Informal note 6

ENGLISH ONLY

Economic Commission for Europe

Committee on Housing and Land Management

Seventy-sixth session
Rome, 14-16 December 2015
Item 5b of the provisional agenda

Summary of activities on smart cities

Summary

In 2012, the UNECE Committee on Housing and Land Management decided to include the topic of "smart cities" as one of its priority activities in the Committee's programme of work 2014-2015 under the cluster "Sustainable urban development".

In May 2014, the project "Sustainable urban solutions for transition and developing countries" was launched. In December 2014, this project was renamed "United Smart Cities".[1]

This informal note provides a summary of ongoing activities under this project and proposals for future steps under the Committee's work programme. The Committee is invited to take note of this information on the project and the proposed future activities.

[1] More information is at http://www.unece.org/housing/smartcities.html

I. Background

In 2012, following a survey, the UNECE Committee on Housing and Land Management decided to include the topic of "smart cities" as one of its priorities. At its seventy-third session in 2013, the Committee also recommended to conduct studies and pilot projects, aimed at applying the smart cities concept, especially in transition countries.

To follow up on the Committee's recommendations, the secretariat conducted a review of existing smart city projects and networks; and organized consultations with other potential project partners. Based on the information collected, the secretariat elaborated a proposal for a project on smart cities. Therefore, the UNECE project "Smart urban solutions for transition and developing countries" was launched at the workshop "Land information systems for smart cities". The workshop, held in May 2014 as a part of the Geospatial World Forum, was jointly organized by the Committee and its Working Party.

For branding and advertising reasons, the project was renamed "United Smart Cities" in December 2014.[2]

II. Definitions

The "smart city" concept is a broad one. The main focus is the use of innovative approaches in information and communication technologies (ICTs) in the management of urban systems.

Since the launching of the "United Smart Cities" project, possible definitions of the concept of "smart city" were debated in meetings and workshops held in several countries such as Armenia, Germany, Austria and Switzerland. Taking the Sustainable Development Goals (SDGs) as a framework for the development of the UNECE smart city concept, this city is *an inclusive, safe, resilient, sustainable and "connected" city for all*.

The UNECE-ITU smart city definition reads as follows. *A smart sustainable city is an innovative city that uses information and communication technologies (ICTs) and other means to improve quality of life, efficiency of urban operation and services, and competitiveness, while ensuring that it meets the needs of present and future generations with respect to economic, social, cultural and environmental aspects.*[3]

III. The "smart cities" approach

The United Smart Cities approach covers several elements which include, among others:

a. Introduction of energy-efficient and health-friendly ways of working, travelling and building

b. Urban resilience to changes in environment and demographics

c. Compact and effective city planning

d. Opening of new markets for sustainable products and services

[2] More information on the previous work on the project can be found in Informal Note 3 at www.unece.org/fileadmin/DAM/hlm/sessions/docs2014/75th_session/Unofficial_docs/informal.notice.3.pdf

[3] ITU Focus Group on Smart Sustainable Cities at www.itu.int/en/ITU-T/focusgroups/ssc/Pages/default.aspx.

e. Greening public transportation and smartly organizing traffic flows

f. Planning and building for an ageing society

g. Integrating information and communication technologies in the urban environment, and

h. Promoting an inter-sectoral approach to city management, engaging national, regional and local authorities and stakeholders, private business, academia, civil society and inhabitants.

The "United Smart Cities" project aims not only to create an enabling framework but also to establish transparent cooperation among the relevant stakeholders. Through the sharing of good practices and the implementation of smart and sustainable initiatives in cities, the UNECE wishes to engage all the stakeholders in the concept of smart cities as a driver of sustainable urban growth and development.

IV. Project objectives and expected outcomes

The overall objective of the project is to promote exchange of best practices between countries and cities engaged in the implementation of smart city activities and to strengthen the capacity of national and local authorities to develop and implement policies on sustainable urban development.

The project establishes partnerships and cooperation between diverse stakeholders, including national and local authorities, public and private sectors and international organizations in the region. All stakeholders are, hence, engaged in cross-cutting efforts to develop new urban systems that are able to integrate all the relevant aspects of the urban environment. This will substantially improve the inhabitants' quality of life and help cities to use their resources more efficiently through affordable front-line and sustainable technologies. These technologies will also leave the cities with additional financial resources generated by savings. This, in turn, will generate employment and the allocation of funds for other initiatives.

Furthermore, the project extends the concept of smart cities to low- and medium-income economies and showcases examples of sustainable urban development principles and practices, including new business models, that can attract capital, technology and managerial skills to meet the challenges of today's society.

V. Ongoing activities

Since the seventy-fifth Committee meeting in October 2014, several initiatives have been started. The main outputs of the project include: the development of a set of smart city indicators; the selection of pilot cities for which smart cities profiles and recommendations will be elaborated; the creation of an online platform to share good practices; and the organization of workshops and events to strengthen countries' and cities' capacity for sustainable urban development.

The ongoing activities concerning the above outputs are:

1. Indicators: from the initial list of 456 indicators that the Environment Agency Austria gathered together after scoping several sources and databases, a set of 59 indicators have been developed. This initial set was discussed internally in three different meetings: on 11 May 2015 in Geneva, on 4-5 May 2015 in Rakvere, Estonia, and on 30 June in Vienna. The UNECE set of indicators was finally merged with the ITU's indicators and further consultations with member States were held by email in July and August.

2. Pilot cities: a network of selected pilot cities has been established. In January 2015, work started in the first pilot city, Goris, in the Republic of Armenia. In February, during the research mission, international and local experts, together with city stakeholders, met in Goris and discussed the needs of the city. While there, the UNECE tested a new approach for collecting information from stakeholders: the so-called Pyramid workshop. In April 2015, a workshop on smart cities was held in Goris, where the research mission report was presented and suggested measures were discussed.

3. Platform: together with other ongoing initiatives, the UNECE constantly uploads all the information relating to the project and its activities onto its website *www.unece.org/housing/smartcities.html*. Furthermore, the UNECE and the OiER launched a website, *unitedsmartcities.com*, in the beginning of July to serve as a platform to share best practices, and connect cities and stakeholders. A logo for the project and promotional materials has also been created.

4. Capacity-building: several workshops and conferences have been organized both in western countries and in those with economies in transition with the aim of raising awareness about the concept of smart cities and of supporting policy makers in the creation of a transparent institutional framework and encouraging sustainable development. Some of these are listed in chapter VI.

VI. Events in 2015

The workshops and events organized or attended either by the UNECE or by its partners in 2015 for capacity- and awareness-building are listed below:

- International Town Planning Conference "Smart Cities", Krasnodar, Russian Federation, 26 February 2015
- RICS European Smart Cities Conference 2015, "Building urban infrastructure for competitive real estate of the future", London, United Kingdom, 12 May 2015
- Metropolitan Solutions Conference, Berlin, Germany, 20-22 May 2015
- "Measuring Progress: Achieving Smarter Cities" at the Geospatial World Forum 2015, Lisbon, Portugal, 26-27 May 2015
- Smart cities indicators training workshop for municipalities, Rakvere, Estonia, 4-5 June 2015
- "Smart Cities for a Better Europe", Rome, Italy, 12 June 2015
- "Energy Efficiency in Cities – monitoring of energy related urban development with special focus on quality of life", Vienna, Austria, 30 June 2015
- II International Forum "Social Innovations – Municipal Experiences", Vologda, Russian Federation, 14-15 August 2015
- JRC Workshop for the validation of the pilot version of the Cultural and Creative Cities Index, Ispra, Italy, 17 September 2015
- ITU expert group meeting on smart city indicators, Geneva, Switzerland, 12-23 October 2015
- Smart City EXPO World Congress "Change the World", Barcelona, Spain, 18-20 November 2015

VII. Project partners

Besides the initial project partners, the United Nations Economic Commission for Europe (UNECE), the Organization for international Economic Relations (OiER), the Environment Agency Austria (EAA), UN–Habitat, the United Nations Development Programme (UNDP), the International Society of City and Regional Planners (ISOCARP), the Royal Institution of Chartered Surveyors (RICS), this year, the project acquired other three main partners.

They are:

a. The Council of the Baltic Sea States (CBSS) Baltic 21

b. The Smart City Laboratory – Moscow State University of Civil Engineering

c. The Austrian Association of Cities and Towns

VIII. Participating cities

In order to test the smart cities indicators, a list of pilot cities, mainly middle-sized cities in countries with transition economies, has been established. They are:

- Goris (Armenia)
- Polotsk (Belarus)
- Vinnytsia (Ukraine)
- Aktau (Kazakhstan)

Further discussions are being held to include pilot cities in Albania, Slovenia and Georgia.

A wider network of cities has been included in the United Smart Cities platform. The cities which have already been selected to join this wider network have already well-developed or initially-implemented sustainable urban activities. These cities are: Amman (Jordan), Astana (Kazakhstan), Dubai (United Arab Emirates), Graz and Vienna (Austria), Rimini (Italy), Rakvere (Estonia), Ismailia and Suez (Egypt) and Djerba (Tunisia). This network of cities is expected to grow rapidly and, together with the pilot cities, will become a wide platform of cities which share more sustainable growth and will provide their inhabitants with better living conditions.