This state-of-the-art report is prepared by a team of the Applied Research and Communications Fund in Sofia, Bulgaria, as part of the Complex Challenges – Creative Cities (CCIC) project funded under the INTERREG IVC programme of the European Union.


Further information on the CCIC Project may be found on its website at http://www.ccic-project.eu.

About ARC Fund

The Applied Research and Communications Fund, ARC Fund, is a Bulgaria-based not-for-profit organization founded in 1991 with a mission to:

- Drive the development of the knowledge economy in Bulgaria and Europe in line with the renewed Lisbon objectives;
- Promote innovation in the European economy and facilitate the transfer of new and advanced technologies and know-how;
- Support cross-border networking and capacity building of businesses, public agencies or private organizations, by using the advances in information and communication technologies.

In pursuit of these objectives, ARC Fund designs and implements strategies for capacity building of NGOs, information society development and technological innovation.
LIST OF FIGURES

Figure 1  Elements of CCIC project methodology and work flow 8
Figure 2  Distribution of survey respondents by country of origin 10
Figure 3  Distribution of respondents by type of organisation; with and without local authorities 11
Figure 4  Shares of respondents to online survey and stakeholder interviews, by type of stakeholder organisation 12
Figure 5  Distribution of respondents by position in the organisation 12
Figure 6  Positions of respondents in their organisations; public authorities vs. others 13
Figure 7  Distribution of respondents by size of municipality 13
Figure 8  Size of organisations; by annual budget, and by number of employees 14
Figure 9  Size of organisation by annual budget; local authorities versus others 14
Figure 10 Distribution of organisations by number of employees; local and regional authorities versus others 15
Figure 11 Word frequency graph: definitions of public sector innovation 17
Figure 12 Word frequency graph of differences between innovation in the public and in the private sector 20
Figure 13 Attributes of innovation most critical to the public sector 22
Figure 14 How much does risk have to do with innovation? 24
Figure 15 Conceptual model of innovation - innovation as the application and adaptation of an invention 25
Figure 16 Conceptual model of innovation - solving challenges and achieving societal growth 26
Figure 17 Conceptual model of innovation - interactions between the public and the private sector 27
Figure 18 Conceptual model of innovation: combination and reiteration of novelties 27
Figure 19 Word frequency graph of examples of successful public sector innovation 28
Figure 20 Comparison plot of words used in definitions of innovation and in success stories of innovation 29
Figure 21 Comparison word frequency graph of definitions of innovation and stories of successful public sector innovation 30
Figure 22 Word frequency graph for goals of public sector innovation 32
Figure 23 Contribution paths of public sector innovation to improved quality of life 32
Figure 24 Word frequency graph of benefits of innovation to the public sector 33
Figure 25 Word frequency graph of drivers for public sector innovation 33
Figure 26 External and internal drivers to innovation in the public sector 34
Figure 27 Influence of and interrelationships among internal and external drivers 36
Figure 28 Drivers of innovation in the public sector; local and regional authorities versus others 37
Figure 29 Word frequency graph of barriers to public sector innovation 38
Figure 30 Text plot of the same words used for drivers for and barriers to public sector innovation 39
Figure 31 Most serious impediments to innovation in the public sector 41
Figure 32 Presence of an innovation unit in the organisation, by type of organisation 42
Figure 33 Outside perception of organisation's innovation performance 43
Figure 34 Distribution of the number of staff employed in innovation units 44
Figure 35 Positions of staff in innovation units 45
Figure 36 Responsibilities of staff in innovation units with respect to innovation-focused decision-making 45
Figure 37 How often is innovation on the organisational agenda? 46
Figure 38 Adopted strategic organisational documents on innovation 47
Figure 39 Presence of strategic organisational documents on innovation 47
Figure 40 Presence of strategic organisational documents on innovation, by position of respondent 48
Figure 41 Innovation as a topic on annual reports 49
Figure 42 Innovation as a topic on annual reports 49
Figure 43 Inclusion of innovation in organisational agenda vs. as topic on annual reports 50
Figure 44 Efficient use of technologies in the organisation 51
Figure 45 Efficient use of technologies in organisation vs. outside perception of organisation's innovation performance 51
## List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARC</td>
<td>Applied Research and Communications Fund</td>
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<td>CCIC</td>
<td>“Complex challenges – Innovative Cities” Project</td>
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<tr>
<td>CSO</td>
<td>Civil society organisation</td>
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<td>EC</td>
<td>European Commission</td>
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<td>EU</td>
<td>European Union</td>
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<td>FI</td>
<td>Financial instrument</td>
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<td>GDP</td>
<td>Gross domestic product</td>
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<td>GPS</td>
<td>Global positioning system</td>
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<td>ICT</td>
<td>Information and communication technologies</td>
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<td>LA</td>
<td>Local authority</td>
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<td>NPM</td>
<td>New Public Management</td>
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<td>OECD</td>
<td>Organisation for economic cooperation and development</td>
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<td>PCP</td>
<td>Pre-commercial procurement</td>
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<td>POE</td>
<td>Publicly owned enterprise</td>
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<td>PPI</td>
<td>Public procurement of innovation</td>
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<td>PSI</td>
<td>Public sector innovation</td>
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<td>R&amp;D</td>
<td>Research and development</td>
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<td>RA</td>
<td>Regional authority</td>
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<td>RIP</td>
<td>Regional innovation plan</td>
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<tr>
<td>SME</td>
<td>Small or medium enterprise</td>
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<tr>
<td>SWOT</td>
<td>Analysis of strengths, weaknesses, opportunities and threats</td>
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<td>UK</td>
<td>United Kingdom</td>
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EXECUTIVE SUMMARY

This state-of-the-art report is a key deliverable within the Complex Challenges – Innovative Cities Project (CCIC), funded under INTERREG IVC Programme of the European Union, and comprising as partners municipal and regional authorities, development agencies and non-profit organisations from ten EU countries and regions – Bulgaria, Catalonia, Estonia, Finland, Italy, the Netherlands, Poland, Romania, the UK, and Sweden.

Its main task and key ambition is to present an overview of how public sector innovation is made possible on the local and regional level in the contexts of the involved project partners. The analysis is based on data collected through an online survey and in-depth interviews conducted with innovation stakeholders – practitioners, managers, innovation planners, policy and decision-makers, civil society leaders. Drawn are general conclusions about the state-of-the-art in public sector innovation as seen through current policies, programmes, and practices within a local (municipal) and regional (NUTS2 and/or NUTS3) context, including through the cooperation of other societal actors, such as civil society, businesses and academia.

Throughout the analysis, responses were grouped into two categories based on respondents’ organisation, comprising, respectively, local and regional authorities, on the one hand, and all of the other types of organisations, on the other. Such a separation allowed a clear distinction between local and regional authorities, whose perspectives are key in understanding public sector innovation on the local and regional level, and, on the other hand, allowed the introduction of a comparative perspective combining the views of all other stakeholders, including civil society, private businesses and academia. This distinction further enabled the identification of the areas and issues where dominant opinions are complementary, as well as those where there is still divergence, and to investigate reasons and consequences thereof regarding implications for innovation planning and diffusion.

CCIC is based on the shared idea of public sector innovation as \textit{the product of new ideas that work for the creation of public value\textsuperscript{2}}. A key task of the report is to present a more specific, relevant, and agreeable definition through the exploration of whether and how innovation is possible within the public sector, what it depends upon, which societal actors are key, what benefits to the society and the regional economy are generated as a result, how policies are being updated to integrate innovation, and to what ends. Furthermore, public sector innovation is contrasted to that in the private sector, where innovation is a key driver of growth, in order to highlight its distinct features, benefits and applications. In addition, cooperation opportunities, as well as the involvement of civil society, are also analysed. As a result of the in-depth analysis of all collected data, the working definition of public sector innovation proposed by this report is:

\textit{Public sector innovation is the integration of realised novelties or new knowledge into any system dependent on public decision-making towards the enhancement of current, or the introduction into use of new, operations, services and practices, whose final and most evident result is improved public service and enhanced quality of life or a major aspect thereof.}

To illustrate the different assumptions of and conceptual differences in understanding public sector innovation, four distinct models were elaborated to portray innovation as an interactive process, underlined by different inputs (such as new ideas, new working methods, new technologies) and outputs (new knowledge, solved challenges). The strength of public sector innovation is especially obvious when these interactive processes are reiterative, with outputs turning into inputs, translating through different processes into additional outputs, suggesting

\textsuperscript{1} Further information about CCIC is available online at http://www.ccic-project.eu.

\textsuperscript{2} Per CCIC’s project application.
that the “innovation cycle” in the public sector is rarely a simple, linear, or uni-directional process.

A powerful theoretical assumption transpiring from many of the interviewed stakeholders opinions is that the key goal of PSI (or rather the answer to the question why innovate in the public sector) is to improve public services (or the modes of their delivery), and thus to enhance the quality of life of citizens. Key implications of such an understanding include increasing the cost efficiency and cost effectiveness of the provided services, as well as expanding their outreach, making them more accessible. As a consequence, a major benefit is the improved relationship between the public sector and the citizens. Strengthening the channels for provision of feedback by the citizens contributes to improving public services so that the latter can better correspond to the needs and expectations of the citizens.

Despite the described differences between the private and the public sector, innovative practices in the public and in the private sector are not mutually exclusive, and frequently benefit from and complement each other. Public sector innovation can happen through the diffusion of prior private sector innovation or through providing assistance to the private sector in the form of creating or supporting enabling conditions such that innovation generation is stimulated and encouraged – through policy, targeted programming, designated funding, mediation, etc. Some stakeholders even believe that innovation in the public sector is only possible through the integration and use of private sector-created innovation (usually a piece of technology) for the attainment of socially-relevant goals. Others, on the contrary, find no significant differences between public and private sector innovation, arguing they share the same inception and diffusion patterns, even though some nonetheless agree there is a difference in the goals of innovating.

Different factors were also identified to affect (stimulate or hinder) public sector innovation, with two broad categories representing internal factors, or such that depend on and are under the control of the organisation, and external ones – such over which the organisation has no direct control and cannot easily change. Organisational culture and organisational leadership were found to play crucial role for driving innovation in the public sector, suggesting that innovation needs proper supportive environment in order to bear any significance. Especially underlined is a culture characterised by the encouragement of open and frequent communication – across the different levels of organisational hierarchies, among different units and departments, as well as externally to civil society and other relevant stakeholders. Another important factor is the presence of political will, or the favourable attitudes of political leaders towards the support of innovation, implying of the often volatile nature of innovation-related decision-making in the public sector.

The importance of legislation is also rated high as a necessary condition in ensuring the necessary enabling environment for innovation to take place, suggesting that inadequacies at the legislation level could be a serious hindrance to innovative thinking and performance. At the same time, changing public needs and demands for public services seem to collaterally drive a demand for innovation, insofar as the latter is seen as a change in policy priorities, the introduction of new services and new ways of working of the administrations, and new themes, which have previously not been of interest to the public sector.

The most serious impediments to innovation in the public sector are associated with the lack of dedicated resources, most frequently financial, but also human and technological. At the same time, general financial constraints are thought to provoke innovative unordinary thinking that stirs creativity and leads to innovative solutions, which are more cost efficient and do not require additional funding.

Certain organisational practices were also found to be supportive of innovation. The presence of a specific unit, tasked with innovation planning and implementation (including either strategic or
EXECUTIVE SUMMARY

policy), and adopting strategic organisational documents specifically on innovation, were found to contribute positively to greater innovation performance in the host organisation. Prioritising innovation – by including innovation as a topic on annual reports or putting it on the organisational (i.e. decision-making) agenda – brings greater external recognition and improves these organisations’ reputations as innovative.

CCIC considers four thematic areas of innovation “praxis”, reflecting specific sets of policies, regulations, actors, and operations where innovation could potentially be realised with significant added value. These, covered in this report, are: public procurement for innovation, civil society’s role for innovation, financial instruments for innovation, and publicly-owned enterprises and innovation. Within those four, the area with the highest potential for and need of innovation, according to the respondents in the online survey, was found to be the collaboration of public authorities with civil society organisations and actors.

Public procurement is confirmed to be a powerful means to stimulate innovation – as a set of policies within the public sector, and as a competitive practice within the private sector. Through procurement authorities can procure R&D services that seek to stimulate innovation, or intentionally create demand for already existing innovative products and services, or such that are delivered in an innovative way. Demand side stimuli can be further supported by policies, such as co-funding of procurement, changes in the underlying legal framework, and changes in the regulatory regimes that contractors need to comply with. The perceived increased risk associated with “procuring” innovation compared to a “typical tender” is one of the rationales for having separate rules for procurement of innovative services in addition to the general procurement rules. Currently, innovation is rarely among the criteria for selecting the winning bidder in public tenders.

One form of cooperation with the private sector, found to be very promising for innovation, are public-private partnerships (which exist anyway, and are not, in themselves, guarantee for more innovation), where partners share responsibilities, contributions and cost burdens. In public-private partnerships the public sector usually can help with the diffusion of innovation, induced in the private sector, but applied towards to fulfilment of public and social needs.

Social services were found to benefit significantly less from public procurement than the utilities sector. Currently, cooperation between local/regional public authorities and civil society that results in innovation occurs rarely. In this respect, social innovation seems particularly relevant for new ways of collaboration in providing social services can be borne through the interaction of the public sector with civil society and the private sector. That would mean that different policies and institutional arrangements, flexible enough to accommodate the different set of collaborating organisations, will be needed. Thus, by scaling social innovation and social enterprises using regulation and procurement, governments can stimulate the creation of new markets, and help spread and mainstream emerging social innovations.

In terms of financing innovation, one way to address the poor innovation performance in local and regional authorities is to have a separate item for innovation in their budgets. A committed to innovation budget item in organisations implies a clear organisational prioritisation of innovation. Considering the degree of risk which inevitably comes with innovation, a separate budget line committed to innovation can be an effective tool to stimulate innovation within an organisation as investing in innovation might otherwise be easily rejected on the basis of risk associated with the endeavour.

Another form of mixing public and private sector is found in the specific case of publicly-owned enterprises, which are subject to market rules, follow economic logic, but are at the same time owned wholly or partially by the public sector. While their market status allows them to introduce more easily innovative solutions, their public ownership (e.g., due to regulation compliance) may also impose greater restrictions. As evidenced by the results of the survey, most
EXECUTIVE SUMMARY

often publicly owned enterprises are expected to contribute to the improvement of public services, some of which they themselves deliver directly (public transport is but one example, common across many countries). POEs were found to be most common in the utilities sectors, in public transport, and in waste management, all of which have direct impact onto the quality of life of citizens.

An important conclusion from this report is that public sector innovation often happens as a response to mounting pressures from citizens and businesses, demanding improvement of old or introduction of new services. It therefore would be more sustainable if and when encapsulated within policy measures. At the same time, civil society’s demands are not perceived as a strong driver to innovation. There is no widespread social “demand” for innovation per se, that is citizens do not expect or want “more innovation” as it is not the product that users get. Rather it is a tool, a strategy or a consequence of policy instruments in delivering “value” to the public sector by responding to the actual demand – better services, efficient and more responsive institutions, greater opportunities, more enabling environment.

Public sector innovation, and particularly the ability of the public sector to generate and harness new knowledge resulting from successful diffusion of innovation, highlights the evolving nature of public sector missions. Identifying knowledge gaps and generating new knowledge, improving innovation planning and innovation diffusion will increasingly represent an attractive new role for public sector organisations, without which their other core tasks would not be adequate and/or efficient in the long-term. With the growing agreement on the evolving nature of public sector mandates, organisational missions will need to be updated to reflect those new responsibilities and commitments. More thorough integration of innovation within organisational strategies will further require more careful situational analyses in order to fine-tune existing plans to harness opportunities and fend off threats.

The authors of this study hope that public sector innovation on the local and regional level will be subject of more and more exploratory attention, with a view of strengthening the capacity of both public sector organisations and other local or regional stakeholders to innovate, and thus help increase the added value delivered to society at large.
INTRODUCTION

Innovation in the public sector has recently become subject of increased attention by policy administrators and decision-makers, but is still far from being uniformly recognised as either an organisational or societal phenomenon. Particularly within a local public sector context where innovation can have the most direct impact, policies and administrative procedures are not always predisposed or designed in a way to yield results that would be considered innovative. While in the private sector innovation has long been seen as a source of growth and competitive advantage, the public sector often struggles to perform in new, different ways, also exhibiting a certain degree of confusion as to the desired impact of generated novelties. Hence, with few exceptions, public sector-induced innovation is not yet as widespread, nor does it reflect sustainable organisational practices that are easy to define and employ elsewhere.

Furthermore, public sector innovation is often seen as a response to increasingly stagnating democratic governance mechanisms and the resultant decrease in public value (Bourgon, 2008). Therefore one key opportunity resulting from public sector innovation is the improvement of both the quality and the range of services offered to communities, including individual citizens, social groups, and businesses (Walker, 2006).

The “Complex Challenges – Innovative Cities” Project (CCIC), supported under INTERREG IVC Programme of the European Union and co-funded by national governments, is a joint response to these and related challenges, involving partners from 13 EU regions in 10 EU countries, and focusing on local and regional administrations3 and stakeholders.

The CCIC context

The Complex Challenges Innovative Cities project’s main objective is to improve regional innovation policies by enhancing innovation in the public sector and increasing collaboration between local and regional authorities, public entities and other stakeholders. Specific objectives include:

- To define a common approach for regional/local innovation policies that enables regional/local decision-makers to implement an efficient innovation policy for growth in terms of planning, implementation and monitoring;

- To examine good practices on themes: Innovative financial instruments, Public procurement and innovation, Publicly owned enterprises and innovation, Civil society inclusion in public innovation;

- To identify and transfer 3 good practices per region for improving knowledge transfer and innovation, leading to planned performance improvement according to EU’s Innovation Union Scoreboard4;

- To promote innovation support and knowledge-based transfer through new effective public incentives for fast intelligent economic growth of the cities/regions; to identify and develop/transfer efficient financial instruments for innovation;

3 Local authority in the context of this report implies that tier of administration, which is authorised to take administrative and policy decisions for a given area within the legal and institutional framework of the certain Member State. These are, for example, municipalities and city councils. Regional authorities in the context of the CCIC report implies a higher tier of administration of a given state; an administrative division larger than and inclusive of local authorities. These are, for example, provinces, regions, counties. According to the NUTS classification (Nomenclature of Territorial Units for Statistics) of Eurostat, these are the NUTS2 and NUTS3 regions.

INTRODUCTION

- To secure inclusive growth through more open innovation engaging in all natural stakeholders, civil society included;

- To adopt Regional Innovation Plans (RIP) that fully anticipate the new financial realities in the EU, the objectives of the Europe 2020 Strategy and the EC’s Innovation Union Initiative. The RIPs will specify how each city/region will integrate the lessons learned from the cooperation into its local/regional policy by focusing on innovative instruments at partner level.

Structure of the report, objectives and methodology used

This State-of-the-art Report on Public Sector Innovation was prepared by a team at the Applied Research and Communications Fund, and is based on information collected by two instruments – an online survey, and face-to-face in-depth interviews with stakeholders. It draws its conclusions on a “snapshot” of current public sector practices as seen by stakeholders in the participating countries.

The main objectives of the current report are:

- To improve the general understanding of innovation in the public sector, sketching a definition thereof, based on the perceptions of the stakeholders’ groups in the public sector innovation process;

- To inquire into the role of innovation for improving the efficiency and effectiveness of local/regional policy-making, as well as into the roles of different stakeholders in innovation inception and diffusion on local/regional level;

- To provide a basis for increased collaboration among stakeholders towards increased public value;

- To provide suggestions to policy-makers on how to strengthen innovation capacity in the public sector through focused planning, transferability of good practices, and innovation policy diffusion.

In fulfilling these objectives, the report includes a summary of the survey respondents, highlighting several important trends in terms of how certain characteristics influence innovation thinking, involvement and decision-making. It further provides an analysis of how innovation is being understood in a public sector context, discussing a number of nuances, key opportunity factors, drivers and barriers to innovating and innovation diffusion. Also detailed are the existing institutional support mechanisms, which contribute to and encourage public sector innovation. Following the conceptual framework of the CCIC project, particular attention is paid to innovation opportunities related to public procurement rules and procedures; to specific financial instruments used to support or resulting from innovation; to the specific relations with civil society actors; to publicly owned enterprises as specific enablers and diffusers of innovation, and also acting as bridges between public and private sector innovation. Discussed are also policies on a local and regional level, which target the planning and diffusion of innovation within and by local and regional administrations. Finally, some ideas are offered for the strengthening of innovation capacity of the public sector.

The report focuses on the perspective of the local and regional authorities. In a document published by the European Commission in 2012 “Innovation in the Public Sector: Its Perception in and Impact on Business”, local and regional governments were identified as the “most innovative level of government”. Considering that municipalities and regional governments are the ones which are closest to the citizens, and having in mind the continuing trend of decentralisation of service provision, it is believed that focusing on local and regional governments in the analysis will significantly improve the understanding of public sector
innovation and, in case appropriate measures are taken, can have practical implications in stimulating innovation proliferation on the local level. In addition, focusing the analysis on local and regional authorities, on the one hand, and on other types of stakeholders, on the other, will help to reveal their distinct perspectives, thus also illuminating particular and specific to the public sector attitudes on innovation and innovation performance.

The report is based on the following:

- **An overview** of the literature related to conceptual frameworks, definitions and typologies of innovation in the public sector, factors affecting innovation generation and diffusion, innovation in the public sector, and more specifically within and by local and regional authorities. In addition, relevant studies on supporting innovation in the local governments have been reviewed and considered. References to the literature have been used for the purpose of establishing an analytical framework within which stakeholders’ opinions can be explored.

- **Two main instruments** are used to collect information from relevant stakeholders on public sector innovation, in an effort to obtain a “snapshot” of current practices and beliefs with respect to innovation in the public sector and its implications for policy design and implementation, as well as innovation diffusion and cross-regional cooperation. These are:

  - *State-of-the-art online survey* designed by ARC Fund and consulted by all CCIC partners. The questionnaire was administered online between July 1st and November 15th 2012. It was carried out with respondents in each participating region. The purpose of the questionnaire was to present as complete and as thorough an overview of innovation as possible across all participating partners’ institutions and their respective environment, and to define the state-of-the-art in public sector innovation, outlining the current state of development in innovation understanding, planning, policy design and implementation, organisational and environmental support factors and constraints.

  - *Semi-structured interviews* were carried out in the cities where CCIC partners operate, resulting in 90 detailed reports from 10 different countries. Each of them identified stakeholders whose input and opinion would be of particular value to the project’s objective or could significantly contribute to the elaboration of more informed policy design with regard to innovation adoption and diffusion. In order to facilitate the process, a template was prepared and distributed by ARC Fund to guide the process of interviewing and data collection.

The identification of potential respondents and the promotion of the online questionnaire were carried out through a stakeholder mapping process. Each project partner had to identify stakeholders within its domain among members and staff of the local and/or regional authority, representatives of civil society organisations, of universities and other academic institutions, of publicly-owned enterprises, and private businesses. Each potential respondent was then sent a personalised invitation with an online link to the survey, briefly explaining the process, the goals of the survey, and those of CCIC. Additionally, each project partner had to choose 10 of the stakeholders already mapped, and conduct semi-structured face-to-face in-depth interviews based on a template prepared by ARC Fund. Therefore, the report is firmly grounded in the result of the efforts of all partners within CCIC, who collected much of the required information for the analysis.

In carrying out the research and analysis based on the above mentioned instruments, the report does not aim to test a certain previously formulated hypothesis. Rather, it aims to gather multiple views of relevant stakeholders, identify trends in the stakeholders’ positions, explain how
INRODUCTION

innovation happens in the context of the local and regional authorities, and ultimately offer initial suggestions for supporting innovation and relevant policy development on a local and regional level.

Figure 1 Elements of CCIC project methodology and work flow

Although the primary intention of this report is to present a state-of-the-art situation in public sector innovation, its findings, due to numerous limitations in data collection and the resulting lack of representativity, should not be considered conclusive. Instead, they should be interpreted only as guiding the attention of policy analysts and policy makers in further research and policy development, or, at best, as alerting signals with respect to each CCIC partner’s specific local or regional context. Findings could help with choosing a direction in policy planning, or identifying the specific areas for further investigation by each partner. They can also be used to determine the range of possibilities in each partner’s context, thus highlighting the specific areas in need of improvement, or the specific organisational attributes in need of closer attention when planning for innovation.

All analyses produced as part of this report were done using the open source statistical software R (R Core Team, 2012). In addition to the core R functionality, several other R packages were used to produce the charts found in this report: lattice (Deepayan, 2008), tm (Feinerer, Hornik and Meyer, 2008), wordcloud (Fellows, 2013), HH (Heiberger, 2013).

Intended audience of this report

Members of CCIC project partners’ organisations are expected to be the primary audience of this report, mostly due to their direct involvement with the process of data collection, as well as due to the greater relevance of the report’s conclusions to their situations. Partners are also expected to share this report with stakeholders in the region, including, but not limited to, political representatives, administrative decision-makers, service managers, policy planners, civil society organisations, chambers of commerce and similar professional associations, managers and directors of SMEs and of publicly-owned enterprises, members of the academic community.

Due to the specific thematic focus of the CCIC project, public sector innovation is considered in four distinct perspectives – public procurement, civil society involvement, financial instruments and publicly-owned enterprises. Therefore, the report might be of particular interest to
stakeholders who are involved in the same areas, and wish to glimpse deeper into how the public sector manages innovation not just generally, but also in response to challenges and opportunities within those specific areas.

The report however (or the CCIC project) does not aim to assert that public sector innovation is only possible within those four thematic areas. On the contrary, it still explores quite in detail how innovation is made possible within the public sector in general, and what drives or hinders it, vis-à-vis policy making on the local and regional level. Hence it would be of particular interest to local and regional stakeholders, people who are involved in the day-to-day policy planning and management processes, who are advocates for innovation, who have been involved in diffusion processes, or who wish to see a more expedient and more efficient public sector altogether.

Despite its focus on the local and regional context, the report provides valuable insights for national and EU-level stakeholders as well, especially since local and regional contexts do not exist in isolation, but are part of rather interdependent systems. National policy-makers, particularly in countries where national policies have a very strong influence on local and regional public sector operations, might find useful hints for their own purposes and institutional mandates, with a hope to increase constructive cooperation with local and regional stakeholders towards maximising opportunities for public value generation.

What the report does not provide is a perspective on governance innovation, or innovation in the ways that local and regional public sector institutions exercise their powers, make decisions, and guarantee accountability. Even though the authors of the report acknowledge the significance of innovative governance practices for the success of public sector operations, it is beyond the scope and inquiry boundaries of the CCIC project to look into this specific domain. Moreover, a proper study into governance innovation models would require a different kind of an inquiry process, analysis of legislative and institutional frameworks, as well as a much deeper analytical discourse on politics, institutional reforms and general governance agendas.

The authors are hopeful that the report will be useful for all audiences who share interest in public sector innovation, in a context of growing popularity of the latter amidst increasing pressures on public spending and sizable cuts in government programming at all governance levels and across national borders.
SURVEY RESPONDENTS’ AND INTERVIEWEES’ PROFILE

In total, 859 respondents from 10 EU Member States participated in the online survey; 90 in-depth interviews were analysed. The initial intention during the planning phase was that each country/region would be able to have a similar number of respondents, despite local demographic specifics due to the underlying assumption that it is not strictly individual viewpoints that are being collected but rather those of institutions, where key stakeholders are structured in a similar way. Due to various local factors however that assumption did not turn out to be correct, and collected responses did not result in comparable regional subsets. Additionally, not all 859 respondents answered all (combinations) of the questions asked in the survey, which is why numbers of responses indicated on the figures vary.

Country of origin and organisational affiliation

The distribution of questionnaire respondents by country of origin is unevenly spread (see Figure 2). Two thirds of all respondents come from only three countries: Poland (33% or 287 respondents), Italy (21% with 181 respondents) and Romania (12% with 103 respondents). The remaining CCIC countries account for fewer than 100 respondents each, ranging from 71 from Spain (or 8.3% of all) to just 10 respondents from the Netherlands (1.2% of the overall number of respondents).

Altogether, 90 interviews were carried out by the project partners (Birmingham 8, Eindhoven 8, Gävle 9, Genoa 12, Harghita 10, Jyväskylä 10, Sabadell 6, Sofia 8, Tartu 9 and Warsaw 10).

More than half of the respondents in the questionnaire represent a local government administration (52% of the respondents). If combined with respondents representing regional authorities, that figure goes up to 58.7% of all respondents. The remaining 41.3% are respondents coming from other organisations (see Figure 3), including civil society organisations (12% of all respondents, or 28.2% of the non-local/regional authority organisations), publicly-owned enterprises (7% of all respondents and 17.5% of the non-local/regional authority organisations). Academia is represented by 6% of all respondents and 14.5% of the ‘other’ organisations. Local development agencies account for 5% of all respondents or 13.2% of the ‘other’ organisations. Similarly, private businesses account for only 5% of all respondents (11.5%
of the other than local or regional authorities’ organisations). The least represented group among the respondents is that of the central government institutions. The right-hand side of Figure 3 provides a more detailed picture of the distribution of respondents from organisations other than local or regional authorities.

**Figure 3** Distribution of respondents by type of organisation; with and without local authorities

Interviewees’ profiles represent a similar pattern. The major differences are in that representatives of local authorities, which, albeit still prevalent in the overall distribution of respondents, do not dominate to such an extent, while at the same time the share of regional authorities’ representatives is higher than that in the online questionnaire. Such a distribution, however, is exceptionally beneficial to the purposes of this report, and to the objectives of the CCIC project, as it enables more focused attention on local and regional authorities’ approaches to and practices of innovation, and at the same time provides for a comparative external perspective derived from responses and views of representatives of other organisations. Therefore, the underlying comparative perspective applied throughout this report is based on a separation between local and regional authorities, on the one hand, and all others, including civil society organisations, private businesses, academia, public enterprises, on the other. Figure 4 on page 12 provides a comparison of respondents’ distribution for the online survey and the interviews.

The particular distribution by country of respondents, and in particular the great differences in the number of valid responses, precludes the making of valid country-specific conclusions or cross-country comparisons. Instead, the analysis will concentrate on the separation of responses into two subcategories, based on the type of organisation, with local and regional authorities forming one of the subcategories, and all other organisations forming the second. In addition, the survey results will be interpreted in conjunction with results from the stakeholder interviews, which provide much more in-depth information, and will further be used to ensure the validity of the conclusions.

**Respondents’ Positions within organisations and size of organisations**

In terms of position in the organisation, the majority of respondents (45%) hold officer-level positions (see Figure 5 on page 12). Another 30% are middle or higher-level managers, and just a little over 6% are political decision-makers or policy-makers. The rest have indicated a different level of authority or position.
Figure 4 Shares of respondents to online survey and stakeholder interviews, by type of stakeholder organisation

![Graph showing distribution of respondents by type of stakeholder organisation](image)

The same distribution is not uniform across local and regional authorities, on the one hand, and other organisations, on the other (Figure 6 on page 13). While for the other organisations higher managers, middle managers and officers represents nearly equal shares of about between 25% to 30%, in local and regional authorities the dominance of officers is apparent at more than 50% of the respondents. Higher managers are only about 5%. Thus the opinions expressed by local and regional authorities will tend to be dominated by the opinions of officers.

Figure 5 Distribution of respondents by position in the organisation

![Pie chart showing distribution of respondents by position](image)
Regarding the size of respondents’ organisations, two measures were used in the questionnaire – annual budget and number of staff. In terms of annual budget, two categories of organisations stand out. Those with budgets of less than 1 million Euro represent the largest single share and account for 20% of respondents. Organisations with budgets of more than 500 million are represented by 16% of respondents. The remaining budget categories, which fall in between the dominant two, are almost equally spread in the range between 7% to 11,5%. The largest share of respondents, or 28,2%, however report they do not know their organisation’s latest annual budget (left-hand side of Figure 8 on page 14).

However, local and regional authorities, on the one hand, and other organisations, on the other, are quite dissimilar in terms of annual budget distributions (In terms of number of employees (right hand side of Figure 8), which is the second measure of organisational size, the majority of organisations represented in the survey, or 41,8%, are quite large, with more than 1,000 employees. The remaining categories range from 11% to almost 18%, with the smallest organisations of less than 50 people on staff accounting for almost 33% of all. Midsized organisations, or such having between 51 and 200 staff members, are represented by a quarter of respondents.

Figure 9 on page 14). The most obvious difference is in the shares of respondents, who do not know the budget of their organisation. For authorities, that is the predominant share, accounting for almost 40%, compared to only
15% for the other organisations. Another important difference is that local and regional authorities have a much larger share (about 25%) for the largest budget category, compared to less than 5% of the other organisations, which in more than 35% of the cases report the lowest budget category of less than 1 million per annum.

Figure 8 Size of organisations; by annual budget, and by number of employees

In terms of number of employees (right hand side of Figure 8), which is the second measure of organisational size, the majority of organisations represented in the survey, or 41.8%, are quite large, with more than 1,000 employees. The remaining categories range from 11% to almost 18%, with the smallest organisations of less than 50 people on staff accounting for almost 33% of all. Midsized organisations, or such having between 51 and 200 staff members, are represented by a quarter of respondents.

Figure 9 Size of organisation by annual budget; local authorities versus others
Local and regional authorities, represented in the survey, are mostly larger organisations, compared to the rest. Nearly 60% of them belong to the largest category of more than 1000 staff members, compared to less than 20% for the other organisations, half of which employ less than 50 people. Less than 20% of local and regional authorities are reported to be of that category of less than 50 employees (Figure 10). In both cases, midsized organisations are least represented, with 20% for local and regional authorities, and about 25% for the rest of the organisations.

Figure 10 Distribution of organisations by number of employees; local and regional authorities versus others

Summary of respondents’ profile
Considering the respondents’ profile presented above, the following conclusions could be made:

- Local and regional authorities participating in the questionnaire tend to be larger structures in terms of number of employees compared to the rest, with 60% of respondents from local or regional authorities coming from organisations with staff of more than 1000 people.

- Overall, responses are not biased due to factors pertaining to gender or educational attainment. The greatest variability in terms of gender is found across positions held in the organisation. Positions representing management or decision-making authority tend to be occupied by men, while women dominate officer-level positions where operational work is concentrated.

- Officer-level positions dominate the respondents’ profile (45% of all). That means that for most of the analysis, the opinions presented are more likely those of staff most directly involved with implementation, with the perspectives of policy-makers largely missing. Such a distribution opens up more space for the analysis of critical suggestions concerning missing or inefficient policies.

- Most of the local and regional authorities represented in the survey are very large organisations. Therefore, their perspectives are expected to influence the analysis more strongly, and the issues discovered – to be more typical of, though not necessarily specific to, larger administrations. Conversely, the perspectives of the other types of organisations are dominated by those of smaller size entities.
- Unequal distribution of respondents from the different countries. Per-country analysis would be inconclusive due to the uneven distribution of responses among participating countries and regions. Similarly, results cannot be considered unequivocally valid for a European-wide context due to missing perspectives from other countries and regions. Nonetheless, results and conclusions should be considered as guiding further analysis and policy development locally and regionally, and could serve as points for consideration by authorities, which deem them as relevant. Since the CCIC consortium represents 13 regions from 10 different EU countries, similar patterns (of issues or opportunities) might also be found in countries and regions beyond the consortium members.

- Results are dominated by responses from local authorities. Since the purpose of this report relates to the state-of-the-art in public sector innovation on a local and regional level, the key perspective of interest is namely that of local and regional administrations, with their differing levels of responsibilities and decision-making structures and layers. Particularly in the public sector, innovation is rarely an organisation-bound phenomenon. Its significance translates into greater public value generated, with impacts always transcending the narrow boundaries of the organisation where the innovation originated. Public value however is not specific solely to the administration; rather it lies and is reiterated within the public. Therefore it is essential to understand what is being used on authority level, but it is also no less important to balance that with the perspective of other representatives of the public at large – civil society, private business, academia, etc. Due to the varying numbers of different organisations’ representatives in the survey, each organisational perspective cannot be traced or analysed, which is why a simpler separation is applied throughout the analysis. Local and regional authorities are grouped together, yet for the most part the perspective of local over regional authorities is dominant. All the other types of organisations are grouped in a separate category, formally referred to as ‘Other’.
UNDERSTANDING INNOVATION IN THE PUBLIC SECTOR

This part of the report presents an in-depth look into how public sector innovation is understood among stakeholders. It is based on qualitative analysis of stakeholder interview responses, particularly of the provided definitions of PSI. Several distinct “models” of PSI are elaborated based on the analysis of those definitions. The report also takes into account a broader perspective including stakeholders’ ideas on what benefits PSI brings, what goals are being pursued with PSI, what are the typical drivers and barriers to greater PSI proliferation, and investigates into how stakeholders discuss successful PSI examples.

Defining innovation in the public sector

There is hardly a single unequivocal understanding of or agreement on what innovation is beyond what is suggested by the Oslo Manual (OECD & Eurostat, 2005), and that is especially true when considering how innovation permeates the public sector. Recently however, that trend is being reversed, and attention to studying public sector innovation is growing. Thorough analyses have been conducted, and attempts to provide a definition of public sector innovation have been made, most recently in the European Public Sector Innovation Scoreboard 2013 (Hollanders et al., 2013). These definitions, however, were mostly a result of theory-driven literature reviews, and to a much lesser degree that of a wider consultation process with stakeholders and especially “users” of public sector innovation.

In this report, a different approach to definition elaboration was undertaken. In addition to consulting prior literature, significant attention was paid to the analysis of the responses (including differences and similarities thereof) of participating stakeholder groups to both the online questionnaire and the interviews as elaborated above. In terms of state-of-the-art it is therefore important to go deeper into the understandings employed by the different actor and stakeholder groups, and determine if, what and where particular delineation semantic lines exist.

Figure 11 Word frequency graph: definitions of public sector innovation

Figure 11 above is based on all definitions of innovation collected through the interviews5, and illustrates the most frequently used stems of words6 from the given responses, with the size of

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5 Stakeholders were responding to the question “Generally speaking, and in your own words, what is innovation?”, and were later asked to elaborate on the distinction between innovation in the public and in the private sector.
the word proportionate to the actual frequency of occurrence of the stem across all responses. Colours are used to help with distinguishing the more frequent from the less frequent stems. Typically, respondents tend to view innovation in reference to a product, service or process, while words like ‘change’, ‘market’ and ‘technology’ that are otherwise common for an innovation context are less prevalent. That confirms the initial expectation that the general understanding of innovation would correspond closely to the “classic” notion of innovation as pertaining to a product or service, something more or less specific and tangible.

Opinions on the distinction between innovation in the public and in the private sector differ to a considerable extent. One point of view states there is no fundamental difference between the two, emphasising that “cost savings, time saving, and simplicity of the processes apply to everyone”, as aptly expressed by one of the interviewed stakeholders. Further to this, both private sector innovation and public sector innovation share (at least) one common purpose, which is “assisting the community in its everyday life”. Others, however, disagree with the above and point to a range of differences. Figure 12 on page 20 portrays the distinction in the perceptions of the public vs. the private sector, representing words (rather, their stems) used to explain innovation in the private (upper half) and in the public (lower half) sector, respectively, in different colour.

What becomes immediately apparent is the emphasis on products, markets, money and profits in the private sector, as opposed to that on service, social, process and user in the public one. Thus, the presence of two fundamentally different foci of innovation also reveals the differences in approach, content, goals and implementation for innovation in the public versus innovation in the private sector. To that extent, statements about the equivalence of innovation across the two sectors seem slightly limiting in that they tend to simplify any or all of the implementation processes, goals, and diffusion patterns, or tend to regard innovation as a highly abstract notion. In either sector however, but especially in the public one, such simplification would likely be counterproductive as it precludes the proper and efficient identification of priorities and policy opportunities.

Despite the described differences between the private and the public sector, innovative practices in the public and in the private sector are not mutually exclusive, and frequently benefit from and complement each other. Public sector innovation can happen through the diffusion of prior private sector-originating innovation (such as integrating new technology or management information systems within the administration, including through a procurement process). It could also happen through providing assistance to the private sector in the form of creating or supporting enabling conditions such that innovation generation is stimulated and encouraged – through policy (new or changed regulations), targeted programming, designated funding (including specific financial instruments and the implementation thereof), mediation, etc. Boundaries between the public and the private sector

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6 Word stemming is a technique that allows more context-specific analysis. It combines closely related words sharing the same stem into single units (i.e. it combines plural and singular forms of the same word into a single unit, adding up the respective frequency counts). Thus closely related words are grouped together, and their frequency counts are added up into a single number. Displayed on the frequency graphs are the words stems, which often have common suffixes removed.

7 Stakeholders were responding to the question “What are the differences between innovation in the public and in the private sector?”

8 See footnote 6 above.
are additionally blurred in the case of providing traditional, but improved, public services, such as transportation, which are technology-bound by definition, and where innovation can lead to lasting, tangible and proven value in the sense of enhanced passenger safety and comfort, resources saved, cleaner environment, improved traffic flow and management, etc.

Within the CCIC context, partners adopted a general, point-of-departure type, definition of public sector innovation – “new ideas that work at creating public value”. Such a definition however remains rather elusive for it provides no reference to any real process or policy, both of which are essential for the functioning of the public sector. Nor does it elaborate on the created public value, which could be very broadly interpreted and is not necessarily the result of innovation. Therefore, taking into account interviewees’ responses, this definition will be revised and extended with more specificity and higher relevance as to the inception, proliferation and sustaining of innovation within and by the public sector.

**Distinguishing public sector innovation from private sector innovation**

New ideas can refer to a range of applications – from a basic new notion or basic theory, to a new model of operation, to a new management system altogether. The **Oslo Manual**, which focuses on private sector innovation, can, however, be used as an important frame of reference in the analysis of public sector innovation. The proposed definition therein reads: “the implementation of new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in the business practices, workplace organisation or external relations”. It is a matter of interpretation to what extent this definition could also be straight-forwardly applied to the public sector. Figure 11 on page 17 confirms that stakeholders’ definitions closely correspond to that offered in the Oslo Manual. The most frequently mentioned words as can be inferred from their size on the figure are ‘product’, ‘service’ and ‘process’.

Stakeholders were specifically asked to discuss the differences in innovation between both sectors, which are clearly displayed on Figure 12 on page 20. While the private sector context is dominated by words such as *product, market, business, money* and *profit*, in the public sector one there is just a single term dominating – *service*, followed most closely by *social*, thus pointing to the conclusion that **most of public sector innovation is concentrated in service design and delivery, with clear social impact.**

Typically, in the case of the public sector *service* and *product* are often used interchangeably, since services are frequently regarded as the key product of public sector operations, especially from the point of view of citizens. In almost all interviews, both are mentioned together and no distinctions are made between the two.

Not all of Oslo definition’s integral concepts seem to correspond to the definitions given by the interviewed stakeholders, thus suggesting they are not directly applicable to the public sector realm. The ‘marketing method’ is the obvious exception, but a plausible explanation is given by Bloch (2010), who refers instead to ‘communication innovation’ as a public sector counterpart. The public sector “markets” its services and products by making information about availability, accessibility, eligibility, but also through reporting on its achievements, successes and other solutions. Therefore, improving ways and channels of communication with innovation end users, such as citizens and businesses, is a natural opportunity for innovation.
Very few of the interviewed stakeholders drew parallels to the fourth type of innovation discussed in the Oslo Manual – *organisational innovation*, although it has a clear place within discourses on public sector innovation. Organisational innovation implies change related to management practices within the organisation, as well as in the internal systems, structures and hierarchies. In the public sector, however, such changes are not easy, are often tedious to implement, and almost always require political, in addition to administrative, sanction. Not least, the focus on service in the public sector is understandable as it more closely corresponds to that sector’s mission. Thus, even though organisational innovation may be in place, it is not considered as highly as innovation which targets beneficiaries of public services.

Some authors offer more complex typologies. Windrum (2008) refers to service innovation, service delivery innovation, administrative innovation, conceptual innovation, policy innovation and systemic innovation. The Audit Commission (2007) discusses service design and delivery innovation, process or managerial innovation, democratic innovation and strategic innovation. Albeit relevant, stakeholders’ responses touch on these only in isolated cases, attesting again to the perceived focus of public sector innovation on the end product, rather than on the underlying systems and structures within public sector organisations, which made it possible, or on the processes involved and the characteristics thereof.

An important emphasis in the definitions elaborated by the stakeholders is that on ‘change’. It suggests that **often innovation is understood as a novelty in something – a product, service, structure or process – that already exists, including elsewhere, in order to address new challenges or arising social issues.** A number of scholars seem to agree.

“**Innovation, from my perspective, is something new that comes to use. Before something comes to use, it is not an innovation**”

Stakeholder interviews

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9 Italics added.
something that is brought from somewhere and used in a new context for the first time. The latter suggests of the possibilities which lie with the careful study of innovation practices across local and regional boundaries, and with their subsequent transfer and integration within different settings.

In the private sector, the value of innovation is understood as the value generated for the stakeholders (Moore, 1995). Generating profit has been pointed out by the respondents as the major goal of innovation in the private sector. This is mainly done by developing new products, creating new markets, and attracting more (new) customers. In the public sector, however, in contrast to the stakeholder value in the private one, public value is considered a paramount goal of the public sector innovation. The leading factor in the public sector, according to the respondents, is the community interest (as well as often the political one). Thus, creating social value by delivering new/improved public services is a major objective in the public sector.

Another major difference is the assessment of value in the private and public sector. While in the private sector one measures the return on investment (alternatively cost-savings) as a major indicator of the outcome of an implemented innovation, in the public sector an assessment “on the basis of impact on a range of social value and economic value indicators” (Hughes et al., 2011) is more appropriate. To these two, one should also add environmental indicators, as environmental protection has gained principal position on the agenda of policy makers and the society at large.

Attributes of public sector innovation

Public sector innovation, as demonstrated earlier, has some unique aspects in which it differs from popular constructs of innovation as it is realised in the private sector. Five attributes were considered in terms of driving factors in the motivation to pursue innovation. These include:

- relevant advantage compared to the idea, product or service preceding the innovation
- compatibility with (local/regional) values and beliefs
- trialiblity
- observability
- opportunity for cost-savings

As evidenced by Figure 13 on page 22 the most relevant attribute of innovation to the public sector is considered by the survey respondents to be the opportunity for cost-savings, with nearly 80% of the respondents to this particular question finding it to be mostly or absolutely relevant. This is therefore a key motivation in introducing or supporting innovation, but also reflects a widely popular concern about the lack of funds, especially funds for innovation. Under conditions of tightened budgets and restricted spending, innovation in the public sector might therefore be seen as key in cost savings. Rather than cutting service and closing public programmes, authorities could use a different approach and try to introduce such changes to their programming that would be less costly, but at the same time at least as productive to beneficiaries, thus effectively producing innovation.

“The public sector is more conservative, abiding to limitations related to the legal and regulatory framework”.

Stakeholder interviews
**Figure 13** Attributes of innovation most critical to the public sector

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**Observability** comes second with about 70% of the answers rating it mostly relevant or absolutely relevant. Observability refers to the extent to which an innovation’s use and the resulting benefits are visible and determinable by the public (and stakeholders). Such a high degree of relevance of this particular attribute suggests that innovation in the public sector has a higher chance for success when it is made obvious, when its use affects (or brings benefits to) more people. On the other hand, however, that also reduces the significance of purely organisational innovation or such that enhances, among others, the public sector’s systems, operations, or structures, whose consequences typically are slow to observe and lead to longer-term effects. It also emphasises the discomfort towards change in the ways public sector organisations work internally, as greater attention would likely be paid to results produced externally. Although that directly corresponds to the general public sector’s mandate, namely – “to serve” – it also suggests that innovation in the public sector may have added political significance, especially if visible innovation results translate into subsequent voters’ support. The purely political uses of innovation in the public sector, however, remain beyond the scope of this report.

**Relative advantage** is seen as mostly relevant or absolutely relevant by 60% of the respondents to this question. It refers to improvements over previously available alternatives but does not necessarily correspond only to incremental changes resulting in an improved service or product. Instead, it serves to emphasise the new approaches used to address (and possibly solve) existing problems, or the new opportunities resulting from the deployment of a particular innovation, which had previously been impossible. The key “value” of innovation in this case would be in that it is better than what it supersedes.

**Trialability** is rated as mostly relevant or absolutely relevant by about 50% of respondents to this question. Prior to diffusion and implementation, it may be difficult (or costly) to estimate the effects of a new product, service or idea, which is why any novelty contains an inherent risk of failure. To the public sector, failures are rather costly, not just due to the possible economic losses, but also due to the higher visibility and the likely political repercussions. Trialability refers to the opportunity to test the planned intervention, and analyse its effect prior to full-scale official deployment. It remains however not as highly rated, and one likely reason for that is that most public sector interventions, particularly new ones, require a longer time frame before
“When you fail in your business it will give expression in a learning curve. In the public sector failure translates into political risks.”

Stakeholder interview

visible results are demonstrated and results are possible to evaluate. Further proof to such a hypothesis is found in the fact that among respondents, who indicated their position as political decision-maker, more than 75% rated trialability as mostly relevant or absolutely relevant, while for each other position category the same rating is between 40% and 50%. Thus, for decision-makers trialability is a much higher priority with respect to innovation, for it allows making decisions based on less risk, and mostly when positive impact is fairly certain.

The least relevant of the attributes, according to respondents, is compatibility with values and beliefs, with less than 50% of respondents to this question finding it mostly relevant or absolutely relevant. That has interesting implications in terms of diffusion and steady adoption of the novelties behind an innovation, as it most likely means that planned innovation would not take into account cultural specificities. Implementation could therefore potentially bring significant changes to local and regional cultures, and stir a lot of disapproval when first deployed, requiring even more careful planning and posing additional public management challenges.

Overall, all of the discussed attributes of innovation are perceived as relevant by many of the respondents. The resultant “ranking” in terms of relevancy to the public sector serves as an indicator of how innovation is perceived, and towards what ends it is being deployed. The highest relevance attributed to cost-savings reflects the general pursuit of costs optimisation, which is especially important during times of financial austerity and ever more reducing public spending. At the same time, cost-savings concerns highlight the need to apply innovative thinking towards the way the public sector works in general. In particular, it alerts to the need to rethink “traditional” approaches to products and services offered by shifting popular management paradigms, which need to become more enabling in that authorities need not stick to solutions, which used to work, but should focus instead on opportunities for cooperation, shared responsibilities (and risks), new communication and solicitation channels, all of which would ultimately contribute to enhanced presence and response capacities of public sector organisations.

Risk taking within the public sector

One of the key distinctions between innovating in the private and in the public sector is found in the process of implementation. Some of the interviewed stakeholders stated that the public sector is more conservative, and abides to limitations codified in legal and regulatory frameworks. On the other hand, there is a common perception that the private sector is more dynamic, more flexible, and less time-consuming in implementing innovation. The reasons for this are manifold, including organisational factors, such as the complex hierarchy of decision-making in the public sector, organisational culture, and resistance to change, as well as more general ones such as the level of risk the public sector can afford to bear.

Innovation inevitably involves risk taking (Mulgan and Albury, 2003). Risk as a concept has been predominantly studied in the context of the private sector. Risk taking in the public sector is considered to be a more complex issue. The Australian National Audit Office (2009) refers to risk as “uncertainty” in the sense that “consequences” and/or “likelihood” of introducing a new idea might be unknown. The more difficult it is to quantify the ‘consequences’ or ‘likelihood’ of a particular initiative, the greater the risk that the novelty involves. Considering the complexity that measuring the outcome of innovating in the public sector might involve, public sector's risk assessment becomes a more formidable task than risk assessment in the private sector, where profit would be the ultimate measurement of the ‘consequence’ from introducing
an innovation. The “accountability framework” and “the political environment”, in which the public sector works, also add to the complexity of risk management in the public sector. Furthermore, the risk-reward relationship in the public sector is usually a more complicated one than in the private sector.

The following Figure 14 reveals the opinions of the respondents replying to the question of “How much does risk have to do with innovation?”

**Figure 14** How much does risk have to do with innovation?

As it can be seen on the figure, respondents have given a rather ambiguous reply to the question of whether public organisations can bear any risk of innovating. On the one hand, respondents demonstrate a relative agreement with the statement “Risk-taking is a prerequisite to an innovation culture in the organisation”, suggesting that organisations where risk-taking is not “condemned” are more likely to stir innovation. In answer to the question about the level of risk public organisations can bear, responses are equally distributed between agreement and disagreement, with sizable share of those who neither agree, nor disagree, suggesting there is no clear opinion about how much risk a public sector organisation could bear. Similar degree of ambiguity is also demonstrated from the distribution of the responses on the statement “Innovation should carry no risk to the organisation or to any entity involved”. The contradiction in these responses reflects the considerable level of complexity of the issue of risk-taking in the public sector.

In regard to risk management, there are a few important measures to be undertaken in order to mitigate the risk from the introduction of a certain innovative practice. These are:

- Risks should be properly identified so that thorough understanding can be achieved as to the risks taken in the context of the organisational explicit and implicit objectives. Sources of risks are threats and events that might “prevent, degrade, delay or enhance”\textsuperscript{10} the achievement of the organisational objectives.
- Risk assessment is a “systematic process to quantify or qualify the level of risk associated with a specific threat or event” (National Treasury, 2010). Measuring the likelihood of the risk

understanding innovation in the public sector

occurring and the impact of this occurrence on the organisational objective are both essential elements of risk assessment.

- Proper risk response implies “developing strategies which reduce or eliminate the threats and events that create risks” (ibid.).
- Risk monitoring implies regular checks to confirm the proper functioning of the entire risk management system.

Conceptual models of innovation in the public sector

The definitions that the interviewed stakeholders provided served as a basis for the elaboration of several “conceptual models” of how public sector innovation happens, particularly with regard to input factors, processes, and outcomes. As such, they could be regarded as tracing the inception of innovation and its subsequent proliferation, or diffusion, within societal structures.

The models are not identical, and may even seem incompatible. They however do represent alternative views of how innovation is implemented within the public sector, and each emphasises important, yet different, aspects of how it becomes possible. Therefore they remain open for interpretation and discussion, and do not pretend to exhaust public sector innovation as a societal or public management phenomenon. Neither are they meant to be critical of other well-established theoretical constructs of innovation in the “classical” sense or of public sector innovation in particular. Any of the models could be subject of criticism and sound argument from a theoretical point of view, especially if some or all of their assumptions seem to contradict already established ideas. Therefore, readers are encouraged to reflect on their own understanding, and to try to find which of the models appears to be most in tune with their own experience or professional conviction.

The different components of the models are coloured for visual clarity, and in order to easily distinguish the underlying logic in each model. Three types of components are included. In orange are the components, which are considered as inputs in the specific models (though it is still possible that in different interpretations these “inputs” would not be recognised as such). These inputs are the necessary conditions or factors that are a prerequisite for the inception of innovation. In blue are the components, which symbolise outputs - outcomes, impacts, or resultant changes, which the implemented innovation produced. Finally, the components coloured in green represent processes, which are necessary for the inputs to turn into outputs, per each specific model. On some of the models, processes are not explicitly drawn, but should instead be sought in the nature of interactions between inputs and outputs.

Figure 15 Conceptual model of innovation - innovation as the application and adaption of an invention

Figure 15 represents what is perhaps the simplest linear interpretation of how innovation happens. It starts with the notion that innovation necessarily represents an invention\(^\text{11}\), and puts the emphasis on the process of application. The result of that application is the adaptation of (or incremental change in) the underlying condition that was the reason behind the innovation.

\(^{11}\) Not all stakeholders however agree that inventions are a necessary input in innovation – either in the public or in the private sector. Instead, preference is given to the mode of use, emphasising that innovation is in the new uses of something, which is commonplace elsewhere. Therefore, this model is distinct, but very few of the interviewed stakeholders understand public sector innovation in this way.
Continuous re-application and re-adaptation of the original invention is an expression of the diffusion process as it happens within the public sector.

The model does not provide for an explanation of what exactly could be qualified as an invention. A closer look at the responses of stakeholders, whose opinions provided the foundation for this model, reveals there is no agreement (or limitation) on the exact scope of what constitutes an invention, except that most of the interviewees tend to think of it in terms of a (technological) product, whose application and adaptation underlies public sector-provided services.

The model depicted by Figure 16 below represents a more complex view of public sector innovation, putting the emphasis exclusively on inputs and outcomes, with processes expressed as interactions amongst them. The four key inputs are a new product, a new theme, a new service, or a new way of working, all of which are at the foundation of innovation. However, these inputs do not always result in innovation, even if present. Rather it is the combination and interaction among them that creates the innovation. For example, the introduction of a new theme (or a policy priority) for the local or regional authority also requires the introduction of a new way of working if it is to produce an innovative result. It could additionally include the design of a new service, the provision of which results in innovation.

Most often, the resultant innovation is a solved challenge, which this model presupposes as the key outcome of public sector innovation. However, the true result, and the one that bears the most significance in the public sector, is that solving a challenge is what results in an actual benefit – expressed as new value, new relations, and ultimately societal growth. Without that last part, solved challenges would not be innovation, as typically public sector institutions and structures deal with challenges on a daily basis, without the requirement for innovation.

Also important and highlighted by this model are the possible reiterations of the innovation processes. Once a challenge is solved, new ways of working are already in place, and they might result in the adoption of new themes and priorities, or even in the introduction of entire new domains where the public sector has a stake. This particular cycle closely corresponds to the application-adaptation process as depicted on Figure 15 on page 25.

Another model is depicted on Figure 17 on page 27, with the key emphasis on the cooperation and interaction between the public and the private sector. The underlying assumption of this model is that in order for innovation to happen in the public sector the involvement of the private sector is a must. Though no less complex, this model does not focus on the particular types of interactions between critical input components, but instead prescribes a critical role for the private sector, effectively mandating the public sector to cooperate with it, if it is to develop.
The model further stipulates that there are two basic ways (ideal types) that innovative outcomes are generated, or two general and principally different ways that innovation generation processes unfold. In the first case, the underlying condition of the innovation process is the cooperation between the public and the private sector (the innermost circle on Figure 17), which is seen as interplay of inputs. The actual processes that depend on these inputs are seen as abstract transformations whose outcome can be expressed in terms of either new technologies or new knowledge. Those processes are also the most significant part of this model, since it is there where the actual cooperation between both sectors takes real shape.

In the second case, either of the sectors provides its own input independently of the other, and the cooperation between them happens during the actual process phase (the middle “circle” on Figure 17), which, again, could be initiated by either sector. The possible processes cover the creation, dispersion, acquisition or practical usage of new knowledge, or the initiation, introduction, change or spreading of new technologies. Innovation in this case happens through the supplementary contributions of new technologies and new knowledge, or at the outcome level (outermost circle of Figure 17).

Possible real-world examples of this model of innovation could be seen in the introduction of new environmental technologies in the transportation sector, which first emerge as technologies in the private sector, but also lead to innovative ways of public transportation and environmental protection, thus effectively generating added value in the public sector.

The last model deduced from the stakeholders’ definitions puts innovation in a more limited organisational context whereby public sector innovation is contained within the institutions of the sector itself (Figure 18 above). It takes for inputs three times of novelties – human resource-related, organisation-related and technology-related – and considers innovation itself as the outcome of any of those novelties or the various combinations thereof.

**Working definition of innovation**

The presence of four distinct models of public sector innovation, all of which depict different views, but also different mechanisms and understandings of what constitutes innovation in the public sector, confirms the complexity of innovation when sought in the context of public sector...
institutions and decisions. This points to the conclusion that innovation in the public sector is more permeating than what common awareness may dictate, and might also be subject to less constraints than its private sector counterpart. Consequently, any thorough study of its manifestations will have to take into account a very rich set of contexts, actors, processes and results in determining the exact (public) value added, especially in terms of long-term societal evolution.

Therefore, suggesting a single all-encompassing definition of public sector innovation will need to be either too broad and vague (as is the one adopted within CCIC), or be specific but rather complex and detailed in order to satisfy the many facets popularly ascribed to it. Based on the analysis carried out thus far, the following working definition is proposed:

**Public sector innovation is the integration of realised novelties or new knowledge into any system dependent on public decision-making towards the enhancement of current, or the introduction into use of new, operations, services and practices, whose final and most evident result is improved public service and enhanced quality of life or a major aspect thereof.**

**Public sector innovation in success stories**

Another way to look at how public sector innovation is being defined and understood is to consider a specific discourse – that of success, or what people regard as successful practices and examples with respect to innovation in the public sector. Interviewees were specifically asked to give examples of successful public sector innovation cases, thus putting their understanding of what public sector innovation is in positive practical terms.

The word frequency graph below is based on the responses of interviewees to that question (Figure 19).

As with previous word frequency graphs, words are represented by their stems, with the size depending on the frequency count within all answers given by interviewees to the question “Can you give examples of policies, services, methods or products that you consider successful innovation in the public sector (local/regional level)?” The presence of the stem “servic” in the middle of the graph suggests that most often interviewees related successful public sector innovation to specific services, or shared an expectation about an innovative service as a generator for public sector success.

**Figure 19** Word frequency graph of examples of successful public sector innovation

That is a particularly intriguing observation considering that when defining innovation, most interviewees refer to a “product” (the latter being the most frequently used word), while in terms
of success the word “product” is much more rarely mentioned. Figure 20 below provides a clearer glimpse into the contextual differences between how interviewees define innovation and how they think of successful examples of innovation in the public sector. Plotted are only those stems that appear at least once in each context. The graph represents the stems of the most frequently mentioned words in both contexts, as discussed above, but stems are plotted according to their relative weight within each of the two contexts. Thus, the stem that is mentioned the most is given 100% relative weight, with the other frequencies computed as a ratio between the number of occurrences of each stem to the number of occurrences of the most frequent stem. The red line separating the graph into two mirrored halves serves as a visual aid to help distinguish those stems, which have similar relative frequencies in both contexts. The closer a stem is to the red line, the more common it is for both contexts. The farther to the left a stem is, the more typical it is for the context of innovation definitions; conversely, stems lying farther to the right of the line are most typical for the context of examples of successful innovation.

Figure 20 Comparison plot of words used in definitions of innovation and in success stories of innovation

The most frequently mentioned word (or stem thereof) in the definitions of innovation is product (100% relative weight), but its corresponding relative weight in the examples of successful innovation stands at less than 10%. “Process” is also far more prevalent in the
definitions context with a relative frequency of about 70%, and only 25% in the examples of success context. On the other hand, “servic”, is the most frequent stem in the latter context (100% relative weight), while its relevant weight in the former stands at a little less than 80%.

Essentially, the definitions context is more theoretical, and in a way it reflects an “ideal” (or a should-be) picture. It demonstrates how interviewees think of what innovation is, what it should cover, towards what goals. Conversely, when asked about examples of successful public sector innovation, interviewees are “forced” to think in more applied terms, referring to something real, with proven positive impact. Such a difference suggests that even though innovation is most easily thought of in terms of products, it is far more recognisable and influential in terms of services provided or improved. Another possible interpretation is that, generally, in the public sector, innovation is far more likely to happen and to be visible at the service level. This does not mean that changes in the ways public sector organisations operate or are being managed cannot lead to innovation. Rather, it reflects a popular expectation that the public sector has to deliver efficiently, given its successes are typically judged by the quality of its services.

The word frequency graph on Figure 21 below provides another view on the differences between the two contexts, using different colours to make the distinction among the most frequently used words in the interviews that define the two discourses. The size of the word stems here reflects the actual frequency counts. Unlike Figure 20, this graph does not ignore words absent from one of the contexts, but is instead separated based on how word stems differ.

In the lower half, the word “product” clearly stands out, as it is the most frequently mentioned word when interviewees defined innovation. Other words are significantly smaller, indicating their absolute frequencies are much lower than that of “product”. In the upper half however most frequent is the stem “citi” (coming from “city” or “cities”, but not citizen), and “servic” and “system” seem to come second. The key reason why “citi” appears larger, despite its lower absolute frequency, is that “servic” is more commonly found in both contexts than “citi”, which is mostly exclusive to the examples of success. Thus, success of public sector innovation is often attributed to initiatives originating, being implemented within or being specific to a strictly local context. Such a conclusion is additionally amplified by the prevalence of stems, such as “local”, “region”, and “administr” (for words such as administrative and administration).

*Figure 21* Comparison word frequency graph of definitions of innovation and stories of successful public sector innovation

<table>
<thead>
<tr>
<th>In examples of success</th>
<th>In definitions</th>
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<tbody>
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<td>citizen</td>
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A more detailed contextual analysis reveals an even broader perspective on success. Although the presence of a discourse on services is apparent in general, it is in fact deeper and more complex. Rarely do interviewees focus on just a single service or the delivery thereof, but rather examples are given about initiatives that create enabling conditions for the expansion of the available services, and for the introduction of entirely new ones, targeted at specific user groups, often not just citizens, but also businesses and professional associations. In many such cases, there is a double effect. On the one hand, the processes underlying the creation of enabling conditions represent innovation in themselves; on the other — through public sector involvement, innovation is stimulated so that it evolves within the private sector, which in turn is given as an example of success. In such a scenario, it is the role of the public sector as an enabler of and partner in innovation development and diffusion that is the key facet of success.

Other “success stories” focus on specific services, which are considered (by the interviewees) innovation, even though no specific reasons or logic are provided. Such examples include the introduction of an electronic ticketing system in the public transportation vehicles or the instalment of smart heat allocation meters for households, both from Sofia, Bulgaria. Examples from Genoa, Italy, include references to electronic purchasing of goods and services offered by the municipality, thus greatly reducing the buying costs, as well as online booking of medical examinations.

The above examples also indicate that public sector innovation is not equally perceived across different contexts, but rather is considered in mostly relative terms. This is very aptly indicated by the range of different practices and examples commonly referred to as success. Such discrepancies are yet another indication that innovation is context-specific, and what might be considered innovation at one place, within one particular context, may be rather irrelevant under different conditions.

Goals of public sector innovation
A few major trends can be observed in regard to the perceived goals of public sector innovation. Increasing the cost efficiency and cost effectiveness of the provided public services is a paramount goal of public sector innovation, as suggested by both the online survey responses and in the stakeholders’ interviews. Increased efficiency is mostly thought of as providing more and better services to citizens at the same cost, while simplifying administrative procedures. This is considered to be one of the paramount goals of the public sector, and more specifically of local and regional authorities providing public services to its citizens, as these institutions are accountable to tax payers for the efficiency and effectiveness of public expenditures. Improving the relationship between the public sector and citizens is a major benefit, which innovation can bring. Strengthening the channels for provision of feedback by the citizens contributes to improving public services so that they become better aligned to public needs and expectations. These both contribute to the achievement of what is the major purpose of innovating in the public sector, namely to increase the quality of and access to the public services provided by the local or regional authorities. This further leads to citizens’ increased quality of life, which is perceived as the ultimate goal of the public sector’s service to citizens. That suggests that innovation in the public sector is a means, which facilitates particular public policies, rather than being a goal in and of itself. It is therefore highly likely that public sector innovation is recognisable within a variety of policy designs and across policy domains. Figure 22 represents a word frequency graph of what interviewed stakeholders said about the goals of public sector innovation.
That makes the link between public sector innovation and the improved quality of life much more obvious. Figure 23 below demonstrates the different paths, in which this process transpires.

**Benefits of innovation to the public sector**

Interviewees were specifically asked about what they consider to be the benefits of innovating to the public sector, thus soliciting their views on how public sector innovation is transforming the public sector itself. This is a significant perspective as it bears close relevance to the design of innovation-supporting policies and regulations, as it reflects what would change positively for society if innovation is implemented. Such a perspective further outlines the range of (public) expectations specific to public sector innovation, and highlights what makes it distinct in comparison to the traditional business-oriented idea of innovation in general.

Figure 24 on page 33 provides the visual representation of what interviewees indicated to be the benefits of public sector innovation. The stems “service” and “improve” are the ones, which occur most frequently in interviewees’ responses, suggesting that the key benefit of public sector innovation is improved services. Cost efficiency and increased effectiveness, which can easily be attributed to service improvement, are a close second.
The above figure suggests there is significant commonality in the way interviewees talk about successful examples of public sector innovation and about the benefits thereof. That proves that success stories demonstrate how the expected benefits of innovation in the public sector are actually realised. More in-depth and specific look however is needed to understand fully the details involved. Many of the interviewees promote a view of innovation as being an additional “mandate” for public sector authorities, with diverse impacts both on the authorities itself and the community at large, resulting in cost reductions, improved internal and external communications, richer opportunities for civic participation and enhanced capacity of the authority overall. There is a shared opinion that “…if a [public sector] organisation works better, it is an advantage for everybody.” Therefore, the benefits of realised public sector innovation cannot be specific solely to the public sector itself, but do, in fact proliferate even beyond the immediate jurisdiction of the institutions. Not least, benefits realised within the institutional structures lead to further benefits throughout the entire system, thus also emphasising the overall impact of successful innovation.

Drivers of innovation in the public sector

Drivers of innovation are all those factors, which are supportive at any stage of innovation development. These are also the factors which enable a nurturing environment for the diffusion of innovation, and which act as catalysts for the turning of an idea into actionable measures.
With respect to their origin, one can differentiate internal factors (whereby the organisation has a high degree of control) and external factors (whereby the organisation has little or no control). Figure 26 on page 34 provides a visual summary of both, as identified by interviewed stakeholders and survey respondents, ordered discerningly based on the assigned ranks by respondents in the online survey. It can be seen from the figure that there is no predominance of either the internal or the external factors over the others. The presence of internal organisational factors driving public sector innovation suggests that different organisations within the same external environment will most likely be unevenly “productive” in terms of their innovation performance. The presence of external (to the organisation) factors of the environment, such as appropriate legislative framework, availability of external sources of funding, and public expectations all suggest there is a need for strategic planning and management in order to harness opportunities and fend off threats of innovating.

**Internal drivers**

As can be seen on Figure 25 on page 33, culture is considered to be the most crucial driver of innovation by the interviewed stakeholders, the majority of whom clearly emphasise the significance of organisational culture for the inception and diffusion of innovation. Organisational culture is a complex term, comprising different aspects of the behaviour of individuals who are part of the particular organisation. Organisational leadership and managerial attitude towards change are considered key drivers of innovation by the majority of the survey’s respondents. Related to this is the management of human resources (such as the selection of employees), which has been continuously stressed as crucial for promoting innovation in public organisations. Behavioural factors, such as engaging “the right” people - entrepreneurial individuals with an open mind for change - have been pointed out as essential in stimulating innovation. The proper training of staff has also been highlighted by the interviewees, and so have the professional skills and knowledge of staff.

The internal communication within an organisation has also been pointed out as a crucial factor. The facilitation of vertical and horizontal communication within the organisation among different units and different levels in the hierarchy, and receptiveness of new ideas shared by staff are considered major drivers for innovating in the public sector.

Besides intra-organisational communication, creating communication channels between the public sector innovators and the different stakeholders from the external environment has been continuously underlined during the interviews as a major factor for promoting innovations. In order to maintain good communication with relevant stakeholders, organisations should establish such channels that stakeholders be able to provide feedback to the relevant processes where innovation is involved. This also implies better information dissemination and increased transparency of the innovation activities for greater societal awareness (and thus civil society engagement, as mentioned by one of the interviewees).
**UNDERSTANDING INNOVATION IN THE PUBLIC SECTOR**

In the very specific cases when there is an underlying new technology employed to deliver a public service, communication efforts should be planned so that the citizens, to whom the technology in question is addressed, are properly informed about how to use it. There is a strong potential for innovation failure, even when the technology in question represents a significant advantage, if those for whom it is intended, cannot use it. To that end, the responsible unit or department in the public sector organisation should also be fully aware of how the new technology deployed operates.

**External drivers**

The **adequate legislative framework** has been given high priority among the key factors driving innovation, as it can be seen on Figure 28 on page 37. In itself, the legislative framework is not a sufficient condition for positive innovation-induced results, but it is nonetheless a requirement in order to ensure a stimulating, supportive environment within which innovation can thrive.

**Public needs and expectations** are recognised to be a driving force for public sector innovation although not to the extent of the previously mentioned factors. In this respect, Ruffner and Sevilla (2004) pointed out to the growing focus on performance of governments, rather than merely conformance with the law as a major factor, having an impact on innovation within public organisations. This is related to the concept of “knowledgeable end-user/citizen” (Vigoda-Gadot et al., 2008), which implies the responsiveness of public agencies to changing citizens’ expectations as a key antecedent to innovation in the public sector. In addition, being democratically elected bodies, local authorities are regularly exposed to citizens’ pressures. That makes it highly likely that local and/or regional authorities would be favourable to introducing changes in public services and their delivery, especially if citizens’ demands correspond to political opportunities (Walker, 2006).

Another factor which has been identified in the literature as a driving force for innovation in the public sector is the **rapid emergence of new technologies**. Authors suggest that technologies have the potential to improve the efficiency of the public sector. In addition, the oversight of local and national level governments’ activities can serve as a driver of change and innovation (Ruffner and Sevilla, 2004). Yet, other factors play an equally important role. In order for the benefits of newly emerged technologies to be incorporated within the public sector and translated into societal benefits, openness within the organisation towards such new technologies is required. Managers need to be aware of new technological solutions available, staff needs to be favourable towards changing the old ways of working and users need to be informed (and sometimes even actively taught) about how to use the new technology, if needed. Cultural and generational nuances have to be taken into account, as well as the affordability of new technologies.

However, very few of the interviewed stakeholders refer to technology in the context of innovation drivers, which suggests of a limited awareness of technologies’ integration in innovation solutions, or of its relatively low priority in the elaboration and design of innovation-based policies.

Respondents ranked highly the **presence of political impetus**. It does not easily fit into the internal-external categorisation since within the public sector political impetus may have different sources, both within and from outside the organisation. Political impetus refers to decisions, public or not, that have direct influence onto the integration of innovation on the decision-making agenda. The relatively high ranking of this driver suggests of the importance that political pressures have within the local and/or regional innovation systems. In a way, this means that the

“**Innovation is all about networking. Bringing different parties together creates new ideas and solutions**”.

*Stakeholder interviews*
(local and regional) public sector innovation should also be considered from the point of view of political dynamics. Such a finding has already been established by Grady and Chi (1994), who assert that “successful implementation of a public sector innovation is fundamentally a political process”, and by Bartos (2003), according to whom public sector innovation necessarily depends on favourable political impetus. The key reason behind such importance is that innovation-related decisions are also decisions about the distribution and re-distribution of organisational resources, capacities, and constraints, and those may frequently be the subject of conflict, particularly when public funds are also involved. It is therefore quite understandable why representatives of local and regional authorities tend, on average, to rank political impetus higher than their counterparts from other organisations (see Figure 28 on page 37).

Figure 27 Influence of and interrelationships among internal and external drivers

Financial resources have also been a focal point in discussing the drivers for innovation during the interviews. As financial resources for innovation can be allocated internally as part of the organisational budget and/or can be provided by an external source, such as government grants, EU funds, private funding or others, the factor can be considered both as an internal and an external driver. The importance of availability of slack resource or “stock of excess resources available to an organization during a given planning cycle” (Voss, Sirdeshmukh and Voss, 2008) has been highlighted in the literature as it allows for greater openness to bearing risks (Damanpour, 1991). Yet, lack of finance has also been mentioned as a motivating factor for innovation by some of the interviewees as it makes improving efficiency necessary and stimulates creativity.

Figure 27 above depicts the described drivers, and illustrates how they interrelate in influencing public sector innovation. On the right side, one can see the internal for an organisation drivers, as listed in the text above. On the left side, external for the organisation drivers are listed. An additional dimension added to the picture are the top-down and bottom-up pressures driving innovation in the public sector. The drivers which have been prioritised by the respondents in the survey as well as the interviewees have been marked with red (a thicker line indicated the drivers which have been mostly emphasised by the respondents).

Local/regional authority vs. others

In general, the majority of the interviewed stakeholders and of the survey respondents agree on the relative importance of the above mentioned factors. Figure 28 on page 37 shows how respondents prioritised a range of identified driving factors, also featuring a comparison between responses of local and regional authorities to those of respondents from other organisations. Each driver was ranked in terms of its importance, with lower ranks indicating higher priority.
Most of the factors seem to share the same priority across both types of organisations. A more distinct difference is observed for the presence of vibrant SMEs in the community and for international networking with authorities. Local and regional authorities rank the former much lower than other organisations, suggesting that for public authorities SMEs do not contribute significantly to public sector innovation. On the other hand, respondents from other organisations seem to be more convinced in the role of SMEs, even with respect to public sector innovation, which suggests of a possible gap in the availability of innovation-related policies, focused specifically on SMEs. As much as the presence of vibrant SMEs in a region can be considered an indicator of entrepreneurial capacity, it is very likely that authorities do not see entrepreneurship as a necessary condition for public sector innovation.

With respect to international networking with authorities, the difference goes in the opposite direction. Public authorities rank this relatively higher than do other organisations. Even though for neither it is among the top-ranked factors, such a distinct difference indicates the importance of cooperation and idea exchange opportunities for the authorities, and suggests of another possible gap that needs to be addressed, and also highlights the opportunities that might be used through the transfer of innovation practices from other (international) contexts.

As with the highly ranked factors, three stand out among the rest – the presence of an adequate legislative framework; an organisational culture, which promotes and rewards new ideas; and organisational leadership committed to innovation and change. The importance of legislation is hardly disputable, and its high ranks serve to remind of the dependence of local and regional authorities on national politics, especially with regard to innovation stimulation and diffusion. It also serves to remind of the critical nature of the relationships local and regional authorities have with national-level policy and legislation-makers, and emphasises their responsibilities in communicating and advocating for their priorities.

**Figure 28** Drivers of innovation in the public sector; local and regional authorities versus others

Organisational culture and leadership committed to innovation, on the other hand, are internal drivers, suggesting that stimulating and promoting of cultural nuances in public sector
organisations will indeed have strong influence on the ability of those organisations to produce, champion and diffuse innovative solutions. In turn, the continuous innovating in an organisation is bound to affect organisational culture as well, thus effectively perpetuating the influence of culture models into both organisational and innovation sustainability.

Interestingly, citizens’ demands are not considered to be a particularly strong driving factor for innovation, while at the same time it is the services to citizens where public sector innovation is mostly concentrated. That has an implication for how most innovation-resulting decision-making happens on the local and regional level – it is most likely not the result of a “democratic” or consultative process, and is probably more focused on entire systems rather than on specific parts thereof. Furthermore, such a finding additionally suggests that innovation is possible even in locations where citizens’ demands are not frequently voiced or taken into direct consideration.

**Barriers to innovation**

Barriers to innovation in the public sector are considered to be the factors, which prevent the development and/or the diffusion of innovation and, which might hinder an organisation’s ability to plan strategically for change and improvement. A graphical summary of interviewed stakeholders’ responses about which the barriers to innovation in the public sector are, are displayed on Figure 29 below.

*Figure 29 Word frequency graph of barriers to public sector innovation*

When talking about barriers to innovation, most frequently stakeholders use the word *lack*. Typically, it is the lack of resources – financial and to a lesser degree, human resources, that seems to hinder public sector innovation the most. Much less often they also refer to fear of or resistance to change, which is a key reason why innovation is lagging in the public sector in general. That, on the other hand, bears very close relevance to one of the identified supporting factors, namely organisational leadership, and additionally underscores the importance of internal communication.

*People* is another frequent mention in the context of barriers. It highlights an important dimension of decision-making, which is often subjective, and also serves to remind that organisations depend on the people at every level of the hierarchy. Therefore, barriers might emerge from the highest leadership levels, or at the middle-management level, or even during implementation. Very likely, the situation will vary from one organisation to another, and even from one unit or department to another within the same organisation.

Other hindrances are associated with *political risks*, as well as with the involved risks of implementing an innovation in general. That bears relevance to both resistance to change, and, in
more general terms, to the reluctance towards the management of uncertainties, which is so typical of most public sector organisations and contexts.

**Figure 30** Text plot of the same words used for drivers for and barriers to public sector innovation

Barriers identified by the responses in the online survey share a lot of commonalities with the opinions expressed by stakeholders during the interviews. The majority of respondents agree that **organisational culture**, which is unsupportive of innovation, is a major hurdle for innovating in the public sector. Another major impediment is the **lack of organisational (development) strategy**, with a clear focus on innovation. That suggests of the perceived importance of assigning strategic priority to innovation planning, as well as of the idea that innovation is generally the result of strategic planning and elaboration of how innovation relates, feeds into, and results from typical organisational activities, or how innovation itself is being pursued as a strategy for organisational change. The **missing or ineffective communication with external stakeholders** in the innovation cycle has also been stressed, pointing at the importance of networking, but also suggesting that public sector innovation is a collaborative process, which is not the product of a single organisation, department, or unit therein, and much less that of a single individual, regardless of how high he or she is positioned within the organisational hierarchy.
The word frequency graph depicted Figure 29 on page 38 reveals that among the most frequently mentioned words in the context of barriers is *people*. Two are the most frequent discourses where, people are mentioned with relation to barriers to innovations:

- **Systemic hurdles.** The strict vertical structure of communication, as well as decision-making impeding internal communication within the organisation, have been repeatedly mentioned as major hurdles to innovating in the public sector. In addition, the lack of internal communication among the different units and departments in the organisation additionally inhibits the capacities of public institutions to create new products and services. As already pointed out, successful innovation planning and implementation oftentimes requires the collaboration of experts in different fields, some of which come from the various structures in the same organisation, and some represent external stakeholders.

- **Behavioural hurdles.** These include, but are not limited to people’s reluctance to try new things, inability to see opportunities, possessing hostile attitudes towards change and innovation. Some of these hurdles may be overcome by amending human resources policies and desired employee profiles, complemented by organisational leadership open to (and accountable for) risk taking and strategic management for innovation.

**Conflicting political views within the governance hierarchy (local vs. regional vs. national),** which may often result in poor governance, has been identified as another major impediment to innovation. That suggests of the importance of coordination among the different levels of government, especially where decentralisation and deconcentration of executive authority to the local and regional level is not sufficiently strong, and because of that dependencies following political lines are strong. A derivative of that is the **Lack of political will for change** (which is the opposite to favourable political impetus, identified as one of the top-five drivers for innovation). This reaffirms the conclusions made with regards to the drivers of innovation, namely that innovation may become a priority or may be denounced due to a politically-bound decision or pressure. That effectively means that regardless of how supportive managers and officers are of innovation, political figures still need their say.

**Local/regional authorities vs. others**

Figure 31 on page 41 suggests that with small exceptions, the positions of the local/regional authorities and those of the other organisations overlap in regard to the impediments for innovation in the public sector. According to the local and regional authorities, it is the restricted budgets that obstruct innovating in the public sector the most. For the other organisations however, the factor that is most frequently rated as serious or most serious is the lack of organisational strategy, which prioritises innovation. Similarly rated is the organisational culture, which is not supportive of innovation. Such discrepancies could be interpreted as indicators of where local and regional authorities lag the most in terms of dealing with innovation hurdles. To address such a challenge successfully, however, authorities are likely to need more time and guaranteed political support over a longer period of time. Devising a good strategy that promotes innovation would then be easier, and will reinforce organisational commitments to innovation-supporting policies and initiatives.

With most of the factors generating similar rating patterns, the ratings on seriousness of the citizens’ demands as a hurdle to innovation demonstrate a different trend. Unlike all other factors, included in

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“People always have a tendency to listen to leaders and authorities, but to succeed as a society you also need to listen to people regardless of their position. The inability to do so is a gigantic hurdle.”

*Stakeholder interviews*
the survey, which typically at least 40% of respondents rate as either serious or most serious, too pressing demands from citizens is rated much lower in terms of how serious its impact is on innovation. This points to a conclusion that citizens’ demands could in fact be regarded as constructive and useful in innovation planning, rather than as an obstacle. Furthermore, it once again highlights the role of citizens as a likely consultation partner in the processes of policy development in general, and of innovation-related policy development, in particular.

**Figure 31** Most serious impediments to innovation in the public sector

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<th>Other</th>
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<td>Innovation is not part of organisational strategy</td>
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INSTITUTIONAL SUPPORT FOR INNOVATION IN THE PUBLIC SECTOR

This section of the report explores particular aspects of institutional arrangements that make innovation more likely (or more potent) to deliver higher public value.

Several variables serve as key indicators in determining institutional practices in supporting innovation generation, diffusion and implementation, and are considered key for understanding what makes it more likely for an organisation to exhibit greater innovation performance.

Six variables are considered in particular. One is the presence of a dedicated unit within the organisation, whose mandates include, or are focused upon, innovation. No specific roles are explored or stipulated for such units, mostly because institutional configurations are different and mandates of such unit are probably not directly comparable. A supportive variable in this context is the size of staff in such units, which serves as a hint to the complexity and scope attributed to such units.

**Figure 32** Presence of an innovation unit in the organisation, by type of organisation

![Figure 32](image)

Second indicator is whether innovation is on the institutional agenda. This is especially true for public sector organisations, whose agendas are often public and debates thereupon are public. This is a very broad indicator, which does not inquire into the specific context, because of which innovation becomes a topic on the agenda. A key assumption however is that organisations where innovation is more often on the agenda, are basically going to demonstrate greater innovation performance, and would have wider supporting mechanisms for innovation.

The third indicator is whether the organisation is working on the adoption or has already adopted a strategic organisational document on innovation. The basic premise behind the use of this as an indicator is that such documents attest for an organisation’s commitment in the long-run, and are usually based on strong analysis substantiating an organisation vision, of which perhaps innovation is part, and strategic goals. It is also a visible recognition of innovation as a strategic priority, one that future policies will be incorporating.

The availability of an annual report, in which innovation is among the topics, is the fourth considered indicator, mostly because it reflects a sound organisational practice that emphasises commitment to transparency and accountability. It also suggests that the organisation has achievements it would like to present, so a stipulation about the possible involvement of
Institutional Support for Innovation in the Public Sector

Innovation could be made. Including innovation in the contents of the annual report must, then, reflect a conscious strategic commitment to communicate openly and to a wider audience of stakeholders about the specific achievements linked or attributed to innovation. Exploring such a trend, though beyond the scope of the report, might provide an intriguing perspective into how organisations think about and act upon innovation, especially within the public sector.

The fifth indicator concerns the extent to which respondents think their organisation uses technologies efficiently. The use of technology is only a proxy indicator for the presence of innovation and reflects upon how the organisation utilises existing technologies in its daily operations, but also suggests of the capacity of the organisation to deploy technologies and technology-based systems in order to improve or expand its services base.

The sixth indicator used refers to the presence of formal recognition of innovation performance, seen in one of three ways – the receipt of an award or certificate signifying the organisation’s innovation performance; nomination from a third party for the receipt of an award or certificate for innovation performance contest; and the self-application into such a contest. These three are then combined into single composite indicator for the purposes of the analysis.

The six indicators are not viewed independently, and are cross-compared with other variables from the survey in order to enhance their understanding. Following are the summaries from the analysis.

**Indicator #1: Presence of an innovation unit within the organisation**

Figure 32 on page 42 shows to what extent different types of organisations have innovation units within their administrations. The majority of organisations do not have a special unit committed to fostering institutional innovation. 25% of the civil society organisations report on having an innovation unit, 50% of the universities as well. Only about 30% of the respondents from local authorities report on the presence of an innovation unit. Nearly 30% are not aware whether such a unit exists, which is the highest percentage of people who respond with “I don’t know” across all types of organisations surveyed.

Figure 33 Outside perception of organisation's innovation performance

One interpretation of this is that innovation-related topics are not sufficiently (and efficiently) communicated within those local authorities; another is that the specific organisational structures
make it difficult to pinpoint such a clearly designated unit, which, on the other hand, means innovation, if at all a priority, is dispersed among multiple organisational and hierarchical levels within the organisation.

Figure 33 on page 43 presents a different perspective into the role of having an innovation unit at the organisation. It provides a graphical representation of how respondents believe their organisation’s innovation capacity is perceived from outside. Not surprisingly, 60% of those who think their organisation is perceived as highly innovative also report about the presence of an innovation-related unit. That suggests that the presence of such a unit is likely to increase the favourable perception of the organisation as innovative.

Figure 34 Distribution of the number of staff employed in innovation units

The structure of those innovation units is another interesting aspect of institutional support to innovation. Of all respondents 35% of those who answered the question confirmed the presence of a designated innovation unit, and only 40% provided a figure for the number of staff employed in those units. The figures reported vary from 2 to 600, with the majority (84% of all) being between 2 and 30. In fact, most organisations have relatively small innovation units, with an average of nearly 10 employees. Such a large range possibly indicates that in some cases, particularly where innovation units are reported to have large numbers of staff members, innovation is only a subtask within a larger organisational unit, along with other more or less relevant tasks. Figure 34 above provides a more detailed look into the distribution of innovation unit staff.

Another interesting insight into the structure of innovation units concerns the hierarchical positions occupied by their staff members (Figure 35 on page 45). In general, innovation units appear more likely to employ middle and especially higher-level managers (accounting for 55% of units’ staff). Officers are only about a third of staff members at innovation units, compared to nearly 60% in the rest of the organisation. What this means is that most likely innovation units frequently deal with more strategic issues that require deeper managerial insight.
Figure 35 Positions of staff in innovation units

Figure 36 below provides further clarity into how decision-making responsibilities with regard to innovation differ in innovation units compared to the rest of the organisation. Members of innovation units are far more likely to make decisions about implementation, or about how innovative ideas are put into practice. They are also more likely to evaluate how those ideas were implemented, as well as to be in charge of planning. Those three key functions account for nearly 70% of innovation units’ responsibilities.

Figure 36 Responsibilities of staff in innovation units with respect to innovation-focused decision-making

Interestingly, however, new policies and or implementation methods are not so frequently developed inside innovation units as they are in the rest of the organisational structures. That points to the conclusion that innovation units are more frequently in the role of implementers.
than they are strategic or policy planners; they also are more likely to do “organisational scanning” in order to collect ideas and determine which ones could be amended or directly implemented. Therefore, innovation units are an integral part of organisational structures, and must not operate in isolation.

**Indicator #2: Innovation being part of the institutional agenda**

The presence of a dedicated innovation unit does not *a priori* make innovation a policy priority despite its positive role to that end. What is also important is to trace whether innovation is being formally made part of the decision-making processes in the organisation. Respondents were asked how often innovation is part of their organisation’s agenda, that is when innovation is subject of a decision being made or is a topic being discussed. The question bears particular relevance to the public sector organisations, which have collective decision-making bodies, such as a City Council or a City Board, whose sessions are public and whose agendas are published and publicly accessible.

**Figure 37** How often is innovation on the organisational agenda?

For the majority of respondents, innovation is on the agenda in at least a third of all decision-making body’s meetings (Figure 37 above). For about 10%, it is among the most frequently debated topics, being present in more than three quarters of the meetings.

**Indicator #3: Adoption of strategic organisational documents on innovation**

The frequent presence of innovation as a topic on the organisational agenda is likely to result in the inclusion of innovation in key strategic documents of the organisation. Therefore, a viable organisational discourse suggests the presence of tangible results reaffirming organisational commitments related to innovation. On the other hand, a richer innovation discourse might also be the result of previously adopted strategic commitments. In both cases, it is likely that innovation will be present in key strategic documents produced by the organisation, especially such that define longer-term perspectives, policy intentions, or management objectives.
In terms of organisational strategies, almost half of the respondents confirm their organisation has adopted strategic documents focused specifically on innovation (Figure 38). Interestingly, local authorities lag behind other organisations in this respect, while at the same time demonstrating the highest share of respondents, who are not aware if their organisation has adopted any strategic documents on innovation. Such an observation further reaffirms the finding that the innovation discourse does not proliferate the entire organisation, but is instead confined within particular departments or groups thereof. Strengthening of internal communications on innovation, or highlighting innovative aspects of “traditional” decision-making and/or organisational or policies, might help mitigate such a shortcoming when present and recognised. Figure 39 demonstrates the discrepancies among the types of organisations participating in the survey about the presence of strategic documents on innovation.

Clearly, local and regional authorities are less likely to have a designated strategic document focusing on innovation, with slightly less than 40% of respondents confirming their organisation has such documents. The same share for all other organisations is significantly larger – 55%. At the same time, respondents from local and regional authorities are far more likely than their counterparts in other organisations to not know at all whether such a document exists (40% vs. 15%). This suggests that complex organisational hierarchies or agency and structural interdependencies might result in the positioning of innovation as a priority within specific
structures, which are not necessarily (and formally) part of the local/regional authority’s administrative configuration.

**Figure 40** Presence of strategic organisational documents on innovation, by position of respondent

It is however interesting to determine how people occupying the different levels of organisational hierarchy are involved with (and aware of) the preparation of strategic documents on innovation. Such a perspective can potentially reveal where in the organisational hierarchy innovation is the most likely to be declared and/or promoted as a priority. Figure 40 presents this distribution of responsibilities. What is immediately obvious is that policy- and political decision-makers, as well as higher management personnel, are the most familiar with their organisation’s strategic documents on innovation, while respondents at the officer-level position, and those who reported “other”, do not know if such documents exist in 40% of the cases – a significantly higher share than the corresponding ones for the rest of the positions.

One possible interpretation of such findings is that higher-level positions are more likely to be involved in the preparation and/or adoption of strategic documents on innovation, or in the actual implementation of adopted strategies, while officers and “others” have a more limited role. Another possible interpretation is that even though officers carry out actions stemming from already adopted strategies, they are not always aware of the existence of such strategies (rather, they follow directions from higher-level managers), possibly due to unequal (and likely inefficient from an organisational point of view) concentration of information across different hierarchical levels. For the entities that such a finding proves to be correct, that most likely means that innovation discourses are mostly limited within upper hierarchical levels.

**Indicator #4: Presence of innovation as a topic in the annual reports of the organisation**

Whereas strategic documents on innovation could be considered proof for the adoption of innovation as a policy priority by the local and regional authorities, annual reports provide a glimpse into how priorities were realised through specific activities, and how policies were implemented. Therefore, respondents in the survey were asked if their organisation published an annual report, and if innovation was a specific topic on the latest one that was published.
Results are shown on Figure 41 above. The large majority of organisations surveyed, or nearly 72%, confirm their organisation has published an annual report, while 17% respond negatively. Another 11% report they do not know. In the annual reports however, innovation is included as a topic in just 40% of the cases, while in another 31% it is not. In 29% of the cases respondents do not know if there is such a topic as innovation.

A closer look at the difference of how local and regional authorities differ from other types of organisations surveyed is provided on Figure 42. While more than 55% of the “other” organisations confirm innovation is a topic on their latest annual report, slightly over 25% of
public authorities confirm the same, while 40% report they are not aware. That might, of course, be due to the fact that those respondents are not familiar with the contents of those annual reports, while in fact innovation is present therein as a topic. More importantly, however, this more likely demonstrates somewhat limited awareness of what the annual report communicates as a strategic and public communications document. Since the corresponding share of respondents from the “Other organisations” category is less than 10%, it could be concluded that it is less likely for public authorities to include innovation-specific topics in their annual reports. Nevertheless, monitoring if such a trend, insofar as it exists, is to be reversed (so that innovation receives greater attention in annual reports, and likely – in the policies, actions and successes reported) could be considered a priority for those who wish to analyse further the proliferation of innovation within strategic organisational discourses.

An additional perspective can be found in the relation between the inclusion of innovation in the agenda of the organisation, and its presence in annual reports. Not surprisingly, and as demonstrated on Figure 43, the more frequently innovation is being included in the organisational decision-making processes, the greater the likelihood it would also be present in the annual report.

**Figure 43** Inclusion of innovation in organisational agenda vs. as topic on annual reports

![Graph showing inclusion of innovation in organisational agenda vs. as topic on annual reports](image)

**Indicator #5: Efficient use of technologies**

The efficient use of technologies is only a proxy indicator for the innovation potential of an organisation, stemming from the hypothesis that technology solutions in the public sector increase the efficiency and quality of the activities thereof (Borins, 2002). Figure 44 on page 51 suggests that local and regional authorities demonstrate slightly greater scepticism in that regard, meaning they might find space for improvement in the way technology is used. Overall, in both types of organisations, relatively more respondents find that within their organisations technologies are used efficiently compared to those who disagree or strongly disagree with such a statement.
Interestingly, the perception of efficient use of technology seems to correlate positively with the opinion of respondents about how the organisation’s innovation performance is perceived from the outside.

As seen on Figure 45 above, about 80% of those who believe their organisation is perceived as highly innovative also agree or strongly agree their organisation uses technologies effectively. To a high degree, this points to the tentative conclusion that those who believe technologies are efficiently utilised in the organisation also believe their organisation must be innovative.
**Indicator #6: External recognition of innovation performance**

The use of this indicator reflects an assumption that public sector innovation is never a solitary phenomenon, that is it affects (and is affected by) stakeholders beyond just the local or regional authority, in which the innovation has originated. External recognition of innovation performance typically serves a double purpose – it helps increase positive attitudes towards public sector institutions willing to engage in innovation; and at the same time it encourages innovation as a positive public management practice (Borins, 2002).

The indicator itself is a more complex one, and is based on three separately measured variables in the survey: the receipt of a formal recognition (award) of innovation performance; application for a formal recognition of innovation performance; and nomination for a formal recognition of innovation performance. These variables provide a better and more objective means of measurement of an organisation’s innovation performance than any of the previously discussed indicators, since they reflect an external perspective and not a perception within the particular organisation. Figure 46 demonstrates the distribution of survey responses on these variables. Only about 30% of the respondents indicated that their organisation has been awarded a formal recognition for innovation performance. Around 20% of all respondents, on the other hand, indicated that their organisation has applied or has been nominated for any innovation performance contest.

**Figure 46 External recognition of innovation performance**

For the purposes of the analysis, a composite indicator was made and used in Figure 48 to Figure 54, combining the three variables and using the following logic to produce the actual plot:

- The composite indicator’s value is set to “Yes”, only if the respondent has responded positively to at least one of the three variables;
- The composite indicator’s value is set to “Don’t know”, only if the respondent answered “Don’t know” to all three variables;
- The composite indicator’s value was set to “No” in all other cases.

Based on this composite indicator, the following figure was made (Figure 47). It shows the level to which local/regional authorities have been formally recognised as innovative versus the rest of the organisations. As can be seen on the figure, the percentage of local/regional authorities,
which have been formally recognised as innovative is slightly less (around 10% less) than the percentage of innovative organisations from the ‘other’ organisations. Such a result is not necessarily indicative of the innovation performance of local and regional authorities, particularly in the sense that it is “inferior” to that of the other organisations. More importantly, it probably points at the fact that it is less common for public authorities to be formally recognised for their innovative performance that it is for other, especially business, organisations. Interestingly, there is great number of people in the local and regional authorities, who “do not know” whether their organisations have ever received a formal recognition for their innovativeness. This once again confirms the conclusions made above on the lacking communication in regard to organisational innovativeness within the local and regional authorities.

Figure 47 External recognition of innovation performance, by type of organisation

External recognition and staff’s own perceptions on organisational innovativeness

Furthermore, insofar as external recognition of innovation performance could be considered an adequate and independent measure, a comparison to the respondents’ own appreciation of how others perceive the innovativeness of their organisation to the actual recognitions of the organisation’s innovation performance might improve the understanding of how well organisational representatives judge if the organisation is truly supportive of innovation (Figure 48 on page 54).

The results clearly demonstrate there is strong relationship between respondent’s own perception of how people outside of the organisation think of the organisation’s innovation performance with the actual tokens of formal innovation performance recognition through awards or successful participation in public contests. More than half of those who think their organisation is considered highly innovative confirm their organisation has received some form of recognition, while only 20% of those who think their organisation is not considered to be innovative report the same. At the same time, while negative responses vary only within the 35%-45% range, the “Don’t know” answers demonstrate an inverse trend. To a considerable degree that points to the conclusion that it is very likely that people in the organisations are properly aware of what those (probably stakeholders to whose opinions they have access anyway) outside of the organisation think of its innovation performance. That should also mean
that there exist sufficient opportunities for dialogue between the organisation and its stakeholders with respect to innovation, with a considerable degree of mutual agreement.

**Figure 48** External recognition of innovation performance vs. outside perception

![Graph showing external recognition vs. outside perception]

**External recognition and staff’s own perceptions on the effective use of technology**

The conclusion made with respect to Indicator #5 above can thus be additionally tested. As long as the efficient use of technology is in fact a true (albeit proxy) measure of innovation performance, it could be anticipated that it will also correlate with the external recognition of this potential. However, there is no strong evidence to such a conclusion.

**Figure 49** Efficient use of technologies in the organisation vs. external recognition of innovation performance

![Graph showing efficient use vs. external recognition]
Figure 49 on page 54 demonstrates mostly a weak connection between both indicators. More than half of respondents tend to think favourably about how their organisation uses technologies regardless of whether it has received formal recognition of its innovation performance. Nonetheless, respondents from organisations, which have received such recognition, tend to ‘agree’ or ‘strongly agree’ to a higher extent with the efficient use of technologies in their organisations than those, whose organisations have not received such external recognition (approximately 68% to 55%, respectively).

**External recognition and internal organisational practices**

Using the same composite indicator of external recognition for innovation, some further comparisons make it possible to determine how internal organisational practices, as discussed above, may be utilised in strengthening the innovation performance of the organisation. Figure 50 below demonstrates the influence of a dedicated innovation unit. Half of the respondents who report there is such a unit at their organisation also report that the organisation has been recognised for its innovation performance. For organisations without such a unit, only 32% are aware of any form of external recognition, with slightly more than 50% denying.

Based on these figures, it is more likely that external recognition be awarded to organisations with dedicated innovation units. That prompts for more in-depth analysis of the roles and responsibilities of such units in order to determine whether the increased likelihood for external recognition is the result of their work, or if it reflects a wider organisational effort concentrating on innovation stimulation through multiple channels and policy goals. Furthermore, it is possible that innovation units are actively involved in extra-organisational networks of innovation stakeholders, thus effectively limiting the scope of public discourses on innovation in the public sector to an essentially limited number of organisations, which share much of the same administrative and managerial practices. It is however beyond the scope of this report to investigate such a hypothesis.

**Figure 50** External recognition of innovation performance vs. innovation unit in organisation

Another comparison tests whether external recognition is related to the availability of any strategic document on innovation (Figure 51 on page 56). For nearly 50% of the organisations, which have adopted such a document, respondents confirm the receipt of external recognition.
In organisations, which have not adopted such documents, less than 30% report the same, and more than 65% deny. That points to the conclusion that having included innovation as a strategic priority in an official document makes it more likely for an organisation to receive external recognition of its innovation performance. It is however impossible to determine whether adopting innovation as a strategic priority, rather than specific actions resulting thereof, is a sufficient reason for recognition.

**Figure 51** External recognition of innovation performance vs. presence of a strategic document on innovation

![Bar chart showing the relationship between the presence of a strategic document on innovation and external recognition.](chart1.png)

**Figure 52** External recognition of innovation performance vs. published annual report

![Bar chart showing the relationship between the publication of an annual report and external recognition.](chart2.png)

When innovation is a topic on the annual report (possibly reflecting the prioritisation of innovation or specific innovation-related activities and accomplishments) external recognition becomes quite likely, as evidenced on Figure 52 above and especially Figure 53 on page 57. Half
of all respondents whose organisations have included innovation as a topic on the annual report confirm the organisation has received formal recognition of its innovation performance, compared to about 25% for those whose annual reports do not deal with innovation.

Figure 53 External recognition of innovation performance vs. innovation as a topic on the annual report

That further draws attention to the importance of “communicating” innovation and innovation-inspired activities across stakeholders and the public at-large, and confirm that annual reports could adequately serve that purpose too.

Figure 54 External recognition of innovation performance vs. presence of innovation on organisational agenda

Most of these indicators reflect “static” variables based on either the presence or the absence of particular organisational traits, and not directly allowing deeper understanding of how exactly
they influence external innovation recognition as measured by the composite indicator. Figure 54, on the other hand, provides a view from a slightly different angle by looking into how often innovation is on the agenda of the organisation. Such a view reflects not just strategic organisational commitments, but also policy-related ones (to a certain degree also political), especially with respect to how local and regional governments operate. Even though presented figures are not definitive, it is apparent that organisations, which frequently include innovation on their agenda, are generally more likely to receive external recognition for their innovation performance. However, the number of responses is too low to permit generalisation across all contexts, and therefore those results are not entirely conclusive.

No other variables of the ones measured in the survey (such as size of the organisation or of the municipality where the organisation is located) were observed to influence any of the three variables in the composite indicator discussed herein.
**PUBLIC SECTOR INNOVATION IN THE CCIC CONTEXT**

**General overview**
There are a number of popular understandings of what public sector innovation entails, towards what goals it should be applied, as well as various arguments why or why not. Following is a brief attempt to dispel some of the still lingering controversy, based on the CCIC project context, and also an effort to reconcile conceptual differences about the role and implementation of public sector innovation.

*Figure 55 Views of innovation in the public sector, by type of organisation*

Figure 55 above represents respondents’ views on some of the most typical understandings on what public sector innovation is and where it has the greatest impact. It also separates responses given by local or regional authorities’ representatives from responses given by members of all other organisations, including civil society, business and academia.

The greatest agreement is demonstrated with the idea of innovation being related to providing services to citizens. More than 90% of respondents from local and regional authorities, and about 80% of respondents in other organisations, agree or strongly agree with that idea. The shares of responses expressing strong agreement are also the highest among the four views, while neutral responses (or those, which typically represent uncertainty of opinion) vary between 10% for local and regional authorities and 20% for the others. That reflects a very strong belief among the representatives of the former in the core mandate of the public sector being the delivery of services.

Second in terms of agreement is the idea that public-private partnerships provide the most favourable opportunities for innovating. A little more than 50% of respondents from local and regional authorities, and about 55% of those from other organisations agree or strongly agree with that view. One possible interpretation is, particularly with respect to respondents who agree or strongly agree on both views, is that increasingly, innovation in the public sector services, or the modes of their delivery, will be subject of shared responsibility among the public sector and the private sector. That prompts for the strategic examination of opportunities for and the possible boundaries of cooperation between public and private sector, in order to analyse the
PUBLIC SECTOR INNOVATION IN THE CCIC CONTEXT

particular areas and services where public-private partnerships are possible, to elaborate the specific mandates, and determine all parameters of such cooperation.

Slightly less agreement is expressed on the view of innovation being the result of cooperation between the public sector and civil society. Forty-five per cent of respondents from local or regional authorities, and 41% of those from other organisations either agree or strongly agree with that statement.

The expressed agreement among respondents on the view that public sector innovation is the result of cooperation with the private sector differs very little from the agreement patterns demonstrated for the previous statements, especially in the case of local and regional authorities. However, there is a more noticeable difference between the responses given by local and regional authorities and those of other organisations. While the former demonstrates the least agreement (about 42% of respondents either agree or strongly agree), the latter’s “agree” and “strongly agree” responses amount to 55%, thus sharing an almost identical agreement pattern with the statement on public-private partnerships (second bar on Figure 55 on page 59). This is a likely indication of a currently not adequately fulfilled expectation on behalf of the “other” organisations for more cooperation in innovation-related initiatives. It further indicates that public-private partnerships appear as the most preferred source of partnership for innovation within local and regional authorities. However, depending on national contexts, that might also mean that SMEs, which are not always a typical participant in large-scale (and therefore highly-visible) partnerships would face difficulties if and when trying to cooperate with the public sector, even despite high promises of resultant innovation.

Areas of application
Four thematic areas are considered within the CCIC project, and are consequently covered in this report. These are public procurement for innovation, civil society’s role for innovation, financial instruments for innovation, and publicly-owned enterprises. These areas reflect key aspects of public sector innovation, and aim to channel the discussion on public sector innovation in a way that will help identify trends, challenges and opportunities. By focusing the discussion on these themes the report aims to help policy planning in respect to public sector innovations on a local, regional and national level.

Respondents were asked to evaluate the thematic areas by assigning a rank (1 meaning the highest priority) on two separate, though interlinked, aspects. One aspect refers to the potential for innovation that respondents see in each of the thematic areas, thus indicating in which areas currently innovation has the greatest impact. The second aspect refers to the perceived need for (more) innovation in each area, suggesting of future innovation diffusion as a possible strategy to address impending challenges. Figure 56 on page 61 presents how respondents ranked both aspects, and shows the respective shares for each of the ranks provided. For visual clarity, ranks 1 and 2, which represent higher priority, are plotted against the “lower” ranks 3 and 4.

Responses do not differ too much across the thematic areas, demonstrating similar patterns in how each area was evaluated. There is no prevailing opinion on the need or the potential for public sector innovation in respect to the areas “Financial instruments and fiscal policy” and “Public procurement”. The responses on “Interaction with the civil society” and “Public enterprise management and performance” illustrate higher degree of prioritisation by the respondents. The opinions reveal the prevailing positive attitude towards the potential and need for innovation in terms of interaction with civil society organisations on the one hand, and the prevailing negative opinion on the potential and need for innovation in terms of public enterprise management and performance.
Public Procurement

In 2000, with the launch of the Lisbon process, the EU put forth the new focus on R&D and innovation for strengthening its economic potential. As a result, governments were encouraged to start searching for ways to promote innovation further, which in turn brought “greater awareness of the role which government could play in the economy by acting as a demanding customer through public procurement” (Rigby et al., 2012). Thus, public procurement as a means to stimulate innovation was effectively endorsed by a number of EU-inspired initiatives, such as “Broad Based Innovation Policy” (European Commission, 2006), “Guide of Dealing with Innovative Solutions in Public Procurement” (European Commission, 2007b), “Lead Market Initiative for Europe” (2007a), and “Pre-commercial procurement: driving innovation to ensure sustainable high quality public services in Europe” (European Commission, 2007c).

Public procurement is an essential activity for all local and regional authorities, and often represents a significant spending item on public budgets. It is estimated that public procurement accounts for about 16% of the total EU GDP (European Commission, 2010). More importantly, it is a powerful tool that authorities could use to implement specific policies or to create and facilitate particular market opportunities. By committing budgets for public procurement of innovation, governments create demand for innovative products and services. Demand side stimuli can be further supported by policies, such as co-funding of procurement, changes of the legal framework, changes to the regulations and standards that contractors should comply with (Rigby et al., 2012).

Beside procurement of innovation (PPI), which implies procuring innovative goods/services that are already (or are close to it) on the market, pre-commercial procurement (PCP) is also an instrument, which has been used by governments to stimulate innovation. In the case of PCP, however, governments procure R&D services rather than already existing and on-the-market goods and services. In other words, “PCP involves the purchase of research by a contracting authority which the contracting authority undertakes with the objective of stimulating innovation that the contracting authority or some other party may benefit from at a later stage when goods or services not currently available are developed from the outcomes of the research.” (Rigby, 2013). Therefore, the contracting authority must not acquire exclusive rights to the development and the contracting authority must not bear all the costs of the procurement (Rigby, 2013). Thus, the risk in PCP is shared by both parties, which, apart from PCP having the potential to increase the innovativeness and quality of public services and to create new markets and demand for certain goods and services, is one of the major benefits of pre-commercial procurement.
On the topic of public procurement, the following trends can be observed on Figure 57 and Figure 58 below. A little less than 50% of the respondents suggest that public procurement is the strongest instrument public authorities have at their disposal to encourage innovation in the private sector. Only slightly smaller however is the share of respondents who disagree with this statement. This response validates the importance of the rest of the instruments for stimulating innovation, as described in the other sections.

**Figure 57** Common statements about public procurement, part I

- Little has changed in the way public tenders are managed over the past two years
- Suppliers are additionally required to comply with a broader set of social goals
- Public-private partnerships are the most successful drivers of innovation in the region
- Tenders for innovative services/products need their own separate procurement rules, in addition to the general ones
- The local/regional authority prefers a long-term partnership with suppliers to public tenders for equivalent services
- The staff responsible for public tenders should also be responsible for innovation strategy
- Public procurement is the strongest instrument public authorities have to encourage innovation in the private sector
- Innovation is among the key criteria used in determining the winning offer in a public tender
- The local/regional authority uses procurement as an (enabling) instrument in stimulating private sector innovation

**Figure 58** Common statements on public procurement, part II

- Before starting the tendering process, requirements of delivery and end-user readiness would have to be assessed
- Procurement and decision makers need to be aware of the implications of each tender
- Technology procurement may involve the creation of a new market niche
- Procurement for innovation needs to be supported by designated additional policies
- Procuring "innovations" has an additional level of risk compared to a "typical" tender
- The use of public procurement can be of significant importance in creating competitive advantage for the private sector
- Procurement is a sustainable way to start public-private partnerships
- Public procurement of innovations has heavier requirements for interaction between procurers and potential suppliers
- Purchasing by public sector actors also aims to influence broader societal goals

The share of respondents according to whom local/regional authorities do not use procurement as an instrument in stimulating private sector innovation is quite significant. Thus, it comes as no surprise that innovation is not among the key criteria for selecting a contractor in public tenders.
according to a large part of the respondents. The data suggest further that local and regional governments manage to stimulate innovations through public-private partnerships although the procedures for public procurement generally do not specifically favour innovative projects.

The increased risk associated with “procuring” innovation compared to that of a “typical tender” may be interpreted as one of the rationales for having separate, and in addition to the general, rules for procurement of innovative services. The need for these additional rules is stressed by more than half of all respondents. Moreover, the preparation stage of public procurement plays a major role for the success of this instrument not only when procuring innovation, but also in general. The statements with which respondents agree the most are related to the preparation procedures in the procurement process. Assessing the requirements of delivery and end-user readiness, as well as assessing and addressing the likely implications of implementation by both the procurers and decision makers, seem to be crucial stages in the procurement process.

Considering the risks involved on the one hand, and on the other - the potential of public procurement as a driving force for innovations in the private sector (see Figure 58 – more than 60% of the respondents agree with the statement), explains the great degree of support from respondents (around 70%) for stimulating public procurement for innovation through designated policies.

On When discussing procurement of social services, an important role is played by social enterprises. There are various definitions of the concept ‘social enterprise’. The definition offered by the Proposal for a Regulation on a European Union Programme for Social Change and Innovation (European Commission, 2011), reads: “[a social enterprise is] an enterprise whose primary objective is to achieve social impact rather than generate profit for owners and stakeholders. It operates in the market through the production of goods and services in an entrepreneurial and innovative way, and uses surpluses mainly to achieve social goals.”

Two major benefits of procuring social services to social enterprises have gained popularity (Curtis, 2005). These are: i) by procuring, the public sector stimulates innovation in addressing social needs which have been previously unmet, by designing and delivering new services; and ii) procuring to social enterprises stimulates innovation in delivering traditional welfare services in new, more efficient and more effective ways. As procurement is not only about externalising services, but also about achieving the objectives of the contracting organisation, by implementing proper regulatory measures, the public sector can promote its objectives, a major one among which is to achieve good quality services at optimal prices, thus enhancing the standards of living within the boundaries of its jurisdiction.

Figure 59 on page 64 one can observe the ranking of the most benefiting sectors from public tenders in the last 2 years. The order of the sectors is based on a mean rank score, where lower scores represent higher priority, putting sectors that benefit the most closer to the top. These are the utilities sectors (water, sewage, electricity), construction, public transport, and waste management. Healthcare is also one of the sectors which benefit a lot from public tenders. The rest of the social services, such as education, public housing, and other social services, as can be seen on the figure, are considered to benefit significantly less from public procurement offers.

This comes as no surprise, considering that procurement of social services is a sensitive issue raising debate on the role of the state to ensure the quality of and access to the provided services, “One of our goals is to foster more public-private partnerships to create innovation beneficial for both the public and the private sector. Innovation procurement is one of the tools we have been working hard with recently.”

Stakeholder interview
ensure social equity, and maintain proper regulative function. Despite arguments that the state should keep its (monopolistic) role in providing social services, some scholars insist that there is no scientific evidence so far as to the degradation of social services after being procured to the private sector or CSOs (Manunza, 2011).

When discussing **procurement of social services, an important role is played by social enterprises**. There are various definitions of the concept ‘social enterprise’. The definition offered by the Proposal for a Regulation on a European Union Programme for Social Change and Innovation (European Commission, 2011), reads: “[a social enterprise is] an enterprise whose primary objective is to achieve social impact rather than generate profit for owners and stakeholders. It operates in the market through the production of goods and services in an entrepreneurial and innovative way, and uses surpluses mainly to achieve social goals.” Two major benefits of procuring social services to social enterprises have gained popularity (Curtis, 2005). These are: i) by procuring, the public sector stimulates innovation in addressing social needs which have been previously unmet, by designing and delivering new services; and ii) procuring to social enterprises stimulates innovation in delivering traditional welfare services in new, more efficient and more effective ways. As procurement is not only about externalising services, but also about achieving the objectives of the contracting organisation, by implementing proper regulative measures, the public sector can promote its objectives, a major one among which is to achieve good quality services at optimal prices, thus enhancing the standards of living within the boundaries of its jurisdiction.

**Figure 59** Most benefiting economic sectors from public tenders over the past 2 years, mean rank scores

<table>
<thead>
<tr>
<th>Economic Sector</th>
<th>Mean Rank Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilities sectors (water, sewage, electricity)</td>
<td>1.47</td>
</tr>
<tr>
<td>Construction</td>
<td>1.71</td>
</tr>
<tr>
<td>Public transport (including service and maintenance of vehicles)</td>
<td>2.21</td>
</tr>
<tr>
<td>Healthcare</td>
<td>2.64</td>
</tr>
<tr>
<td>Waste management (including collection, transportation and disposal)</td>
<td>3.00</td>
</tr>
<tr>
<td>Property Management</td>
<td>1.47</td>
</tr>
<tr>
<td>Banking</td>
<td>1.71</td>
</tr>
<tr>
<td>Management Consulting</td>
<td>2.21</td>
</tr>
<tr>
<td>Public housing</td>
<td>2.64</td>
</tr>
<tr>
<td>Education</td>
<td>3.00</td>
</tr>
<tr>
<td>Street cleaning and other environmental services (excluding waste management)</td>
<td>1.47</td>
</tr>
<tr>
<td>Social services</td>
<td>1.71</td>
</tr>
<tr>
<td>Sports, leisure and cultural services</td>
<td>2.21</td>
</tr>
<tr>
<td>Public safety</td>
<td>2.64</td>
</tr>
<tr>
<td>Animal rescue and welfare</td>
<td>3.00</td>
</tr>
</tbody>
</table>

**Civil Society**

Figure 56 on page 61 demonstrates the respondents’ conviction that the area with the greatest need and potential for innovation is the interaction of the local and regional authorities with civil society. In this respect, **social innovation – as an innovation type, which often involves participation from the public sector and the civil society**— is a particularly useful concept to look at. It is a concept, which is broader than that of the social enterprise, which may and frequently are the result of social innovation.
PUBLIC SECTOR INNOVATION IN THE CCIC CONTEXT

From a theoretical point of view, social innovation can be briefly and broadly defined as being “innovation that is social in both its ends and its means” (Bureau of European Policy Advisors, 2011). Social innovation, in contrast to technological innovation, can evolve in the public, the non-governmental, and/or the private sector (Young Foundation, 2010). In aiming to solve a certain social issue, new networks and collaborations are created, which can include to a different extent, any of the three prime sectors. This is the primary difference of social innovation with any other type of innovation and is what makes it a distinguishable innovation type. Similarly to public sector innovation, social innovation is a new idea that “meets social needs”. There are myriads of examples of already well-functioning and effective innovative ideas implemented in Europe and contributing to the solution of persevering social issues, such as youth unemployment, women’s education, and elderly care. It is important to look at social innovation as in the interaction of the public sector with the civil society new way of collaboration can be borne (it could also include the private sector), which might, thus, need different policies and institutional arrangements that are flexible enough to accommodate the different set of collaborating organisations. As argued by Capodieci (2010), “The stakeholders involved are perceived as subjects capable of providing resources, skills and knowledge. Whether these resources and potentials are actually unlocked and transformed into initiatives capable of producing sustainable social innovation ultimately depends on the capacity of public and private actors to change not only their role, but also the implementation tools of welfare policies.” Currently, as suggested by Figure 60 below, cooperation between local/regional public authorities and civil society in producing innovation occurs rarely.

Figure 60 Civil society and public sector innovation

By scaling of social innovation and social enterprises through regulation and procurement, “governments can help accelerate the widespread adoption of social innovations, stimulate the creation of new markets, and spread and mainstream emerging innovations.” (The Young Foundation, 2010). Moreover, as pointed out by Noya (2010), supporting market development for social enterprise through public procurement “can bring many community benefits”. Public sector officials, however, often lack proper skills and knowledge on how to design procurement calls for contracting to social enterprises. Social enterprises, on the other hand, sometimes lack skills in tracking procurement opportunities and writing offers. Trainings for both groups should
be encouraged and provided so that both can benefit from their mutual cooperation in the provision of public services. Some of the issues with the existing commissioning and procurement structures, as listed in report of The Young Foundation, are:

- Short-term contracts, which makes it hard for social enterprises and civil society organisations to manage their staff and access capital;
- Setting unrealistic prices, which do not allow the provider to recover cost fully;
- The costs for monitoring and evaluation diverts resources from service delivery;
- Favouring larger, already established organisations leads to the disregard of new, innovative enterprises.

The statement which was mostly supported by the respondents in regard to civil society is the one that public sector innovation brings benefits to the whole society and not only to businesses. The role of the civil society for promoting public sector innovation, however, provoked quite contradictory opinions. Respondents largely agree with the ever increasing role of social enterprises for innovation in the public sector although quite a significant part of the respondents express the opposite opinion. One interpretation of this discrepancy is the growing recognition of the strong potential of social enterprises in stimulating innovation in the public sector, on the one hand, yet coupled with the lack of cooperation between local/regional authorities and social enterprises to allow the utilisation of this potential, on the other. This interpretation can be further supported by the responses in the survey suggesting that there is lack of cooperation between the civil society organisations and the local/regional public authorities. Compared to the rest, the two statements that provoked most hesitation (“Neither agree, nor disagree”) by the respondents are “Local/regional authorities always welcome contribution from the civil society” and “The local/regional public authority cooperates with civil society to produce innovation together”. In absolute terms, these are the two statements with the lowest total agreement among all statements assessed.

Figure 61 Most common activities where CSOs are involved

![Bar chart showing the most common activities where CSOs are involved](chart)

In addition, lack of consent on the extent to which local/regional authorities are open to contributions from the civil society demonstrates largely critical view on the local authorities’ willingness and capacity for utilising the benefits that collaboration with civil society can bring to the innovation processes and delivery of public services. Furthermore, the highly positive
responses to the statement “Civil society organisation need to bear at least part of the risk when an innovation is introduced” once again demonstrate the permeating “discomfort” among authorities with risk taking, and further advance the expectation of CSOs to be the ones bearing greater shares of responsibility in the process of innovation implementation. In a way, that suggests of shifting accountability burdens away from the authorities, and into civil society, which, at least over the longer term, can grow into sustainable imbalance.

Nonetheless, cooperation for innovation between authorities and civil society is not necessarily an exception. Figure 61 on page 66 reveals the activities where CSOs cooperate the most with local and regional authorities. CSOs are mostly involved in public debates about the delivery of public services as well as providing expertise in policy, organisational or strategic planning. It is evident from the figure that in only around 23% of the cases public authorities outsource services to CSOs. Thus, when it comes to direct involvement in decision-making or to actual service delivery, “monopoly” still lies with the authorities in most of the cases. Therefore, innovation in terms of cooperation opportunities between CSOs and authorities is more likely to be disruptive in those areas (where it is also more likely to occur in the future), whereas in debates and expertise consultations innovation would be implemented through slight improvements, through content, and in the ways the resultant knowledge is integrated back into decision-making.

Financial Instruments

This section of the report discusses different financial instruments which are at the disposal of local/regional authorities and other innovation agents to: i) stimulate innovation within their own structures; and ii) in the case of local and regional governments – to stimulate innovation within their own jurisdictions, including business-induced and social innovation.

Figure 62 Financial instruments for innovation, local and regional authorities versus others

Most of the interviewees considered the lack of funding for innovation to be among the primary impediments to better innovation performance in the public sector. This leads to the question of how innovation is financed, especially when public funds are involved, whether there should be

12 The sum of responses exceeds 100% because respondents were allowed to select more than one answer.
specific budget dedicated to innovation, and what kinds of public spending would be considered for innovation financing (Figure 62 on page 67).

The financial instruments that local and regional authorities use to support innovation within their organisation can be divided into two main groups according to the source of origin: own resources and external resources. Own resources include own budget allocations and using own revenue streams. External sources of funding include private sources, local and regional public sources (outside of the authority), national public sources (government), EU funds or other international organisations providing funding for innovation.

Figure 63 below shows a comparison of how those sources are utilised in the funding of innovation-related activities by local/regional authorities and by other organisations.\(^{13}\)

- **Internal sources of funding.** The most significant difference is the share of own budget allocations used by the local/regional authorities and the ‘other’ organisations. In the case of local and regional authorities almost 80% of all respondents reported using own budget allocations for financing innovation (meaning there is a budgeting decision made by the authority itself). In the case of the other organisations – this percentage is significantly smaller – only around 40% of all organisations allocate from their own budget for innovations. In contrast, when it comes to own revenue streams (from profit-generating activities, i.e. through publicly-owned enterprises that generate both revenue and, at least in the general case, pay corporate tax) – the share of local/regional authorities using these to fund innovations is relatively smaller – around 30% - compared to the ‘other’ organisations where 50% of the organisations use own revenue streams for financing innovation. The revenue streams of local governments usually come from collected taxes and fees, intergovernmental transfers, and privatisation. The risks associated with innovation financing might preclude local governments from using their source of revenue for financing innovation because of the accountability framework and the political environment within which local governments operate.

\(^{13}\) The sum of responses exceeds than 100% as respondents were allowed to select more than one answer.
- **External sources of funding.** The largest difference in the responses given by local/regional authorities and the ‘other’ organisations on the external sources of funding is the great **predominance of EU funds as a source of financing innovations** for the local and regional authorities. In contrast, although EU funds are still the mostly used instrument to finance innovations in the other organisations, the use of other kinds of funds is also significant. This is especially the case with collaborating with the private sector and financing innovations with shared (or exclusively) private resources.

The predominance of EU funds as a major source of financing innovation has been confirmed by the conducted interviews. There is, nevertheless, some disagreement regarding the availability of other kinds of external funds. According to some of the interviewees, European funds are the only available external source for financing innovations. Others say that there are many sources of funding, but local authorities do not have the required administrative capacity to manage them.

**Figure 64** Need for separate innovation budget, local and regional authorities versus other organisations

One way to address insufficient innovativeness within an organisation, according to respondents, is local/regional authorities to have a **separate item for innovation in their budgets.** Figure 64 above illustrates the differences in the perspectives of local/regional authorities and other organisations on this question. Breaking the data into sections of agreement and disagreement, it becomes evident that the positions of the two groups on this question are rather similar. Around 65% of the respondents from either group agreed with the statement, while another 20% disagreed. Yet, the other organisations express clearer support for the statement with more respondents strongly agreeing with it and less respondents strongly disagreeing, compared to the local and regional authorities. This reaffirms the conclusions made within the section on institutional support to innovation. A special budget item for innovation implies a clear organisational prioritisation of innovation. Along with the factors described previously, such as the presence of an innovation unit, the presence of innovation as topic on the institutional agenda (meetings, annual reports, etc.) and adoption of strategic documents on innovation, the designation of a separate innovation budget would be a proof that innovation is indeed a strong priority. Moreover, considering the degree of risk which is inevitably related to
innovation, a separate budget line committed to innovation can be an effective tool to stimulate innovation within an organisation as investing in innovation might otherwise be easily rejected on the basis of too much risk involved.

No agreement was reached on the difficulty to assess the effect of innovation to the local/regional authorities’ budgets. Responses are almost evenly distributed on the scale from “strongly agree” to “strongly disagree”.

In regard to stimulating innovation in the external environment, the following trends have come up from the analysis. The relation between innovation and regional development has been long recognised by researchers and policy makers. As put in the Regional Innovation Scoreboard 2012 (Hollanders, 2012), “regions are increasingly becoming important engines of economic development.” On the European level, the instruments aiming to support national and regional innovation include the European Framework Programmes for Research and Innovation as well as the Structural Funds. The respondents in the survey largely agreed that utilisation of EU-level innovative instruments should be a major priority for the local and regional authorities (Figure 62 on page 67). Both groups expressed their disagreement with the statement that introducing financial instruments for innovation should not require allocation of public funds. These two statements demonstrate that the respondents are largely in favour of public support to innovation.

In regard to the target group of the financial support instruments for innovation provided by the public sector, opinions of local/regional authorities and of other organisations differ. On the statement that public sector innovation should primarily be targeted at businesses (Figure 62 on page 67) 55% of respondents from other organisations either agree or strongly agree, while among local and regional authorities only 40% do so. Moreover, strong agreement is expressed much more sizeably among the other organisations, suggesting of the existing expectation outside of the authorities that the latter should support more substantially innovation in the private sector. However, even though disagreement levels match between the two types of respondents, among the authorities there is much higher level of uncertainty, confirming that local and regional authorities still tend to think of innovation as not solely focused on the business sector, or at least spanning such activities that have a much wider beneficiary base.

Figure 65 on page 71 looks at the utilisation of a range of financial instruments for stirring innovation both within the public sector and within other organisations. Government grants appear to be the most popular instrument, and are also equally employed by authorities and other organisations alike. The only other instrument where differences are negligible are the government loan guarantees, though in a much smaller proportion, suggesting that national governments play an important part in financing local and regional initiatives resulting in innovation. Public contracting and procurement comes second, with nearly equal shares between both types of organisations. Funding programmes for small businesses are popular among 40% of the other organisations, and within only 20% of local and regional authorities. That points to the conclusion that SME-targeted programming (and funding) could be a strong instrument for the public sector to stimulate private-sector innovation.
Generally, innovation funding in the private sector depends on various factors. One of them is the degree of risk innovation involves and the cost of the particular innovation project (Spielkamp and Rammer, 2009). Especially when firms are of smaller size, they might find it hard to finance innovation if the fixed costs and the minimum investments of the projects are higher. Because of the often limited resources of SMEs, they might not be able to find an external source of financing for their innovative projects. In this case, firms have to rely on internal funding for developing and implementing innovation (cash flow financing). External sources of funding include private equity, venture capital and stock markets. These, however, as pointed out by Spielkamp and Rammer (2009), might not be attractive to the SMEs due to their specific terms and conditions. Public grants are also an option for funding innovation. These can be public funds for R&D and innovation, given as grants, loans, subsidies, or credit guarantees.

Figure 66 on page 72 looks specifically into the differences in the responses of local/regional authority representatives and the rest of the organisations on the question regarding the success of financing innovation by the local authority in the last two years. Even though local and regional authorities are highly critical of how successful their efforts in securing finance to innovation have been, their counterparts from the other organisations demonstrate even greater criticism, with more than 50% expressing disagreement. Furthermore, the level of uncertainty among respondents from both categories, as evidenced by the share of those who responded with “Don’t know”, is twice as high among representatives of local and regional authorities as among the rest of the organisations. Almost equal shares of respondents in both groups (around 20%) hesitated to express either agreement or disagreement, which further strengthens the argument that it is hard to judge success in/about innovation unequivocally, regardless of the point of view (i.e. – insider vs. outsider).

14 The sum of responses exceeds 100% as respondents were allowed to select as many of the instrument as they were aware of.
Publicly-owned Enterprises

Definitions and regulatory frameworks among the countries of CCIC project partners probably differ to such an extent that it becomes rather difficult or even impossible to elaborate on an unambiguous common understanding of what constitutes a publicly-owned enterprise (POE). Hence, different national (and in some cases – even regional) contexts might stipulate differing priorities as to the economic and social purposes of POEs. In the most typical case, a POE is a business-like structure, generating economic profit through its activity, but is owned – wholly or partially – by a public authority rather than by private individuals. Therefore, the profit generated is typically reused by the owning authority and may contribute to its operating budget.

Historically, public enterprises have gone through three main waves of reforms. During the first one in the 1970s and 1980s, efforts were made to improve the performance and efficiency of the public enterprises without changes in the public ownership. Later on, in the 1980s and 1990s, inspired by the principles of the New Public Management (NPM) doctrine, governments started privatising public enterprises, hoping for “better service at a lower price”, as promised by NPM. This experiment, however, although more successful in terms of improving the efficiency of the enterprises than the first efforts starting in the 1970s had its drawbacks, such as decreased transparency in the provision of services and pricing, and decreased accountability for failure to meet citizens’ expectations. Hence, the state returned to play a role in the provision of these services, with whole or partial participation and ownership in these companies (Borghi, 2009).

The main arguments in favour of the public sector keeping partly or wholly the ownership of some companies, providing municipal services, can be summarised as follows. Market failures, such as natural monopoly, asymmetric information and negative externalities, such as environmental pollution, are among the main reasons for the public sector to run public enterprises (Massarutto, 2001). In certain sectors, such as mobile services, water services and electricity, the lack of regulation typically leads to the development of natural monopolies because of the high price new firms must pay to enter the market. Thus, the most efficient way of production of these ‘services’ is when produced in large quantities (‘economies of scale’). In order to be able to regulate such monopolies, the public sector, through its institutions, often owns sizeable parts or is the sole owner of such companies. State involvement...
is also supposed to ensure socially acceptable prices of basic goods and services (Massarutto, 2001). This public sector control over certain industries through public ownership of certain companies, however, has also drawbacks, which are mostly related to the efficiency of the sector. As pointed out by Soubottina & Sheram (2000), such enterprises are usually less efficient than private companies. The reason for this is the lack of incentives for POE’s managers to pursue profitability. As the state is an owner or a major stakeholder in such enterprises, access to government subsidies and government-guaranteed loans “removes the threat of bankruptcy as a check on inefficiency” (Soubottina & Sheram, 2000). Public authorities can often keep the prices lower than the optimum price for social reasons, which may additionally distort the efficiency of the POE. That is strongly echoed by the survey responses about POEs’ being the only viable options for the public sector to encourage innovation performance, disagreed with by two thirds of all respondents, with another 20% expressing uncertainty, as evidenced on Figure 67 below.

Asymmetry of information is another market failure that can be solved with direct involvement of the public sector in companies providing major services. Owning a major part in a certain company allows the public authorities to reduce the asymmetry of information between the regulator and the regulated firm and, as put by Marra (2006), introduce ‘internal regulations’, ensuring that they will be observed.

Figure 67 Publicly-owned enterprises and innovation

One example of the negative effect of the asymmetry of information is provided by Sterlacchini (2010), who studied the effect of liberalisation and privatisation in the energy sector on the R&D expenditures made by the companies in this sector. He suggests that privatisation in such major sectors can lead to the decline in R&D spending. The author reports on a major reduction of investments in research and development in the energy sector, which, according to him, is due to the competition in the sector, which made companies focus more on price reduction and research which can bring short-term profits than on long-run projects where profits cannot be guaranteed. He further suggests that firms with public ownership, in contrast, did not reduce R&D investments. Thus, the author recommends to public authorities considering extension of public ownership in the sector or the introduction of other sorts of
public-private partnerships, which will ensure more direct control of the public authorities on the R&D investments made in the sector.

Figure 67 on page 73 shows what survey respondents think on several statements on the role and contributions of POEs to innovation in the public sector. According to a large majority of the respondents in the survey, revenues from POEs can be used to improve the quality and diversity of public services. Another statement upon which respondents reacted rather positively is the one suggesting that POEs have a higher level of freedom than their public sector principals in planning and implementing innovation. In terms of the role of POEs as a kind of intermediary between the public and the private sector, the survey examines the way the public sector can have an effect on the private sector through POEs. Overall, more respondents tend to agree or to strongly agree than express any disagreement with the statement “POEs are an instrument for the public authorities to apply ‘regulative’ measures to the market”. In addition, the number of respondents that marked “Neither agree, nor disagree” to this statement is the highest among all, indicating the relative scepticism of respondents towards the theory, as described above, on the means of the public authorities to implement ‘internal regulations’ through participation in POEs.

The majority of the respondents disagreed with the statement that POEs represent the only viable option for the public sector to encourage innovation performance validating the importance of the other approaches to stimulating innovation, including the ones described in the current report. Furthermore, most of the respondents disagreed that POEs are the same in terms of innovation performance as their fully private counterparts, while at the same time also disagree that POEs should primarily be responsible for public services. A majority further disagrees that POE-inspired innovation has a higher public value than that by the rest of the private sector. Such responses point to the conclusion that POEs, most likely, do not represent a peculiar opportunity for public sector innovation, and that innovation generated by them would not represent a special case.

Figure 68 Most common economic sectors in which POEs operate

Considering the distribution of sectors according to POE operation field, the utilities sectors (water, sewage, electricity) seem to be the most common one (Figure 68 above). Following are public transport and waste management. When data are broken down according to
local/regional authority’s size (Figure 69 below), it becomes clear that in smaller local and regional authorities (up to 500 000 inhabitants), utilities indeed is the sector where most POEs are operating, which is understandable considering the limited need of smaller local authorities of public transport services. Correspondingly, in larger local authorities public transport has a leading position.

Figure 69 Sectors of POE operations, by size of municipality
INNOVATION POLICIES ON LOCAL AND REGIONAL LEVEL

Innovation policies are those public policies, which are aimed at the support of innovation generation, diffusion and/or transfer. As such, they may encompass a range of policy domains, and serve to fulfill a diverse range of policy goals.

Key aspects of innovation policies
The respondents from the interviews have mentioned a few sectors as the ones that have mostly benefitted from public sector innovation. These are: the health care system; education; energy; environment protection, recycling, renewable energy sources; ICT and digital infrastructure; transport. In addition, the following were mentioned as well: elderly care; tourism; creative industries; automotive sector; construction and infrastructure; housing markets; agriculture, wood industry; biotechnology; food packaging; and public safety.

In order to understand better how local and regional innovation policies are designed, it is important to consider who their primary beneficiaries are. Figure 70 presents the word frequency graph based on interviewee's responses to the question “Who are the primary beneficiaries of innovation policies in your municipality/region?” Most frequently, responses are focused on citizens and businesses (as two large aggregate categories), including both SMEs and larger enterprises, with many of the respondents referring to publicly-owned enterprises as well. With respect to policy planning, that most likely confirms the existence of special policies focused on businesses, since citizens are a target of local policies by default. It further confirms that public sector innovation is often not an end result but rather becomes possible due to specific enabling policies. Such duality requires targeted attention to possible cooperation mechanisms between the public and the private sector, and a careful analysis of possible impacts on citizens. Therefore, innovation policies could be viewed as complex public policies, which often transform the more “traditional” service model into a new form of partnership that is capable of providing more efficient and diverse services, and contribute to the creation of public value in more ways than just enhancing the available services base. In a longer-term perspective, a key priority in any innovation policy would be the delivery of services to private businesses as well, particularly in the form of enabling specific opportunities rather than delivering direct benefits.

Figure 70 Word frequency graph: primary beneficiaries of innovation policies

Local economics and innovation
The significance of innovation (in the private sector) for economic growth and encouragement of competitiveness has long been established and is not a source of serious disagreement. What is however also important to understand is how public sector innovation contributes to the dynamics of the local and regional economies, and especially how policies can be designed so that positive effects are maximised. A possible way to analyse such a relationship is to determine
the industries, the economic sectors and the types of services that could benefit the most from innovation, which also indicates the sectors in which innovation can contribute to the greatest change.

**Figure 71** Word frequency graphs: services and sectors benefiting from innovation the most

Interviewees were asked two questions with respect to how innovations affect the sectors of the local economy and the public services offered. Word frequency graphs are shown on Figure 71 above. In addition to outlining the sectors and specific services benefiting from innovation, it also demonstrates how similarly interviewees think about both, oftentimes mixing both and interpreting sectors and services synonymously. One possible interpretation is that the public services offered frequently are the source of most economic activity in the respective sector. That is perhaps the most evident for public transport, which could be considered a service, but at the same time represents a sizable chunk of economic activity that also generates income, including for private businesses involved.

**Figure 72** Word frequency graph: comparison of responses on sectors versus services, which benefit the most from innovation
Both graphs show a lot of similarity in what the services and sectors benefiting the most from innovation are. Besides transport, healthcare and education are the other most talked about during the interviews, thus confirming that innovation policies (or strategies) side with typical and most critical public policies. The challenges, and therefore mandates, specifically for innovation policies remain related mainly to improving those services (better quality, greater efficiency, wider outreach), thus also contributing to the evolution in respective economic sectors. The word frequency graph on Figure 72 on page 77 illustrates the different emphases interviewees put with regards to the sectors and the services benefiting from innovation. It is far more common that they talk about healthcare when thinking of sectors, while transport is more common in the services context. The environment also appears in the sectors, suggesting that more and more innovation initiatives are addressed at environmental challenges, though not necessarily constituting a separate sector in the local economy. Environmentally-friendly transport, improvements in the air quality and noise levels, specific (renewable) energy initiatives, as well as addressing specific environmental challenges in economic development plans and activities (i.e. policies for environmental protection) are but some of how interviewees talk about the environment as benefiting from innovation and innovation policies.

Frequently, when interviewees talk about benefiting sectors they also refer to a particular opportunity enabled by innovation. This is very aptly demonstrated in the responses related to the healthcare sector, in which innovation is frequently seen in terms of new technology, which in turn enables better care services (i.e. electronic monitoring bracelet for seniors). In essence, the combination of already existing technology with traditionally offered social and healthcare services results in applied innovation, which redefines an entire sector as in the case with healthcare in particular. Hence, one of the challenges for innovation policy on the local level is to identify the possible synergies resulting from the integration of specific (available) technology with current modes of operation in service delivery, thus also increasing the added value of those services, and changing the rules and economic opportunities within whole sectors of the local (and possibly national) economy. That is also a particular mechanism underlying the inception, diffusion and impact of public sector innovation in general (see, for example, the conceptual model of public sector innovation depicted on Figure 17 on page 27).

A major part of the discourse in the responses on services focuses on such improvement to currently available services that would make them more accessible to the customers, including both citizens and businesses. In essence, this is not so much innovation in the services as such, but rather in the means (and channels) used to deliver them.

Transferability of innovation practices
Interviewees agree that innovation can be recognised as such only after it has been put in use. In the context of public sector innovation that often means that a practice or model proven to work elsewhere is brought into and adapted to the local specificity in pursuit of greater efficiency or other improvement. Hence, transferability of good practices often refers to the introduction of innovation (such as a policy, programme or service), its continuous monitoring, evaluation of results, and a follow-up decision on its benefits and successive use (Ashley, 2009).

With respect to transferability, questionnaire respondents were asked to rate the importance of several factors relevant to the transfer of good practices or models from one place of implementation to another, where it would represent an innovation. Figure 73 on page 79 details the distribution of responses:

“Innovation makes it easier to fulfil public sector missions in new and better ways.”

Stakeholder interview
Most of the items tend to be rated as either important or highly important, with little differences. Respondents are most uncertain about whether transferred practices should address the same issues at the receiving location as they did at the original one. Only less than 40% have marked it as important or highly important, pointing at an expectation that even though two regions might share the same issues, that would not necessarily mean that analogous actions would contribute to the same kind of solution. Instead, judging by the overwhelming importance ascribed to continuity as a property of transferred practices, respondents tend to think of transfers in terms of gradual improvements over already existing solutions. Also in support of this conclusion is the fact that very high importance is attributed to the presence of support policies. Therefore, it does not seem very likely that public sector innovation would be the result of transferring successful models and practices and implementing them as completely new actions at a new location. On the other hand, that might also mean that transfers would only happen at a later stage, when appropriate measures and policies are already in place, but they need to be fine-tuned by amending them basing on the experience of authorities and administrations elsewhere.

Another finding against the transfer or practices that would represent a radical measure if implemented is the level of importance attributed to the ease of implementation at the receiving location. Without already existing policy “infrastructure” easy implementation would not be attainable. Therefore, transfers would be possible only when local context specificities are sufficiently adequate and receptive of small change.

Such a picture makes good practice transfer a rather challenging endeavour, unlikely to be considered an innovation. On the other hand, it points to a relative resistance to change that might be due to the desire to implement sustainable policies, or, conversely – to a very conservative administrative “setup”, at a relative high unease with change beyond improvement. That would also mean that over time, the public sector would likely respond more slowly to changes in the environment, and will adapt to those changes with greater effort and higher resistance.

Figure 74 on page 80 provides a further glimpse into the similarity in responses about the importance of transferability factors. Overall three “similarity groups” can be distinguished, within which similarity among respondents’ rankings is higher than with factors placed in other groups. Similarity is highest between factors “branched out” together.
The importance of this similarity measure is to facilitate the inherent complexity of relationships among different factors when considering possible transfers. Though it does not bear any direct relevance to those wishing to implement a transfer, it is important from an analytical point of view to the extent that the proper understanding of those relationships will inform decision-makers about which factors to consider, as well as about which factors possibly affect (or are affected by) other factors.

The three groups (also known as clusters) on the figure reflect the grouping of respondents’ rankings, which is also a reflection of how respondents tend to view each of the factors. Since each of those factors is independently “rated” in terms of its importance, it can be concluded that grouping based on the similarity of responses also delineates among trends in attitudes or approaches to the transfers of good practices.

The first group, positioned at the left of the figure, contains just two factors – “issues addressed should be the same” and “new practice will not cost much”. The high degree of similarity indicates that respondents tend to rate one and the other in the same way, while rating all of the others differently. Those who consider the first important, also consider the other one important, and vice versa. This effectively means that those whose motivation for a transfer is to provide a new solution to an existing issue expect (and probably would only accept) the new solution, if it did not cost more than what is currently in place, or if it would at least not cost too much additional resources.

The cluster in the middle of the figure is “richer” and groups together another four of the factors, again based on the similarity in respondents’ ratings. The two factors most similarly rated are “proven impact and success at the original location” and “ease of implementation at the destination location”. Such a similarity suggests that success and proven (hence visible) impact predisposes respondents to think that implementing the practice at a new location would necessarily be easy, perhaps due to its known effects and underlying interventions. Trialability, or the opportunity to test a measure prior to full-scale implementation, is also within this cluster of factors, though not as closely related to the prior two. However, the ease of implementation strongly suggests an opportunity for a trial execution of particular measures, but with a limited scope, and also follow-up full-scale implementation if the results of the trial phase are supportive. The last in the group – “relevant support policies need be in place” – is in fact
definitive for the entire cluster, and can hence be considered to be the underlying necessary factor for the others. The presence of support policies seem to define the ease of implementation and trialability, as well as to determine what kinds of expected impacts will be sought when identifying potential candidate practices for transfer.

The third cluster of factors, found to the right on the figure, contains two distinct subgroups of similarly rated factors. Typical for all four factors in the cluster is that they refer exclusively to the “destination” of the transferred practice. The subgroup on the left suggests of a general expectation that continuation of already working practices, especially through improvement, is considered to be bound by budget constraints, and practices of improvement will likely not be transferred unless there are guaranteed budgets. The remaining two factors within this cluster both seem to relate specifically to the public as a “target” of innovation transfer, highlighting the role and significance of local publics (including beneficiaries of transferred practices) in determining transferability. Positioning of the factor “compatibility with local values and beliefs” within this cluster is a clear indication of the influence (and relevance) of culture on policy planning and possibly on policy choices when it comes to introducing new practices. In addition to this, it also suggests that improvements of current practices will likely not be introduced if they are found to introduce incompatibilities with the dominating culture or with the positive perception of current practices.

The transfer of innovation practices (and thus also effectively creating innovation locally) has another important benefit in that it helps create and diffuse new knowledge. This ability of the public sector suggests of the expanding nature of its core mission towards the generation and integration of new knowledge into the working practices.
Strengthening Innovation Capacity in the Public Sector

Stakeholders’ recommendations on how to improve innovation planning

Improvement of innovation planning is a dichotomous process in that improvement can be pursued either in terms of enhancing administrative and managerial procedures, or in terms of incorporating innovation and innovation-related interventions in new policy designs and decision making configurations. It is very likely that these processes run in parallel, though independently from each other, with a great degree of variability among the different national, and possibly even regional or local, contexts.

The following Figure 75 presents a word frequency graph, based on recommendations given by interviewed stakeholders on how policy planning for innovation can be improved.

Figure 75 Word frequency graph: how to improve policy planning for innovation

The graph presents a very obvious suggestion, which could be interpreted as “involve citizens”. Such a finding corresponds to the analysis made above and seems particularly apt and relevant given that citizens are the primary “consumers” of public sector innovation, whose primary goal, as seen above, is to improve the effectiveness and efficiency of the provided public services, and thus, the quality of living of citizens. Yet, there is (at least among the interviewees) the feeling that citizens are not sufficiently involved in the policy development processes. This further serves to emphasise the democratic nature of innovation policies, and highlights yet another role of the public sector in the promotion of innovation – that of a facilitator who needs to pay closer attention to citizens’ needs in order to be able to identify properly adequate solutions. Under conditions of higher uncertainty, which is often the case with innovating, when the impact and repercussions cannot be properly determined in advance, designing robust citizens’ consulting processes (in a way – “opening up” the innovation planning) appears to be a sound and needed strategy of growing significance in fulfilling public sector mandates.

In light of the above, determining and implementing changes in the ways public sector organisations work, so that citizens could be more efficiently consulted, represents in itself an innovative strategic path to pursue, especially in locations where such practices are not yet fully utilised, or if already utilised, are not applied to innovation (policy) planning.
Repercussions for the public sector in general will, of course, vary, and such a recommendation may not hold true across all contexts of local governance and civic participation traditions.

What needs to be remembered is that **innovation is not synonymous with solutions**. Problems can persist despite innovation, but innovation can only persist if the solutions it provides are successful. Putting innovation in a problem-driven paradigm does not guarantee success just by itself. Instead, proper innovation management interfaces, mostly within the organisational administration, need be in place.

The majority of the interviewed stakeholders are strong proponents of **increasing collaboration of the public sector across all other social sectors**. However, the roles and responsibilities boundaries of the public sector should be clearly defined, if collaborations are to be considered legitimate. Specifically in the cases of public procurement and of longer-term public-private partnerships the exact role of the public sector needs to be easily distinguishable; if not, any inherent innovation risks not being perceived positively, with the public sector suffering the greater share of negative consequences.

**Innovation policies need be cross-sectoral** (in terms of economic sectors), and not be designed in isolation. Strategic plans for the support of innovation need to determine which sectors in the local/regional economy hold the greatest potential for the development of innovation, and direct policy support, administrative and regulatory attention towards the strengthening of those sectors.

Related to the above is the **challenge of organisational management of innovation**, particularly in **the way decisions, involving innovation, are being made**. Many stakeholders recommend that innovation coordination be improved, as most often different departments have different responsibilities (and accountability boundaries), which might lead to confusion, delays, and further operational inefficiencies. Such coordination may be the result of complete intra-organisational reform.

Such a task would be significantly easier to achieve, if **culture of innovation is actively being fostered within the organisation**. Part of that relates to identifying new forms of employee engagement. Another part includes how the organisation deals with the inherent risks of innovation, how encouraging management is of tolerating failure as a learning experience, but also how failures are being retranslated back to the political decision-making bodies, and sometimes – personally to specific politicians and decision-makers.

**Key policy-relevant findings**

As a summary of the analytical conclusions throughout the report, following is a list of general lessons learned about public sector innovation. Readers are warned they need not take these as universally applicable, but instead try to identify the ones most relevant to their specific context – social, organisational, economic, and cultural. One possible strategy to do that, which is also promoted by the CCIC project, is to organise local (innovation) stakeholders and have a wider debate on purposes of innovation in the public sector, on the changing (or persisting) mandates of public sector organisations, on the stories of success emerging from specific examples of public sector-supported innovation, and then commit to a specific innovation policy agenda, and a time-frame for its elaboration and conversion into a solid strategic plan. Where such strategic plans are already in place, those key lessons learned could be used as baseline indicators for the assessment of progress on innovation policy development and implementation.

- Public sector innovation, and particularly the ability of the public sector to generate and harness new knowledge resulting from successful innovation diffusion, highlight the evolving nature of public sector missions. Identifying knowledge gaps and generating new knowledge, improving innovation planning and innovation diffusion will increasingly represent an
attractive new role for public sector organisations, without which their other core tasks would not be adequate and/or efficient in the long-term.

- In reference to the Oslo Manual (OECD & Eurostat, 2005) public sector innovation could be interpreted as the implementation of a new or significantly improved service, process, organisational method or communication method. Most commonly, stakeholders understand public sector innovation as the introduction of a new service or significantly improved service, or improvement in the service delivery, which often comes as an outcome of organisational, communication and process innovation. The typical idea of innovation in the public sector rarely is the implementation of a completely new service or delivery method. Most often, it is the adoption to the local context of service/delivery method, which has already been in use somewhere else.

- The ultimate goal of PSI is to increase the quality of and access to the public services provided by the local or regional authorities, thus, improve the quality of life of citizens. This implies increasing the cost efficiency and cost effectiveness of the provided services. Improving the relationship between the public sector and the citizens is a major goal of innovation as well. Strengthening the channels for provision of feedback by the citizens contributes to improving public services so that they can better correspond to the needs and expectations of the citizens.

- Innovation generation is stimulated largely, albeit not exclusively, by factors inside the organisation. To a considerable degree, these correspond to the underlying factors of specific organisational cultures, suggesting that different organisations within the same external environment will most likely be unevenly “productive” in terms of their innovation performance.

- Improving internal communication in terms of the innovativeness of a certain organisation should be made a priority regardless of how innovative a specific local or regional authority already is. The effectiveness of the horizontal, as well as vertical, internal communication within the organisation is among the key factors for stimulating the innovativeness in a particular organisation. It is also important to disseminate the successes, strengthen the internal organisational culture towards embracing innovation as a way of thinking, a way of working, and a way of continuing organisational evolvement. Human resource policies are crucial in this respect. Selecting employees, inducing positive managerial attitudes towards change, and stimulating the creativity and collaboration among the organisation’s staff make a fruitful environment for innovation within the public sector.

- Having in mind the complex structures of governance and political decision-making in the public sector, the presence of political will to support innovation is also considered to have a great role in the process of driving innovations in the public sector, especially in highly politicised environments, or such where decision-making is rather centralised and concentrated.

- Organisational innovation practices, such as having a specific “unit”, whose competences include innovation, and adopting strategic organisational documents on innovation contribute to the innovation performance of organisations. Focusing on innovation within organisations – by including the topic of innovation in the annual reports, as well as putting innovation on the organisational agenda – bring greater external recognition of these organisations for their innovativeness, and improve staff’s own perception on the innovativeness of the particular organisation.

- External communication with the various stakeholders is also of primary importance, as this will allow for improving the innovation design and innovation implementation processes. Citizens are especially important in this regard, partly – because citizens’ needs and demands often determine the range and kinds of services offered. Not least, communication with citizens ensures the democratic nature of innovation planning and related service delivery by
enhancing the transparency and accountability of the public institutions. All possible communication channels should be explored, including through other organisations in the community (e.g. consumer or professional associations) in order to ensure information about the results of innovation planning and implementation reach more fully the target audiences.

- Innovation in the public sector is often thought to happen as a response to mounting pressures from citizens and businesses, demanding improvement of old or introduction of new services. It therefore would be more sustainable if and when encapsulated within the policy development cycle. At the same time, civil society’s demands are not perceived as a strong driver to innovation. That is perhaps due to the fact that innovation is but a tool and a strategy (or a consequence of policy instruments) in delivering “value” in the public sector, so there is no widespread social “demand” for innovation per se.

- There is only limited awareness among representatives of local and regional authorities on the potential of new technologies to improve public services. Yet, in order to take advantage of opportunities that new technologies provide, there are other factors to be taken into consideration. Openness to and interest in new technologies within the particular public organisation, coupled with strong awareness of what new technological solutions would bring in terms of benefits across the organisation, are paramount. Managers and staff need not be resistant to change, and organisational cultures should not penalise technological visioning and risk taking. No less important however is that users be informed about (and sometimes actively taught) how to use the new technology, if needed. Citizens’ cultural and generation nuances have to be taken into account, as well as the affordability of new technologies.

- The presence of external (to the organisation) factors of the environment, such as appropriate legislative framework, availability of external sources of funding, and public expectations all suggest there is a need for strategic planning and management in order to harness opportunities and fend off threats of innovating. To that end, SWOT analyses done at the local level could fairly easily be amended to account for innovation-related concerns and opportunities.

- Innovative practices in the public and in the private sector are not mutually exclusive, and frequently benefit from and complement each other. Public sector innovation can happen through the diffusion of prior private sector innovation or through providing assistance to the private sector in the form of creating (or supporting) enabling conditions such that innovation generation is stimulated and encouraged – through policy, targeted programming, designated funding, mediation, etc.

- The greatest impediment to innovation seems to be related to the lack of critical resources: mostly human and financial. It is difficult to ascertain to what extent, however, such claims are used in place of an excuse for insufficient innovation generation, especially given the finding that for local and regional authorities financing innovation is accomplished by specific budget allocations in three fourths of all cases, while for the other organisations the same share need to fundraise from outside, typically from private sector sources. This leads to the assumption that, generally, in order to increase its innovation performance, the public sector may need to diversify financing sources, including through cooperation schemes and mechanisms, through which part of the implementation and running costs are transferred outside of it, or through external sources. To that end, EU programmes appear to provide ample opportunities, and capacities for participating have to be strengthened.

- Innovation affects different stakeholder groups in different ways, thus, measurement of success might stay illusive and subjective without a concrete and measurable list of criteria. Furthermore, the time-perspective should be taken into account as the adoption of a certain innovation might not give immediate results. This prompts at the importance of an additional policy dimension of innovation in the public sector, one that wraps innovation in a
STRENGTHENING INNOVATION CAPACITY IN THE PUBLIC SECTOR

specific set of policies, rather than keeping innovation as an isolated occasional phenomenon.

- Public procurement is a means to stimulate innovation. By dedicating budgets for public procurement for innovation, governments create demand for innovative products and services. Demand side stimuli can be further supported by policies, such as co-funding of procurement, changes of the legal framework, and changes to the regulations and standards that contractors should comply with. The increased risk associated with “procuring” innovations compared to a “typical tender” is one of the rationales for having separate rules for procurement of innovative services in addition to the general procurement rules. In addition, innovativeness can be mainstreamed throughout the general procurement procedures for selecting a contractor, which is expected to stimulate innovation further. Currently, innovation is rarely among the key criteria for selecting a contractor in public tenders.

- Because public procurement practices are of such importance in enabling greater innovation capacity, public sector organisations need to carry a thorough review of how they administer procurement, and towards what ends. Especially where procurement practices remain largely unchanged, it is recommended that public procurement regulations be revised as a result, particularly when innovation is an integral part of the procurement targets and/or processes. Not least, procurement policies can be used as an instrument to encourage social responsibilities of contractors, and thus foster innovation as an externality.

- One form of cooperation with the private sector, found to be very promising for innovation, are public-private partnerships (which exist anyway, and are not, in themselves, guarantee for more innovation), where partners share responsibilities, contributions and cost burdens. In public-private partnerships the public sector usually can help with the diffusion of innovation, induced in the private sector, but applied towards to fulfilment of public and social needs. Strong examples of that were provided by some of the interviewed stakeholders, who referred to new uses of GPS technologies towards public health applications. Innovation in this case is found more in the way the specific technology was utilised, rather than in the introduction of any new functionality. Therefore, it is safe to say that the public sector provides new venues for the application of “traditional” product innovations, and directing that use towards the enhancement of its public service missions.

- Another form of mixing public and private sector is found in the specific case of publicly-owned enterprises, which are subject to market rules, follow economic logic, but are at the same time owned wholly or partially by the public sector. While their market status allows them to introduce more easily innovative solutions, their public ownership (e.g., due to regulation compliance) may also impose greater restrictions. As evidenced by the results of the survey, most often publicly owned enterprises are expected to contribute to the improvement of public services, some of which they themselves deliver directly (public transport is but one example, common across many countries). POEs were found to be most common in the utilities sectors, in public transport, and in waste management, all of which have direct impact onto the quality of life of citizens.

- Currently, cooperation between local/regional public authorities and civil society in producing innovation occurs rarely. Social innovation is a particularly relevant concept as in the interaction of the public sector with the civil society new way of collaboration can be borne (which might also include the private sector), which might, thus, need different policies and institutional arrangements that are flexible enough to accommodate the different set of collaborating organisations.

- Social services benefit significantly less from public procurement offers. Contracting out social services to social enterprises would have two major benefits: 1) the public sector will stimulate innovation for meeting social needs which have been previously unmet by
delivering of new services; and ii) procuring to social enterprises stimulates innovation for delivering traditional welfare services in a new more efficient and more effective way. Proper regulative measures will ensure that quality and access of the provided services do not get compromised in the process.

• By scaling of social innovation and social enterprises through regulation and procurement, governments stimulate the creation of new markets, and help spreading and mainstreaming emerging social innovations. Existing commissioning and procurement structures have to be revised accordingly. Trainings for both public sector officials and social enterprise representatives should be encouraged and provided so that both can benefit from their mutual cooperation in the provision of public services.

• One way to address the poor innovation performance of organisations is to have a separate item for innovation in their budgets. A committed to innovation budget item in an organisation implies a clear organisational prioritisation of innovation. Considering the degree of risk which is inevitably related to innovation, a separate budget line committed to innovation can be an effective tool to stimulate innovation within an organisation as investing in innovation might otherwise be easily rejected on the basis of risk associated with the endeavour.

• In terms of the financial instruments needed in order to stimulate innovation, utilising public funds to this end appears to be essential.
Instead of a Conclusion

Though a humble effort, this state-of-the-art report had the very ambitious task to produce some generally applicable conclusions that public sector organisations could peruse, based on a fairly limited scope of inquiry in just 10 EU member states, all of which having different and often rather dissimilar regulatory frameworks, administrative cultures, and general innovation aptitude. To that end, it is the hope of the report’s authors that the primary mission of this effort has been successfully and adequately fulfilled, namely in that it contributes to a better and more complete understanding of how innovation permeates the public sector on the local and regional level, how distinctive (but also mutually inclusive and synergistic) innovation in the public and in private sector is, and how it plays an important role in the improved delivery of (novel) public services to communities and businesses alike.

Unfortunately, there are some inherent flows, which made particular inquiry discourses largely uninformative. Most importantly, the uneven distribution of respondents – from countries, but also from organisations, made it impossible to draw valid conclusions per region, or per organisational type. Therefore, this report does not offer specific actionable recommendations, but only tries to outline common trends that each interested reader could compare to his or her context, and determine how close or how far his or her organisation is from what this report details.

By all means, this report does not exhaust all possible inquiry perspectives on public sector innovation either, as that would require a much more in-depth study with a far greater number of contributors and stakeholders coming from even more diverse backgrounds. It could however be expanded, within each specific context, by comparing the conclusions made with identified best practices on the local level, by contrasting it with independently done evaluations of local and regional authorities (especially such that focus on innovation performance and policies), and by involving the perspective of citizens, which is very marginally present throughout this particular study – mostly through the perspectives of civil society representatives and stakeholders, but without the perspective of the actual “users” of public sector innovation. That is an ambitious task in itself, and the authors of the report encourage their readers to integrate in their deliberations also those missing perspective.

The unique contribution of this state-of-the-art report however could be found in its scope of inquiry. While public sector innovation has been gaining popularity, including in expert and academic studies, based on robust data collection, this is very likely the first study focused exclusively on the local and regional context, which is the closest to innovation beneficiaries – the local communities and businesses.

It is therefore the hope of the authors that public sector innovation on the local and regional level will get studied more and more, with a view of strengthening the capacity of both public sector organisations and other local or regional stakeholders to innovate, and thus help increase the added value delivered to society at large.
REFERENCES


REFERENCES


Young Foundation (2010). *Study on Social Innovation*. Available at
ANNEX I

This annex presents some additional data to describe in further details some intriguing aspects about the respondents who participated in the survey, which however do not necessarily contribute directly to the analysis of public sector innovation.

In general, there is a good balance in terms of gender and age among survey respondents, with females accounting for 53% and males for 47%. The overwhelming majority of respondents, or 93%, are between 26 and 65 years of age, with half of all being between 26 and 45 (see Figure 78 in Annex I). With respect to the educational attainment of respondents, a significant majority possess a higher education degree (see Figure 80 on page 95). Almost half of the respondents hold a master’s degree (43%) and 23% hold a bachelor’s degree. A little lower is the percentage of the respondents with a college degree. A few of the respondents fall into the two extremes – respondents with PhD or higher are 7% of all, while the ones with secondary education are 6%. More information on the respondents’ distribution according to age, gender and educational attainment can be found in Annex I.

Differences in terms of respondents’ gender are most insignificant, if considered overall, with a slight majority of women over men – 53% and 47% respectively. However, greater differences in gender distribution are observed when respondents are broken down by position held (Figure 76). Males dominate within the political decision-makers and higher management categories with less than 25% and 30% females, respectively. On the other hand, within the officers category, only 40% of respondents are male.

Figure 76 Gender of respondents, by position held

A better gender balance is observed across types of organisations (left-hand side of Figure 77). For the two categories that dominate the respondents’ profile – local and regional authorities, males and females are nearly equally distributed. The greatest differences are observed for civil society organisations, where females dominate with more than 65% and for private businesses where males account for 65% too.
However, when the comparison is made between local and regional authorities, on the one hand, and all other types of organisations, on the other, gender imbalances are largely inexistent. For the authorities, however, females are slightly more than males, as demonstrated on the right-hand side of Figure 77.

In terms of age distribution, the overwhelming majority of respondents, or 93%, are between 26 and 65 years of age, with half of all being between 26 and 45 (Figure 78).

When broken down by type of organisation, age groups distributions are not uniform. Less obvious differences in the age distribution are observed across types of organisations. For local and regional authorities, respondents tend to split almost equally at 45 years of age, with those in regional authorities having greater shares of younger age groups (i.e. around 40% are between 26 and 35-years-old). Most visible differences in age are seen for local development agencies, where the share of those aged 46 and above is less than 25%, and for civil society organisations where that share is at about 30% (Figure 79 on page 95).
Figure 79 Distribution of respondents by age and type of organisation

Educational attainment

With respect to the educational attainment of respondents, a significant majority possess a higher education degree (Figure 80). Almost half of the respondents hold a master’s degree (43%) and 23% hold a bachelor’s degree. A little lower is the percentage of the respondents with a college degree. A few of the respondents fall into the two extremes - respondents with PhD or higher are 7% of all, while the ones with secondary education are 6%.

Figure 80 Distribution of respondents by educational attainment

In terms of positions held in the organisation, education-related differences among respondents are the smallest for the middle management and higher management positions where 60% have a Master’s degree or higher. For the political decision-makers category, respondents are equally split – half have a Bachelor’s degree or lower, and half – a Master’s or higher. The greatest
difference is observed for the ‘other’ category – only 20% of respondents reported a Master’s degree or higher (see Figure 81).

Male and female respondents demonstrate nearly identical distributions of educational attainment, with females having a larger share of Master’s degrees or higher compared to males (55% to 45%, respectively – see Figure 82 on page 97). No female respondents have reported a post-doctoral degree.

More interesting is the distribution of educational attainment across the types of organisation, in which respondents work (Figure 83, on the left, page 97). Not surprisingly, respondents from universities have the largest shares of Master’s and higher degrees, and in particular – the largest share of respondents with a post-doctoral degree (about 10%). The only two other types of organisations whose respondents have reported PhD or post-doctoral degrees are civil society organisations and regional authorities. The least diverse in terms of educational attainment are respondents from ministries and other governmental structures – they are either with a bachelor’s degree (35%) or a Master’s degree (65%). For local authorities less than 50% of respondents have a Master’s degree or higher, which is only true also for private businesses. In every other type of organisation, fewer than half of the respondents have a bachelor’s degree or less. When seen across just local and regional authorities compared against other organisations (see Figure 83, on the right, page 97), there is a more apparent difference, but mostly due to the larger share of respondents with advanced post-graduate degrees in the latter. In local and regional authorities, on the other hand, the shares of bachelor’s degree (or less) holders is larger.

**Figure 81** Educational attainment of respondents by position held
ANNEX I

Figure 82 Educational attainment of respondents, by gender

Figure 83 Educational attainment of respondents by type of organisation