

ITEA Smart City Advisory Board (SCAB) report

Meeting 27 May 2021, online

On 27 May 2021, the ITEA SCAB meeting took place with the following attendees:

City/Region	Country	Represented by
Antwerp	Belgium	Emillie Cowenberg
Brno	Czech Republic	Rob Spal
Dortmund	Germany	Jan Fritz Rettberg
Ghent	Belgium	Bart Rosseau
Istanbul	Turkey	Esat Temimhan
Rennes	France	Ben Lister
Stockholm	Sweden	Camilla Wikström
Tampere	Finland	Seppo Haataja
Northern Hesse	Germany	Manuel Krieg
Zaragoza	Spain	Daniel Sarasa Funes
Zwolle	The Netherlands	Marcel Broekhaar

ITEA is a Eureka Cluster organisation to build R&D&I projects that are funded by national public authorities and aims to build up innovative research projects that are based on urgent needs and requirements of end-users.

The ITEA Smart City Advisory Board is established to understand the urgent needs and requirements of municipalities to build up innovative research projects solving Smart City challenges by the ITEA Community as well as to enable a board of municipalities to learn and to get inspired from each other and to create collaboration among cities and between cities and the ITEA Research Community.

The SCAB meeting was set up to introduce the cities to each other and to build trustful connections between the cities. Therefore, the main subject was to share the urgent requirements of each city and to find potential collaboration opportunities among the cities. This report covers the challenges that are shared by each city and the potential topics for research projects to build new ITEA projects.

Mobility in City – First & Last Mile Delivery

Especially during the Covid-19 period, there has been an unexpected increase in e-commerce. Additionally, there has been a decrease in capacity and capability of logistic services while there has been a demand increase for logistics in every step including the first mile delivery, last mile delivery and in all other steps of the logistic process. Market or shopping delivery, food delivery, package and medicine delivery has dramatically increased during this new way of living.

Additionally, a multi-player platform has been a requirement for cities. Data in silos generated by the 3rd party transport companies adds up on the urgency to build up integration at data services from various service provider and it gets more necessary to build up an integrated view for the citizens to find the safest / easiest / fastest way of mobility in the cities.

All cities mentioned on this challenge in different aspects.

IoT platform and Data platform

Gathering information on the status of any condition is mandatory to build up smart services. The hardware devices as sensors, cameras, etc. must be available at a feasible price so that cities may gather information from each point of the city including outlands of cities and surrounding villages.

Additionally, communication quality shall be available at a high quality to gather big amounts of data and AI-supported services shall be developed to enable on-the-fly decision-making. Platforms must provide easy-to-use interfaces to integrate information generated by the 3rd party service providers and also have easy to use interfaces for citizens. These interfaces must be easily accessible for citizens not only to be informed and understand a status in the city but also to provide input to these platforms.

Although available technologies may cover the needs of cities on gathering data, going into deep analysis of city management, it is very obvious that existing solutions are far away from covering the urgent needs and requirements of municipalities. There is a high potential to build up new research projects on this challenge.

All the cities mentioned this challenge in their presentations and during the discussions.

Citizen engagement

Another common challenge for cities is to build a trustful relationship between the cities and their citizens (individual and corporate). Building open data platforms are technologically doable while any decision making is based on the data in these platforms. For a citizen, providing data to these data platforms may enable them to receive better services while there is a thin line when it comes down to privacy aspects of this sharing concept. Citizens must be able to trust municipalities that their data will not be used against them or be abused by any authority, while municipalities must be able to trust the data provided by citizens is correct. As Stockholm mentioned during the meeting, if there is a requirement that the road needs maintenance, that must be trustworthy data.

There are many opportunities to build research projects on this topic to build a trustful connection and to get correct data from citizens. Innovative solutions release the tension on municipalities to

collect data and also create a collaboration between citizens and management for having a better city life.

This challenge is also shared and mentioned by all municipalities during the meeting in various aspects.

Smart Traffic Management

Independent from the scale of the city, there is an urgent need for smart traffic management systems. Traffic congestion is another common challenge for cities. Having a green line in traffic, keeping track of traffic notices, and tracking parking spaces are already very well-known traffic management issues to be resolved.

Having a healthier life and avoiding crowded public transportation increased the usage of non-motor traffic during the last year. Usage of bicycles and other innovative vehicles need new type of lanes and adds on the traffic management challenge. New services and business management are preferred and required by citizens and municipalities need to respond to this demand.

MaaS (Mobility as a Service) platforms are necessary to support these new models. These platforms provide integrated view for citizens and also make decision making easier for municipalities.

Climate change / Pollution / Green energy

Another common topic for cities is Sustainability. Sustainability is an urgent challenge that needs to be considered at any level of management. Therefore, this is also an important shared topic for municipalities. Citizens are more aware of environmental issues and more cautious for their health.

Taking care of air, water and sea pollution has been enriched by noise pollution and many other aspects. Usage of green energy and reduction of carbon emissions are important topics for municipalities not only to resolve any pollution issue of today but also to have a sustainable city for the future.

Smart energy solutions to improve the usage of green energy is necessary while monitoring and measuring the current conditions are mandatory.

Building an Agile and a Living City – AI and Decision Making

The challenges above are required for a more complex purpose of city management as building an agile and a living city. Building up open platforms, collecting data from devices and people and integrating collected data are the main ingredients for AI-supported decision-making tools for city management. The ultimate purpose that a city is managed in a collaborated manner by municipalities and citizens based on the facts collected and supported by decision-making systems.

Therefore, there is an important topic for research and innovation as decision-making systems that are based on a huge number of requirements in multiple topics (dimensions) and a dynamic decision making based on continuously changing conditions of cities, just like a “Living Organism”.