

Initiatives and challenges of Smart City in Bucharest- Ilfov Region

Hyperion University



Agencia pentru Dezvoltare Regională
București - Ilfov

ENEC 2018
31 May – 1 June

Bucharest-Ilfov Region



Agenția pentru Dezvoltare Regională
București - Ilfov

- The mission of Bucharest-Ilfov RDA (Regional Development Agency) is to achieve territorial cohesion, economic and social development in line with the EU policies and the National Plan for Regional Development.

What is a smart city ? (I)

- The conceptualization of Smart City, therefore, varies from city to city and country to country, depending on the level of development, willingness to change and reform, resources and aspirations of the city residents.
- The challenges that cities face, and will continue to face in the future, are complex and multi-sectoral. They are also very specific – two cities are not identical

What is a smart city ? (II)

A smart city uses information and communication technology (ICT) and Internet of things (IoT) technology to improve the citizens' quality of life.

- a smart **economy**
- smart **mobility**
- a smart **environment**
- smart **people**
- smart **living**
- smart **governance**



Why we need a smart city ?

- 80 % amount of people living in cities in 2050
- 2% surface occupied by today's cities on the earth's surface
- 60% amount of energy consumed by actual cities
- 70% amount of waste and greenhouse gas emissions produced by cities

Source: United Nations Sustainable Development Goals, press release, June 2017

Principles for smart cities

- Respect for the environment and life in general
- Respect of law, towards the community and its members
- Its rational use of available resources and recycling them
- Increase the active involvement of community members in order to solve the problems
- The pursuit of a sustainable development, coordinated and rational at the individual level and the Community

Smart Solutions

E-Governance and Citizen Services



- 1 Public Information, Grievance Redressal
- 2 Electronic Service Delivery
- 3 Citizen Engagement
- 4 Citizens - City's Eyes and Ears
- 5 Video Crime Monitoring

Waste Management



- 6 Waste to Energy & fuel
- 7 Waste to Compost
- 8 Waste Water to be Treated
- 9 Recycling and Reduction of C&D Waste

Water Management



- 10 Smart Meters & Management
- 11 Leakage Identification, Preventive Maint.
- 12 Water Quality Monitoring



Energy Management



- 13 Smart Meters & Management
- 14 Renewable Sources of Energy
- 15 Energy Efficient & Green Buildings

Urban Mobility



- 16 Smart Parking
- 17 Intelligent Traffic Management
- 18 Integrated Multi-Modal Transport

Others



- 19 Tele-Medicine & Tele Education
- 20 Incubation/Trade Facilitation Centers
- 21 Skill Development Centers

REGIO 2014-2020

The objectives of the ROP 2014-2020 are:

- Increase the competitiveness of the productive system;
- Supporting innovation and investment in human capital;
- Promoting the natural attractions, environmental and tourism in a sustainable development perspective;
- Promoting energy efficiency and sustainable mobility;
- Promoting policies for social inclusion.

Urban regeneration and Regional Operational Programme in Bucharest Ilfov Region

Regional Operational Programme 2014-2020 :

Axes 3 - Measures dedicated energy-efficiency for buildings and urban mobility such as :

- Building Insulation,
 - Efficient equipment, efficient cooling/heating, use of renewable technologies for heat or power
 - Public Lighting
 - Urban mobility
-
- **Allocation: 300 mil Euro**

REGIO 2014-2020

- **Axis 3 Increase Energy Efficiency**

Priority 3.2 – Sustainable mobility

Allocation for Bucharest-Ilfov region: 150 mil euro

- Promote healthy, sustainable and safe modes of transport, by designing and modernizing urban areas and human settlements to improve quality of life and the conditions for safe and convenient walking and cycling;

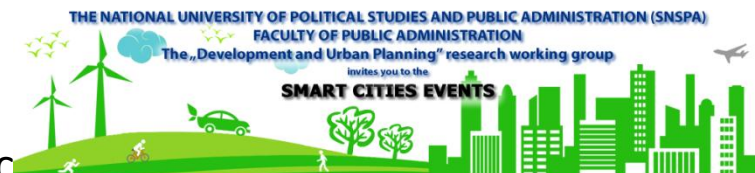
Smart City initiatives for Bucharest (I)

- Romanian Association for Smart City and Mobility
 - Development of Smart City industry in Romania
 - A “community network” of citizens, companies and public institutios
 - <http://romaniansmartcity.ro>
- Association Smart City Pro



- Academic conferences on ‘smart city’

- National University of Political Studies and Public Administration, Faculty of Public Administration



- University Politehnica of Bucharest

- Private initiatives

- Association for Metropolitan Mobility
- ETL Mobility Cluster



Smart City initiatives for Bucharest (II)

- **Bucharest Smart City Development Strategy** – announced in March 2018 by General Mayor of Bucharest
 - Attributed to Deloitte Consultanta S.R.L for about EUR 95,000.
 - has to be completed within 17 weeks from the start date of the project.
 - Application: traffic management, parking, lighting, infrastructure, local government - intelligence administration, public safety, including the emergency system at Bucharest level, energy (electric, thermal, water, etc.), telecommunications , environment - intelligent buildings, green energy, smart tourism services.

Smart city and Regional Operational Programme in Bucharest Ilfov Region

- European funds are important for projects that will be designed in the Bucharest Smart City Development Strategy



Conclusions

- Bucharest, but also the region, face similar problems as other big cities
- The private and public initiatives are at the beginning and disparate
- The solutions should be specific and holistic
- Bucharest Smart City Development Strategy will be the first document of its type assumed by the municipality
- ROP is an instrument for a small part of the needed infrastructure

THANK YOU FOR YOUR ATTENTION!

BUCHAREST-ILFOV REGIONAL DEVELOPMENT AGENCY

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