

Executive Summary: Smart Cities in Belgium: A qualitative analysis of 11 projects¹

The research conducted in this report is qualitative in nature: eleven “Smart City” projects were studied in Belgium. The projects were selected in order to ensure geographical diversity — an initiative for each province and the Brussels region— as well as diversity in the subjects covered — each dimension of “Smart City” is represented at least once (Smart Economy, Smart Mobility, Smart Environment, Smart People, Smart Living, Smart Governance).

The results shown in this report are based primarily on in-depth analysis of interviews conducted with two key actors for each initiative. This data was completed by general information on initiatives drawn from various resources (internet, reports etc.).

The analysis criteria used echo the intrinsic characteristics of the project and six primary characteristics in particular (1 - the dynamic of stakeholders around the project; 2 – The development and management of the project; 3 – The use of technology; 4 – The sustainability of the project; 5 – Funding for the project; 6 – The legal status of the project).

KEY FINDINGS

The “smart city” phenomenon is well under way in the town of Belgium. Indeed, « smart city » projects are actively being developed on Belgian territory, but these differ from each other in terms of their size and the challenges they present. These projects are also currently in different phases of development ranging from projects that have been in operation for a number of years to future plans that have yet to be implemented. However, this demonstrates that the “smart city” concept does not apply to large cities such as Amsterdam, London or Brussels. Nonetheless, ideas, technologies and concepts from abroad can be an inspiration in terms of the development of new solutions that can be implemented in Belgium.

The socio-economic and territorial situation in our towns is not similar to that in place in other countries such as France, Germany or the Netherlands. The design and implementation of a “smart city” project must factor in the fundamentals and characteristics of Belgian towns (size, political context, socio-economic situation etc.).

In view of this fact, certain Flemish towns have decided to develop projects over a more extended area. The establishment of a coalition of towns and public activists is a route that must be given serious consideration. Another route would be to work on a different “smart city” scale and to adopt a “smart region” dynamic instead.

The projects studied are practically all incorporated into a local and institutional strategy. The European dimension, however, is under-estimated or rarely considered and the national dimension is never mentioned.

Identifying a project as being “smart” is quite complex. The majority of the projects analysed are part of the dimensions of the environment, the mobility and the economy. There is evident confusion, however, between Smart Living and Smart People.

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Smart Governance is presented in a limited way. It is nonetheless essential that the authorities be smarter in the services they offer to citizens. E-governance and the participation of civil society in political decision-making must be integrated by public authorities.

Politics plays a key role in the “Smart City” projects analysed. The majority of projects are carried out by means of a top-down approach. The top-down approach is at the heart of the dynamic. The role of local authorities (policy and administration) is to implement all the conditions necessary (vision in particular) to support the “Smart City” dynamic either directly or indirectly.

The 11 initiatives seem to include the notion of citizen participation, even though this participation remains passive or barely active. There are more and more bottom-up projects. A process of co-creation and citizen and city-dweller involvement is necessary to ensure the efficient implementation of “Smart City” projects. Civil society must be seen both as (1) a client to be satisfied (2) a source of innovation and (3) a partner in the project.

The integration of Universities and tertiary colleges is already observed in a majority of projects but a broader involvement is necessary. Research by researchers and teachers as well as work carried out by their students can be sources of inspiration and contribute to the success of “Smart City” projects (for example, scientific direction of a project, start-up ideas etc.).

The business community is a key actor in “Smart City” projects by contributing valuable expertise, economic vision and the requisite level of local reality required for the smooth functioning of “Smart City” projects. International companies and large groups are perceived as stakeholders that are difficult to reach.

In tandem with the “Smart City” dynamic that is under way, many ecosystems involving stakeholders which are sometimes very complex are created. In order to foster strong relationships within these ecosystems and successfully complete “Smart City” projects, a project integrator or facilitator, whether public or private, is an asset in terms of the smooth functioning and success of the project.

Although there is a limited amount of diagnostics prior to project launches (territorial or subject-based diagnostics), most of the initiatives analysed develop control or monitoring systems for results.

The concept of sustainable development and its three pillars (people, planet, and profit) are not always connected with “Smart City” projects by the key stakeholders who were questioned. The sustainability presented in certain projects hides very simplistic justifications. And yet, these projects have a positive impact on the sustainable development of our society.

Information and communication technologies (TIC) or mixed technology are unquestionably present in the subjects covered. However, the gathering, processing and sharing of data remains a major challenge. The data gathered from projects are generally under-used.

The “Smart City” projects studied take different legal forms. The majority of projects come in quite traditional legal formats. Outside of this framework, projects produce innovation, notably with the conclusion of a specific convention and agreement between stakeholders.

The funding of these projects is mainly in the form of loans and subsidies, but the demand for other types of funding and related initiatives are starting to appear.

Support for creativity and innovation (technological innovation, but also legal, social and managerial) is necessary. The dynamics of the “Smart City” concept require the development of new “Business Models”, new modes of funding as well as new legal vehicles in order to promote “Smart City” projects and grasp their complexity.