on social, economic, technological and sustainability trends
- Understanding of content matter in many aspects
- A consistency in learning and decisiveness over (governance) generations
- True end-to-end, open innovation (opening all relevant stakeholders, including citizens, sharing vision, uncertainties, setbacks and successes: trust, for a longer term!)
- Building a platform
- Experimentation and joint learning to identify relevant use cases (not everything that is technically possible is useful and economically relevant, agile experimentation)
- Large (real) scale pilots (the city becomes a laboratory, experimentation must be unconditioned) → more a social than a technical experience!
- Education (include academic partners, include all stakeholders)

- Vision based contracting rather the tendering against details specifications (open minded approach needed, modernizing public tendering rules)

**Technology is only a fraction of the challenges to be solved.**

**Managing uncertainty and building trust is key.**

Example of the Philips Lightning approach: identifying a relevant issue and opportunity.

About 500M streetlights are installed in the world, on average they are +20yrs old and not energy efficient. Less than 1% of all our global street light are currently connected.

**Up to 40% of a city's energy bill is spent on public lightning.**

Remotely managed LED street lighting provides high quality light on demand while **saving up to 80%** against traditional lighting.

**Data-enabled lighting asset management (justified by energy savings offers a platform for new uses cases beyond illumination)**

AIOTI: tries to offer/create what is missing in the ecosystems. It leverage other initiatives and fills the gaps.