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Policies Supporting Innovation in Public Service Provision

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1 Executive summary

1.1 Objectives and scope

This INNO-Grips policy brief discusses how governments can foster innovation within the public sector in order to increase efficiency gains, cost-savings and welfare. It (i) documents major current policies supporting innovation in public service provision in Europe and beyond, (ii) identifies barriers and drivers of innovation, (iii) analyses how innovation in the public sector is likely to enhance multi-actor collaborations by bridging the gap between supply and demand and by promoting citizens’ trust, and (iv) explores how more efficient and responsive public service provision can be implemented, using various types of innovation, and how these processes can be sustained. The brief concentrates on policies and initiatives supporting innovation in (i) general public services at central, local and regional levels; (ii) health and social protection; and (iii) environmental protection - (see Section 2)

Innovation policy should address innovation both in the private and the public sector. The public sector should be able to reinvigorate its institutional framework and public services as the private sector might. Comprehensive policies supporting innovation in public service provision are often missing, however. In addition, the results and sustainability of individual measures are quite unpredictable. International policy practices focus mainly on the environment that supports new initiatives and the policy learning process. The policy brief is rooted in the belief that contemporary challenges, including the one calling for fiscal consolidations to tackle the sovereign debt crisis, are establishing a claim for public sector innovation. This innovation should provide significant cost-reducing opportunities without any decline in service quality or accessibility, whilst at the same time building trust and being long-term sustainable (see Sections 3.1-3.3).

1.2 Prerequisites of innovation in the public sector: drivers and barriers, institutional architectures

1.2.1 Drivers and barriers

We identified the following drivers and barriers for enhancing innovation in the public sector (see Section 3.4).

Decentralised initiation: a more decentralised institutional framework tends to motivate public servants and managers to be innovative. In the case of public sector organisation, decentralised initiation depends upon the given institutional architecture allowing for the organisation to initiate what it wants in favour of the public interest. There are barriers and bottlenecks hindering decentralised initiation, such as conservative hierarchies or overly controlling leadership. Decentralised initiation provides opportunities for innovation in services and organisational practices, showing that not only technological innovation is possible in the modern world.

High rewards: risk aversion is a cultural phenomenon that relates to a number of things – no incentive to innovate, a culture which punishes failure, a culture which does not seek to learn positive lessons from failures, a work setting in which trying new things is not a condition for promotion etc. However, it can be seen that using private sector reward-methods, especially financial rewards, to boost innovation has a limited role here. Alternatives include dampening the
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de-motivating factors, by either offering career opportunities (e.g. upward mobility within the management hierarchy) or by being vigilant about the use of automated internal performance management systems. Outward orientation and knowledge of what the consumer wants can also be supportive in obtaining a spate of new ideas and guiding preferences. Additionally, “innovation” is normally not part of a public servants’ job description. Therefore, it is not a standard feature in performance reviews and does not lead to promotion. A change in this practice is something to be considered.

**Competition**: the lack of competition in the public sector means that pursuing greater market share or profits does not apply. However, competition has been introduced into the public sector and public services via different strategies aiming to create a more business-like public sector. Examples of these strategies include competitive tendering, encouraging collaborations through public-private partnerships and public procurement procedures that incorporate concepts of fair competition. Such collaboration is facilitated by citizen and private sector confidence in state institutions. Consequently, a credible signal of the public sector’s commitment to continually improve public services is crucial. Since efficiency gains and better services generally, lead to cost reduction and more streamlined procedures, the savings they create can be seen as the “profit” of public sector innovation.

**Scope for experimentation**: there is less opportunity for experimentation in the public sector. Citizens and consumers of public goods and services are more likely to prefer stability rather than erratic and non-predictable changes in public services. Citizens can be wedded to old forms of provision and can resist change or even be hostile to public money being spent in new ways on new things. Moreover, public sector workers are often inclined to follow old routines rather than support a risk-taking or innovative culture; this phenomenon maintains a culture of organisational stagnation. This calls for opportunities for risk-taking and perhaps autonomous institutional units of creative workers nevertheless keeping ties to “old” units without however being bureaucratically restricted.

**Flexibility of finance**: the availability of the necessary financial resources for innovation is a basic prerequisite of a healthy innovative capacity. Yet as a result of vote and budget maximizing purposes, politicians and bureaucrats generally exhibit very short-sighted ways of thinking. However long-term commitment to, and strategic thinking about, the financial support provided to ensure innovative capacity are of paramount importance.

1.2.2 The importance of the institutional architectures and innovation patterns

The ways how public sector innovation can be promoted also depend on its institutional architecture. As the architecture differs considerably between Member States, measures need to be carefully selected and possibly adapted in order to be effective. The following aspects in particular have to be considered (see Section 4.1):

- European countries exhibit huge discrepancies between their functional and financial power. For example Portugal and Romania exhibit significant mismatches in that they have a relatively high level of functional autonomy yet comparatively small budgets. Such mismatches may have a negative impact on public sector governance performance, since a bias towards fiscal indiscipline is more likely if functional tasks are coupled with lower level of financial resources.
- Any given institutional structure has its own incentives that formulate innovation patterns *(e.g. innovation sources, motivation, organisational characteristics, risk taking and parallel...*
and a preferred method for obtaining them (top down/policy-driven or bottom up). Certain patterns and innovation-methods are compatible with certain given institutional settings.

- As institutional settings differ across countries, public organisations also differ. This suggests that one specific feature of innovation in a certain public sector organisation does not inevitably apply in other parts of the public sector in that country.
- Addressing the institutional structure and diminishing the institutional barriers must be an integral part of any smart fundamental policy that aims to promote innovation.
- Further analysis of countries with a greater share of bottom-up innovation policies may offer important lessons, especially about the kind of institutional structure that seems to have inherent incentives for innovation.

1.3 Objectives of public sector innovation policies & initiatives

Our research of relevant activities in 32 countries worldwide identified three generic objectives of policy interventions to support public sector innovation (see Sections 4.2 and 4.3):

- **Internal focus - enhancing efficiency in the public sector**: policies and initiatives that aim to “achieve more (or at least the same) for less” by enhancing the efficiency of the public sector, often through restructuring or reducing organisational units, and often as part of larger-scale reform programmes or strategies;
- **External focus on improving services for citizens and businesses**: policies and initiatives that aim to improve the quality of the public sector service delivery;
- **External focus on “inducing” innovation in other sectors**: policies and initiatives that aim to promote innovation in business or in the third sector, either by creating incentives or by enforcing innovation through regulation, for instance in public procurement.

While we found only few examples of coherent and comprehensive policy frameworks in support of public sector innovation, there are many initiatives which address specific aspects. The specific focus and approach of public sector innovation initiatives, and indeed their prevalence, differ considerably across countries. We monitored 32 countries worldwide and found the following types of initiatives:

- **Procurement related innovation initiatives** in Austria and Sweden;
- **Initiatives aiming to foster innovation through focusing on skills development** in the public sector in Austria, Belgium, Bulgaria, Iceland, Latvia and Lithuania;
- **Collaborative / participative approaches** (“co-creation”) in Australia, Canada, Denmark, France, Germany, Greece, Japan, Norway, Portugal, Switzerland and the UK;
- **Initiatives focusing on news forms of service delivery** in Finland, Sweden, Ireland, Norway, China and the U.S;
- **ICT-based initiatives** such as providing better electronic services and open data/governance initiatives in Czech Republic, Estonia, Hungary, Iceland, New-Zealand, the Netherlands, Poland, Russia, Slovakia, South Korea and Sweden;
- **Initiatives focusing on non-technological innovation** (in this case, organisational innovation) in Finland and Slovenia.
1.4 Case studies on public sector innovation

The study team conducted eight case studies of public sector innovation initiatives in different countries specifically for these policy brief (see Section 4.4 and Annex I for details):

**Brazil: Participatory budgeting and its transferability to the European context.** Participatory budgeting proved to be a good way forward, favouring a public administration incorporating the needs of citizens in a more dedicated way by being more responsive. The example offers lessons for Europe, as well as indicating that policymakers should carefully use the contextualised participatory budgeting in order to ensure better and shorter feedback cycles under the guidance of fiscal anomalies.

**Norway: Altinn – a Norwegian ICT platform for public sector innovation.** Altinn is the most comprehensive e-governance innovation project in Norway’s history. In addition to being a stand-alone innovation, it more importantly constitutes an innovation platform, with new governmental services continuously being added. Bottom-up initiative from subordinate public agencies, large estimated cost-savings, proactive leadership and close contact with the private sector, are identified as key drivers. In contrast, the silo-structure of the government (i.e. the lack of communication and understanding between different departments) and low public acceptance of errors are seen as central barriers. Altinn exemplifies how public information sharing platforms can trigger extensive public service innovation and collaboration across public agencies, and with the private sector.

**UK: Smart procurement related to the health care sector.** The case of Unimedic Ltd. suggests the public sector should focus more attention on the frequent re-evaluation of the health care technologies it uses in order to compare them to potential alternatives pioneered in the private sector. Being open to smart procurement by focusing on the comparative value of innovative technologies and services in healthcare is of immense importance.

**Sweden: Innovation driven procurement to better promote care of the elderly.** This project targets the establishment of new forms of procurement in the field of meal solutions for the elderly. The main aim of the project is to build a platform for Innovative Procurement in regions of Sweden. The expected results of this project are an improvement in the public welfare and quality of life for the elderly and in the development of public purchases in the county.

**Canada: Innovation for active ageing.** The main message of the case study on Canada is that active ageing should be supported by both top-down and bottom up initiatives. Moreover, by building on the large-scale voluntary sector, public policy development that is in the interest of Canadian society can be significantly promoted.

**Switzerland: Collaborative efforts in tackling environmental problems.** This case sheds light on the fact that innovation belongs by definition to a process of dynamic analysis. This is because innovation in one field can trigger the additional need for further innovations to address the problems that may have arisen as a result of the initial innovation. Public sector organisations should therefore focus primarily on results and outcomes rather than on the mere contemplation of activities and processes.

**Poland: Network based innovation in Gdynia.** Gdynia represents a case of public administration being not so starkly separated from the private third sectors due to its mindset being orientated towards external groups and actors. The current ecological and social challenges that have to be addressed in a city pursuing sustainable urban development proved to be some of the key driving forces in this project.
**Austria: SmartCity Vienna as multi-actor innovation series.** In Austria, the Viennese SmartCity initiative points to the role of citizens and the public sector being mutually committed to the continual improvement of Vienna, so that it becomes a more sustainable city and one which is pleasanter to live in. The initiative aims to face up to environmental problems and tackle climate change in a more dedicated way.

**Main conclusions**

These case studies, as well as existing cases from literature (reviewed in Section 4.4.1), lead to the following general conclusions:

- The existing case literature puts special attention to the role of workplace innovation and the role of boundary spanning leadership (management), whereby fostering the “linking capacity” of organisational units is critical.

- A promising way to foster innovation seems to be to create an innovative “milieu” by establishing special units or project- or team-based organisations. These allow innovators to deploy their innovative ideas without being exposed to the influential role of bureaucracy.

- Putting the “customers” (i.e. citizens’ or businesses’) preferences and needs into the focus is of immense importance in favour of a more innovative public sector.

- Methods like more explorative public-private innovative partnerships or the more collaborative participatory budgeting support innovation within the public sector. The institutional architecture matters a lot when it comes to driving public sector innovation;

- Public sector innovation initiatives, to be effective, require long-term commitment and buy-in from relevant internal stakeholders in the administration;

- To achieve stakeholder buy-in, having an approach which takes into consideration the views of many groups is very important;

- There must be sufficient demand among the targeted customer community (businesses / citizens) of the respective innovation initiative;

- The length and quality of the learning curve has to be addressed.
1.5 Strategic responses for innovation policy

Based on our analysis of the case studies, and the accompanying review of literature, some specific implications and recommendations for the design of policies or initiatives in support of public sector innovation can be made (see Section 5).

**Acknowledge and include differential diagnosis**

The given institutional setting creates incentives that structure innovation patterns and sets out the preferred methods of innovation. Although the public sector is frequently seen as a single sector, since institutional settings differ, public organisations also differ. This suggests that a feature of innovation in one public sector organisation cannot necessarily be applied to other parts of the public sector. This calls for a differential diagnosis, requiring strategies for identifying and addressing various institutional rigidities across the many countries in Europe. It calls for further research.

**Seek methods to enhance the value base of the public sector**

The value base in the public sector translates into the working culture which in turn can limit innovation and therefore has to be addressed by policymakers if innovation in the public sector is to be promoted. If the public sector is to be more innovative, certain fundamentals must be re-aligned. Success is not measured through delivering the same service over and over. **People should be rewarded for introducing new ideas and not penalised. Career progression should be linked to innovation,** not the status quo. The civil service should encourage creativity as a key skill rather than compliance.

**Establish techniques to increase public appetite for innovation**

The public does not always welcome innovation and the change it brings. Indeed the public can be very wedded to certain institutional practices and services. Innovation needs to be accompanied by a conversation with citizens about what is being changed, why, and what the end result will look like. Mechanisms are needed that promote innovation across the public sector by increasing the general public’s readiness to accept the innovations, such as awareness raising or accelerating civic start-ups (early stage seeds).

**Designing ways to roll out, take up and scale up good practices**

An important measure could be the dissemination and sharing of good practices between public institutions (depending however on the comparability of the institutional setting in one place and another) in the interest of promoting the mindset for “next practices” which reflects more that continuous innovations are must. Peer review exercises and twinning exercises can work, as well.

**Seek out options for bringing doses of creativity into public sector organisations**

Although each country has its unique innovation eco-system and institutional architecture, the need for creativity in the public sector can be regarded as a common feature. Creativity matters because it is needed to spark innovation and to identify underperforming policies or initiatives. Creativity, however, may often be hindered by the leadership which is likely to be wedded to its own specialisations. Importing creativity doses in various ways, for example by establishing a European Public Sector Leader Academy (e.g. or by using interim management), can help to counteract this phenomenon.
Search for ways to strengthen the principle of “variation and selection” in public sector innovation

Innovation is often the fruit of networking, hence collaboration, and need not therefore be driven by competition between actors. The importance of collaboration in service provision has been increasing. Citizens do not have a different set of standards for the services they receive between the public and private sectors. Therefore, as the private sector gets better at innovating and improves the quality of the services it provides to businesses and citizens, this necessarily raises public expectations for public services. Sharing services in various ways can be thought of as a way of taking the first step toward reducing the service quality gap. Shared services often require skills from local administrations that are not present. Strategies for obtaining the necessary skills should be addressed. What is more, bringing more external aspects into knowledge-building through multi-actor collaboration is of key importance. Broadening the portfolio of actors involved (multi-agency delivery) can be treated as a path to a more strategic and evidence-based policy orientation that may help unleash innovation potential. Political and leadership commitment (e.g. boundary-spanning leadership) are basic prerequisites.

Establishing the European Public Policy Innovation Centre (EPIC) as a network of local laboratories

Establishing innovation laboratories (e.g. between local authorities), saved however from strict bureaucratism and not made up of “old” units can be an option in this regard. The basic vision behind this recommendation is to directly connect local public bodies across the European Community to permanently exchange information on daily governing practices. By doing so, innovative local governmental procedures and actions would be promoted across Europe and assist in harmonising institutional and legal frameworks according to the principle of subsidiarity (i.e. decentralisation). The mission is to create institutional structures that function as a permanent European wide innovation centre for local public policies. The creation of a European wide innovation centre for public policy making (with a network of local, regional or national innovation laboratories) could initiate and strengthen this exchange of know-how and practices across local public bodies.
2 Objectives and approach

2.1 Objectives and scope of the policy brief

Objectives

The objectives of this policy brief are:

- to map and document major current policies supporting innovation in public service provision in Europe and beyond,
- to identify barriers and drivers of innovation,
- to analyse how innovation in the public sector is likely to enhance multi-actor collaborations by bridging the gap between supply and demand and by promoting citizens’ trust, and
- to explore how more efficient and responsive public service provision can be implemented, using various types of innovation, and how these processes can be sustained.

The main new features which this policy brief aims to offer compared to the previous work on innovation in the public sector (see for example the INNO-Policy TrendChart Policy Brief by Cunningham and Karakasidou, 2009) are:

- It follows an approach that involves the full innovation eco-system (see Section 3, Exhibit 2).
- It explicitly reflects on the global economic crisis and its implications on European public finances.

Thematic scope

The policy brief focuses exclusively on policies as well as initiatives supporting innovation in the following fields of the public sector:

- general public services at central, local and regional levels;
- health and social protection;
- environmental protection.

Large, comprehensive structural reforms (i.e., public finances reform including for example pension reform or the issue of world’s health financing models) are not under the scope of this brief.

The rationale behind this definition of the thematic scope is twofold. On the hand one, the fiscal consolidation-related economic literature suggests that general public services, health and social protection show the highest increase in terms of expenditures. Therefore they have been the most promising domains of consolidation in the last decades (Alesina – Ardagna, 1998; De Cos – Moral-Benito, 2011). On the other hand, the role of innovation is becoming ever more emphatic in case of environmental protection and numerous studies have been emphasising the importance of greening the economy during the consolidations.¹ Moreover, due to the nature of these services selected, there is a great potential for creating, rebuilding and maintaining trust level of citizens and end-users in governmental institutions through greater transparency and open collaborations. This could bring bigger leaps, i.e., more significant impetus into the system of public service provision in response to the challenges (see also OECD 2001, OECD 2011a).

¹ With the EU2020, the low-carbon, resource constrained world has to be pursued and it needs budgetary commitments both on national and EU budget level (Spencer et al. 2011).
The following fundamental questions are to be addressed:

- What were those predominantly targeted fields by innovation that achieved significant savings through improved service quality/accessibility (not only within the public sector)?
- What kinds of tools are useful to public service innovation in the respected areas (e.g. decentralisation, user-centric shared service delivery etc.)?
- What are the basic preconditions of public sector innovations that seem to guarantee sustainability and effectiveness?
- How to make collaborative efforts in order to increase the perceived quality of public services by fostering joint policy learning?

In line with the holistic and dynamic approach described earlier, the analysis looks into whether a given measure/initiative prevalent in the business sector can be adopted by the public sector as a good practice.

2.2 Definition of key terms

We summarise in this section the working definition of key terms. Further considerations in this context are presented in Annex III.

“Public sector”

For the purpose of this policy brief, we use the framework proposed by the System of National Accounts (SNA). It suggests that the public sector can be defined as all activities (let those be either market or non-market) that are controlled and dominantly financed by public authorities on different institutional level of the administration. This includes both (i) the general government sector and (ii) the public corporation sector. General government sector refers to all governmental units, social security funds and non-profit, non-market public or private institutions. Public corporation sector comprises all of the institutional units that produce for the market (Hammouya, 1999).

“Government sector”

Among the abundantly endowed literature dealing with government sector, one of the most pivotal definitions is given by the OECD’s Frascati Manual (OECD, 2002) which it is also applied in the EPSIS Report (2012). According to this manual, the government sector encompasses “[...] all departments, offices and other bodies which furnish, but normally do not sell to the community, those common services, other than higher education, which cannot otherwise be conveniently and economically provided, as well as those that administer the state and the economic and social policy of the community. (Public enterprises are included in the business enterprise sector.)” (OECD, 2002:62). This policy brief follows this definition.

“Public sector innovation”

According to the OECD’s Oslo Manual, “an innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational...
method in business practices, workplace organisation or external relations” (p. 46). Although the Oslo Manual does not provide a specific definition for public sector innovation, it may be derived that in the context of the public sector, the minimum requirement for an innovation is that it must be new or significantly improved for the public sector at different institutional levels. The challenge with this definition is that its categories may entail interpretation-related problems due to the specific features of public sector (including policy formulation and service delivery). Therefore, this policy brief applies recent considerations over public sector innovation echoed for example by Innobarometer 2010. Innobarometer 2010 (2010:13) considers public sector innovation as “[...] any novel, or significantly improved (without indicating precisely what a ‘significant improvement’ might be) service, communication or organisational method”. In elaborating this definition and complementing the mentioned types with process innovation, this policy brief also joins to the line of thinking of the EPSIS Report (2012) indicated earlier (see Annex III for details).

“Policies” vs. “initiatives”

A policy is defined here as “a deliberate act of government that in some way alters or influences the society or economy outside the government”. Policies include, but are not limited to, taxation, regulation, expenditures, legal requirements and prohibitions, as well as the provision of consulting, coaching and training. The term policy does not necessarily equal to the term initiative. We use the term policy to refer to comprehensive frameworks and programmes, while we use initiative for a specific measure which can (but need not) be part of a larger policy framework or programme.

2.3 Methodological approach

This policy brief was proposed to be prepared as a synthesis of a number of detailed background papers (a variety of examples for public sector innovations). To this end, the following methods of data collection and analysis are applied: a literature review, case studies and expert interviews.

Literature analysis

The literature analysis concentrated on the following sources:

- Research in literature databanks such as JStore, ScienceDirect, E-Journals Database (EBSCO), Wiley Online.
- Research in publications presented by highly qualified experts at prominent international organisations such as OECD, World Bank, European Commission.

Case studies

We conducted eight case studies on public sector innovation initiatives. The results were documented in papers of 8-10 pages length each, in a pre-defined structure. A summary of the case studies is presented in Annex I. The case studies put much emphasis on the effects of relevant EU and domestic policy environment both with regard to general and innovation-specific policies.

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Innobarometer 2010 survey

Results of the Innobarometer 2010: Analytical report on innovation in public administration⁴ was used as statistical background information to empirically support qualitative arguments.

Guidance and reviewing of findings by external experts

In preparing this brief, ICEG European Center cooperated with international experts who were either interviewed about specific aspects or who helped to develop the methodology and reviewed the findings. A full list of contributors is included in the acknowledgements (p. 2). In particular, the following experts guided and supported the work:

Mark Napier (The Centre for Public Innovation): Mr Napier is a leading advocate for innovation in the public and voluntary sectors, both as practitioner and as a thought leader. As Managing Director, he leads CPI’s strategic development.

Tamás Sófalvi (Central European Consulting Ltd): Mr Sófalvi is a policy expert and an independent consultant on economic development and innovation policy. Mr Sófalvi provided valuable insights on the content of this policy brief (see Annex IV: An example for the realisation of the EPIC programme).

3 Theoretical framework

3.1 Introduction: rising interest in public sector innovation

Looking into the evolution of economic development theory, it seems the prominent contemporary theorists focus again on the role of the state and its institutional setting by going back to the origins. As a consequence, public sector in general has a critical role in economic development as it was echoed by many (Evans et al. 1985; Adelman, 1999). In addition the public sector represents about 45% of the EU’s GDP (European Commission, 2011a). Against this background, unsurprisingly the need for better and more efficient public services provision is increasingly emphasised. There are some challenges, however, coming from a variety of conditions:

- In general, the role of the state and the vision of public services becomes customer oriented. The public service of the 21st century shall not serve the governments per se, but rather the customers – either the business sector or citizens or employees and even actors within the public sector itself.

- Although there has always been innovative potential in the public sector, New Public Management (NPM) has changed the terms of how innovation is pursued and where ideas are developed. While in the pre-NPM paradigm there were a few top down innovations heavily driven by central government, nowadays a more diffuse model is accepted where local actors have the freedom to experiment solutions for themselves. In many European countries (definitively for most of the Eastern EU Member States, even though the transition started only two decades ago), the public services have still not had undergone the necessary transformation and these countries has not managed to get rid of old an uncompetitive structures.

- Public eServices play an increasing role in public service provision. eGovernment, Local eGovernment, eHealth, eEducation and G2B eBusiness services are developing fast, and are considered as key policy priorities of the EU as well.

- The introduction of eServices forces governments to process reengineer the existing models, workflows, procedures, in order to be able to operate efficiently the back office system for the eServices. This – regardless of front-office service delivery – raises the role of innovative solutions in the mechanism of public services as chaotic institutional procedures cannot be supported by IT solutions.

- The growing focus of Pan-European eServices connected to public actors is an additional layer of pressure towards finding innovative solutions both on the European level and on the national level as well. The key factor is the necessity to identify and realize the best options to connect to the Pan-European services.

Beyond the above mentioned, public sector also encounters grand challenges that can – to a large extent – undermine either the quality of public services offered or the sustainability of the state itself by resulting observable dissatisfaction with the democracy. This democratic deficit largely reflects the worsening confidence and trust levels of citizens towards the state and its institutions. The issue of democratic deficit has become a persistently analysed topic in the European Union (Azman, 2011).

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5 See the series of the Standard Eurobarometer provided by the European Commission (2011b).
As a logical consequence, innovation policy should not only be addressed to the private sector but also to the public sector itself. This is a prerequisite to set up an efficient institutional structure and to provide quality public services. Innovation in public service provision is essential in order to meet the growing demand of citizens, who are used to the increasing services quality in the business sector. As the private sector gets better at innovating and improving quality, this necessarily increases the expectations for public services and puts further strains on state funding.

Another point worth mentioning is the psychological phenomenon “hedonic adaptation”. What was once an outstanding service merely becomes the new norm and baseline against which all other services are measured – i.e. all services must now start from this higher level as people’s expectations are revised upward.

In short, innovation in the public sector means the creation and implementation of new ideas that can be manifested as new processes, products, services and methods of delivery with the aim of achieving significantly improved efficiency, effectiveness or quality of outcomes (Mulgan – Albury, 2003). Since the term “innovation” can be portrayed as a very elusive process in case of public service provision, it must be made clear that there is no unique and standard approach at hand. On the contrary a diversity of approaches and perspectives (e.g. top-down, sideways, bottom-up, co-creation) whose combination supports in exploring the real picture with a greater diligence and clarity (Borins, 2001). Furthermore, policymakers should also take into account the fact that policy objectives are moving targets, and stimulating innovation within the public sector needs a holistic and dynamic approach over time.

Innovation in the public sector is widely analysed in the economic literature, highlighting that challenges establish an intensifying pressure on public service provision. The demographic challenge closely linked with the so-called ageing society and other societal problems such as climate change raise delicate issues for public service provisions. In the interest of pursuing collective impact higher financial burden has to be imposed (e.g. ageing population entails a society demanding at least new types of public services and also more prolonged treatments for elderly, but its ultimate consequence are unsustainable pension and social systems – as World Economic Forum (2012) notes: “In Europe, pension schemes allow people to retire at 55, a costly luxury in ageing societies.”). Despite the growing literature, it has only recently been discussed whether policy engineering in this regard is directing Europe towards a more efficient public sector without neglecting recently emerged challenges. Since public service provisions require solid financial background, one should not ignore the fact that recent trends in fiscal performances in the developed world suggest that the era of “Great Moderation” has ended.

The “Great Recession” has been placed onto the policy agenda (Coibion – Gorodnichenko, 2010). Now cyclical fluctuations show significant increase and fiscal challenges are exposed. Recently more and more European countries faced serious liquidity problems (e.g. Hungary, Latvia and Romania in 2008) and even threats of sovereign debt crisis (Italy, Spain, Ireland, Greece and Portugal in 2010). Importantly, even creditor countries (Germany, France) did not prove to be immune to indebtedness, as their debt-to-GDP ratios have started to increase at record heights. It is hardly by chance that Reinhart and Rogoff (2011:4) already considers the period 2007-2018 as a decade of debt.6

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6 As it was historically pointed out by Reinhart et al. (2012), high debt levels (90% of GDP) have a secular negative impetus on economic growth, and these episodes often last two decades or more. The average high-debt episodes since 1800 last 23 years and were associated with a growth decline by more than one percentage point relative to the rate typical for periods bearing lower debt levels. That is, after a quarter-century of high debt, income can be 25% lower than it would have been at normal growth rates.
This can be seen as a certain signal of a series of fiscal consolidation episodes to be taken place inevitably throughout the EU in the current decade. Consolidating public finances, i.e. manoeuvring towards the sustainable path of public finance is unavoidable due to the fact that there is no state with unsustainable public finance that would be able to promote collective impact in addressing grand challenges. Policymakers should therefore consider the following:

(i) The conventionally postulated impact of such consolidations on economic performance is not unambiguous. What is more, many argue that these fiscal adjustments will affect primarily negatively the real GDP growth performance in most cases.

(ii) According to an IMF study, European governments will be able to reduce their public debts merely with a maximum of 1.5% of GDP per year without triggering significant additional deteriorations in terms of output and unemployment (IMF, 2010). This per se calls for prolonged and persistent consolidations in Europe. This largely reflects the consensual view echoed by Cottarelli (2012), namely, neither the too fast nor the too slow fiscal adjustments seem to be expedient since both of them will presumably deteriorate the recovery process. As a consequence, policymakers should aspire to extenuate the “pains” (i.e. the fiscal consolidations induced decline) via innovation in the public service provisions in a more dedicated way, as well. Alleviating the pains also means moderating the uncertainties (Shackle, 1955; Lachmann, 1978:26).

(iii) There is no any optimal and ready-to-use consolidation method at hand that can be applied in each case. Public sector innovation may offer a reasonable opportunity to combat fiscal laxity. It may also provide a way for the public sector to be more efficient in rehabilitating and maintaining the trust level of citizens and end-users towards governments and state institutions at a time when painful and perceptible changes are needed.

(iv) Citizens are not prepared to accept a lower standard of service regardless of the crisis. A number of political parties across Europe that have introduced austerity measures or who propose significant changes to state benefits (e.g. retirement age) faced major loss of voters. Thus even though the financial background has radically changed, public expectations are at best slow to change, or at worse, unwilling to change.

Even if the public sector adopts some market-like strategies it is often reluctant to fully realise the necessary steps. If genuine market forces are unleashed, this may lead to the need to terminate some services through creative destruction. It appears that governments are however far from keen to close hospitals, schools etc. when they appear to be failing.

Challenges (e.g. the impact of cutbacks) have reached the coast of public sector related economic literature and led to lengthy discussions over the role of academics that should “[...] identify, analyse and theorize both the gains and the losses” (Pollitt, 2011). The challenges are establishing a claim for public sector innovation which could occur even in a shorter time frame by providing significant cost-reducing opportunities without any decline in service quality as well as accessibility, but with improvement that constitute a trust-builder and maintainer channel. This calls for innovations resulting bigger positive changes complementing the incremental and slowly evolving ones.

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7 Without trust the results of the consolidations will more likely be infinitesimal. Complying with the new fiscal rules and discipline assumes a good public service quality and accessibility which could maintain the trust in governmental institutions from the side of citizens. See: Győrffy (2007); Vigoda-Gadot et al. (2008)
3.2 Conceptual framework for analysing policies supporting innovation in public sector

Albeit most of the previous studies have analysed the issue from various aspects, there is still a need for bridging our knowledge gap on the nature of innovation in the public sector. Public sector innovation is often seen as the “successful exploitation of new ideas”. Baxter et al. (2010) also considers that this definition can by no means provide a more realistic picture of innovation in the public sector.

Importantly, the basic institutional structure is a result of the often century-long development of formal and informal institutions (e.g. traditions, norms, values). As Hodgson (2006:13) emphasised: “institutions as durable systems of established and embedded social rules that structure social interactions, rather than rules as such. In short, institutions are social rule-systems, not simply rules.” Minimizing the discrepancy between formal and informal institutions has to be one of the state’s roles, because economic history teaches us that formal ones have to follow evolutionarily the informal ones (Hayek, 1988). In this regard, innovation in the public sector has an important role in fitting the two together. An organic harmony between the macroeconomic institutional framework and the company and industry levels is essential, because the microsphere is competing on the global scale. But, institutions influence the quality of governance which can be regarded as a substantial determinant of international competitiveness.

Our approach also embraces the issue of (fiscal) decentralisation by distinguishing among public sector innovation patterns taking place in federal (the highest level of fiscal decentralisation) and non-federal states. Depending on the level of independence and decentralisation, the institutional structure allows local entities to face their own challenges, in many cases with their own budgets and to make their own decisions.

Exhibit 1 illustrates the relationship between the quality of governance and international competitiveness in terms of formal institutions. In so doing, we use the World Bank Worldwide Governance Indicators database as well as the sub-index for institutions of the World Economic Forum Global Competitiveness Report 2011. The first one is to capture the quality of governance by using six indicators that are ultimately geared towards to political, economic and institutional dimensions (Kaufmann et al. 2008). The latter one offers us an opportunity to contemplate how the given economy performs in case of international competitiveness with special attention to its institutions. This makes it possible to see the distribution of countries across these indicators according to whether they have good (above average) or “less good” (below average) governance as well as whether they have either high (above average) or low (below average) institutional quality.

Without neglecting the fact that measuring governance quality has its own limitations (Oman – Arndt, 2010), the chart conveys at least two messages: (i) there is a strong correlation between good governance and internationally competitive institutional setting; (ii) the size of the state (i.e. concerning the redistributed share of GDP) does not seem to matter in the sense that good governance and better international competitiveness are not necessarily associated with small states in terms of centralisation. Instead, the quality and efficiency of governance and that of the

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9 Including a variety of federalism, such as competitive, cooperative, etc.
institutions are more important as the case of the Nordic countries represents with relatively enormous centralisation.

Exhibit 1. Institutions and governance quality in selected countries (2010)

Note: vertical axis refers to the institutional competitiveness of countries prepared by World Economic Forum in its Global Competitiveness Report 2011-2012, while the horizontal axis represents the aggregated The Worldwide Governance Indicators prepared by the World Bank (See: Kaufmann et al. 2008). The intersection reflects the averages of the two indicators.
Source: own compilation based on data mentioned above.

The group of countries of good governance that also have high institutional quality are of a heterogeneous structure, yet the federal states are highly represented in this group (e.g. Australia, Austria, Belgium, Canada, Germany, Switzerland and even the United States can almost be ranked with this group). These countries are also at the top of global rankings such as the World Economic Forum Competitiveness Report 2012, IMD World Competitiveness Yearbook 2012, World Bank Doing Business 2012 as well as the Global Innovation Scoreboard 2012.

Beyond this, the best performing countries having good governance and high institutional quality are those of being either innovation leaders or followers according to the methodology of the Innovation Union Scoreboard 2011.11 (The Innovation Union Scoreboard uses four categories: innovation leaders and followers, moderate and modest innovators). Interestingly, these countries are mostly not those of being the leading innovators according to the definition of Innobarometer 2010. The difference between the two measurement methodologies is that the Scoreboard measures a wider aspect of innovation embedded in the institutional framework while the Innobarometer exercise focuses on

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self-reported innovation actions, mostly grasping the frequency of innovations.\(^{12}\) It follows that the quality of governance indigenously depends on the institutional framework in which innovation takes place.

Additionally, these states have relatively better fiscal conditions after the financial and economic crisis and its ensuing sovereign debt crisis (IMF, 2010). Federalism and decentralisation are not without doubts especially in case of new democracies (Rodden, 2001; Tanzi, 2001; Cai – Treisman, 2004), because it is often argued that spill-over effect and the economy of scale requires centralised structure.\(^{13}\) The institutional architecture of better performing countries having federal structure (or highly decentralised one like Sweden) has evolved historically over the centuries. Thus, incorporating this evolutionarily developed institutional form into our analysis may provide reasonable considerations in trying to understand public sector innovation in a more dedicated way.

Our theoretical framework (*Exhibit 2*) is based heavily on an extended approach, placing into focus not only the innovativeness of the given policies and initiatives but the innovativeness of policy making as a whole, as the main institutional framework of policy setting. The preconditions of an environment that generate innovative policies are crucial to be taken into account for this analysis.

Theoretical and empirical works suggest that federal institutional structure may influence innovation activities in the public sector and public policy making in a more dedicated way relative to the unitary states (Rose-Ackerman, 1980)\(^{14}\). Furthermore, innovation prospers in an environment with several actors and sufficient level of information (i.e. appropriate flow of knowledge, etc). Studies point out that the lack of information on local preferences due to information asymmetry can be significantly moderated by decentralisation.

In other words, this brief investigates the innovation patterns in public service provision by broadening the scope of research. The following basic considerations of institutional structure are discussed in this policy brief:

- Public sector organisations are embedded into the institutional framework that can be seen as one of the most decisive factors influencing innovation activity (Glör, 2001).
- Taking into account the federal versus non-federal character of the public sector analysis seems to be conducive to our research. The distinction between federal and non-federal states is quite inevitable, because in federal systems each layer of the government has an autonomous constitutional existence, while in unitary systems any regional governments are legal creation of the central institutions. However it is important to note that in practice some unitary countries are more decentralised than some federations (Anderson, 2008:5).
- There is a hypothesis that a country with a substantial political decentralisation or even with a federal system is more likely to benefit from better policies than a centralised one because its greater efficiency in identifying the best policies (Oates, 1999; Weingast, 2006; Saam – Kerber, 2008). As theory suggests, bottom-up innovation mainly emerges under decentralised provision of public services while top-down innovation is a typical innovation pattern.

\(^{12}\) In terms of innovation intensity, Greece and Bulgaria are among the top (European Commission, 2010:16)

\(^{13}\) Not to mention that the issue of how to organise the joint provision of services by various level seems to be the key behind the expected success of decentralisation (Prud’homme, 1995). For a well-elaborated and comprehensive picture on federalism and fiscal decentralisation see: Ribstein and Kobayashi (2007)

\(^{14}\) As Rose-Ackerman (1980:614) states: “[…] federalism may produce a search for new ideas simply by generating a more competitive low-level political system”.

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type in centralised systems.\textsuperscript{15} Therefore exploring the level of decentralisation seems to be an expedient way for analysing policies in support of innovation in the public service provision.

- Literature emphasizes that decentralisation and federal political and fiscal structure are more likely to lead to higher economic growth and decreasing regional inequalities owing to the optimal provision of public services (Martínez-Vazquez, 2001). It is also worth noting that federal structure is more likely to trigger direct democracy which in turn is tended to be associated with stronger fiscal prudency as the case of Switzerland suggests (Funk – Gathmann, 2012).

By distinguishing between public sector innovation patterns that take place in states having different level of decentralisation we take into account the fact that framework and incentive conditions differ across states. Grand challenges require more flexible framework and better incentive regimes in order to trigger collective impact.

The approach of this brief embraces the characteristics of the state that influence not only public service delivery but also policy formulation. These characteristics can either foster or hamper the realisation of innovative ideas within the public sector.

\textsuperscript{15} By considering the origins of the concept and implementation of New Public Management (i.e. Originally, the implemented public administration reform, modernization and new public administration policy were called NPM in the United-Kingdom, New-Zealand, and Australia – See: Fábián, 2010), one may claim that bottom-up innovation is witnessed more in countries that have modernised public management systems, whereas the top-down approach relates more to a centralised state.
From the perspective of innovation, the institutional layer largely determines and influences at least the following dimensions and the innovation patterns within:

- **Institutional architecture**
  - policy formulation
  - establishment of best practices with dynamic view
  - policy implementation
  - correction, refinement, policy-learning
  - evaluation

- **Outcome**
  - cost-efficient services
  - innovation in service provision
  - new services

- **Potential spill-over effects**
  - dampening democratic deficit
  - fiscal consolidation and structural reform
  - improved fiscal latitude and service quality/accessibility

**Exhibit 2. Theoretical framework for analysing public sector innovation**

**Source:** Principal author, ICEG European Center
Innovation sources

Sources of innovation and information in the public sector includes: (i) external or internal partners (e.g. public or private organisations); (ii) citizens and (iii) employees. The role of employees is pivotal in pursuing better policies and public services. As decentralisation grows, the opportunity to involve others in order to meet citizen’s preferences and policies through sorting (Rodden, 2004) becomes a real perspective. Proper information about the preferences of citizens is more likely to be available and used in an efficient way in a more decentralised system (Hayek, 1939). Decentralisation helps citizens to avoid being poorly informed and allows them to play an active role in normative policymaking.

Motivation

Motivation behind innovation: the institutional setting can substantially influence public servants’ motivations to identify and terminate or re-organise inefficient policies. Incentives may include payments, long-term employment, political success, etc. In decentralised structures local visibility and accountability are important incentives. If the public sector is largely decentralised and transparent (information technology can further support transparent governance), public servants are more likely to make efforts to identify ill-performing and inefficient policies/services.

Organisational characteristics

The institutional layer also determines the characteristics of public sector organisations. There is a widespread consensus in the organisation theory related literature that decentralised structure with smaller organisational units has greater potential for achieving effective internal knowledge flows and intra-organisational knowledge sharing (Serenko et al. 2007) since they are more likely to be in conformity with local needs of citizens. This would presumably shape not only the core values of the organisation, but it also has the potential to transform the organisational culture into a more innovative one.

Risk taking

Capabilities to adopt innovation strategies or riskier innovative initiatives/policies: learning capability is the necessary human capital that determines the willingness of organisational culture to evaluate and monitor its policies and initiatives along the policy cycle. Financial capability is the necessary financial background because innovative initiatives are often risky and can lead to increased expenditures. Innovation depends on risk taking but also on learning from the risks that have been taken – what has and has not worked. An organisation that uses risk as a learning process is inherently geared to be more innovative as opposed to one that sees failure in absolute terms. Fiscal federalism operates an interregional fiscal transfer system from higher to lower tiers of government (e.g. the constitutionally declared so-called ‘Finanzausgleich’ in Germany, Austria etc.) with the aim of dampening the fiscal shortcomings on the basis of solidarity in times of fiscal shocks (Darby et al. 2004). This mechanism also serves as a cushion for realising riskier (costly) innovations therefore provides better basis for such learning environment.

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16 In case of fiscal federalism, there are four elements which constitute its operation: (i) sub-central political entities enjoy independence/autonomy to decide taxes and expenditures; (ii) these governments face fairly hard budget constraints, that is a no bail-out rule is consistent with the ideal type of fiscal federalism, (iii) there is a common market based on free trade and mobility within the fiscal union, thus there is scope for competition among sub-central governments, and (iv) the system of fiscal federalism is institutionalized in a set of rules. See: Sorens (2008), Bordo et al. (2011)
Parallel learning

Potential for policy learning from parallel exercises: in theory, highly decentralised governance can stimulate the governance innovativeness through permanent and more efficient policy learning process (Weingast, 2006; Saam – Kerber, 2008). Recent literature suggests that decentralisation leads to a more reasonable availability of multiple experimental policies that can be useful for the central government in providing the public good of disseminating the lessons.¹⁷ ¹⁸

“It is one of the happy incidents of the federal system that a single courageous State may, if its citizens choose, serve as a laboratory; and try novel social and economic experiments without risk to the rest of the country.”

*Justice Louis D. Brandeis, New State Ice Co. v. Liebmann, 1932*

As Exhibit 2 shows, the institutional setting influences the processes of policy formulation. Innovation can be achieved through policy formulation, implementation, adaption and evaluation. Policy learning ability is a crucial factor of success.¹⁹ For a permanent adaptation capability a dynamic view is needed since policy is an open-ended experiment. Policy setting must react to both old and new challenges by learning from the experience and concentrating on “sequencing of initiatives” (OECD, 2009:54).

Innovation can occur not only in the policy cycle but also in service provision. Taken into account our conceptual framework, the innovations leading to cost-efficient services are inevitable for countries facing the challenges of fiscal consolidations.

Democracy is an extremely important framework condition (Bhatta, 2003; Pollitt, 2003). The challenge requires the state to dampen the democratic deficit felt by citizens especially during painful interventions. Necessary consolidations require social acceptance. They are closely associated with trust in governmental institutions and citizen’s satisfaction with public services. Banfield (1958) and Arrow (1970) also argued that the lack of trust impedes economic development. Since public sector innovation affects citizens’ trust in governance and their satisfaction with state and its institutions – as Vigoda-Gadot et al. (2008) amply demonstrated – reinforced trust and potential spillover effects have to be pursued at policymaking level.

As the private sector gets better at innovating and improving quality of its service provision, this necessarily ramps up expectations of public services. The quality gap between private and public sectors’ services hampers the satisfaction of citizens with the services they receive from the state and leads to the deterioration of democratic deficit. Rehabilitated and strengthened trust level from citizens may provide the necessary ammunition for the implementation of painful measures (e.g. fiscal adjustments and structural reforms (OECD, 2012) geared towards the long-term sustainability

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¹⁸ However, empirical evidence on the effect of decentralisation on policy innovation is often debated (Strumpf, 2002; Taylor, 2007). Without being exhaustive we can recall to the messages of (new) political economy emphasising that policymaker is to maximise the votes, consequently, policymakers are not so benevolents as it was expected in early works, for example in Keynes’ papers. See more on the issue: Downs (1957), Nordhaus (1975) or in the context of federalism: Schnyder (2011).

¹⁹ As the comprehensive study of Hughes et al. (2011) draws the lesson that repeatability is of key importance as a way of continuous monitoring the repercussion of the efforts to make improvements.
of public finances as well as services). The improved fiscal performance increases the flexibility of various levels of governance to carry out innovative ideas by encouraging local policy experiment (Harrington, 2010:7).

High quality public services with better accessibility may also improve the general framework of the innovation eco-system from the side of public sector. Cultivating the innovation eco-system is essential in terms of grand challenges requiring collective impact. It may create a „virtuous cycle” – i.e. an improving innovation eco-system feeds into and improves institutional architecture, as well.

3.3 The specific features of public sector innovation

Innovation has been long attributed to the private sector. As Hayek (1978) argued innovation is a market process, hence innovation refers to the entrepreneurial activity. As Kirzner (1973) stated innovation is the continuous discovery (and utilisation) of arbitrage opportunities. Utilisation of an arbitrage opportunity means improvement in the efficiency which is the ultimate goal of each entrepreneur.

Nonetheless, innovation has been infiltrated into the public sector. It enhances the public sector efficiency, improves the service quality and accessibility and provides salutary impetus on private sector. This effect manifests in significant productivity improvement that is essential in the interest of sustainable growth as Solow (1957), Easterlay and Levin (2001) emphasized. In light of this, innovation should be seen not just as a market process, but also as a core activity of the public sector and a meaningful supporter of public sector reforms, as well.

There are several similarities between private and public sector innovation (Halvorsen et al. 2005; Hartley, 2005). For instance, there are greater transferability in the fields of business process improvements and many aspects of information and communication technologies that would be useful for public sector in a similar way.

One of the most fundamental differences between public and private innovations is linked to the issue of evolution (rise and fall) of innovation. In the private sector, prevailing and dominant innovations are results of a strong selection process provided by market competition (Matthews, 2009). While some innovation proves to be successful, some inevitably fails. On the contrary, there is no such strong “invisible hand” in the public sector that would select out the failed innovations and the concept of contestable market (Baumol, 1982) does not apply, either.

It is inevitable to review and reassess the outcomes of a given public sector innovation for which performance measurement, based on continuous feedbacks and systematic monitoring, can serve as a basis. Transforming the lesson learnt into practice is the sine qua non of such activities; otherwise metrics are just time and energy consuming actions (Van Thiel – Leeuw, 2002). Yet public organisations tend to pursue failure avoidance because it might be particularly costly (let those be human, political or budgetary costs).

The cost of their failure is great. Therefore public organisations tend to stick to known options of low performance, rather than risky solutions of potentially high efficiency. Public organisations are very

20 It is not surprising that Akerlof and Shiller (2009) emphasised in their riveting book the central role of trust in trying to explain how the real economy works.

21 For example, improved productivity can entail potential increase in tax base and add to the sustainability of public finances.
visible in what they do and when they fail (the Norwegian case study in Section 4.4). The public sector is accountable (Potts, 2009) and so it does not like to be seen to fail. As a result, the visibility of failure is the reason for avoiding innovations. Since failure is costly and monitoring also needs significant financial resources, public organisations prefer stability over innovative changes.

The market competition is a major driving force for private sector organisations (for-profit enterprises): (i) decision-makers have to be crystal-clear about the current status through the analysis of accurate and real-time data on relevant internal and external factors; (ii) this requires all necessary data to be rapidly collected, organised, stored, processed and analysed; (iii) on the basis of analyses, decisions and action plans are made in order to optimize capacities and processes; (iv) the efficient implementation has to be later accompanied by measurement of results, collecting and assessing feedbacks; (v) these activities have to be an integral part of day to day operation in order to contribute to the innovativeness of private organisation. Since “[…] competitive incentive is a very weak force in the context of public sector innovation” (Potts – Kastelle, 2010:123), the public sector does not emphasize these activities as much as they are taken into account in case of the private sector. Public sector has so far much less innovation experience compared to the private sector however its innovativeness is not denied (Osborne – Brown, 2005; Mulgan, 2007).

An additional feature of public sector innovation is linked to the issue of how to measure the outcome of innovation. In case of the private sector, prominent international organisations with support of national statistical offices have established standard methodologies in measuring for example productivity on which innovation has a non-negligible impetus. Private sector innovation can be captured in terms of turnover, profit, market share, return on investment etc. On the contrary, public sector aims at achieving higher societal goals like welfare and increased level of well-being (Koch – Hauknes, 2005) that cannot be easily captured by metrics. When measuring the results of public sector innovation it is crucial to take into account a wide range of outcomes and impacts for instance reflected by the improved responsiveness to clients/citizens.

In case of private sector methodologies are based upon comparability; however, this is not the case in public sector because a unified institutional background with elaborated and widely used methodology is still missing and the measurement of the output of public sector innovation is often sporadically addressed (Boyle 2006). Still, measuring public sector innovation has been increasingly receiving attention (Searle – Waite, 1980; Jääskeläinen–Uusi-Rauva, 2011) and some progress has already been made.

The public sector is a heterogeneous and complex system with a high variety of influencing factors and an extensive variety of innovation attributes that make policy learning more difficult. Heterogeneity can be observed for several reasons.

First, there are different levels of governance and public administration with differing size of organisations. Second, the public sector cannot be homogeneous, because the public sector, the private sector and the tertiary sector heavily overlap and interact in different ways. Third, the rotating feature of political governance does not necessarily offer long-standing leaderships to support sustainable innovations. The phenomena of creeping normalcy (when year-by-year
deteriorations along a new initiative or policy are proved to be hardly imperceptible by public servants), coupled with the problem of lack of long-standing leaderships also make it difficult to identify bad policies.

If we take a glimpse into the major objectives pursued by private and public sector we can see major differences. While the private sector is the arena for profit-maximizing market actors, public sector is the sphere where policymaking and implementation are to achieve welfare objectives and to reasonably contribute to the socio-economic development. In terms of objectives, private sector organisations have to live with shorter planning horizons, while public sector has the opportunity to set plans not only within the electoral cycle, but also in a longer time frame. Although the above mentioned differences between public and private sector are not exhaustive, it becomes clear that transferability regarding the adoption of successful private sector practices does not seem to be feasible in all cases.

3.4 Potential drivers and barriers of public sector innovation policy

In order to illustrate the major prerequisites of an impulsive innovation process in the public sector, we adopt the concept prepared by Kornai for the market (2010). In doing so, we aim at pinpointing the differences in case of public and private sector innovation. This way, potential drivers and barriers of innovation can also be unravelled in a more vigorous way. According to the major findings of Kornai (2010) the following fundamental prerequisites are to be considered when it comes to the issue of innovation: (i) decentralised initiation; (ii) high rewards; (iii) competition; (iv) opportunity for broad experimentation; and (v) flexibility of financing.

Decentralised initiation

In the context of the private sector, decentralised initiation means that every business actor (e.g. an SME) has the opportunity to determine themselves what they want to invest in. In case of public sector organisation, decentralised initiation relies mostly on whether the given institutional structure allows the organisation to initiate what it wants. A public sector organisational unit being in a centralised institutional setting has less authority and resources to initiate innovations by its own. In a more decentralised or federal system public sector organisation is more likely to have a fertile institutional ground favourable for being much closer to the public (de Mello, 2000) which is important from the aspect of getting feedback and ultimately reaching better innovative organisational culture. A more decentralised institutional background tends to serve as a status quo breaker in the sense that it motivates public servants and managers to be innovative, e.g. to

in their organisational units, this type of manner is able to shape the standard operating routines of public sector organisations (Hood, 2011).


25 According to Martins and Martins (2002), an organisational culture can be treated as innovation-friendly when trust-based relationship pervades the working environment thereby employees are encouraged to bring up their ideas etc. in the interest of permanent improvement through innovations.

26 Preserving the status quo is often forced by various interest groups (Olson (1971 | 1965). Although the theoretical discussions does not argue that decentralisation is always the solution (Fjeldstad, 2004; Redoano, 2007), still, we have to recall to the fact that sub-national governments’ ability to tax is essential (i.e. not depending so decisively on the transfers coming from central government) in explaining why bigger social capital can be associated with these types of decentralised structures (Bardhan – Mookherjee, 2000).
identify ill-performing and inefficient policies/services and to make efforts for better policies/services.

However, capability for decentralised initiation can also be hampered by many factors. Public choice theory and political economy literature suggest that politicians and bureaucrats are nothing else but vote- and budget-maximizing machines (Downs, 1957; Niskanen, 1971; Tullock, 1980). Subsequently public sector leaders may not aspire to be sufficiently innovative. ‘Dysfunctional’ leadership does not prioritise performance measuring activities (e.g. the cycle of feedback and performance related review) in an “ideal public service as usual” way. Let us add immediately that no one wills themselves to be dysfunctional neither in the public nor in the private sector organisations. The disfunctionality can be interpreted as a product of an organisational inertia that prevents steady state over rapid change and this assumes an institutional background that explicitly rewards steady state. As Donald Schön rightly described there is a “dynamic conservatism” (Schön, 1973) – that is, an active striving not to change. This concept neatly captures much of the problem with innovation in the public sector but makes it clear that this is not a public sector issue per se, but rather one of organisational culture.

This also plays significant role not only in maintaining the risk aversion of public servants (Bellante – Link, 1981; Buurman et al. 2009), but also in the evolvement of tensions that can inhibit innovation. In addition, one may also highlight that these processes are influencing the political will (the political push) in case of innovation which is required when strategic changes are needed in the public sector (Clark et al. 2008). Proper, passionate and committed leadership is a key enabler for decentralised initiation as well as for professionalization of the public sector, requiring creative workers (Bason, 2010).

"If your actions inspire others to dream more, learn more, do more and become more, you are a leader."

John Quincy Adams, American 6th US President (1825-29)

Public sector leaders have to be aware of the fact that “knowledge workers” (Davenport, 2005) (e.g. high skilled, creative experts) require greater autonomy to work and particularly different management techniques and approaches that has to be obtained via smart knowledge management.

The latter one can support the assumption on the positive impetus of decentralisation on corruption, as well. There is some theoretical and empirical backing emphasising the role of decentralisation in curbing interest groups. See: Arikan (2000) who carried out a cross-country analysis; Cheikbossian (2008); Fischer et al. (2009) on the issue of how interest groups were pushed into the background in Switzerland.
Box 1. The importance of non-technological innovation on knowledge management in the public sector

Adequate knowledge management is the first step towards bridging the knowledge-doing gap. Knowledge management is a multifaceted field because it encapsulates at least the following areas: HR, informatics, accounting and legal issues. Eventually the human factor is in its centre, as the source of all knowledge.

Knowledge management is not only about the establishment of a wide range of ICT solutions invoked to collect, assess and store knowledge. Adequate knowledge management is also expected to motivate public employees to share knowledge (especially non-codifiable tacit knowledge), to conduct vital disputes and dialogues with all relevant stakeholders. Under this angle, technology is “just the maid servant”, while human factor is the key in transforming ideas into practice based on collected and assessed data.

Improved knowledge management plays an inevitable role at national, regional or local levels alike, because public sector organisations can be regarded as knowledge-based organisations. According to comprehensive studies on knowledge management in developed and developing countries (OECD, 2003, Yuen, 2007), the human factor was underestimated in the efforts to build up knowledge management. These shortcomings demonstrate the necessity of non-technological innovations tailored towards the human factor (e.g. organisational innovation, new management practices through coaching, interim management to create better organisational resilience etc.) in favour of the cultural “innovation” towards an advanced collective intelligence required by complex challenges.

High rewards

The issue of risk aversion is to a large extent able to lead us to the next prerequisite: high-rewards. In the private sector, the most successful innovations are accompanied by an enormous amount of financial reward, as well as a long-lasting reputation (e.g. Facebook). Reward is given in a market competition situation, hence, there is no such accurate incentive within the public sector at hand. As it was rightly pointed out by many, for example by Pfeifer (2011) in case of Germany, public servants/workers are risk averse; in turn, “[...] risk taking is rewarded with higher wages in the private but not in the public sector.” It may fundamentally maintain the culture of risk aversion.

Risk aversion is a cultural phenomenon that relates to a number of things – no incentive to innovate, a culture that punishes failure, a culture that does not seek to learn positive lessons from failures, that trying new things is not a condition for promotion etc. It calls our attention to the limits of public sector using private sector reward-methods to boost innovation, especially financial rewards.

Still, dampening the de-motivating factors within the public organisation by engaging public servants in public mission (e.g. solving puzzling issues, make use of wasted resources etc.) (Miles, 2012) should be the major leitmotif of the efforts aiming at reaching a positive and innovative organisational culture. Related to this, fostering public servants’ motivations by either offering career opportunities (e.g. internal upward mobility within the management hierarchy) or applying automated internal performance management systems are among instructive options. The latter option is essential in supporting public sector organisation management not only to deliver accurate feedbacks, but also to train employees through more proper coaching (UNDP, 2006) that is heavily based on adequate performance measurement. By resorting to incentives, the public sector may become a place where competition earns meaning, employees and senior leaders may also compete...
with each other. In this way a diversified and most importantly creative staff can be compiled as a driver of innovation.

Box 2. Incentives affecting positively public sector staff’s motivations

- **Financial incentives**: payment, cash transfers, insurance, allowances, subsidies etc.
- **Non-financial incentives**: gifts, travel, rewards, increased work flexibility, constructive feedbacks and coaching, increased responsibility with salient rewards and advancement opportunities etc.
- **Non-materialistic incentives**: psychological benefits through respect, appreciation as well as status of power; higher self-esteem due to higher level of transparency.

*Source*: based on UNDP (2006)

Certain business practices in rewarding (business HR solutions, business-type performance management techniques, large-scale digitization programmes) may also be adopted for the public sector, with the necessary contextual customisation. Involving end-users, collecting users’ feedback is also supportive in the rewarding process. Important to note, that the word “innovation” is usually not listed in public servants’ job description and in most cases, “innovation” does not feature as a part of the performance review (if there is such) and neither does it lead to promotion. It must be ensured that innovation that leads to good performance is well honoured for actors at different levels of public sector.

**Competition**

Although the public sector does not face competition the way private sector does; the public sector also has to strive for its long term existence through sustainability. In case of unsustainable public services, financing also becomes unsustainable and that endangers the feasibility of any socio-economic objectives. As a consequence, public sector must enhance efficiency, performance and thereby reach better public services. Innovation serves as one of the key drivers for this development process.

Moreover, competition has been introduced into the public sector/services via different ways leading to a more business-like public sector (Lawton, 2005:231) (e.g. creating market through privatisation, competitive tendering, aspiring for collaborations through public-private partnerships and public procurement pervaded by fair competition etc.). These collaborations among the public sector, the citizens and the private sector are defined by the respective laws and regulations, specified by contracts but successful partnerships are also supported by confidence and trust among the actors. In order to preserve and enhance this trust, signalling credibly the willingness and commitment to permanently improve the public services is crucial.

Better services with improved access and efficiency gains will optimally lead to better fiscal performance (i.e. due to rationalised expenditures allocated in a more efficient structure) and thus to

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27 Korea introduced the so-called Open Competitive Position System (OPS) in 1999 with the aim of attracting the best available leaders and employees both from public and private sectors (OECD, 2001:21). In 2003, Namkoong (2003) carried out an evaluation and concluded that OPS program proved to be a first big leap towards an open and more efficient government.

28 Increasing transparency in decentralised governance leads to less scope for corruption which otherwise could be rather destructive for organisational culture, and thus for innovativeness. Fisman and Gatti (2000) conducted a comprehensive cross-country investigation on whether fiscal decentralisation lowers the level of corruption. Their empirical analysis suggests that fiscal decentralization in government spending is significantly associated with lower corruption.
better economic performance that will be observable in the trajectory of risk premium, as well. More precisely, improving the public sector efficiency entails a more disciplinarian fiscal policy, lowering the interest rates related to debt service. The ameliorating trend in risk premium can be to a large extent regarded as the “profit” of the public sector when it pursues innovation. One may add to this interpretation that there is no harm in such consideration stating that fiscal consolidations underpinned with credible commitment can be among the drivers of public sector innovation.  

**Opportunity for broad experimentation**

In general, there is less opportunity for experimentation in the public sector than in the private. First, citizens and consumers of public goods and services are more likely to prefer stability over hectic and non-predictable changes in public services. This raises the issue of what the public’s appetite is for innovation in public services? Citizens can be used to old forms of service provision and can resist change or can be hostile to public money being spent in new ways on new things. Public’s appetite is more likely to differ across various services, which has to be addressed. Preferring stability is primarily due to the fact that citizens and consumers are not in the position to switch quite easily from one to another public service. 

Increasing transparency by dampening information asymmetry could trigger more frequent feedback from citizens about service quality. This feedback is crucial because there is a longer feedback circle in case of public services. An enhanced feedback circle has a positive impetus on the learning curve; therefore it is *per se* an influencing force to be reckoned with. Improving feedback opportunity may also imply that the learning curve is much longer on which along policymakers are discovering policies performing better or badly.

Since the success of innovation is defined retrospectively, the cumbersome character of public sector innovation (often risky, time consuming, there is less innovation experience, moreover significant risk aversion is also registrable) leads to even less room for experimentation, as public workers prefer to follow old routines, procedures (Barrados – Mayne, 2003). The system is engineered to produce stability and routine; it supports neither learning culture nor the role of experimentation. Instead, it maintains the phenomenon of organisational “unlearning” (Hedberg, 1981). Additionally, the political voluntarism prone to populism often leads to longer term legal obligations and public contracts that impede the cost-savings effect of innovations. This might even imply the side-effects of contra-selection of innovative initiatives/policies. All in all, extending the scope of experimentation is a fundamental enabling factor of public sector innovation.

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29 It is worth mentioning that Innobarometer 2010 (2010:8) founds that one of the major driving forces of public sector innovation was the significant budget decreases.

30 However, federal and more decentralised countries seem to have greater opportunity to detect, modify, or filter out ill-performing programmes and policies because of the more intensified policy learning. There is a greater degree of opportunity to start parallel innovative initiatives by lower tiers of governments leading presumably to a more rapid and efficient policy learning on best practices.

31 The public sector, by its nature, must respond to the dictate of citizens and that it can be inertia among citizens that prevents innovation. A good example is hospital care. Increasingly, health care does not need to be hospital based but the public are very wedded to accessing health services in a particular way according to a certain paradigm. Attempts to shift health provision away from hospitals have therefore run into significant resistance.

32 It is not surprising that co-production of public services is developing in a gradual way. See: OECD (2011b).
Flexibility of finance

The availability of necessary financial resources and flexibility of finance are basic prerequisites of a healthy innovative capacity of public organisations being at different levels of governance. But in the public sector, budgetary allocations are often time consuming and bureaucratised procedures. We also must consider that in organisational budget constraints are getting even tighter and tighter with the fiscal anomalies of public finance management and the present sovereign debt crisis.

On the bright side, there is still an opportunity to emphasise that “budget constraints are important in explaining the adoption and spread of employee involvement techniques” (Lonti – Verma, 2003). Still, as a result of vote and budget maximizing purposes, politicians and bureaucrats have a strong myopic thinking and this ensures short-term budget and planning horizons. These are some of the basic constituents of the cumbersome innovation activity of the public sector.
4 Empirical evidence on policies supporting innovation within the public sector

4.1 Institutional structure and innovation patterns

In an attempt to have an introductory view on the current state of innovation patterns in public sector we use the major findings of the Innobarometer 2010 for selected European countries. Our intention is to emphasise that basic institutional structure should not be shrugged off when it comes to the issue of how to think about innovation in the public sector. It is not sufficient to state that “institutions matter” but it is also essential to examine how it matters. Often assumed commonalities between public sector organisations become unverifiable once we consider them within a broader context (Aberbach – Rockman, 1987).

We juxtapose the patterns decipherable from the Innobarometer 2010 along the dimensions influenced by the institutional structure described in Section 3.2.

This structure is captured by the **degree of decentralisation** in countries selected (Exhibit 3) by using the decentralisation index prepared by the Assembly of European Regions\(^{33}\). As it can be seen, four groups of countries can be unravelled (the higher the index, the more decentralised is the country): (i) federal states as the utmost constitutionally decentralised ones; (ii) highly decentralised countries whose decentralisation index is above the average; (iii) less decentralised countries; and (iv) highly centralised ones.

*Exhibit 3. The degree of decentralisation in case of selected European countries (2009)*

Note: indexes for Cyprus, Malta, Luxembourg and Slovenia are not calculated.
Source: own compilation based on Assembly of European Regions (2009).

\(^{33}\) For detailed methodology see: Assembly of European Regions (2009)
The following analysis is built on the relevant dataset of Innobarometer 2010 in showing the patterns of innovativeness pervaded by the dimensions mentioned in the Section 3.2. (Innovation sources, Motivation, Organisational characteristics, Risk taking and Parallel learning).

In our approach, “Sources of innovation and information in the public sector” organically refers to the information sources whereby innovation can arise within the public sector. Based upon data from Innobarometer 2010 (“Source of information to innovations in the public sector”) Exhibit 4 illustrates that public sector actors are on average more likely to obtain information essential for innovation from other actors (other public and private organisations) in federal and highly decentralised states.

Exhibit 4. Source of information to innovations in the public sector

![Source: dataset is based on Innobarometer 2010, Table 27a.](image)

The dimension of “Motivation behind innovation” suggests that public servants in highly decentralised systems are more likely to pursue permanent development and refinement of policies/initiatives mainly due to the coercive power of greater transparency.

Interestingly, the data from the Innobarometer 2010 on “Staff has incentives to think of new ideas and take part in their development” show no significant incentives for federal and highly decentralised states (Exhibit 5). But, as mentioned before in Section 3.1, federal and highly decentralised states are innovation leaders or followers. This suggests that there must be inherent and underlying incentives for public servants embedded into the institutional structure in federal/highly decentralised states, without having a need for an additional, specific innovation incentive policy.

It is also important to note that the proportion of incentivised staff is the highest in case of less decentralised countries that are not innovation leaders or not even followers (see Section 3.1). Policymakers always have to bear in mind that a broader context is needed to get a better understanding on incorporating specific incentives’ design into the institutional arrangements (Azfar et al. 1999; Barenstein – de Mello, 2001).

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34 The period used in the Innobarometer 2010 is from January 2008 to the survey date of October 2010.
Exhibit 5. The issue of having incentives for the staff in pursuing new ideas and their development

Note: % Not at all: proportion of staff that do not have incentive. % Fully: proportion of staff having an incentive system and are fully involved in the development process. Source: dataset is based on Innobarometer 2010, Table 35a.

As for the “Organisational characteristics”, in order to capture the patterns of knowledge sharing, i.e. using internal or external information in the interest of innovation, we concentrate on the opportunity of collaboration that can be addressed by using the Innobarometer 2010 dataset on “New or significantly improved processes or organisational methods were developed by...”.

Exhibit 6. Collaborative-efforts - New or significantly improved processes or organisational methods were developed by...

Source: dataset is based on Innobarometer 2010, Table 12a.

As Exhibit 6 illustrates, public organisations in federal states tend to develop new or significantly improved processes or organisational methods by collaborating with private businesses. This phenomenon, however, is a complex array of issue, that may be ravelled out by incorporating the fact that since local level governance having greater autonomy in a federal state is much closer to the
enterprises than in case of a hierarchical and centralised system. This institutional closeness helps public sector organisations to carry out projects in a more iterative and collaborative way with people whereby they “maximise learning and often minimise risks” (Bason, 2010:240). Thus, the collaborative capabilities of public organisations (See: Huxham – Vangen, 2005) differ across institutional settings.

The dimension of “Capabilities to adopt innovation strategies or riskier innovative initiatives/policies” has been tantamount to the necessary financial background to implement riskier, but necessary innovations. In this regard, we use the dataset of Innobarometer 2010 on “Effect of various factors on the ability to introduce new or significantly improved services: Mandated decrease in organisation’s budget”.

**Exhibit 7. The impact of foreseeable budget cuts on innovation activity over the next two years**

![Exhibit 7](image)

*Source: dataset is based on Innobarometer 2010, Table 49a.*

Exhibit 7 conveys the message that the greatest proportion of respondents who are expecting neither a positive nor negative impact of decrease in the organisational budget stem from federal states. Additionally, the salient proportion of respondents who envisage negative impacts are linked to highly centralised states. Federal states have relatively better fiscal condition and a more disciplinarian fiscal policy thereby they can abide spending cuts in the public sector without endangering the innovation activity. The opposite is happening in those countries having a fiscally derailed public finance position.

As far as the “Potential for policy learning” dimension is concerned, the dataset on “Importance of examples of best practice by another government organisation for development of innovation” is used. Exhibit 8 illustrates that reviewing best practices and learning from them are regarded as very important elements of public sector innovation both in federal and highly centralised states.\(^{35}\)

\(^{35}\) To a certain extent, it refers to the existence of a much healthier political-economic interdependecce, i.e. a more symmetric political economy, in the cases of federal states and highly decentralised ones. As it has been long discussed (Lindblom, 1977; Marsh, 1983, Pinkele, 1985), that governmental decision-makers are
The institutional setting has a pivotal role in influencing and determining the different innovation patterns within the public sector, either in policy formulation or in service delivery. Our analysis also confirms the significant findings on decentralisation and fiscal federalism that should not be neglected by policymakers. Since policy is an open-ended experiment, opening towards the private sphere and citizens in gauging the real preferences and needs in a more vigorous way could bring closer to a better public sector.

In an attempt to complement this short analysis, we address the issue of innovation methods. Basically, we can distinguish between two types of innovation-methods: top-down (policy-driven) and bottom-up. The first one is the case when innovations are driven by policies (i.e. innovations are triggered for example by the introduction of a new regulation or government program). On the other hand, bottom-up innovation method can be considered when a public agency or even one individual concentrates on enhancing its innovative capability by itself. We use the major findings of Arundel and Hollanders (2011) on this particular issue who also built on the European Commission’s Innobarometer Survey used throughout this section. We organise the major findings of Arundel and Hollanders (2011:14) according to our four groups of countries to see whether our basic assumption – stating that countries having highly centralised institutional structure are more likely to follow a more policy-driven (top-down innovation) way – can be justified or not (Exhibit 9).

structurally constrained and affected strongly by business-capital interests when it comes to agenda building. Being closer to the micro level in a federal state, having a more symmetric interdependence is more likely to be obtained.
Exhibit 9 demonstrates that the greatest average share of respondents stating that innovation is more likely to happen in a top-down way is associated with highly centralised states, whilst bottom-up approach is more dominant in case of countries having decentralised institutional structure.

In demonstrating further the non-negligible role of basic institutional structure, the major findings of the study prepared by the Assembly of European Regions can provide a helping hand. The study uses the aggregate decentralisation index, already presented in this Brief. The aggregate index contains the following sub-indexes: administrative (the manpower resources of the sub-national tier), functional (it reflects the balance between decision making and implementing power), political (it is to capture how independent is the given sub-national tier politically) and financial decentralisation (it reflects the degree of power to levy taxes, financial debts, incentives autonomously). Furthermore, the functional decentralisation sub-index consists of two components: decision making and implementing power.

Policymakers should take into account that the decision making and implementing power are not so outbalanced throughout the selected European countries as one would expect in case of lower tiers of government. As Exhibit 10 shows, sub-national tiers tend to have more implementing power than decision-making power, because of the intention of the central level to keep the decision making power at hand by delegating primarily implementing power to lower tiers (reflected by the fact that each country is above the 45°-line). The data suggests that there is perceptible discrepancy between the decision-making and implementing powers at sub-national tiers (the only exception is Austria where the two indexes are very close to each other).
Policies Supporting Innovation in Public Service Provision

Exhibit 10. Decision-making and implementing power in the selected European countries

Taking into account this institutional feature before one tries to stimulate innovation within the public sector is of paramount importance. In countries having higher decision-making and implementing capacities, the process of policy learning is supported because preparing evaluations, putting the lessons learnt into practice have a more fertile ground.

Since financial decentralisation without functional power (to decide and implement) is economically irrational, considering whether the given country has the necessary financial competency required by functional power (decision making and implementation) is crucial (Exhibit 11).

Exhibit 11. Relationship between functional and financial autonomy in the selected European countries

Note: functional index contains the decision making and implementing sub-indexes. The intersection represents the averages of the functional and financial autonomy indexes.

Source: index data are stemming from Assembly of European Regions (2009)
Notwithstanding the fact that less decentralised as well as highly centralised countries are more likely to be associated with lower level of financial autonomy, there are substantial differences in terms of functional autonomy among these countries (e.g. Slovakia has by far the lowest level of functional autonomy, while Portugal and Lithuania are much above the average). This conveys the message that there are countries in Europe having relatively huge discrepancies in case of sub-national tiers between functional and financial power (e.g. Portugal and Romania are encountering significant mismatch in the sense that they have relatively higher level of functional autonomy with significantly smaller financial competencies).

This mismatch may cause significant negative impetus on public sector (governance) performance, since a bias towards fiscal indiscipline is more and more likely if functional tasks are coupled with lower level of financial competencies (resources). Addressing this mismatch by policy would spark public sector innovations by triggering significant cost-reductions or efficiency gains within the public sector. Additionally, smart policies may also lead to significant increase in productivity in the economy which presumably leads to larger tax base in the future.\(^\text{36}\)

If functional and financial autonomy are not guaranteed, innovations in a hierarchical public organisation may merely aim at signalling (Spence, 1973) the quality of intelligence and leadership within an internal promotion game (Potts – Kastelle, 2010).

Policymakers should acknowledge that the given institutional structure has such incentives that formulate innovation patterns (innovation sources, motivation, organisational characteristics, risk taking and parallel learning) and the preferred method (top down/policy-driven or bottom up). In other words, these patterns and innovation-methods are the compatible ones with the given institutional setting.\(^\text{37}\)

Nevertheless, innovation policy should consider at least three things:

- as institutional settings differ across countries, public organisations are also differing which suggests that one specific feature of innovation in a certain public sector organisation does not inevitably apply in other parts of the public sector;
- addressing the institutional structure and diminishing the institutional barriers must be an integral part of any smart fundamental policy that aims to promote innovation, in order to change the way innovation policies work in the public sector and their learning curve\(^\text{38}\);
- further analysis of countries with greater share of bottom-up innovation policies may carry important messages, especially about the kind of institutional structure that seems to have inherent incentives for innovation.\(^\text{39}\)

36 Neglecting the fact that this mismatch was one of the driving forces behind the implementation of various fiscal policy innovations in some European countries (e.g. responsibility laws, fiscal rules and independent fiscal institutions) would be a naïveté. These institutional innovations are \textit{inter alia} counterbalancing the deficit bias.

37 By using the case of Germany, Preissl (2012) pointed out that adopting market-related tools (e.g. performance based payment) without shaping them according to the public sector’s mission might be rather problematic.

38 See for example Røste (2004:20)

39 Arundel and Hollanders (2011) also argue that bottom-up innovation-method do seem to be more successful than the policy-driven approach. Additionally, considering these is crucial since Innobarometer 2010 also ascertained that “a top-down approach of innovation or innovation support has been prevalent in developing innovations. A bottom-up innovation culture was the least characteristic of the government sector” (European Commission, 2010:8).
4.2 Global trends in fostering public sector innovation

After studying the role of basic institutional structures, we concentrate on outlining major recent innovation trends in selected countries. We look at policies and initiatives either in the phase of policy formulation or service delivery with special attention to the following areas: (i) general public services (public administration including public finance) at central, local and regional levels; (ii) health and social protection; and (iii) environmental protection.

As we indicated earlier, Europe faces a series of challenges (demographic, climate, debt-crisis, etc.) that are establishing a claim for public sector innovation in Europe. These innovations are expected to provide significant cost-reducing opportunities without any decline in service quality as well as accessibility. Moreover, improvement in quality and accessibility can constitute a trust-builder and maintainer channel. According to the model of “radical efficiency” coined by Gillinson et al. (2010), significant service quality improvement can be reached with substantial (approx. 20-60%) cost-savings. This requires the recognition that new insights, the re-conceptualisation of customers and their roles in public service delivery, and last but not least new resources are needed. The cited authors collected 100 cases throughout the world that can be characterised by the term “radical efficiency”.

The cases convey inter alia the message that local level governance is of paramount importance because it is more conducive to receive and utilise valuable information about citizens’ preferences and needs. It is important in at least two regards: first, decentralisation of responsibilities for key services to local government is of particular interest, what is more, is well underway; second, opening towards citizens and customers in a more intensified way seems to be instructive from the point of view of public sector innovations, as well. As far as the decentralisation of responsibilities is concerned, it often entails mismatching problems between expenditures and revenues by calling for innovative resourcing or responsibility sharing. For example, during the culmination of the recent financial and economic crisis the UK developed policies (Planning Act 2008) in the interest of smoothing the problems arising along infrastructural development that would otherwise have been difficult under the previous system. The Community Infrastructure Levy (CIL) is a capital cost payable by developers towards the cost of local and sub-regional infrastructure to support development in fields like transport network, environmental and social infrastructure, schools and parks. This project can be ranked with the waves of innovative collaborations like public-private partnerships as well; however, the registrable delays in payment of CIL should be addressed within the project. Delays in payment can create such problems that are endangering the feasibility of the whole project (See for example the case of the UK: National Program for Information Technology in the NHS in the Box 3).

40 See: Dirie (2005)
41 Let us allude to the case of the Finnish public sector reforms since 1970s until the early nineteens. The Finnish governments resorted to decentralisation by building greater flexibility into the system and emphasised the financial and fiscal crisis as an ideological weapon triggering more social acceptance over the need of reform. When the crisis came, local governments were relatively good fiscal positions to cope with financial constraint. See: Niemelä and Saarinen (2009)
42 See more on CIL: http://www.urbanareas.co.uk/#/planning-gain/4542076642 Accessed on: 03.20.2012
Box 3. Imagination, nod approval, shattered success in service delivery – UK: National Programme for Information Technology (NPIT) in the NHS

The case of the large-scale and uniquely enormous digitalisation program of the UK’s Health System can be to a large extent treated as a not so unambiguously performing public sector innovation since this giant initiative proved to be more time- and expenditure consuming than one would have ever expected.

**Objective:** According to the initial idea, if a citizen being wherever in the UK faces for example an evolving and painful bulge on his groin after lifting heavy weights, the only thing to do is to take some tool out from the pocket that can display where the nearest doctor is and then the system chooses an appointment date and time so the patient will avoid any queuing. In addition to the medical examination, the doctor has access to the patient’s all available medical data (e.g. drug sensitivity, previous surgeries etc.) that may be in favour of a more precise diagnosis. The doctor has the opportunity to compare his diagnosis with the recommendation of the computer system equipped with artificial intelligence, and then the concordant diagnosis is: inguinal hernia. Since all medical data would be centralised and digitalised, the real-time availability will offer a more efficient use, for example: nurses communicate with their specific devices in gauging for timely injections and drugs; the learning process of resident physicians is also controlled by the system that signals when they make a mistake etc. Against this background, the main purpose was to build a computer system which *inter alia* connects more than one hundred thousand doctors, nearly four hundred thousand nurses, fifty thousand other health professionals; additionally, it puts the storage and query of documents onto electronic basis, and what is more, this centralised system stays sentinel over each process happening in the medical system.

**Detours in the success:** NPIT programme was launched in 2002 by anticipating 10 years of operation up until its maturity and approx. £11.4bn was allocated for its purpose. NPIT aimed at streamlining the NHS significantly; however, its informatics-maturity for such digitalisation lags behind the expectations. Beside a series of problems there was no single company which would have accepted to be charged with the whole modernisation programme. The complex character of the project forced the decision makers to establish five regions in the country whereby the supervision of the modernisation was entrusted to five local service providers (LSPs) (Accenture with 2 regions, Computer Science Corp.; BT and Fujitsu). These LSPs started to work on different aspects of the project (e.g. establishing the data centre, the booking system, and building up the Wide Area Network having the necessary bandwidth). Although there was some perceptible improvement in the waiting times up until to 2006 (Gubb, 2006), huge delays have emerged from the side of suppliers leading to expenditure exceeding. The official statistics as well as other evaluation studies showed that the additional costs were not in line with the expected improvements (e.g. in 2000, the £11.4bn was considered, however, according to the National Audit Office, this sum exceeded this amount by 2006). One strand of critics emphasises that the basic concept of that gigantic project was misguided from the onset, and that there was no need for a centralised and country-wide system, since the relationship between the doctor and patient is built on trust and confidence. By the same token, most people are getting health services within a well-defined district, in a smaller geographical area; therefore there is no significant benefiting effect from having country-wide medical data with real time availability.

**A potential conclusion** is that the gargantuan tasks emerging during the establishment of a country-wide digitalised health system call for due diligence when it comes to the issue of public health sector innovation. The time- and expenditure consuming character establishes a claim for relatively stable public finance position which bears the delays, additional extra costs without endangering the already existing service quality.
As for **innovative public-private partnerships**, which forms another relevant recent trend in public sector innovations, more and more local government has become committed to pursuing smarter decision makings in order to tackle challenges facing in the 21st century. Birmingham (UK), Dortmund (Germany), Eindhoven (Netherlands), Syracuse (Italy) and Malaga (Spain) – all are located in countries having either federal or highly decentralised institutional settings – have demonstrated recently that their leadership aspires to reach smarter cities by city-wide collaborations with relevant actors (financial institutions, service providers and other stakeholders). Owing to their singular commitments to smarter cities, IBM selected them in 2012 – within the confine of its Smarter Cities Challenge programme – to be granted in fostering the achievement of their goals. In addition to the financial support which amounts to 50 million USD allocated to 100 cities selected throughout the globe, IBM will also delegate and send experts to the municipalities by providing reasonable helping hands to understand, interconnect and manage their core operational systems such as transport, communication, water and energy.

Partnerships are the result of a cohort of **collaborative efforts** which also manifests a major trend in public sector innovation. For example, inter-municipal collaborations can be identified in the Netherlands. In the case of the **Netherlands**, Metze and Levelt (2012) rightly pointed out by using the cases of four Dutch regions, that collaboration should be credible over time which needs continuous communication. What is more, conversations should be constructive and reflective especially in time when conflict of interests emerges, i.e. when “[...] participants realize that collaboration may no longer be in their best interest or deliver on expectations of innovation” (Metze – Levelt, 2012:11). It is also worth noting that there are programmes initiated by local level governance aiming at monitoring and assessing collaborative efforts. For example, in the **United States**, the City of Alma, Michigan has created a program called Economic Vitality Incentive Program (EVIP) and one of its declared requirements is the permanent reporting about how the collaboration among local, state and federal agencies, citizens, and businesses perform. The city of Alma has therefore created the 2011 Collaboration Plan and was committed to reporting that puts emphasis on effective and potential cost-savings stemming from collaborations.43

The issue of **open governance** is among the recent major trends of public sector innovation developments started in the **United States** in 2009 and has spread further around the globe, for example it is on the European Union’s agenda as well. Moreover, the Open Data initiative has been also promoted by the European Commission.44 Open governance can help in creating, rebuilding and maintaining citizens’ and end-users’ trust level in governmental institutions through greater openness and collaborations that are necessary in responding challenges. Under the angle of trust-building, open governance is not just about making the public sector transparent, it can also be interpreted as a tool for demonstrating that the state is still able to achieve valuable objectives.

With respect to **opening up governance**, **Iceland** has also joined to the line of thinking emphasising the key role of openness especially as a reaction to the consequences of the financial and economic crisis. The crisis put Island onto the brink of economic collapse in 2008. By 2011, Iceland was on the road of recovery, in which the role of public sector innovation was non-negligible. Iceland intended to create a new constitution by relying heavily on citizens’ involvement through the intensive usage of social media. The Constitutional Council was quite active on Twitter, Facebook, Youtube and Flickr


with the purpose of receiving relevant suggestions of the society. By using social media, the government was also able to identify and incorporate useful recommendations regarding the introduction of innovative tourism campaigns. With the benefit of hindsight, as a result of the deployed innovative practices, the inflowing tourism started to increase by strengthening further the trust level of citizens towards the government (which is extremely important in time of painful consolidations and reforms). In Section 4.4., another case of opening up is presented from the UK.

The **Hungarian** initiative in the interest of sparking good governance can also be ranked with the most recent openness-related initiatives. In January 2012, the Hungarian government started an online forum at [www.joallam.kormany.hu](http://www.joallam.kormany.hu) in the spirit of adopting best practice of other European countries. Citizens can express their thoughts and suggestions on how to rationalise governmental operation with the aim of cost-savings. This way, citizens are directly linked with decision-makers who are in charge of improving the quality of governance in fields covering the whole gamut of governance, such as: health care, public administration, environmental protection etc. Decision-makers are also encouraged to provide feedback. All valuable ideas will be processed by working groups of sectoral ministries.

The **Czech Republic** has also decided to make governance more transparent by a series of new initiatives; however, this aim is also connected to the intention of reducing administrative burdens significantly on private sector firms. To this end, a web page [www.zjednodusujeme.cz](http://www.zjednodusujeme.cz) (meaning “we reduce”) is being created. Entrepreneurs and other citizens are able to point at duplicate legislation, absurdities or other red tape, so that the government can make necessary steps to cut it down. Single Registration Forms designed both for legal and natural persons in order to simplify the process of starting up and conducting a business in the Czech Republic have been created. Forms can be used for example for trade notification, licence application, or tax registration (VAT, road tax, real estate tax, etc.). In dealing with cutting red tape, reducing the administrative burden on businesses in general is one of the priorities of the Czech government, which aims to reduce the burden by 25% by the end of 2012, thus consistent with the objectives of the EU. Some activities related to eGovernment took place as well, such as building a network of contact points Czech POINT or Public Administration Portal. In the future, the Czech Republic would like to focus also on projects specifically aimed at reducing administrative burdens for citizens. An example from the regional level comes from the city of Brno that prepares an accessibility map of Brno for wheelchair bounds based on a master thesis of a cartography student of the Masaryk University. Every public place, such as public administration offices, courts, museums, libraries, churches etc. will have its symbol using the traffic lights (red – not accessible by wheelchair, orange – accessible with some minor problems, green – accessible).

Along the idea of more openness and better accessibility to public services, the **Polish** initiative of Electronic Platform of Public Administration Services (ePUAP) can also be mentioned as a coherent and systematic action program designed and developed to allow public institutions make their electronic services available to the public. Most importantly, the real aim is to establish a single, secured electronic access channel to public services for citizens, businesses and public administration as a whole by reducing the time required and lowering the costs of sharing information resources and functionalities of administration domain systems. Apart from the fact that the created website ([www.epuap.gov.pl](http://www.epuap.gov.pl)) extends the spectrum of public services provided electronically, the site is able not only to help in defining citizen and business service processes, but also to create channels of access to different systems of public administration. The website came to light with the view of having a portal that can ensure smooth and safe communication between: customer to administrations (C2A); business to administration (B2A); and administration to administration (A2A).
The project also devoted particular attention to the issue of how to keep the uniformity of IT standards, to this end, an interoperability portal was also established for experts working on recommendations for electronic documents and forms used within Polish administration systems.

Making public data publicly available by opening is spreading throughout Europe as the Estonian Ministry of Economic Affairs and Communications has also started to develop the background for such an initiative after years-long discussions. Citizens expected an improvement in local governance services quality and accessibility, but the Open Data initiative made clear that there are huge mismatches between fiscal capacity and devolved responsibilities as it was also well-documented by the OECD (2011c).

The Netherlands has also been committed to opening government data by announcing the Linked Open Data pilot project whose objective is to open up various data sources of the cities Amersfoort and Nijmegen as well as linking them together from April 2012. Beyond the cities, a series of organisations participates in the pilot project, such as the national bureau for standardisation, Geobusiness Netherlands, the association of Provinces, the Cadaster, the Quality Institute of Dutch Municipalities, the Programme for Key Registries, GeoNovum and the Ministry for Infrastructure and Environment.

Another important wave of public sector innovations occurs in the form of organisational restructuring and reshaping with the aim of refurbishing public organisational units and making them able to have an innovative milieu in providing better public services. As the so-called Business 2010 survey (including 776 public sector representatives from 23 European countries, Asia-Pacific region and America) conducted by the Economist Intelligence Unit also emphasised, organisational restructuring in the public sphere is getting more and more shaped by borrowed best practices from the private sector (especially in European countries like Finland, Denmark and Sweden).45 When adopting best practices of the private sector, assessment on how to customize to the context of public sector is a must. There is a discernible tendency towards organisational innovations with the aim of better organisational arrangements tailored to improved public service delivery processes.

Related to the importance of organisational revitalization in favour of overcoming the structural lock-in phenomena – when public servants and organisations stick preferably to current and prevailing techniques as well as methods (Marsh – Edwards, 2009) – the UK government set up a Strategic Unit whose main overall objective is to filter out new policy thinking and disseminate it in a more dedicated way across governmental organisations and individuals. Strategic thinking fully acknowledges the complexity of policymaking, therefore it also aspires to establish, maintain and continuously improve the relationship between science and policymaking by creating science-policy interfaces.46 Science can bring new evidence-based answers even to old questions that gained new

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46 The relevance of science-policy interface is fully advocated in initiatives aiming at solving the problem of inadequate knowledge utilisation even in the field of environmental protection. In this case, the NERC funded BRIDGE project serves as a prime example of such aspiration. BRIDGE is a hub of the Natural Environment Research Council’s (NERC) Valuing Nature Network (VNN). It aims to improve the understanding of, and to find ways to, incorporate eco-system knowledge into decision-making. NERC’s VNN and the BRIDGE project are a likely precursor to future funding in this area. This work is immensely timely and policy relevant as DEFRA (Department for Environment, Food and Rural Affairs, UK) seeks to implement its eco-systems services approach and roll out stage 2 of the UK National Ecosystem Assessment (NEA).
meanings in new settings. In this regard, cross-country and cross-organisational partnerships, like the European Observatory on Health Systems and Policies, seem to be gainful. Additionally, there is a conspicuously shrinking gap between policymaking and academic communities due to the network of public health observatories.

Implementing new ways of working can deliver better outcomes and lower costs in the public sector. The United Kingdom, Australia and Canada have workplace innovation policies aiming at the establishment of telework. According to the preliminary calculations, changing to smaller, more flexible workspaces through remote work, office re-designs and home work will result approx. 1.2-1.8bn savings by 2013 (Hardy et al. 2008).

In Slovenia, home-based support for elderly and often ill citizens is legally bounded for municipalities. Most available telemedicine and telehealth services (Rudel – Fisk, 2010) were concentrated primarily on the capital city, Ljubljana. To this end, the municipality of Škofljica set up a working unit within its organisational border of which workers were responsible for this type of service provision. As time passed, service quality related concerns have emerged. As a consequence, Škofljica resorted to eke out the knowledge base by extending the working unit with competent and skilled workers of the local authority and that of the Department of Social Activities. In this way, the municipality was able to improve the service quality by relying on professional supervision, as well.

An exemplar organisational innovation can be found related to the field of health and social care in Norway where the top management of the Haukeland University Hospital addressed the problematic issue of malnutrition prevailing during the patient’s hospitalisation. Malnutrition can hinder the recovery process by lengthening the necessary stays and thus causing additional costs for the Hospital. The managers addressed the issue on a project-based approach and initiated the patient nutrition programme in 2006. They set up two inter-professional work groups to unravel the weight of the problem and to form strategies for innovation (Corwin et al. 2012). One group had the task of looking into the actions and feasible solutions deliberately, and the second group was responsible for analysing the organisation of nourishment. According to the cited authors, an intensive collaboration was inevitable among all the relevant actors across and within the hospital hierarchy. Apart from the fact that it was a successful collaborative initiative, it required solid financial background from the Hospital since significant additional costs had to be covered (Corwin et al. 2012:8).

The above mentioned examples have been already underpinned by the intensified role of ICT technology in the public sector. Assessing the opportunities on how technology could foster public sector’s productivity as well as the quality and accessibility of services is broadly considered. For instance, the Danish Ministry of Finance set up an initiative called the PWT Foundation-Investments in Public Welfare Technology, with a budget of 400 million EUR for 2009-2016, aiming at overcoming the ageing of public servants and workers as well as the shrinking (financial) resources in the public

47 The Observatory is built on a solid partnership among the followings: World Health Organization Regional Office for Europe, the Governments of Belgium, Finland, Ireland, the Netherlands, Norway, Slovenia, Spain, Sweden, and the Veneto Region of Italy, The European Commission, the European Investment Bank, the World Bank, UNCAM (French National Union of Health Insurance Funds), the London School of Economics and Political Science (LSE), and the London School of Hygiene & Tropical Medicine (LSHTM). See: http://www.euro.who.int/en/who-we-are/partners/observatory. Accessed on: 13.04.2012

48 This was documented by Mindell et al. (2004) as well as Choi et al. (2005).

sector. In doing so the Foundation is to enhance the performance of public sector by gathering best ideas and projects, funding cross-sectoral solutions, evaluating them, and what is more, keeping up permanent discussions about the main lessons learnt with intensive experience sharing.

There are certain initiatives at policy level helping public sector organisations and players (at all level of governance) to conduct a proper diagnosis in identifying bottlenecks hence improving public sector innovativeness. For such a case, the Department of Industry, Innovation, Science, Research and Tertiary Education in the Australian government established the so-called Public Sector Innovation Toolkit, whose purpose inter alia is to lend support to governmental agencies to obtain knowledge on innovation process. The Toolkit helps them to identify shortcomings and to carry out proper diagnoses.

Finally, if we consider the European level, the European Public Sector Award (EPSA) acts as a tool for disseminating new problem-solving models and supports the EU2020 strategy. In addition to that it serves as an arena in which Europe’s public sector institutions can excel and become an exemplar for the rest of the world. In 2011, EPSA offered awards for applicants from local, regional, national and European institutional levels in three themes: (i) Smart Public Service Delivery in a Cold Economic Climate; (ii) Opening Up the Public Sector Through Collaborative Governance; and (iii) Going Green: Concrete Solutions from the Public Sector.

Moreover, the recently launched two European Innovation Partnerships (Raw Materials and on Agricultural Sustainability and Productivity; Active and Healthy Ageing) are also to tackle the whole research-development-innovation chain, bringing together public and private stakeholders across borders and sectors in order to achieve real and measurable goals. The EIP can help to focus current financial tools, stimulate the active use of innovative procurement, develop innovative incentive mechanisms at the appropriate levels, and explore venture capital support.

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50 Approximately 25% of public sector employees will be retired within the next 6-7 years. See: Børner (2010)

4.3 Assessing policies/initiatives in support of public sector innovation

In this section we turn to countries with the aim of getting a more comprehensive picture about their current state of public sector innovation. This policy brief is rooted in the belief that technological and non-technological innovation equally matter. Since the technology aspect of innovation is often dominating research on public sector innovation, we concentrate primarily on non-technological innovation in this section.\(^{52}\)

To this end, we choose to analyse two countries, Canada and the Czech Republic in order to get a better understanding on their public sector innovation trajectories. The rationale behind this selection is twofold: \(i\) Canada has a federal system; therefore it is instructive to learn about the presumably more bottom-up way of innovations in those institutional structures. \(ii\) the Czech Republic has just recently conducted a pilot survey on innovations in the public sector in 2011 for the reference period 2008-2010 and the methodology was partly based on that of the MEPIN project. The empirical evidence emerging from the project and its practical lessons are crucial to examine for this policy brief.

**Canada**

In case of the Canadian federal state we take a mere glimpse into the issue of permanent performance monitoring that can stimulate learning and eventually public sector innovation. In an effort to contribute to the better understanding of how not-for-profit organisations could encourage public sector innovation, we shortly outline the histories and relevancies of two actors.

The **Canadian Research and Education Foundation** (CCAF-FCVI Inc.) is a Canadian non-profit actor, established in 1980 with the aim of providing exemplary thought leadership and building knowledge and capacity for effective governance, accountability, management and audit. The foundation works in close connection with the Canadian public sector (e.g. with auditors, elected officials and government executives). CCAF-FCVI’s Innovation Risk and Control research project was to contribute to the permanent learning process.\(^{53}\)

As far as the **Public Policy Forum** is concerned, it was brought to life in 1987 with the aim of providing opportunities for dialogues among public, private and voluntary sectors. By now, its members include more than 180 organisations from business, federal, provincial and territorial governments, academic institutions, organised labour and the voluntary and not-for-profit sectors. PPF’s *Ars Poetica* is that good government cannot be left to government alone.

Among other things, PPF advocates that Canada’s competitiveness is at stake unless public sector and policymaking embrace the issue of non-technological innovation (such as workplace innovation); thereby public sector would be more responsive to future challenges and opportunities.

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\(^{52}\) It has to be mentioned that non-technological innovations are often based on technological ones, as the issue of modern workplace innovation exemplifies (e.g. modern IT devices are the technical apparatus for mobil work).

\(^{53}\) The analysis of the project was supported by James Oulton, Corporate Officer at CCAF-FCVI Inc., Canada.
Box 4. Canada: Permanent learning through neutral platform of CCAF-FCVI

Objectives:

– Encourage innovation in the public sector as well as reveal and reduce barriers to innovation;

– reduce red tape in government (what the Canadian Federal government refers to as the ‘web of rules’), while effectively managing risk;

– effectively control innovative projects.

Beyond the central role of enhancing trust in government, the research recognised that there is an increasing need for intensive discussion (e.g. conferences, consultations both on federal and provincial levels) over the topic, and at the same time, case studies may also be helpful to identify good practices.

Key messages to take actions:

– Management should encourage a trust-based culture where staff can test creative ways to improve performance. Successful tests of new ideas should be rewarded, and tests that fail to deliver desired results should be examined and learned from.

– In setting the tone at the top, management should shape an environment of control that strengthens public service values and capacity – and enables stewardship, accountability and results.

– Organisations should develop the capacity to assess risks and confidently act on opportunities to innovate, to simplify administrative rules and to improve performance.

– Administrative rules should be clear, linked to objectives and proportionate to risk. To limit red tape, managers should review existing rules and modify those that lack a clear purpose, or whose burden is greater than the risk at hand. Proposed new rules should be challenged and promised benefits should exceed expected costs.

Problems emerging:

The original goal of the project would have been to follow up and assess how government departments had worked to encourage innovation using the guidance; however, CCAF-FCVI was not able to complete this final phase due to financial constraints.

It is important to note that a shift in strategic priorities for CCAF, coupled with a public sector environment that has been uncertain at best in the past few years, made it difficult for CCAF-FCVI to continue to pursue this project. The Canadian government’s own priorities have shifted somewhat from the ‘Web of Rules Action Plan for 2008-09’ initiative to ‘strategic review’ and spending restraint as the government’s focus.

Outcomes:

Where CCAF-FCVI did see impact was in awareness and in contribution to the dialogue of public administration in Canada. Ideas from the guidance were incorporated into a number of the annual reports released by the Canadian Prime Minister’s Advisory Committee on the Public Service. These reports are written by former senior public servants and are influential in Canadian public administration.
Box 5. Canada: Permanent learning through neutral platform of Public Policy Forum

**Objectives:**
- Place into the focus the issue of how the work at public sector organisations gets done;
- Foster workplace innovation at federal, provincial and municipal levels;
- Transform the organisational culture into a more performance oriented, collaborative and innovative one;

**Key messages to take actions:**
- Develop policies, tools, guidelines that help managers to cope with workplace innovation;
- Use clearly articulated visions and targets, management plans;
- Invest in dynamic workspaces (e.g. flexible teams, groups) and enable information technology in favour of workplace innovation (e.g. for increased connectedness with greater mobility);

**Problems emerging:**
- Insufficient senior leadership incapable of coordinating among multiple fields affected by workplace innovation (HR solutions, real estate and management functions);
- Strict public employment protection inhibits the adequate management of underperforming employees;
- Discrepancy between actors/units responsible for facility procurement and for internal fit-up;
- Workplace innovation (like greater reliance on remote works) often requires upfront investment (e.g. laptops, tablets, smart phones) necessary to ground virtual collaboration such as video conferencing, telepresence, etc;

**Outcomes:**
One of the most notable potential outcomes is the increased attractiveness of public sector for employees and their improved satisfaction with the environment and cultural milieu in which they work. Workplace innovations can lead to more flexibility, which is, in general, of key importance in countries with rigid institutional frameworks. Workplace innovations might also be the manifestations of the intention to bend rather than break the institutional frames.

PPF’s everyday activity is to help to build a consensual view of public service leaders who participated in series of conversations from all levels of government and, furthermore, to disseminate that view to a wider public. “Innovation in Government? Conversations with Canada’s public service leaders” is the result of a year-long project, which engaged nearly 100 public service leaders across Canada in one-on-one conversations about the development of innovation in Canada’s public services. Leaders from all levels of government in Canada (federal, provincial/territorial and municipal) and from all types of departments and public agencies were engaged. Actors shared their view on the challenges facing Canada’s public service, the measures being undertaken to innovate and the obstacles to change.

The report on the project was received by a large audience of public service leaders across Canada, and was presented to the Council of the Federation, an annual meeting of Canada’s most senior provincial public servants.54

According to the report, the current way of instilling innovation into the day-to-day operation of the Canadian public sector seems to be inefficient. Some of the major findings are:

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54 The analysis about “Innovation in Government? Conversations with Canada’s public service leaders” was supported by Mary-Rose Brown, Research Associate, Public Policy Forum, Canada.
• The current public debate fails to set the stage for real reforms. New ideas are needed but political direction is required for successful innovation to occur. For this reason, more forums and venues are needed for senior public service leaders to be open and frank about the challenges facing government.

• Public service leaders expressed concerns that innovation is being limited to operations at a time when policy reforms are also needed. Therefore, the full continuum of policy and execution should be addressed when it comes to promoting public sector innovation.

• The level of public service innovation in Canada appears to be low and disconnected. A defined innovation process and central, strategic approach appears absent. As a consequence, putting ‘strategy as innovation’ into long-term planning is seen as an instructive way forward. However, a greater executive oversight is needed to drive innovation.

• Innovation is being pursued without substantive collaboration or sharing of information. Therefore, more sharing and replication of innovation is required across jurisdictions and levels of government.

• The capacity to execute innovation agendas needs to be strengthened. New skills and talent are required. As a corollary, there is an intensified need for increased priority on attracting and developing innovation leaders at all levels across the public service.

To sum up, the Canadian case seems to represent well an innovation environment where several bottom-up initiatives exist parallel and various actors at different levels of government attempt to face individual challenges with innovative exercises, nevertheless the coordination of such efforts is problematic. As complex problems require collective solutions, Canada needs a more top-down approach in order to find the appropriate public sector innovation policies. Such policies should be lifted to the central level of government, with a long-term, strategic focus, serving as a guiding principle for the various different initiatives at provincial governments’ level.

Czech Republic

In the Czech Republic, Czech Statistical Office conducted the pilot survey on innovations in the public sector in 2011 for the reference period 2008-2010. The main objectives of the Czech Statistical Office were (i) to unravel whether there is a real perspective of conducting this survey on a regular basis; (ii) it intended to test the understanding of innovations in public sector in general.\(^{55}\)

As far as the methodology used is concerned, in the absence of a generally prevalent methodological guideline, the Czech Statistical Office conducted the pilot survey by building heavily on the followings: (i) Oslo Manual 2003 as a guiding principle; and (ii) the MEPIN project whose questionnaire was applied with a significant reduction in the number of questions.

The pilot questionnaire included a list of examples for all surveyed type of innovations, which were broke down further by a group of surveyed reporting units (i.e. government; regional, municipal/local bodies; basic, secondary schools and universities; public research institutions; public hospitals; and public libraries). This list of examples was primarily based on information gathered from Internet (best practices of innovation in the public sector). The list was prepared similarly to the

\(^{55}\) The analysis about the pilot survey was supported by the continuous discussion with Václav Sojka, R&D and IS Statistics, Czech Statistical Office who provided the necessary dataset, as well.
list of examples for Community Innovation Survey (CIS) (Innovations in Enterprises). Eventually, the number of respondents/reporting units in the sample reached 1794.

In this short analysis, we selected the following reporting units in order to embrace at least two domains addressed in this policy brief (general public administration as well as health and social care): central government bodies; regional bodies (NUTS3), municipal bodies (NUTS5); and public hospitals.

As far as the distribution of innovation types (Exhibit 12) is concerned, it can be concluded that separating the various types from each other is rather problematic because they are often interrelated and overlapping. Public hospitals are mostly associated with a greater share of process and organisational innovation compared to the product and communication innovations. In turn, regional bodies reported that product and process innovations were of key importance from their perspective in the period 2008-2010. Among the reflected units, both process and organisational innovations seem to have the highest relevance in case of municipal bodies. The latter one may reflect to a large extent that the decision making power and implementation power are relatively high in the highly decentralised Czech Republic (See: Exhibit 10). Last but not least, central government bodies reported that process innovation was more decisive relative to the other types of innovation.

Concerning the originators of innovations, who are responsible for the introduction of the given innovation, the results are in conformity with the main findings of empirical literature emphasising the central role of the management (Exhibit 13).

The role of employees is also dominant as it may be expected from a highly decentralised system which presumably assumes them to pursue innovative ideas. Still, in case of central governmental bodies, most notable originator of innovation is the higher horizontal organisation, office or regulator (including legislation), which is the Parliament of the Czech Republic.
The pilot survey also presented an indicator on collaborative attitude in the Czech public sector by showing the developers of innovation (Exhibit 14).

Concerning those who did not develop the innovation by themselves, Exhibit 14 highlights that cooperation with other organisations is surpassing especially in case of regional- and municipal bodies. Moreover, public hospitals also tended to establish cooperation with enterprises.

The objectives behind the initiated innovations in the period 2008-2010 were predominantly the significant decrease of administration. It was strongly reported by public hospitals, municipal bodies as well as central governmental bodies (Exhibit 15). Another important objective was the
simplification of internal processes, especially in the groups of municipal bodies and central governmental bodies. Let us add immediately that several Czech respondents did not find the list of objectives offered by the MEPIN methodology suitable, as it is reflected by the high share of answers in the “other” category.

Exhibit 15. Main objectives of innovations in the Czech public sector (2008-2010)

Another important technical lesson from the survey is that respondents did not fare quite well in understanding the term “overall expenditure on innovations”. It would be better to use the same concept as in the CIS, i.e. recommended list of cost items. In 2010, regional bodies spent the greatest amount of money on innovation (approx. € 10 million on average); it was followed by municipal bodies with the expenditure of approx. € 3.2 million on average. While the average expenditures of central governmental bodies and that of the public hospitals were below € 1 million in 2010.

Although the survey helped to get a better understanding about the current state of public sector innovation, due to the lack of financial resources (deep budgetary cuts) the Czech Statistical Office does not plan a second round of the survey on innovation in the public sector in 2013 for the reference period 2011-2012.
4.4 Case studies of public sector innovation

4.4.1 Review of existing case studies on public sector innovation

This section reviews the results of public sector innovation case studies that have been prepared by various organisations in recent years in the following domains:

- Cases of public sector innovation initiatives addressing businesses, notably by providing services for enterprises
- Cases of innovation in social services
- Cases of innovation in environmental protection.

In the last decades, economic literature on the public sector has increasingly focused on innovation-related issues, such as decentralised initiation of innovation, high rewards, competition, scope for experimentation and flexibility of financing. The role of formal and informal institutions is accentuated by many, because innovators in the public sector are embedded in the institutional architecture. For example, Lewis et al. (2011) put special emphasis on networks in government in order to capture the interactions between structure and actions. The authors conducted a survey on 11 municipalities in Victoria State, Australia arguing that institutional architecture is largely influencing the informal networks and the way policymakers and public workers conceive innovation. They also concluded that innovators tended to be those of being in a central position within the internal networks. These recognitions were also considered in the Australian Public Sector Act, which introduced a more values-based (e.g. loyalty, commitment, collegiality) public sector by leaving behind the rule-driven, centralised bureaucracy (Wanna, 2005). Beside, this type of results correlates with other findings stating that originators of public innovation are mostly stemming from middle managers or front-line workers (Borins, 2001). Therefore, as Bekkers et al. (2011) rightly pointed out, bolstering the “linking capacity” of organisational units in bringing them closer to innovators may be benefiting due to the potentially evolving relationships.

One should not be ignorant of the fact that fostering linking capacity requires measures initiated by the management. As a corollary, “managers and staff must display the courage to lead innovation at all levels” (Bason, 2010:29). Vigoda-Gadot et al. (2008) devoted special attention to social and health services and investigated the major antecedents of public sector innovation in nine countries (Ireland, Israel, Lithuania, The Netherlands, Norway, Slovakia, Spain, Sweden and the United Kingdom) by using a questionnaire in case of senior and mid-level managers. The survey suggested inter alia that responsiveness, together with leadership and vision, are important for innovation in the public sector.

The role of leadership with regard to initiating the creation of such relationships is heavily appreciating. However, it relies largely on the institutional structure (i.e. in a less decentralised system, organisational units at lower tiers cannot be regarded as much autonomous as they would be in a federal system). As a direct consequence of this institutional determination, leadership’s longstanding commitment differs across institutional settings which wield a non-negligible impetus on bureaucratic structure, as well. Teofilovic (2002) and de Guerre (2004) pondered on whether the institutional setting plays an important role in innovation within the Canadian public sector. According to their findings, the organisational rigidity, hierarchy can lead to intermittent and problematic innovation activity within the Canadian public sector. They therefore argued that dismantling the bureaucratic structure through stimulating partnerships as well as more
collaborative team based organisational structures can be seen as instructive methods in favour of a better innovation milieu.

It can often be supported by ICT which has received much empirical backing (Heeks, 1999; Gronlund – Horan, 2004; Karmack, 2007; Bonina – Cordella, 2010). Of particular importance for our purposes is the aspect of outsourcing to private service providers. By outsourcing, better quality of services to the users (citizens, businesses) can be achieved in a cost-savings way. There are telling evidence saying that if governmental organisations are not capable of managing larger-scale and technology (ICT) intensive projects, outsourcing can promise a good solution towards a direction of better services with less public costs (Grout, 2009; Auriol et al. 2009). Importantly, outsourcing is not without risks due to the phenomena of moral hazard. By outsourcing and relying on intellectual property of others, the quality level of the service is not controlled directly by the public actor anymore. In addition, often there is a lack of sufficient incentives for public actors to stop the outsourcing project, i.e. to restart it with new supplier whereby the poorly performing services might prevail. It per se calls for strengthening the monitoring (Pierce – Toffel, 2012) to mitigate the moral hazard. The number of systemic reviews on outsourcing in the respected fields and therefore the generalisable lessons are rather limited.

Opening through stimulating linking capacities can alleviate the risk aversion because of the greater chance to share responsibilities. It implies greater scope for experimentation as well as higher level of learning potential which in turn moderates the phenomenon of failure avoidance.

It was implicitly reflected in the 10 case studies presented in the Australian National Audit Office’s Better Practice Guide, “Innovation in the Public Sector: Enabling Better Performance, Driving New Directions”. The case studies covered almost the whole gamut of public sector ranging from customs and border protection through innovations at Taxation Office to The Treasury; and it has been enunciated that innovation is always a courageous experimentation. Recognition via awards can easily be a fundamental incentive for public sector employees in sparking innovation further.

In addition, another equally important message of the case studies on how to stimulate a more innovative organisational culture within the public sector is that boundary-spanning managers, coined by Tushman and Scanlan (1981). These managers are expected to serve as a perennial source of gathering and transferring knowledge by sharing experience and information about opportunities available on the basis of being a linchpin between the internal organisation and external (informal

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56 See for example the case study on Pakistan prepared by Arfeen and Khan (2009).
57 Sometimes service quality can slip. For example, experience in the UK has been relatively mixed with some areas improving in quality whilst others are no better or even worse. Outsourcing is a useful tool but not a panacea.
58 In the UK, health and education services are primarily affected by outsourcing to business and to third sectors. According to the estimations of Kable (2005), approx. € 72bn of public sector services are likely to be outsourced, what is more, they will be associated with IT services and IT-based business processes.
59 See Guimarães and de Carvalho (2010) analysed the state-of-the-art of the health care sector outsourcing in Germany, the United Kingdom, Australia, New Zealand, the United States and Greece, and emphasised that outsourcing is not a panacea in dampening risks or reducing costs.
networks, other units etc.) ones. This was reflected to a great extent in the recent work of Austin et al. (2012) who investigated the boundary-spanning capabilities of human service managers in the United States and the United Kingdom in order to better understand how the relationship between public and non-profit sector programs can be ameliorated significantly.

Another valuable source of case studies is the Manchester: Knowledge Capital institute whose primary aim is to unleash the innovativeness of the city of Manchester by collecting international evidence and building upon them when it comes to recommendations, for example on how to transform public sector into a more efficient one by refraining from prodigal management practices, and at the same time, aims at improving the flexibility of financing innovations. Related to this, Bailey et al. (2010) collected case studies – on Slovakia, Slovenia, South Korea, Spain, Turkey, Nordic countries and the UK – and pinpointed the importance of innovative public finance which is beyond the conventional view of public finance based only on taxation, income generation and public spending. By innovative public finance the authors mean that not only the internal (public sector) funding solutions, but also new external (private and third sectors) ones are in use (e.g. private funding initiative, service vouchers, co-funding, co-payment, risk-funding methods and debt-funding institutions of local governments). For example, the emergent field of social finance and social bonds can also be mentioned. Social Impact Bonds are declared as innovative way of attracting new investment that benefits individuals and communities in fields like health and ageing.

The Manchester: Knowledge Capital also collected and elaborated case studies on successful public service innovation in the considered fields (general public services, health and social protection, environmental protection). These cases furnish the message that creating and maintaining meaningful and trustworthy interactions with the society has a vital role in pursuing better innovativeness within the public sector – and this view is in conjunction with the movement towards new external and internal funding solutions, as well. To this end, leadership should rise above the entrusted tasks and roles by directing towards a more customer-oriented view. Acquainting customer's perspectives and needs as well as incorporating such information into the process of setting targets would contribute to the elimination of arbitrary target setting (i.e. set from bureaucratic aspect). The case studies also showed that concentrating on unjustified efforts, waste and flow are more conducive to reduce costs and, presumably, to speed up services.

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61 This was more or less the case in Sweden, where Lund University Hospital in partnership with the Scandinavian hotel chain SAS organised and started to operate the so-called Patient Hotels by extending the available bed-capacity with significantly lower costs.

62 The issue of innovative funding in public sector infrastructure has gained momentum in recent years. Bailey (2011) conducted a case study on the UK and called the attention to the various models of national and local government models that proved to be innovative forms for financing public sector infrastructure.

63 Although some studies emphasised the role of third sector with languid attention, it can be mentioned that its role is non-negligibly increasing. For example, in Norway, private charitable funds are working on the logic of venture capital. See: Koch and Hauknes (2005)

64 Evidence suggests that considerable savings could be generated from shifting the emphasis of health services away from the reactive provision of ‘crisis’ health services (e.g. hospital care) and towards the proactive provision of preventative health services and those which help people better manage long-term health conditions such as diabetes and asthma. But, this type of shift requires significant up-front investment (i.e. the redesign of patient pathways for long-term conditions, and the development and scale-up of community-based health services need solid financial backing). In a context of constrained budgets, Social Impact Bonds are well-positioned to raise this necessary investment at minimal risk to commissioners. See: http://www.socialfinance.org.uk/work/sibs/other. Accessed on: 06.05.2012

65 Speeding up processes is of key importance in the health sector, as well. For example, in February 2012, the Philippine Health Insurance Corporation launched its eClaims project with the objective of speeding up the
Another equally important message that can be drawn from contemplating publically available case studies is that public-private partnerships tended to become **public-private innovative partnerships** (PPI), notably in the welfare sector. This field seems to be extremely important under the domain of searching for examples of innovations that provided significant cost-savings with improved service quality/accessibility. It was articulated in the case study-based analysis prepared by Weihe et al. (2011) on the five Nordic countries (Denmark, Sweden, Norway, Finland, and Iceland). PPI’s overall objective is innovating and developing public welfare solutions in a way when mutual cooperative arrangement is established between public and private organisations. PPI is fully pervaded by the views of aspiring to public services with significantly ameliorated quality within the improved framework conditions; and that of creating business opportunities for those being involved.\(^{66}\)

Public-private partnerships (PPP) demonstrate that involving stakeholders through mutual cooperative arrangements is worth in the sense that public servants get a more realistic picture about the effective needs and preferences via permanent knowledge and experience transfer. However, it was argued by Noble and Jones (2006), by using the cases of ten Australian and British PPP, that it often requires boundary-spanning managers to overcome arising problems in each stage of the partnerships. Nonetheless, the need for these cooperative arrangements is also illustrated by the case of **innovative public procurement methods**. Apart from the traditional way of public procurement, innovative forms are more likely to be based on longer term contracts dominated by explorative manner, i.e. providers are allowed to freely optimise their productive capacity and utilise their competences in favour of the improvements requested by the clients. It was clearly demonstrated by Jensen (2011) who built on Danish cases in this field. It can be accentuated that innovative procurement is to revolutionise the way public sector buys goods and services by supporting business and third sectors in a more dedicated way.\(^{67}\)

The explorative manner of procurer is needed when it comes to innovative procurement in the sense that grand challenges, for instance social challenges, efface to a certain degree the old routines prevailed in public procurement techniques. Specific societal issues require such innovative solutions that do not exist yet. An emblematic example on this type of innovative procurement can be found in the Netherlands, where case studies have shown that pre-commercial procurement of innovation can bring different innovative ideas from different sectors together and can thus result in new solutions. As NL Agency noted on the Small Business Innovation Research project (SBIR), which has a clear procurement dimension, innovative ideas from the automotive industry were useful in dyke eligibility verification process at hospital level and that of minimizing the rate of return-to-hospital claims due to member eligibility concerns. See [http://www.philhealth.gov.ph/news/2012/e-innovations_launched.html](http://www.philhealth.gov.ph/news/2012/e-innovations_launched.html). Accessed on: 11.04.2012

66 The experience of the so-called PPINs (public-private innovation networks) in Slovenia conveys the message that they are extremely able to bring fresh waves of the generation of innovative services and organisational solutions. See: The paper by Bučar et al. (2012) who processed the case of Slovenia with public-private innovative networks. This type of networks has different stakeholders with the necessary complementary assets in terms of knowledge and social skills, addressing therefore the needs of businesses and citizens is easier.

67 In the UK, the Autumn Statement 2011 juxtaposed in 8 points the major measures geared towards a better public procurement. It includes *inter alia* the followings: publishing £50bn of potential business online; making it 40 percent faster to do business with government; involving businesses and collaborating with them at a substantially early stage in the procurement process. See: [http://cdn.hm-treasury.gov.uk/growth_implementation_update.pdf](http://cdn.hm-treasury.gov.uk/growth_implementation_update.pdf). Accessed on: 1.04.2012
monitoring.\textsuperscript{68} It is worth mentioning that the environmental component in public procurement can be supported in this way, whose relevance has been growing in recent years.\textsuperscript{69} The issue of sustainability has been more and more highlighted. It is fully reflected in the UK, where the public sector started to lay down the major cornerstones of sustainable procurement.\textsuperscript{70} Economic, societal and environmental sustainability require coherent and long-term policies. It was confirmed by an OECD (2011d) study on environmental innovation which scanned member countries for giving a picture about policies and initiatives used in favour of eco-innovation and concluded that while there are many policies and initiatives in use for various objectives, the issue of co-ordination is critical.

\textit{Exhibit 16. Potential conditioning factors of public sector innovation}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{potential_conditioning_factors.png}
\caption{Potential conditioning factors of public sector innovation}
\end{figure}

\textit{Source: ICEG European Center}

An explorative, innovative way of public procurement may also prevent the flames of confidence and trust of citizens and that of businesses from being extinguished. Beyond that, there are other equally important opportunities in this regard, such as the so-called participatory budgeting, which can also corroborate the perceptions of citizens that they can influence changes according to their expressed preferences. In essence, participatory budgeting means a repeated process when specific forums are provided for public deliberation over certain budgetary issues. According to the case studies prepared in this field, participatory budgeting has been spreading all over the EU. However, we can claim very little precisely about its impacts (Sintomer et al. 2005) since robust quantitative evidence

\textsuperscript{68} See: SBIR The power of public procurement: innovative solutions to societal challenges. NL Agency. 63. Ministry of Economic and Business Affairs

\textsuperscript{69} There are certain surveys dedicated to analysing the environment component of public procurement in various European countries. These surveys are built on Green Public Procurement criteria developed by the European Commission following the COM (2008) 400 on “Public Procurement for a Better Environment”. As for the studies, in 2009, on average 71% of authorities in Austria, Denmark, Finland, Germany, the Netherlands, Sweden and the UK reported to have environmental component (PricewaterhouseCoopers, Significant and Ecowys, 2009). Another abundant evidence is found in the paper on „The Uptake of Green Public Procurement in the EU27” prepared by CEPS and College of Europe published in early 2012. This paper conveys that regional and local authorities are more inclined to include a green component in their procurement policy.

is still scarce. In some cases, it contributed to the streamlining of public administration by giving better coordination to the civil society.\textsuperscript{71}

**Conclusions**

The review of the existing case literature allows the following conclusions:

- The existing case literature puts special attention to the role of \textit{workplace innovation} and that of the role of \textit{boundary spanning leadership} (management) whereby fostering the “linking capacity” of organisational units in bringing them closer to innovators may become a real perspective.

- A promising way to foster innovation seems to be to create an innovative milieu/context through establishing special units or \textit{project- or team-based organisations}, which provide innovators with a unique atmosphere to be innovative without being exposed to the influential role of bureaucratism.

- Case studies also exemplified that putting the customers/citizens’ preferences and needs into the focus is of immense importance in favour of a more innovative public sector. Incorporating such information into the process of setting targets would limit arbitral target setting and can contribute to establishing and treating trustworthy and meaningful relation with the society.

- Methods like more explorative \textit{public-private innovative partnerships} or the more collaborative \textit{participatory budgeting} support innovation within the public sector.

**4.4.2 Case studies prepared for this policy brief**

This section summarises the results of eight public sector innovation case studies that have been specifically conducted for this policy brief. The cases include different types of innovations and are geographically diverse, with cases from federal, highly decentralised, less decentralised and highly centralised countries. The cases focus on the following key questions:

- How and to what extent has the institutional architecture of the given country influenced the illustrated public sector innovation?

- What were the main driving forces and obstacles of the given public sector innovation?

Thus, the cases aim at identifying the drivers and barriers in front of public sector innovation and potential best practices to solve those issues. The main results of the case studies are synthesised in this section for the purpose of deriving policy implications and recommendations. The more comprehensive case reports are available in Annex I.

\textsuperscript{71} For instance, The Community Safety Pilots of the Participatory Budgeting Unit (PBU) project, which is carried out under the umbrella of the charity Church Action on Poverty, exemplified throughout the UK that citizens felt greater influencing power right after the specific forums than before. See: \url{http://www.yhep.org.uk/webfm_send/121}. Accessed on: 14.04.2012
Our synoptic analysis of the case study evidence leads to the following conclusions:

**Institutional architecture matters in driving public sector innovation**

- The cases from Brazil, Norway, Sweden, Canada, Switzerland and Austria demonstrated that highly decentralised setting can provide an inherent incentive for pursuing new and more efficient way of problem-solving.

- As the UK procurement case illustrated, highly decentralised institutional solution can also act as a barrier for the diffusion of a more efficient and cost-saving innovation if the public sector ignores the value-added aspects.

**Public sector innovation without internal and long-term commitment is risky:**

- Brazilian case: Internal institutionalised commitment to fiscal sustainability does not necessarily endanger public sector innovation; on the contrary, it helps the operation of participative budgeting through improving the transparency which is essential for that. Participative budgeting is only with a soupcon of transferability to the contemporary context of the European Union if transparency and fiscal discipline are not emphasised and pursued in parallel with a more participative modernisation. As a corollary, participative modernisation and fiscal prudency should be in tandem.

- Norwegian case: Internal commitment was a fundament in continuing the initiative in an innovative way as the long-term collaboration exemplified it.

- Swiss case: The case study pointed out that success is always interpreted in a retrospective approach; as a consequence, dynamic view of innovation is a must with a longer-term commitment.

- Polish case: Current ecological and social challenges force to pursue long-term commitment both at local level of governance and at the level of private sector.

- Austrian case: The case exemplified that long term commitment is needed with short term and feasible actions.
The role of cross-group mindset is appreciating in a multi-actor framework:

- Brazilian case: Participative modernisation, “feeling the pulse of the citizen opinion”, proved to be a significant contributor to social innovation, because it strengthened the social learning by stimulating the creation of civic associations. Hence, the local administration could step out of its narrower perspective by improving its responsiveness.

- Norwegian case: The rich past experience based on trustful relationships among key agencies provided a fertile ground for innovation. Additionally, the procurement process was conducted in an explorative manner. The approach has been widely recognized and adapted in later public procurement processes. This emphasises the importance of excellence and creativity in procurement.

- The UK case: The case of the Arteriograph conveys that bridging the gap between science and policymaking is crucial in order to support the diffusion of cost-effective technology and services promising efficiency gains. The public sector can act as a facilitator through smart procurement, unless institutional rigidities such as administrative conservatorship create obstacles.

- Canadian case: Active ageing needs a more holistic view by involving all the relevant stakeholders and stimulating the voluntary sector that can be a driving force of pursuing active ageing.

- Swiss case: The capacity of the public sector to innovate is of the essence, as introducing innovative solutions does not have a clear recipe and new problems may emerge just right after the launch of the initiative. Therefore a more holistic approach is in order, which may entail cross-group methods leading presumably to a more interdisciplinary thinking.

- Swedish case: The Swedish malnutrition of elderly also called for multi-actor solution.

- Polish case: Responsibilities of different authorities have to be in line with the aim of achieving a sustainable urban development. It requires permanent discussion, true dialogue on the development issues among stakeholders.

- Austrian case: Smart City Wien initiative would be at stake if the lower tiers of government – having the necessary commitment – would not involve and coordinate among all the relevant stakeholders.

Public’s demand for innovation and putting customers into the focus matter:

- Brazilian case: Participative budgeting contributed to the process of placing customers’ preferences into the forefront, since it resulted in non-negligible changes in the priorities followed by municipal government.

- Norwegian case: Involvement of the private sector was one of the most important leitmotifs of the innovation. Moreover, as the case study showed, technical difficulties and relatively low public acceptance of failures have influencing power.

- The UK case: The case study implicitly furnishes the message that through smart procurement public sector can put the customers into the focus since the innovation already aims at increasing their life quality in a more efficient and effective way for which there is always high appetite from the public facing health care problems.
- Swedish case: The case study reflected that the lack of focus at consumers in elderly nutrition is a problem. It would be important to collaborate with the consumers in order to recognize their needs, their opinions and their experiences to improve the current services.

- Canadian case: The share of seniors has been increasing within the total population, their needs and priorities have to be addressed in a more dedicated way.

- Swiss case: Public sector organisations should focus at least as much on the results and outcomes as on elaborating activities and processes.

- Polish case: One of the main driving forces behind the Gdynia urban green network development is citizens’ pro-active commitment to such development.

- Austrian case: As the case illustrated, smart city cannot be built without the organic contribution of smart citizens.

The length and quality of the learning curve have to be addressed:

- Brazilian case: Increasing transparency by dampening information asymmetry could trigger more frequent feedback from citizens about service quality. This feedback is crucial because of the longer feedback circle in case of public services. Participatory budgeting can serve as a mechanism for improving the learning curve because of the higher quality of feedback circle.

- Norwegian case: Senior leadership’s capacity to act promptly and be personally engaged and adaptive to changes is crucial. Personal engagement overlaps with internal commitment, but commitment should be built in an organisation-wide way.

- Canadian case: Voluntary sector proved to be a remarkable contributor to public policy learning and development therefore it has to be addressed when it comes to the issue of active ageing.

- Swiss case: The Swiss case also demonstrated that innovative policy can be an open-ended experiment, reacting to both old and new challenges by learning from the experience of existing ones and concentrating on “sequencing of initiatives”.

- Polish case: The quality of learning curve can be easily linked to the issue of scope for experimentation which requires innovative collaboration among actors (a bank that provides the missing financial background for those of being committed to urban green network development).

- Austrian case: The smart city initiative is open for new ideas and initiatives that can be linked to the sustainable city lifestyle and to future development path of Vienna. Policy learning is guaranteed by having a framework, a background with principles with the ability to meet future challenges by using a dynamic view.
5 Strategic responses for innovation policy

Based on our interviews, the analysis of the case studies, and the accompanying review of existing literature, we have derived the following implications and recommendations for policies or initiatives in support of public sector innovation. All empirical evidence suggests that there is further potential for the public sector to improve its own efficiency through internal innovations. While much focus has been placed on the role of ICT in this context, the role of non-technological innovations is also of great importance. Moreover, innovations in the public sector can generate a positive impetus on the broader economy by improving the whole innovation eco-system. Unleashing this potential, however, will require a holistic, systemic policy approach which involves the institutional features and considers the underlying framework conditions (the “innovation eco-system”).

Our specific recommendations with regard to policies or initiatives supporting public sector innovation are:

1. Incorporate the importance of differential diagnosis

The given institutional setting creates incentives that structure innovation patterns and sets out the preferred methods of innovation. Although the public sector is frequently seen as a single sector, since institutional settings differ, public organisations also differ. This suggests that a feature of innovation in one public sector organisation cannot necessarily be applied to other parts of the public sector. This calls for a differential diagnosis, requiring strategies for identifying and addressing various institutional rigidities across the many countries in Europe. It calls for further research.

2. Seek methods to enhance the values-base of the public sector

The value base in the public sector translates into the working culture which in turn can limit innovation and therefore has to be addressed by policymakers if innovation in the public sector is to be promoted. If the public sector is to be more innovative, certain fundamentals must be re-aligned. Success is not measured through delivering the same service over and over. People should be rewarded for introducing new ideas and not penalised. Career progression should be linked to innovation, not the status quo. The civil service should encourage creativity as a key skill rather than compliance.

3. Establish techniques to increase public appetite for innovation

The public does not always welcome innovation and the change it brings. Indeed the public can be very wedded to certain institutional practices and services. Innovation needs to be accompanied by a conversation with citizens about what is being changed, why, and what the end result will look like. In this regard, resorting to strategic thinking in which certain innovations have to be understood by the consumer would be a step forward. Mechanisms are needed that promote innovation across the public sector by increasing the general public’s readiness to accept the innovations. The following measures, to this end, could be considered:

- **Raising awareness** by promoting workshops and direct knowledge transfer for the municipalities and local institutions in different member states.
- **Accelerating civic start-ups** (early stage seeds) with the aim of changing the way citizens ask for and receive services from governments. An example might be a programme lasting a couple months that provides an opportunity for the selected civic start-ups to increase market awareness of their services and products, to access a wealth of business training and advice, and to be introduced to a broad network of potential investors and civic leaders.
Continuous, honest dialogue and the promotion of voluntary groups engaged in the background work of decision making would be a good way forward.

4. Designing ways to roll out, take up and scale up good practices

An important measure could be the dissemination and sharing of good practices between public institutions (depending however on the comparability of the institutional setting in one place and another) in the interest of promoting the mindset for “next practices” which reflects more that continuous innovations are must. Peer review exercises and twinning exercises can work, as well.

In addition to intentions and proposals on behalf of DG Enterprise and Industry regarding fostering innovative public sector behaviour and the question of its dissemination, it would be useful to consider the activity of the EU Directorate General Information Society and Media or "DG INFSO" (as of 1 July 2012, the name of the DG is Directorate General for Communications Networks, Content and Technology or DG CONNECT). Via the CIP ICT PSProgramme a lot of pan-European initiatives have come to light demonstrating a strong "innovative public sector behaviour"-component or dimension and DG Infso also looks into aspects like interoperability, adoption, etc. These pan-European initiatives are vehicles in themselves for roll-out and adoption across Europe as they are supposed to develop solutions that work in different places.

5. Seek out options for bringing doses of creativity into public sector organisations

Although each country has its unique innovation eco-system and institutional architecture, the need for creativity in the public sector can be regarded as a common feature. Creativity matters because it is needed to spark innovation and to identify underperforming policies or initiatives. Creativity, however, may often be hindered by the leadership which is likely to be wedded to its own specialisations.

Importing creativity doses in various ways, for example by establishing a European Public Sector Leader Academy (e.g. or by using interim management). In order to achieve even greater awareness and hence efficiency, the proposed Academy could operate under the umbrella of the renowned European Institute of Public Administration (EIPA). This could contribute an even greater positive impetus to public sector innovation since the EIPA also fosters the development and dissemination of new innovative solutions through its European Public Sector Award (EPSA) initiative. Nonetheless, pre-existing yet unleashed creativity could be liberated and dynamised through training, job mobility across hierarchies and with flexible tasks, in sum, through non-technological innovation related methods (e.g. workplace innovation).

Particular attention should be given to the syllabus of any such Academy, who teaches there and what its teaching methods are. The question of whether there are more innovative ways of teaching/learning than traditional classroom practices should also be addressed. Consideration should also be given to recruiting students for the Academy – it would need recruit creative civil servants who are risk-takers prepared to implement new ideas, rather than more traditionally-oriented civil servants.

6. Search for ways to strengthen the principle of “variation and selection” in public sector innovation

Innovation is often the fruit of networking, hence collaboration, and need not therefore be driven by competition between actors. The importance of collaboration in service provision has been increasing. Citizens do not have a different set of standards for the services they receive between the public and private sectors. Therefore, as the private sector gets better at innovating and improves
the quality of the services it provides to businesses and citizens, this necessarily raises public expectations for public services. Sharing services in various ways can be thought of as a way of taking the first step toward reducing the service quality gap.

Sharing services often requires skills from local administrations that are not present. Strategies for obtaining the necessary skills should be addressed. What is more, bringing more external aspects into knowledge-building through multi-actor collaboration is of key importance. Broadening the portfolio of actors involved (multi-agency delivery) can be treated as a path to a more strategic and evidence-based policy orientation that may help unleash innovation potential. Political and leadership commitment (e.g. boundary-spanning leadership) are basic prerequisites.

7. Establishing the European Public Policy Innovation Centre (EPIC) as a network of local laboratories

Establishing innovation laboratories (e.g. between local authorities), saved however from strict bureaucratism and not made up of “old” units can be an option in this regard. International aspects may also play a role, for example when intergovernmental laboratories deal with complex and sophisticated issues that are more likely to eclipse national borders (e.g. environmental protection).

The basic vision behind this policy recommendation is to directly connect local public bodies across the European Community to permanently exchange information on daily governing practices. By doing so, we can promote innovative local governmental procedures and actions across the member states and assist in harmonizing the institutional and legal framework of local solutions according to the principle of subsidiarity (i.e. decentralisation). The mission is to create institutional structures that function as a permanent European wide innovation centre for local public policies.

The creation of a European wide innovation centre for public policy making (with a network of local, regional or national innovation laboratories) would strengthen the free movement of knowledge across local public bodies. A European wide innovation centre for public policy innovation would aim to bring together public employees, theoretical researchers, and ordinary European citizens to match abstract socio-economic ideas with daily experience for the purpose of creating more responsive and supportive public services.

Importantly, new cultures and practices are required to promote innovation. Consequently, such a Centre must “practice what it preaches” by avoiding a bureaucratic, hierarchical, process driven institutional feature. Policymakers must be sure that any new institution embodies the principles of innovation at its core and thus does not become another secretariat issuing dictates from above.

Externally, public-science interfaces are also of immense importance in creating a more evidence-based policy orientation which seeks innovative answers to new questions, as well as to old questions in new settings. By the same token, adopting best practices mechanistically is not a cure-all. These practices should be customised to fit into the context of the public sector organisation they are being transferred to. This sheds light on the need for “next practice” rather than “best practice”.

Public-science interfaces must be permeated by a cross collaborative mindset that calls for ‘reverse public sector innovation’. Intergovernmental laboratories should, on the one hand, actively share their experiences and suggestions with each other. On the other hand, the application and implementation processes should rely predominantly on the local actors who are aware of local specificities.

Annex IV provides a practical example for the realisation of the EPIC programme.
References


Dirie, I. (2005): Municipal Finance: Innovative Resourcing for Municipal Infrastructure and Service Provision. For the Commonwealth Local Government Forum in cooperation with ComHabitat, ComHabitat


SCM Research BEM Bordeaux Management School September 29, 30 and October 1st 2010


Policies Supporting Innovation in Public Service Provision


Annex I: Detailed case studies – background papers

5.1 Brazil: Participatory budgeting and its transferability to the European context

The Brazilian Porto Alegre is a good example of participatory budgeting (PB). It shows that PB can be a means to make public administration address the needs of citizens in a more effective way. It indicates that contextualised participatory budgeting is in the interest of a much better as well as shorter feedback circle under the aegis of fiscal anomalies.

5.1.1 Case profile

By now, more than 50 small, medium and large cities in Europe (e.g. Berlin, Cologne, Emsdetten, London, Paris, Plock, Rome, Seville) have exemplified that there is a growing predilection for following the way of the Brazilian Porto Alegre, which is the capital city of Rio Grande do Sul, by being committed to ‘feel the pulse of the citizen opinion’ through the introduction of participatory budgeting (PB), i.e. discussing budget-related issues with citizens on public service delivery. PB provided positive impetus at least in the following four dimensions: (i) increasing democratic awareness of citizens and improving feedback circle; (ii) dampening information asymmetry regarding urban-administration; (iii) changing priorities in accordance with the expressed local preferences; (iv) strengthening social learning by fostering the willingness of people to establish civic associations to take part in PB in a more organised and organic way. For these reasons, participatory budgeting can be seen on the one hand, as a dialectical relationship-building initiative at local level governance, on the other hand, it can also be regarded as a catalyst of social innovation.

Since the diffusion of this kind of dialectical relationship-building and utilisation, originated in Porto Alegre, demonstrates that various forms of participatory budgeting exist, it is worth investigating the cradle of this development in order to have important messages for the perspective of the European participatory budgeting.

The case study was prepared on the basis of semi-structured interview through permanent discussion with Carsten Herzberg, Universität Potsdam, Lehrstuhl Politik und Regieren in Deutschland und Europa, who studies the issue of participatory budgeting and its appearance all over the world for a long time.

5.1.2 Factors influencing the innovation

The effect of the above mentioned ‘participative modernisation’ can be understood if we also incorporate the basic feature of the Brazilian institutional architecture that shapes all policy design and implementation. The institutional structure is often seen as a competitive federal one which is to a certain extent originated in the historically fragile political system and the relatively huge regional inequality (Garman et al. 2001; Ames, 2001).

Decentralisation of responsibilities

Behind the curtain of the participatory budgeting initiative was indirectly the new Federal Constitution approved in 1988 which resulted in an even more decentralised state by delegating more tasks and responsibility to the lower tiers of governance. The new constitution entailed increased autonomy of municipalities meaning that states have great latitude to set their own tax
system by leading potentially to fiscal competition (Afonso et al. 2005). It is often cited as a way of attracting business investments by states. By decentralisation, a more solid coercive power for disciplinarian fiscal policy appeared in Brazil. The constitutionally declared institutional changes through decentralisation signalled to a large extent the commitment of winding up the fiscal laxity that was neatly registrable in Brazil under the centralised system that culminated in a form of the well-documented Latin-American populism (Dornbusch – Edwards, 1991; Leoni – Rennó, 2006).

After 1994, the Fiscal Stability Program signalled this recognition as well as the commitment to a more sound fiscal policy which offers a more fertile ground for economic development. The requirement for avoiding the laxity of fiscal policy as well as to preach the importance of transparency at all level of governance called for the Fiscal Responsibility Law which was eventually enacted in 2000. The law defined rules for all level of public administration (e.g. ceilings on public debt, or on changes in the debt, limits on deficits; an expenditure proposal always have to bear the stamp of the compensation principle to identify the revenues from them the given proposal will be financed; if total personnel expenditures eclipses 95% of the levied limit, public organisation is not allowed to create new offices or hire employees etc.).

Even though the literature on fiscal rules suggests that rules can easily prove to be either too strict or too loose, there is always a chance to re-calibrate and refine their usage and to gear them towards the necessary fiscal flexibility. The latter one is crucial to finance investments that are of explicitly enunciated by citizens via participatory budgeting. As comprehensive studies pointed out, after these developments, fiscal stabilisation became a reality in Brazil under a more decentralised fiscal system (Eichengreen et al. 1996; OECD, 1999).

Furthermore, the effect of the ‘participative modernisation’ of public administration cannot be understood separately from a much broader context related to fiscal development of the country. Since Brazil has a history of relatively surpassing inflation (i.e. hyperinflation was a basic feature of the Brazilian economy from the 1980s to the midst of the 1990s), the monetary policy had to be coupled with a fiscal policy becoming eventually more and more disciplinarian. The constitutional decentralisation went in this direction by stipulating *inter alia* that municipalities are responsible for a large share of expenditures in public health.

As always, there were two sides of the coin. On the one hand, decentralisation without appropriate coordination among states led to the well-known ‘beggar-the-neighbour’ phenomenon manifested in the well-documented fiscal war among states (i.e. when Brazilian states resorted to VAT-reductions in the interest of attracting more business investments). On the other hand, decentralisation also offered a ‘window of opportunity’ to curb the burgeoning and long-lived corruption and clientelism (Santos, 1998) by replacing them with a more transparent and a more clear administration which is more close to the public. The initiative was partly therefore the result of the alliance of top-down as well as bottom-up forces that contributed to the improvement of public integrity.

**Internal commitment to development**

The initiative was crystal-clearly the harbinger of the increased commitment to ‘pseudo-direct democracy’. Porto Alegre recognised that businesses are more likely to be settled where they find

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72 If the monetary policy does not insist on sustainability, the commitment of fiscal policy itself will not be credible. See: Dixit and Lambertini (2003).

73 In the Transparency International Corruption Perceptions Index 2011, Brazil was ranked 73rd of 182 countries. Ernst & Young (2012) also corroborated that Brazil is on the road of increasing public integrity, however, as always, the road is still bumpy.
proper volume of workers, what is more, where the corruption and clientelism are lower than elsewhere in the country. Moreover, Porto Alegre’s leaders and its community were also entirely aware of that their own development rests on factors like health care and educational conditions as well as appropriate living conditions (water supply, waste water systems etc.). The examined participatory budgeting played a key role in transforming the priorities into the really requested direction. Participatory budgeting was institutionalised and became a yearly phenomenon in Porto Alegre. PB is based on an annual review which is to safeguard the constant refinement of procedural rules by adapting them to the intensively changing circumstances.

PB enhanced the feedback circle facing citizens when they want to express their opinions and suggestion on public service provisions. Owing to the PB, critical human development gained momentum. “During the first seven years of this experiment the share of households with access to water services increased (from 80% to 98%), and the percentage of the population with access to sanitation almost doubled (from 46% to 85%)” (UNDP, 2002:13). PB autochthonously and incrementally broadened the opportunity for experimentation. Apart from this, PB also proved to be the most expedient way of not only reducing costs but reducing waste.

The Latin American PBs offer the possibility that people can select priorities between different projects. So, one could argue: Money is limited, and “government cannot do everything”. Hence, it is the task of the citizen to decide which of all proposals projects should be realized. As investments priorities were shaping, the need for taking into account social justice was also raised. For this reason, Porto Alegre established and started to use an allocation formula in which criteria were used that incorporated the specific features of various districts when it came to allocation of funds.

Participatory budgeting served as a catalyst for introducing collective action on local policymaking level. It influences prevailing priorities and re-configures the mindset of resource allocation according to the perceived and expressed needs. Additionally, PB brought a new élán into the self-organising process of civic associations that led to broadening networks and weaving relations among them (e.g. the number of neighbourhood associations underwent a vibrant growth; it rose from 380 to 540 in 1990-1998 (Abers, 2007). PB played an essential role in social learning because it significantly supported the process of empowering citizens with information and called their attention to the necessity of a more transparent and open governance – which was repeatedly emphasised in 2012 when President Dilma Rousseff launched an "openness offensive".

What is perhaps even more important is the fact that PB in Porto Alegre was geared predominantly towards infrastructural projects that can easily increase expenditures because of the costs of maintenance emerging afterwards. Hence, in some cases, expenditures are increasing and government can get trouble of this as it has been the case in Porto Alegre itself. Nonetheless, according to analyses on whether PB is associated with changes in social spending or changes in several indicators of well-being, Wampler (2009) found that PB municipalities in Brazil (incl. Porto Alegre) spent a slightly higher share of their budget on health and education programs. Therefore the institutionalised fiscal framework tailoring towards prudent and sustainable public finance is a must (especially in Europe where social welfare systems of some countries prove to be unsustainable).

74 In Belo Horizonte and perhaps also Recife citizens can select on internet their priorities on infrastructure projects based on government’s proposals.

Barriers and shortcomings

As far as the main barriers and shortcomings are concerned, we can identify three factors: (i) allocation formula has to be improved continuously by tailoring it to the actual circumstances; (ii) PB needs public organisations to be prepared for the follow up of suggestions in terms of institutional and administrative capacity; and last but not least, (iii) improving transparency prior to the introduction of PB is essential.

Concerning the first factor, the funds available at the disposal in each investment areas are distributed among the districts by taking into consideration the number of residents, the quality of the infrastructure available as well as the local list of priorities (Sintomer et al. 2008a). As a consequence, poor districts with relatively high density of population are not under the loupe of PB due to their lower ranking positions.

As for the second factor, improving the institutional and administrative capacity of local governance is one of the most pivotal cornerstones in preparing for PB. It is necessary because of the increasing amount of suggestions, critiques and recommendations requires human and technical capacity to be addressed and tackle in an efficient way. The credibility of PB relies heavily on whether citizens see improvements in their districts based on their proposed suggestions and recommendations. In case of Porto Alegre, the largest parts of the proposals were implemented. Importantly, in case of Porto Alegre, participatory budgeting contributed primarily and spectacularly to the improvement of basic infrastructure. The reason behind this is the fact that people started to think about basic needs which were either given insufficiently or were missing, e.g. building paved roads in poorer districts and connecting them to developed ones via public transport, or enhancing the sanitary system. But, there are other, mainly more sophisticated and complicated smaller issues as well that would have required higher skills both from the side of local administration and citizens because of the information asymmetry (e.g. how to share public health services in a more efficient way).

In case of participatory budgeting, and any kind of participative modernisation, a solid limit against permanent improvement might be the fact that the complexity of perceived problems increase. It calls for a more sophisticated suggestion based on qualified advocates. As a corollary, involving citizens into the policymaking and policy forming processes can create more room for experimentation on the basis of suggestions in the spirit of the Darwinian ‘variation and selection’.

As Sintomer et al. (2008b) stated, in some cases citizens offer to contribute to the realisation of their proposals. Participation might thus result in service provision by citizens exclusively or in forms of shared services. Let us underline that shared services often requires skills that are not available at the given local authority. It per se can also drive collaboration among departments – as well as private/third sectors.

Related to this, learning the work of public administration and getting better understanding on its progress are of paramount importance from the perspective of a pro-active participatory budgeting, Porto Alegre therefore collaborated with non-governmental organisations (NGOs) whose aim was to prepare and learn the representatives for that kind of contribution that can optimally culminate in collective actions. It is essential to give realistic picture to the local community about the current

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76 The number of cities where there was a commitment to attempt the adoption of PB was huge during the first half of the nineteen's; however, public sector officials could not cope with massive protests arose once it became clear that the tremendously increasing demand in terms of expressed preferences and requirements cannot be rapidly and spectacularly put into practice. See: Abers (2007).
status and challenges of urban-management and financial condition. It is crucial because the sheer increase in the number of participants – in 1990, only 976 participants were registered, by 2002 this number exceeded 28 thousand people (See: Novy – Leubolt, 2005) – does not necessarily lead to valuable suggestions and recommendations rather to a collection of desires that are not fully met with real opportunities.

Furthermore, since citizens are not fully aware of how the organisational system looks like and works, a suggestion can easily establish a claim for departments to work together by building on common knowledge to solve the given issue. Consequently, as it was the case in Porto Alegre, PB can spark inter-departmental communication and collaboration, as well. This initiative attracted attention from other Brazilian cities as well; more than 100 cities adopted the main idea after mature contextualisation (Riberio – Grazia, 2003).77

Transparency is therefore a prerequisite of an efficient participatory budgeting initiative. Importantly, participants are expected not only to make suggestions or scathing critiques over public service provision, but also to be responsible for the ranking of the prepared and advocated projects.

**PB’s transferability to the European context**

Participatory budgeting has been garnering most of the attention of European small and large cities as we indicated earlier. Now, we shortly delineate its importance in the European context by pinpointing two facts. *First*, fiscal situation became even gloomier than it was during the era of Great Moderation due to the financial and economic crisis and its ensuing sovereign debt crisis which affected many countries and indirectly numerous cities throughout Europe. This called for strengthening the fiscal framework in the European Union. *Second*, the services aspect is becoming increasingly crucial to be addressed.

More and more European countries faced serious liquidity problem (e.g. Hungary, Latvia and Romania in 2008) and even the threats of sovereign debt crisis (Italy, Spain, Ireland, Greece and Portugal in 2010). Importantly, Reinhart and Rogoff (2011:4) already considers the period 2007-2018 as a decade of debt. As a corollary, the question of fiscal institutions tailored towards fiscal sustainability is still relevant in the European Union where the Stability and Growth Pact has not been able to promote fiscal discipline throughout the Member States. The inefficiency of the Stability and Growth Pact (SGP) was manifested already in its lenient manner concerning the sanctions on non-complying countries such as Germany and France. Still, aiming at strengthening the SGP suffers from the lack of empirical evidence, namely, that the internal fiscal commitment is more likely to be effective than the external anchoring role of the EU.

It seems that SGP with an extended authority (e.g. with explicit debt rule) would have a deleterious effect on the democratic system if it wants to directly influence the given taxation and spending constellation of a country. Some voices argued that SGP, which has an avowedly weak external enforcement character (Wyplosz, 2006), does not need any further reforms, but EU needs more fiscal federalism in supporting the harmonisation of national fiscal policies. Nevertheless, Csaba (2012) sensitively indicates that fiscal union is neither necessary nor possible if we take into account the empirical experiences of fiscal unions, the unique political and legal nature of the EU, as well as the special institutional construction of the EMU. The history of EU and EMU conveys that member states are inclined to preserve their sovereignty and they require a solution which bolsters the fiscal

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77 And there are numerous hybrid forms of PB all over the world. See: Sintomer et al. (2010:10).
discipline without endangering the transfer of sovereignty. As a consequence, due fiscal governance remains a priority at national level (Csaba, 2012; Di Fabio, 2011:464).

Since fiscal policies in Europe has been going through various forms of institutionalisation in favour of a more disciplinarian fiscal policy, participatory budgeting may have additional positive impetus in an era when seeking cost-reduction opportunities and improving the trust level in governance are of key importance. There may be a great potential in participatory budgeting that is not likely to increase the deficit bias encoded into each democratic political system because of the inbuilt counter-incentives like fiscal rules and independent fiscal institutions. As an IMF (2009) study pointed out, more and more European countries have been devoting special attention to numerical fiscal rules that can reduce sovereign risk under high uncertainties (Iara – Wolff, 2010). Additionally, independent fiscal institutions have also gained momentum in the European panorama (European Commission, 2008).

As far as the services aspect is concerned, no one can live now under the belief that citizens’ expectations regarding public sector services do not ramp up with the increasing innovativeness and improving service quality of private sector (e.g. business services). It can become even more emphatic when we also consider that in developed economies (e.g. in the EU) service sectors (i) typically account for about 70-80% of GDP and (ii) have been a major source of growth in the past decades. In this regard, participatory budgeting may serve as a tool for getting better feedback from citizens about their expectations on services whereby the gaping expectation-gap can be reduced. For example, in Germany, PB has mainly not been on infrastructure projects, but on service improvement. Here, people give feedback to improve services (Sintomer et al. 2008c). Theoretically, there is no escalation of expenditure (in practice people always tends to make proposals for investments too). The idea is how money is better used due to feedback of citizens.

5.1.3 Conclusions

By using the example of the Brazilian Porto Alegre, as the cradle of participatory budgeting, it can be concluded that PB proved to be a good way forward in favour of a public administration incorporating the effective needs of citizens in a more dedicated way. While PB in Porto Alegre and its hybrids that evolved throughout Latin-America addressed mainly larger infrastructural projects; it is always important to pursue prudent fiscal management (e.g. expenditure rules, targets to fend off the heightening process of deficit bias). One of the lessons that can be drawn from the case of Porto Alegre is that transparency and access to information are critical for PB, hence PB can remarkably contribute to the improvement of public sector effectiveness as well as to the winding up of corruption.

In the European context, the Porto Alegre-model of participatory budgeting should be shaped and contextualised in each time according to the current challenges (e.g. shrinking fiscal latitude and financial flexibility calls for internal commitment to disciplinarian fiscal policy and budgetary considerations at local levels). What is more, in Europe, service improvements are more likely to be

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78 Independent fiscal bodies, as complements of fiscal rules, are more likely to help the more sufficient transfer of sovereignty by providing flexibility for countries how they want to impose tax and spend on different fields under the consideration of prudent and sustainable debt management (Wyplosz, 2010).

expected than large-scale and city-wide infrastructural developments triggering further increase in expenditures.

Policymakers should carefully use the contextualised participatory budgeting in the interest of much better as well as shorter feedback circle. PB can influence and make the prevailing priorities in line with the needs of the community; however, the final decision should be made by public sector because short term claims must not threaten longer term strategies and perspectives. If deficit-bias is supported by generous behaviour represented in participatory budgeting, fiscal sustainability can be undermined and therefore future development goals are at stake. Consequently, participative modernisation and fiscal prudence should be in tandem.
5.2 Norway: Altinn – a Norwegian ICT platform for public sector innovation

This case study describes Altinn – a web portal and interaction platform between the government and the private sector. To date, it constitutes the most comprehensive e-governance innovation project in Norway’s history. In addition to being a stand-alone innovation, it more importantly constitutes an innovation platform, with new governmental services continuously being added. In the case study, close contact with the private sector, bottom-up initiative and large expected cost-savings, are identified as key drivers behind the innovation. Although generally regarded as a success, this case also exemplifies the grand challenges of innovating with respect to vital governmental services.

5.2.1 Altinn profile

Altinn constitutes a web portal used to electronically manage the public sector’s interaction with citizens and the private sector. It started as a collaboration project between three governmental agencies: the Norwegian Revenue Service (Skattedirektoratet), Statistics Norway (Statistisk sentralbyrå: SSB) and the Brønnøysund Company Register (BRC). The main idea was 1) to ease the burdens of the private sector and 2) make the public sector more effective by creating a single electronic interface handling all of enterprises’ reporting requirements to various governmental agencies. Since its launch in 2003, Altinn has constituted a continuous innovation project with new services, organizations and governmental agencies continuously being integrated into the platform (for a complete list see: Altinn, 2012b). Recent upgrades include access to governmental registers, collaboration services - where several services can be linked together in a comprehensive process involving one or more users and one or more public agencies and event-based reporting - meaning that all data are instantly transmitted to all relevant registers and agencies. Close to 1,100 governmental services are now available through the Altinn website and about 300 are implemented through the Altinn platform. To date, it constitutes the most comprehensive ICT innovation project in the Norwegian government’s history, both in terms of the number of agencies involved and project costs. It has received considerable international attention as an example of successful e-governance innovation (Digi.no, 2012b).

The case study was based on desk research and a semi-structured interview with Edward Pedersen, the head of innovation in the Altinn project at the Brønnøysund Register. Pedersen played a key role in the Altinn project, acting as project manager in the comprehensive Altinn II update from 2006 to 2011. The study was prepared by Thor Haugness, Innovation Advisor, Infosector AS, Norway; and the final editing was made by the principal author of the present policy brief.

5.2.2 Factors influencing the innovation

At least six key driving forces of Altinn can be juxtaposed: (i) it was a bottom-up initiative underpinned further by (ii) the deep involvement of the private sector; (iii) the matured level of information society; (iv) the rich past experience based on trustful relationships among key agencies; (v) competent leadership; (vi) the promises of significant cost reduction and that of the positive image building.
Bottom-up initiative

The final decision to develop Altinn was made by the governmental ministries and followed a classical top-down, hierarchal pattern. Officially, it was initiated based on governmental White Papers stating the need to improve on e-governance and decrease the administrative burdens of enterprises (e.g., Ministry of Finance, 1997). In innovation literature, such a centralized decision-making structure is commonly seen as an inhibitor of innovation. The reason is that a public sector organizational unit, being in a centralized hierarchal institutional setting, has less authority, incentives and flexible resources available to initiate innovation projects (Christensen et al, 2004; de Mello, 2000). Although the final decision to launch Altinn was made by the political elite, the initiative to develop Altinn was the result of bottom-up pressure. It started out with the three involved agencies mentioned earlier, launching a collaborative project to explore the possibilities of using internet as an interaction and data-catch tool. Pedersen (2012) describes Altinn as a bottom-up initiative and emphasize this as an important success factor as it ensured that the project had broad support by all the involved governmental agencies. Representatives from the Norwegian Revenue Service also supports this view: “There was a strong inner pressure to become technologically modern [...] the initiative to launch Altinn came, to a large degree, from the agencies themselves” (Pellerud, 2005). The case constitutes an example of public agencies capable of being innovative, risk taking and collaborative-seeking in a centralized government structure, and without the financial rewards incentives present in the private sector. Moreover, it points to attentive ministries capable of using the ideas and initiatives of their subordinate agencies when designing policy. All in all, fostering collaboration seems to be able to dampen the lack of high degree of decentralized initiation over time and the rewards cannot be interpreted in terms of financial dimension, on the contrary, the long term collaboration can be seen itself as a high reward.

Involvement of the private sector

The development of Altinn II which started in 2006, also marked a radically new way of managing public procurement in Norway by using a new method called “Competition-driven dialogue” (Pedersen, 2012). The new approach was based on the project management’s recognition that they did not know what all the requirements should be. Neither did they have an overview of all the technical possibilities existing in the market. Dialogue meetings were therefore established between project management and suppliers in order to define the specifications of the tender in 2007 (Difi, 2010). In this way, the project management drew upon the expertise and innovative power of the private sector. The procurement process was therefore, in some way, conducted in an explorative manner. The approach has been widely recognized and adapted in later public procurement processes.

Second, the Altinn software was based on open standards. This helped avoiding supplier lock-in and enabled open competition among enterprises for supplier contracts. The use of open standards can be seen as particularly important in the case of Altinn, since it constitutes a continuous innovation platform with many suppliers and users involved.

The private sector, and especially their strong interest organizations, was also a driving force behind the decision to launch Altinn. The interest organizations played a key role by putting pressure on the agencies and the government to improve public reporting procedures which was regarded as complex and inefficient prior to Altinn (Pellerud, 2005; Pedersen, 2005). According to Pedersen (2012), the interest organizations have also been a driving force in the later development of Altinn by forwarding the needs and ideas of the private sector in terms of future functionality. The three above
examples point to the government’s attention to the private sector as an important driver behind the Altinn innovation – both in the initiation phase and later development phase.

**The impact of ICT developments on Altinn**

The information-society’s level of maturity was an important factor enabling the development of Altinn from 2003 and onwards. At the turn of the millennium most citizens had access to World Wide Web. Since 2003, open standards and the XML-format, which enables distribution of data that also entail semantic information about the data, became increasingly more common. These advances in ICT technology were necessary preconditions for the development of the Altinn platform and its services.

Deep involvement of the private sector as would not have been a real perspective if the above mentioned matured information society had not been present by offering the necessary field of experimentation for collaborative agencies.

**Past collaborative experience and good trust relationships**

The extensive collaboration between the three governmental agencies proved challenging sometimes. The main reason highlighted by Pedersen (2012) was the “silo”-structure of the government which made necessary horizontal communication between the agencies difficult. Despite the challenges, the collaboration between the agencies is generally considered a success, especially from an international perspective (Pedersen, 2012). A contributing factor was that the three agencies had prior collaborative experience working together on similar projects (e.g., the SLN and Enhetregistreret projects). Pedersen also stress that recent Altinn projects, involving both private and public actors, have been surprisingly numerous and that the climate for collaboration between the two sectors has improved with time. One explanation for this development is the collaborative experience accumulated through the decade long duration of the Altinn project, but more importantly Pedersen points to the particular strong trust relationship existing between the government and the private sector in Norway as an important success factor in this regard.

**Competent leadership**

Past evaluation studies of Altinn have emphasized proactive and competent leadership as a major driver in the Altinn project (SSB 2005: DNV, 2005). Representatives from Brønnøysund and Statistics Norway - the two smallest agencies in the project management board, highlighted the value of having the much larger and resourceful Norwegian Revenue Service as a “locomotive” in the planning and development phase (DNV 2005). In particular, the leading role of Bjarne Hope, the director of the Norwegian Revenue Service, has been accentuated: “Bjarne Hope’s personal engagement, participation and prioritization of this project, I believe was the most important success factor in this project” (SSB, 2005 [interview with Statistics Norway representative]). Bjarne Hope illustrates the importance of having top managers who are truly passionate and engaged in the project. Since governmental projects in general are more hierarchal and top-down managed, it may be that proactive, passionate leaders are particularly important in public sector innovation.

**Expected benefits and cost-savings**

From an instrumental perspective, the anticipated cost-savings of the solution were the key reason for initiating the project. Past analysis showed that Altinn II, during the course of 15 years, could provide total cost-savings between EUR 1.2 - 2 billion (Mertier, 2010). The anticipated cost-savings were divided among the three involved actors in the Altinn system: enterprises, private citizens and governmental agencies. Past estimates indicated that enterprises spent approximately 7300 FTEs
every year on reporting to governmental agencies (Mertier, 2010). By developing electronic reporting services through a common platform, quantitative estimations expected cost-savings for the private sector in the area of EUR 620 million in a 15 year perspective. The cost-savings for this group was primarily the result of reduced time spent on registration (re-use of information), reduced postage expenditures and not having to navigate complex governmental structures. The cost-savings for private citizens were estimated to be the same as for enterprises. It is worth noticing that the most widely used service on Altinn today is the opportunity for private citizens to hand in their tax-return scheme electronically. For governmental agencies, Altinn was expected to provide even bigger cost-savings; EUR 720 million in a 15 year perspective. Some of the main cost-saving factors were reduced postage expenditures, less manual work and lower operation- and maintenance costs of individual services and data systems (Mertier, 2010). Altinn was also expected to improve general efficiency and quality of service by better enabling horizontal collaboration between the governmental agencies. In addition, Pedersen (2012) points out significant cost-savings as result of not having to make parallel investments in the development of similar solutions. Secondly, he argues that Altinn has contributed to a general change in the public sector from a technophile approach to implement ICT, to a more result-driven approach.

The government’s thrive for legitimacy

Some data support the hypothesis that Altinn was initiated not solely because of its expected benefits, but also as a result the government wanting to improve their image. This hypothesis has its origins in the so-called "myth perspective" which states that public organizations are dependent on creating legitimacy for their existence (Christensen et al, 2004). Support of this theory is found in a survey from 2005 where respondents ranked “improved image of the state among citizens” as the most important effect of Altinn (Pellerud, 2005). Similarly, an evaluation study showed that Altinn significantly contributes to Norway rising on the international rankings in terms of “e-governance” (SKD, 2005). The project was also in line with current trends and fashions at the time, such as Service Oriented Architecture (SoA), standardization, open source, semantic technology, e-governance, cost-efficiency, interoperability, etc. Thus, it is reasons to assume that the public sector’s wish to increase their legitimacy and image, to some degree functioned as a driver behind the decision to launch Altinn.

After contemplating the main drivers behind Altinn, an even more productive inquiry would be to concentrate on the major barriers of the Altinn project. In this regard, the case study outlines the following hampering factors: (i) the myopic thinking; (ii) supplier lock-in; (iii) technical difficulties and relatively low public acceptance of failures.

Focus on short-term results

Public choice theory and political economy literature suggest that politicians and bureaucrats in essence are vote- and budget maximizing machines. As a result, politicians tend to be risk averse and prioritize short-term results while downgrading quality and long-term planning and financing (Downs, 1957; Niskanen, 1971; Tullock, 1980). Ex-post evaluation studies indicate that these barriers to successful public sector innovation were, and still is, present in the Altinn project. A comprehensive evaluation study conducted in 2011 by Det Norske Veritas (2012) concluded that efforts to keep time and development costs to a minimum have been prioritized at the expense of quality of service. The report points to several weaknesses such as a lack of competent personnel and adequate preparations for managing and maintaining a complex system like the Altinn platform. Furthermore, a significant number of errors have been discovered, emergency plans are lacking and the quality of tests has been poor in all phases of the project. The DNV report also concludes that
Altinn still lacks both sufficient operations budgets and a clear long-term strategy (DNV, 2011). These conclusions support the hypothesis that there has been an over-focus on efficiency and short-term results at the expense quality and long-term success. However, it is somewhat unclear whether these short-comings are, in fact, caused by the vote and budget maximizing tendencies among politicians, as Public choice theory suggests.

**Supplier lock-in**

The consultancy company Accenture was responsible for both developing and operating Altinn and became a total-supplier in the early years of the project. The project management of Altinn II recognized the danger of getting caught in a supplier lock-in and divided Accenture’s contract into three new tender offers. As a result, new suppliers were involved in the project and a lock-in was avoided (Pedersen, 2012).

**Technical difficulties and low public acceptance for errors**

Altinn has experienced two major errors in the last two years. In 2011, the whole platform broke down due to overload when citizens were using the system to hand in their tax-return schemes. In March 2012, Altinn experienced a major security breach when thousands of Norwegians automatically got logged in to the same user. The errors caused an outrage from the public, media and politicians alike, characterizing the project as a scandal. Beside from the two instances, the platform and its 750 services have functioned without major difficulties. Nevertheless, the strong reactions illustrate the high level of stability demanded by the public with respect to government services. In a comment to the two errors, Pedersen (2012) argues that the public’s tolerance for failure, in a comprehensive ICT project like Altinn, could have been higher. Looking at past research, political scientists have observed that the media and opposition parties’ interest in exposing public sector failures forms a powerful impediment to innovation (Bornis, 2008). In light of this research, the strong criticism may cause governmental service providers on Altinn to be more cautious and risk averse, thereby hampering future innovation efforts.

**5.2.3 Conclusions**

Altinn constitutes the most comprehensive governmental ICT project in the Norwegian history. Bottom-up initiative from subordinate public agencies, large estimated cost-savings, proactive leadership and close contact with the private sector, are identified as key drivers in the project. In contrast, the silo-structure of the government and low public acceptance for errors, are seen as central barriers. Most importantly, Altinn exemplifies how public information sharing platforms can trigger extensive public service innovations and collaboration among public agencies, and with the private sector. The government’s confidence in Altinn, despite recent setbacks, is reflected in the prime minister’s recently announced plan of fully digitalizing the public sector (Digi, 2012). This implies that Altinn will become the default solution, and not just an alternative option, for communication with the public sector.
5.3 UK: Smart procurement related to the health care sector

The case of Unimedic Ltd. exemplifies that public sector should put more attention on permanent evaluation of health care technologies and services that are prevailing within the public sector by comparing them to available potential candidates pioneered by the private sector. In this regard opening towards a smart procurement by focusing on the value of innovative technologies and services in case of health care is of immense importance.

5.3.1 Case profile

Unimedic Ltd. is an emerging company located in the United Kingdom and since 2008 it is operating in the spirit of providing high-end, non-invasive cardiovascular risk assessment tools to eliminate the mystery and misery of arterial function and structure measurements for identifying asymptomatic but high CVD (Cardiovascular Disease) risk patients. Unimedic’s innovation can be portrayed by focusing on its so-called Arteriograph, which is a significant catalyst in the paradigm shift from the currently used superficial Systolic and Diastolic blood pressure measurement to a sophisticated, validated Comprehensive Hemodynamic Assessment. Unimedic provides an interactive environment where all visitors can receive real-time information on their arterial age by the Arteriograph measurement and discuss the results and the experience with their specialists. Replacing some of the regular blood-pressure monitors in the clinical routine with a superior option of the Arteriograph would clearly have the positive impact on patient outcome and the healthcare system with minimal redesign of the service, but having substantial positive effect on the load and costs in the secondary and emergency care.

The case study was based not only on desk research, but also intensive discussions by building on a semi-structured interview with Anett Hodosi, commercial director at Unimedic Ltd.

5.3.2 Factors influencing the innovation

The case study argues that the major drivers behind the given innovation are heavily interrelated and interdependent ones and they can be referred as good framework conditions, such as the relatively good business climate and lower transaction costs (e.g. low administrative burdens and smaller volume of red tape).

In order to understand the major driving forces as well as barriers behind Arteriograph we need to embed the case of Unimedic into a wider context by encapsulating the NHS and UK regulatory environment in general. As far as the major leitmotifs of the innovation are concerned from the perspective of UK regulatory environment, one should not ignore the fact that the level of red tape in the United Kingdom is continuously decreasing and therefore one of the lowest in the European Union beside Sweden and Finland). It is crucial since the administrative burdens and all costs related to obtaining information (transaction costs) are less likely to stymie the birth of new ideas by forming new firms.

Additionally, the business-friendly regulatory environment can also be characterised with the aspiration to make regulation simple and transparent. As a corollary, businesses operating for example in the field of health care do not encounter shambolically changing rules and regulations which would otherwise make the business environment incalculable.
According to the experience of Unimedic, the major organising principle of the rules and regulations is to cushion the companies' day-to-day running by enabling them to pay taxes easily rather than to punish and deter them in each case. In the field of health care, the UK supports the main actors of the sector via public spending to foster the collaborations with SMEs, as well.

These all contributed to have a relatively fertile ground for innovation which was the main results of years-long research and evaluation processes made by Unimedic staff; however, there are still lots of hampering factors that are not directing Unimedic towards the way of bearing the problems easily arising along the development of the company.

Despite the above-mentioned drivers, it seems that they do not offer enough ammunition to believe that easing the doing of business would be enough from the aspect of adopting technologies and services by the public health care sector as a way forward in using innovative state-of-the-art tools.

**Institutional and cultural rigidities**

The UK public sector also shows the basic symptoms that are described in this policy brief: the public sector is broadly pervaded by conservative view refraining from significant changes or alterations and the risk aversion is also observable. Beyond this – which per se yields a strong negative impact on the diffusion of Unimedic innovation throughout the public sector – another equally important problem is the fact that the NHS prefers and accepts only such studies as references that were conducted in the UK on UK population having UK professors as Key Opinion Leaders. These prevalent circumstances can be largely interpreted as shackles of the broad experimentation regarding new and potentially better technologies and services adopted from the private sector.

Albeit the current objective is to heighten the innovativeness of the health sector, the necessary volume of funding is still missing by hampering the required flexibility of financing. Related to this, development opportunities that are not displayed in the National Institute of Clinical Excellence (NICE) Guideline are totally ignored even if they might be more effective solutions and being available to more people. NICE Guideline usually contains such procedures which have widespread empirical backing and that are associated with extensive practical usage (e.g. the necessary of 24-hours blood pressure gauge was listed merely in September 2011). On the back of this, getting into the Guideline is a very lengthy and difficult process even if a company like Unimedic possesses clinical and cost-effectiveness analysis in justifying its novelty. According to the calculations based on widely used methods (e.g. QALY – quality-adjusted life years), the nationwide deployment of Arteriograph could significantly conducive to the requested reduction in the NHS’ budget.

Private health care sector typically pursues a waiting position and uses the same procedures used by NHS, as well. The simple reason behind this is the fact that NHS is seen as a benchmark by insurance companies and they are therefore not inclined to list procedures that are not named in the NHS.

**Decentralisation as an obstacle**

Although health care sector actors are trying to adopt best practices from each other, treatments are differing across primary care trusts (PCTs) creating the so-called postcode lottery effect.\(^8\) This constitutes a significant obstacle against the diffusion of Arteriograph as well, because Unimedic has to persuade each PCT individually. It is important to note that hospitals and General Practitioners (GPs) all have some freedom regarding the purchase of certain technologies. This is important

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\(^8\) Postcode lottery refers to the way local budgets and decision-making can lead to different levels of public services in different places especially with regard to health and social services.
because each Acute Trust (i.e. hospital) has very significant discretion over how and where it spends its money. A new product therefore has to be sold to each trust rather than being sold once to a central NHS procurement division which then cascades the product down. Of note in relation to one of the central theses of this report, the very decentralisation of health service provision in the UK in this sense acts as a barrier to new product entry – or at the very least, limits the scale and speed of diffusion.

The contemplated situation on the diffusion of such innovative solutions in the health care system conveys the message that a smart procurement should overcome these shortcomings; otherwise the institutional rigidity circumvents the power of decentralised initiation within the health sector. Also the evaluation and adoption of some of the private sector’s best practices in the public care could accelerate the uptake of new technologies in the NHS.

When it comes to the cumbersome feature of public sector innovation, it should also be mentioned that the current agenda regarding the future changes within the NHS emanates uncertainties for companies operating in this field. On the one hand, the major aim is to reach a minimum of £20bn efficiency savings by 2014/2015 via bolstering innovation relying on the agenda of The Quality, Innovation, Productivity and Prevention programme (QIPP). On the other hand, a conspicuous restructuring is going on within the NHS. The system of Strategic Health Authority of which under PCTs have belonged with hospitals and GPs is already started to change configuration without any accepted law by causing non-negligible uncertainties over the boundaries of responsibilities by making more difficult the planning and working of Unimedic, as well.

5.3.3 Conclusions

To sum up, the adoptability related problem of Unimedic’s Arteriograph is particularly associated with institutional rigidities that are mainly due to the highly decentralised health care system in the UK. Still, the described case does not necessarily direct towards the necessity of a more centralised procurement system, but towards a smart procurement in which the focus is placed onto the value of innovative technology and service and where sufficient funding is allocated to such incentives as well. In this way, the smart promotion and diffusion of such technologies and related services would dampen conspicuously the counterincentive feature of the present national health system regarding the further innovation of private firms by promising higher rewards.

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82 In line with the key findings of the research project commissioned by Eucomed: “Procurement of medtech innovations in the EU- Impact of procurement centralization in the EU on the innovation strength of the medical technology sector”. See: http://www.eucomed.org/uploads/Modules/Newsroom/20120308_smart_and_sustainable_healthcare_ne eds_smart_procurement.pdf. Accessed on: 03.15.2012
5.4 Sweden: Innovation driven procurement to improve the care of the elderly

The pilot project titled “Innovative Procurement X” – “X” is running in the period 2012-2015 in four Swedish regions. The project targets to set up new forms of procurement in the field of meal solutions for elderly. The main aim of the project is to build a platform for Innovative Procurement in Swedish regions. The expected results of the innovation in the field of public procurement in the nutrition of elderly are to improve public welfare and quality of life of elderly and to develop of public purchases in the county. The main results of the pilot project will be useful within Sweden and even within the European Union.

5.4.1 Case profile

The “Action for prevention of functional decline and frailty” under the first pillar of the Strategic Implementation Plan for the European Innovation Partnership on active and healthy ageing ("Prevention, screening and early diagnosis"), focuses on physiological frailty and malnutrition among elderly people. The malnutrition of elderly is an existing problem also in Sweden within the European Union. In Sweden in 2011, 18.5% of total population was 65 years or over, which shows a growing tendency (as in 2002 the proportion of 65 years and over was only 17.2% and it is projected to rise to 23 percent by 2030). These people are usually pensioners. A significant part of the Swedish welfare policy is the health and social care for the elderly and the nutrition of elderly is an important part of it. The expenditure on care for elderly represents a significant proportion in Sweden, it is 2.33% of the GDP, and it is high above the EU-27 average (0.41%) as it constitutes the highest share in the EU-27.

Regarding the financing, as the Swedish institutional architecture can be seen as a highly decentralised one, it is not surprising that elderly care is usually funded by municipal taxes, but government grants are also important sources. In Sweden the municipalities are responsible for elderly care, but they often contract out their elderly care services. Ageing people have the possibility to choose between home help or special housing to be managed by public or private operators. Those people who continue to live at home can expect support in various fields, among others, the most of the municipalities operates meal service and offer ready-cooked meals (or some of them offer communal meals at special day centers, or organize small groups of the elderly into teams that cook their own meals). The municipalities also provide delivery services to the homes of elderly and disabled people, who are unable to care for their own cocking. In Sweden the meal time chain is complex, there are different stakeholders involved in different parts of the chain. Despite these efforts elderly suffers from malnutrition in Sweden.

The project “Innovative Procurement X” – “X” try to solve these problems and aiming to build a platform for Innovative Procurement in the regions of Sweden based on Public Procurement. The project is supported by the Swedish Government through Vinnova and run from 2012-2015. The selected municipalities joined in the project are: Gävle, Ljusdal Ockelbo and Hudiksvall.

The case study was based on a semi-constructed interview and regular discussion with Johan Almesjö, federal officer as well as Sigrid Pettersén, research manager of the project "Innovations procurement "X".
5.4.2 Factors influencing innovation

The main aim of the pilot is to create innovative public procurement models for the mealtime situation for elderly people. The project is a multidisciplinary initiative with a holistic approach, which main target is to significantly change the mealtime situation of elderly. The project is in its initial phase but the project leaders expect new models for how to perform innovation procurements in the future.

Institutionally decentralised initiation

The “Food Distribution (FD)\textsuperscript{83}” of meal service in Sweden is social care service assistance, and it is organised by municipalities. There are two acts: the Health and Medical Services Act and the Swedish Social Services Act which regulate the food distribution and meal service in Sweden, however these acts do not include detailed information about how FD should be organised within municipalities. On one hand, the lack of general rules for distribution forces municipalities to launch their own practice. On the other hand, this situation leads to a much diversified system, which is not able to solve the problem of malnutrition of elderly.

An important constituent is the Swedish institutional setting in which the eldercare dimension is also embedded. Szebehely and Trydegård (2012) analysed the Swedish Level of Living surveys from 1988/1989 and 2004/2005 and a database on all users of tax deductions on household and care services in 2009. The analysis led to the conclusion that there are two observable trends with respect to the eldercare services in Sweden: (i) there is a non-negligible decline in the coverage of publicly funded services on the one hand, and (ii) their marketisation process is permanently increasing. The authors also states that “[...] the decline of tax-funded home care is not the result of changing eldercare legislation and was not intended by national policy-makers. Rather the decline was caused by a complex interplay of decision-making at central and local levels, resulting in stricter municipal targeting.”

As a consequence, the institutional architecture bearing a highly decentralised character has an inherent incentive for such a progress in case of eldercare. Therefore, municipalities are to launch their own practice in accordance with our one of our prerequisites, decentralised initiation.

Pursuing permanent learning

Another important aspect is the cost of the social care service assistance, which is usually based on the client’s pension in other countries, but in Sweden the food distribution is based upon the elderly person’s ability to pay, but it should not higher than 10% of total cost (it is higher in other countries usually 20-30% of total cost). This provided not so flexible financial background for municipalities responsible for eldercare practice, including nutrition. The number of ageing population (65 years and above) partaken meal service distributed by municipalities organised FD is approximately 60 000 persons.

According to researches on the food distribution system of Sweden the following criticism were drawn upon the current system\textsuperscript{84}:

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\textsuperscript{83} “meals on wheels”

\textsuperscript{84} For a detailed analysis see Zada Pajalic, The Experiences of Elderly People Living at Home Related to Their Receiving Meals Distributed by a Municipality in Sweden. Journal of Food Research Vol. 1, No. 1; February 2012
The current food distribution service imperils ageing people, they are threatened by malnutrition.

The lack of “consumer-focus nutrition” is also a problem. It would be important to collaborate with the consumers in order to recognize their needs, their opinions and their experiences to improve the current FD services.

Based on the above mentioned circumstances, the main aim of the “Innovative Procurement “X” – “X” pilot project is to create innovative public procurement models for the mealtime situation of elderly people. The most important elements of new models will be accessibility and usability in transport and logistics. As a corollary, Swedish eldercare service seems to be pervaded by a permanent learning process in which further innovations are avowedly must.

Multi-actor collaboration

The main elements of the project which can be considered as innovative elements are related to the new forms of the public procurement process of meal solutions/food distribution for the elderly. The main aim of the project is to create innovative public procurement models for the mealtime situation for elderly people and to create a platform for testing and implementing of innovative solutions.

The meal distribution chain as well as the procurement process of meal service is quite complex, therefore involving different stakeholders at different stages is a must. The main actors of a procurement process are: public clients, purchasers, public service providers, enterprises operating in the food industry and companies from the logistics and transport sector. Regarding the transport of the meals for elderly, it happens through private firms but sometimes by the municipality from a central kitchen. To design a complete meal service including the transport put demands on a holistic approach where the customer’s needs are of key importance.

The project has a user-centric approach with the aspect of public health, and innovative procurement, which results the foundation of a new way to work. Purchasers and suppliers will make better affairs and the value of the public purchased products and services will make a difference for the private person. The public purchaser should be able to run innovative solutions forward with possibilities to increase the value of the public fund from without the user, purchaser, seller and owner perspectives with the purpose of lowering cost, increasing efficiency and quality for the private and public community.

Extending the opportunity for experimentation

Four municipalities were selected for pilot studies: Gävle, Ljusdal Ockelbo and Hudiksvall, based on their geographical spread and size. The contents of the pilot projects are as follows: (i) buy and develop today’s outsourcing solutions in Gävle; (ii) distribution, supply and logistics in Ljusdal; (iii) a new comprehensive solution for food in a special housing for elderly in Ockelbo; (iv) locally supplies, other stakeholders and environmental aspects in Hudiksvall. Selecting these municipalities can be regarded as a smart step towards broadening the experimentation in the interest of a more efficient way of learning how to innovate.

Albeit the project is in an early stage (ongoing between 2012-2015); it is expected to generate new model for innovative procurement, a National Platform for Innovation, driven by public procurement and a Regional Platform for Innovative Development, with level against caring with support of innovative procurement. The function of these platforms should be knowledge dispersion about innovative development nationally and internationally.
5.4.3 Conclusions

“Innovative Procurement X” – “X” is a Swedish pilot project supported by the Swedish Government through Vinnova (running 2012-2015). The main aim of the pilot is to create innovative public procurement models for the mealtime situation for elderly people. The project is a multidisciplinary initiative with a holistic approach, which main target is to significantly change the mealtime situation of elderly. The project is in its initial phase but the project leaders expect new models for how to perform innovation procurements in the future, that can be seen as rewards for the public sector whereby a more efficient and welfare-generator outcome become a real perspective in case of elderly nutrition.

The project is ultimately about improved quality of life for the elderly, public welfare and development of public purchases in the country. The conclusions drawn will also be useful for other parts of the country and will carry lessons even for Europe as well.
5.5  Canada: Innovation for active ageing

The case study is to emphasise the multifaceted character of public sector innovation. It offers a possibility to discuss the appropriate connections among public sector, civil sector and volunteers; the case study echoes the fact that retired people are the first source of volunteer workers that are of particular importance ahead of demographic challenge. The main message of the case study on Canada is that active ageing should be supported both by top-down and bottom up initiatives. Moreover, by building on the large-scale voluntary sector, public policy development can be significantly triggered in the interest of the Canadian society.

5.5.1  Case profile

Ageing population is a perplexing issue in more and more European countries. According to Canada’s largest Advocacy Association for Canadians As We Age (CARP\(^85\)), by 2016, there will be more people over 65 than under 14 and that will be the first time in the entire history of Canada. The Canadian case is to illustrate that in order to achieve an active ageing local level of governance have to deal with that issue in a more holistic way. Active ageing should be built not only on the recognition that the age *per se* do not tell much about the competences of elder people, but also on the consideration that lots of accompanying conditions have to be addressed at the same time to maintain an age-friendly community. In Canada, thanks to the relatively surpassing share of volunteer sector, and the network maintained among governments, local level of governance and voluntary sector organisations (VSOs), there is an increasing body of evidence that the retired people become the first source of people involved in that way. Since VSOs’ involvement shapes the public policy development, building on voluntary sector – in which the share of retired, senior people has been increasing over decades – is of crucial importance. Retired people can live an active lifestyle; for instance, they can even be trained for energy-savings related consultancy which could also be conducive in transforming the society into a more environmental-friendly one.

5.5.2  Factors influencing the innovation

As a result of some fundamental driving forces working behind the scene, a vivified network of voluntary sector organisations having potential impact on public policy development has evolved.

**Demographic development**

First and foremost, the demographic trajectory reflects that the volume of seniors (those of being over 65 years) has been skyrocketing throughout Canada. This in turn offers human supplies for the voluntary sector as well. The mass of people who has to work something after the retirement is growing and their interest in meaningful and influential works is also increasing (e.g. to shape public policy development and learning by their guidance and expertise in particular fields).\(^86\)

\(^85\) For more about CARP, see: [http://www.carp.ca](http://www.carp.ca)

\(^86\) According to Robb et al. (1997), many Canadian seniors stay active in their communities by volunteering; nearly one quarter (23%) of seniors participated in volunteer activities in 1997. Seniors are somewhat less likely than adults in other age groups to participate in volunteer activities, in great part due to health limitations. However, senior volunteers contribute more time to such activities than people in other age groups - 44% more time than volunteers aged 25 to 44. The contributions of seniors are vital to Canada’s volunteer sector, notably to a wide variety of community organizations including those created by and for
Institutional setting grounding for collaboration

Second of all, the federal institutional architecture also lends support for such development – i.e. to be the voluntary sector engaged in the development of public policy as well – since it has an inherent incentive for a more intensified willingness to cooperate due to the fact that local governments are more close to the private/business/third sector than in the case of a highly centralised country.

Apart from this, there are organisations working in the background dedicated to stimulating the collaboration among relevant actors like VSOs and governments/municipalities. For instance, the Max Bell Public Policy Training Institute which is an excellent learning opportunity for staff or volunteers in non-profit organizations whose work brings them into contact with the activities of governments (let those are at municipal, provincial, or federal levels). By completing the program, participants have an enhanced level of knowledge and skills that are required to develop, inform, and monitor public policy on issues relevant to their organizations.

By concentrating on a more vigorous involvement of the third sector (VSOs), governments seize the opportunity to make some refinement on policy priorities because of the received feedbacks and suggestions. Public policy contributions from charities / VSOs tend to focus on provincial and municipal governments rather than on the federal government. Moreover, a five-year long initiative, called “The Voluntary Sector Initiative”, was set up in the spirit of fostering good relationships between the federal government and the voluntary sector as a whole. The initiative was introduced in 2000 and its financial backing amounted to more than $94 million for five years. One of the most essential objectives of this initiative was to strengthen the capacity of the voluntary sector by facilitating their collective operations with the federal government.

There were initiatives to maintain the commitment of the voluntary sector, which is getting more and more pervaded by seniors, to be engaged in true and genuine policy dialogue in favour of all Canadians. The above mentioned initiative, The Voluntary Sector Initiative, contributed to the process on which along a more horisontal management approach came to life. It is needed especially in time when problems to be tackled by the governments are becoming even more complex requiring more and more aspect and thus, expertise.

An important ingredient of the innovation was its holistic view. It manifested in enhancing the followings that are of key importance from the perspective of active ageing: (i) developing outdoor public spaces and buildings that are physically accessible and secure; (ii) improving the coverage and quality of public transportation that are sensitive to the needs of older people; (iii) and offering opportunities for seniors to participate in leisure, social, cultural activities with people of all ages and cultures. Apart from these, principles were also defined: encouraging and improving the employability of older people with more flexible tasks and retirement options; searching for options that make older people able to take part in counselling and voluntary activities; and developing health promotion opportunities by ensuring that these are easily accessible, affordable in terms of price, proximity etc. These principles were also displayed in the report prepared by EuroHealthNet in 2012, which dealt with the issue of healthy and active ageing in Europe on the basis of collected evidence from countries like Canada.

In addition to the governmental level of initiatives/programmes, there are also bottom up initiatives aiming at diminishing the passive and unhealthy ageing. For instance, Workplace Institute made

seniors. The value of the unpaid assistance provided by seniors is quite substantial. In 1992, it was estimated that seniors contributed unpaid help worth $5.5 billion, or $1650 per senior.
efforts to offer guidance for a much wider range of entrepreneurs and firms who are to cope with the issue of retirement by building on a strategic approach.

The organisation developed the so-called: Older Workforce Strategy Toolkit which helps employers to improve the management of mature employees and it also embraces strategic tips for how to address older workers-related issues.

5.5.3 Conclusions

In an effort to support active ageing both top down and bottom up initiatives could be conducive to fulfil our aims. Top down initiatives can shape the framework by providing guiding principles for local level governance; while bottom up initiatives (e.g. by the contribution of voluntary sector) are also crucial because the transition period into the era of retirement is of key importance if government would like to stimulate an active ageing. Active ageing can be sparked by voluntary sector of which first number one resource can be the retired people.
5.6 Switzerland: Collaborative efforts in tackling environmental problems

The following case of the Swiss public sector innovation, which is presented here as a resource sharing based environmental problem-solving opportunity, can be seen as a prime example of the fact that holistic vision is needed when it comes to the issue of environmental protection via innovations. Its case sheds light on the fact that innovation belongs by definition to dynamic analysis since innovation in a certain field can trigger further need for ensuing innovation in addressing the problem that is potentially arising as a result of the given innovation. Public sector organisations should therefore focus primarily on the results and outcomes rather than on the contemplation of activities and processes.

5.6.1 Case profile

As it was accentuated by studies prepared by various organisations ranging from national authorities to international organisation (OECD, 2011e), Switzerland has to cope with very bleak and pervasive pressures on its environment stemming from the industry, the internationally high density of population, agriculture, transport and last but not least tourism. Importantly, Switzerland’s exposure to seismological events is substantial. In order to strengthen world-class research in Switzerland, public sector made significant efforts to establish the CSCS Swiss National Supercomputing Centre in 1991, which is now located at Lugano, in canton Ticino. CSCS offers a range of high-performance computing services, ranging from classical supercomputing to grid computing, as a national user lab facility. Hence the Centre is an organic building block of the new paradigm of collaborative science. By using this common resource in the public interest (either by public or private researchers), more adequate estimations on future geological changes are achievable. Beyond the collaborative dimension, the Centre also aspires to optimise the use of each participating resource. However, with the escalation of nation-wide and often international collaborations in public interest, the required energy capacity as well as consumption increased at a rapid pace at the same time.

To this end, CSCS had to resort to intensive search for such solution that would reduce costs related to the continuously growing energy consumption. The latter one can be regarded as a significant burden on Swiss environment. Eventually, CSCS constructed a new supercomputing facility, which utilises water from the lake of Lugano as a free cooling resource, thus lowering the power utilisation efficiency coefficient from 1.6 to 1.2 (i.e. the energy overhead for cooling from 60% to 20%).

The case study was relied on the supportive hands of Ulmer Dominik, General Manager of CSCS - Swiss National Supercomputing Centre, which included semi-constructed interview about the topic.

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88 Although it was established in Manno, Ticino, CSCS moved to a new building in March 2012. CSCS is now located at Via Trevano 131, 6900 Lugano, about 10 minutes from the local university USI (see http://www.usi.ch).

5.6.2 Factors influencing the innovation

From the perspective of CSCS, there was an increasingly intensifying need arriving from the Swiss society for trying to anticipate the seismological changes in Switzerland by providing world-class simulation-based science in a more vigorous way. In doing so, the Swiss Federal Institute of Technology in Zurich (ETH Zurich) on behalf of the federal government initiated the establishment of a rock-solid and well-performing platform, the Swiss National Supercomputing Centre as an independent unit. However, the Centre’s budget is based primarily on federal financial contributions (it is complemented with research institutes’ contributions) by providing the necessary flexibility of finance; the initiative can be seen as a bottom-up one since research community in canton Ticino sprang to life the idea and the commitment to that Centre. The Swiss Seismological Service performs a constant public service task on behalf of the federal government, while the Swiss National Supercomputing Centre CSCS in Manno/Lugano is developing and delivering technical and scientific supercomputing services for the academic world, as well.

Apart from the driving role of the federal government, ETH Zurich’s innovative organisational climate equipped with highly skilled workers and good industrial relationships throughout Switzerland were also among the major success factors. The Centre provides wider scope for scientific experimentation on environment protection related issues, as well, e.g. how to minimise errors in estimations on seismological changes. This per se serves as an indispensible reward for the research community and overall, the Swiss society. Above all, the case of the Swiss CSCS can also be linked to the phenomenon of “big data”.

The term big data refers to the gigantic databases with enormous amount of data which researchers have to cope with in terms of their volume, variety and velocity. Dealing with big data requires not only technological modernisation, but also cultural changes in research.  

Organisational streamlining

It was hardly by chance that the organisational structure did not fit to the imagined purposes. Therefore CSCS set up a working group dedicated to this organisational challenge. The major aim was to make the organisation able to handle proper reporting and steering mechanisms with greater autonomy. To this end, general manager proposed the following structure (See Exhibit 18) with the view of having user group in a self-organised way like in some industries as well as boards. Interestingly, the basic principles of this change in organisational setting was based on the so-called FLAG (Führung mit Leistungsauftrag und Globalbudget) concept of the federal administration, i.e. they have to serve as reporting entities at various levels of the organisation.

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91 See: Peer Review of CSCS, July 14th – 18th 2002, pp. 53
Institutional tail wind

The above mentioned FLAG concept, as an institutionally given opportunity, plays a key role in the federal state of Switzerland and thus it was also a driving force of the organisational innovation. The concept offers a federal state-wide management model and it has been going through an organic development over the past decades by serving as a guiding principle.

By continuous development of FLAG, federal state is to foster the results-based leadership via continuous monitoring. One of the most fundamental objectives of the FLAG to stay sentinel over the global budget by gauging whether the outputs are in line with the requested targets in case of public services. In this way, the gap between the functional and financial autonomy is permanently investigated with the aim of promoting mid-term planning methods throughout the public sector.  

As we mentioned, CSCS strived to reach a more energy efficient usage of computer platform by constructing a new innovative facility which utilises free cooling from the lake of Lugano. The new facility is initially equipped with a power capacity of 5MW, corresponding to annual energy costs of approx. 11 million CHF. The improved power efficiency of the facility reduces the annual costs of the energy overhead for this consumption from almost 7 million CHF to less than 2.5 million CHF. Additionally, CSCS adopted the GE’s uninterruptible power protection technology. This contributed to the reduction of costs and environmental impact of high performance computing. However, CSCS uses the GE UPS system for only 1 MW of the consumption. The main consumption does not use any UPS, which contributes substantially to the power efficiency of the new building (at the cost of a slightly higher operational risk).
an institutional mainspring behind this can be deciphered if we consider the fact that the Swiss federal system is built inter alia upon the principle of subsidiarity. In our current context subsidiarity means that cantons are responsible for using energy/electricity economically and rationally tailored to their local needs (related to this, each canton has more or less dominant shares within electric power companies, as a consequence, they are playing major role in the production and the composition of electricity). Bearing this responsibility in mind, in an effort to meet these requirements cantons apply various policies without neglecting the common interest. It calls for policy coordination which is determined by an institution, the Inter-Cantonal Conferences of Energy Directors (ICED) since 1979. This institution acts as an entity of socialisation regarding energy policy throughout cantons because its platform provides opportunity on a regular basis for knowledge and experience sharing with the aim of getting better and more aligned energy policy. This is why canton Ticino also has to be open for good energy saving solutions and financially contributed to the innovative cooling solution for CSCS.

5.6.3 Conclusions

Public sector innovation aimed at providing a state-of-the-art public service that is open for collaboration. On the other hand, this innovation was embedded into an institutional setting in which the responsibility of cantons constituted a main driving force towards a recognition of being open for technologies that are helping in rationalising the resulting energy consumption. The institutional background has an inherent incentive to force the internalisation of negative externalities, at least to neutralise them by triggering further innovations. However, as the case also illustrated, it often needs financial backing. Another potential conclusion is that public sector organisations should focus primarily on results and outcomes rather than on the sheer contemplation of activities and processes.
5.7 Poland: Network based innovation in Gdynia

Gdynia represents the case when public administration became not so hermetically separated from the business and third sector due to the network based mindset having an external orientation. One of the most pivotal driving forces was given by the current ecological and social challenges that have to be addressed in a city pursuing sustainable urban development.

5.7.1 Case profile

The city Gdynia considers the institutionalised spatial planning, design and management as part and parcel of the concept of sustainable development in urban areas. By urban green network development the city means that there is a solid demand for the same care regarding the urban open space and greenery as it is the case in the already built areas. Gdynia Green Network concept aims at being a useful tool in guaranteeing mature deliberation with regard to the further design and management, and in complying standards of development for specific types of green areas in the city. The concept, as a masterplan, is fully recognises that green areas and built areas are fundamentals when it comes to the issue of urban space (the natural and semi natural greenery covers nearly 49% of the city area). As a consequence, there is a relatively great share of areas that are excluded from urban development by offering a promising opportunity to create sustainable urban green network among independent organisations that are responsible for green areas.

To this end, the concept encompasses activities such as defining specific areas and elaborating flagship projects that are inevitable in favour of a sustainable green urban network development. In this way, the plan is expected to have a positive impetus on the development of public services both in terms of quality and accessibility.

The case study was based on a regular discussion with Agnieszka Kowalewska, Freelancer, Poland, who studies the case of Gdynia for a relatively long time; she also worked at Gdynia Urban Planning Office.

5.7.2 Factors influencing the innovation

Apart from the fact that Gdynia is often cited as a city that can be regarded as a “genius loci”, the most fundamental resource of the development is the human capital, the citizens whose enthusiasm for being open for new ideas and to contribute to their implementations, in other words, their vital commitment to the development is by far the best in Poland. The driving force behind this commitment are the social, environmental challenges (i.e. water pollution, the effects of urbanisation on forests via biogeochemical cycle, insufficient development level of parks for recreation etc.) that manifest in a strengthful power to search for new and smart solutions.

Decentralised initiation

From the perspective of institutional structure, Poland is a relatively highly decentralised state in which the municipalities are forced to collaborate and involve relevant stakeholders; what is more, the city can be seen as one of the youngest one in Poland (established in 1926). The “infant” feature of Gdynia per se corroborates the assumption of Olson (1971 | 1965) emphasising the role of youth because interest groups, that can hamper the development process, could not solidify themselves enough during this relatively short time. In this way, public administration at municipal (local level of
Policies Supporting Innovation in Public Service Provision

governance) level could foster the openness of citizens by engaging them into urban development as well as social innovations.

Multi-agent mindset for collaboration

At this point, no one should omit the two fact: (i) raising awareness is crucial over the importance of innovation that is based on more and more involved organisations and stakeholders, while, at the same time, they are networking by bringing the social innovation concept into life; (ii) the numerous green areas with lots of responsible authorities and organisations (e.g. two Forestry Departments, several departments at the Municipality, Tri-City Landscape Park Management Board, Polish Army and housing cooperatives) require to have a common understanding on green urban network by being committed to collaborating with each other.

As far as the awareness is concerned, the Gdynia Innovation Centre – Pomeranian Science and Technology Park, which was established in 2001, also serves as a mechanism that sparks the city’s development in a more innovative and holistic way. The holistic feature stems from the fact that this Centre has been contemplating, monitoring the development perspectives of Gdynia by accentuating the importance of a shift from heavy industry dominated paradigm to a more information and knowledge based paradigm. Beyond the main achievements (i.e. focus was placed onto fields such as: ICT, biotechnology, industrial design, automatics, robotics, multimedia) the Science Park complemented its “portfolio” with a module dedicated to the social innovation domain in which the role of the third sector received much more emphasis (e.g. Park’s companies interacted with social welfare units and organisations). The Park’s activity (e.g. events that gathers social innovators to disseminate, demonstrate their results and practices) has been dampening the discernible lack of awareness on the importance of innovations in the social sector.

As regards the network to be triggered and maintained among all relevant actors, creating common arenas for discussion and dialogue among actors is of key importance. This is why the above mentioned social innovation module was initiated by providing such places to meet and to talk about new ideas grounding for new projects. It is extremely important to note that network should be based on bottom up mechanism that can be safeguarded by permanent project ideas. In this way, the city and its citizens will be able to promote cohesion and interconnectivity between the built environment and unbuilt green zones.

Development for improved quality of life

The flagship projects are organised around the purpose of improving the perceived quality of life in Gdynia. Among the main flagship projects are for instance: the re-development of key public spaces in the city center; the establishment of two new big parks with the aim of having some sports, recreational spaces with the view to stimulate social integration; green walking/cycling ecocorridors in river and stream valleys intertwining the urban fabric, that would allow everyone to get to a landscaped recreational area within a walking distance from home; and last but not at all least, a project of educational and recreational paths in the most precious of Gdynia forests, located right next to the city center and residential districts.

Beside these initiatives, there are others tailored towards a more network oriented city development that can significantly ameliorate the perceived quality of life in the city (See: Kowalewska, 2011:7): (i) Gdynia viewpoints trail – a pedestrian trail linking places with the most beautiful views in the city;

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94 Four distinct zones were defined: (i) urban zone; (ii) forest zone and river/stream valleys; (iii) coastal zone; and (iv) protected zone. See more on zones as well as flagship projects: Kowalewska (2011).
(ii) Green Gdynia without barriers – a programme intended for the disabled, in order to provide them with access to the green areas and encourage to spend time outdoors, in an active way, integrating with other people; (iii) Monuments of Nature programme - protective and educational programme dedicated to the old trees, which often are older than the city itself; (iv) White Waves – a programme that creates a coherent image of the public greenery in the city, with a choice of plant species for the streets, steep escarpments and public spaces.

The Green Urban Network development is expected to substantially improve the quality of public spaces and city life, improve the accessibility for all inhabitants, regardless their social status or physical ability, and including the disabled, elderly, as well as teenagers and families with small children. Moreover, small businesses will also benefit from such a development owing to the enhanced level of city-attractiveness that in turn will help enterprises doing business either in the tourism sector or in recreation fields.

**Flexibility of financing is of key importance**

What is perhaps even more important from our perspective is the fact that authorities – coping with social and environmental issues – have to collaborate with each other with the aim of having a long lasting fruitful cooperation necessary to address urban green network as well. By cooperation, the citizens can be propelled and geared towards a more active way of living that is in line with environmental targets. Apart from the fact that authorities have the required openness, other actors are also working pro-actively in this regard. For instance, the Environmental Protection Bank (Bank Ochrony Środowiska SA – BOŚ SA) as a co-operator with the municipality, also supports to have the indispensable financial flexibility by providing loans and ecological subsidies, hence the bank offers a helping hand for citizens/entrepreneurs who otherwise would not have been able to carry out ecological investments that are subsidised by the city, but they suffer from the missing financial resources.

### 5.7.3 Conclusions

A potential conclusion that can be drawn from the case study on Gdynia urban green network development is the fact that the city offers a productive ground for such a development due to the organically evolved openness both in the public and private (citizens, third sector) spheres. It per se guarantees an extensive scope for experimentation without skipping the necessary deliberations over any kind of development oriented projects (i.e. involving the actors by building on their perceived problems and suggestions etc.). Harmonising the tasks among all the relevant actors (authorities, agencies) is a crucial prerequisite of the success. Still, the longer term commitment is clearly perceptible and the expected positive results seem to maintain it in the future as well.
5.8  Austria: SmartCity Vienna as multi-actor innovation series

The Austrian Vienna SmartCity initiative points to the role of citizens and public sector being mutually committed to the permanent improvement of Vienna in favour of a more liveable, more sustainable city by dampening the environmental burdens and tackling climate change in a more dedicated way. Even though the Smart City initiative can be seen as a bottom up innovation, the political will at higher tiers of government has to be maintained over time.

5.8.1  Case profile

Vienna City Administration, Urban Planning and Development department decided to pursue to become a smart city which can be seen as a pioneer enterprise of how to make the urban development, and overall, the city of Vienna more sustainable by being capable of coping with environmental problems as well in the 21st century. According to the vision, by now, more than half of the world’s population already live in cities. On the basis of forecasts, this number will presumably rise up to 70 percent by 2050. The increasing urbanisation gives rise to problems and opportunities, and ecologically sensible and secure power supply will be a central theme. Against this background, the vision of the Climate and Energy Fund for the “Smart Energy Demo – FIT for SET” programme is the first implementation of a “smart city” or a “smart urban region.” That means a residential area or an urban region in Austria, which, with the use of intelligent, green technologies, will become a “zero emission city” or “sustainable urban region” where the people will live sustainably.

To this end, “Smart Energy Demo – FIT for SET” programme initiated and funded by the Austrian Climate and Energy Fund encourages the consortia building for large-scale demonstration and pilot projects; what is more, it also stimulates the integration of existing and mostly developed technologies and systems into innovative interacting total systems; and last but not at all least, it supports the realisation of a “smart city” and/or a “smart region”. The programme contained inter alia an overview on the current status of and potential impact of implemented and available infrastructure of relevance to the “Smart City” project.95

The case study was prepared on the basis of discussions with Ina-Homeier Mendes, from Vienna City Administration, by building on her presentation at the INNO-Grips workshop on ‘Policies Supporting Innovation in Public Service Provision’ which was held in Vienna on 19 June 2012.

5.8.2  Factors influencing the innovation

A City can be defined smart when systematic information and communication technologies and resource-saving technologies are used to work towards a post fossil society, to reduce resource consumption, enhance permanently citizens’ quality of life and the competitiveness of local economy – thus improving the city’s sustainability. At least the following areas are taken into account: energy, mobility, urban planning and governance. An elementary characteristic of a smart city is the integration and cross-linking these areas with the aim of implementing the targeted ecological and social aspects of urban society and a participatory approach (Wiener Stadtwerke, 2011). There were 13 targeted fields defined along the SmartCity initiative to be addressed in the coming years, such as:

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the City; Bahnhof-Wien (with the aim of being central business district); airport Auspern; Danube canal (water power plant, ecological buildings for banks); Siemens-Allisen (research and development); Prater – Messe – Krieau – Stadion (event city, culture centre) etc.

One of the most plausible explanations for the necessity of such multi-actor collaboration like SmartCity Vienna initiative is the discernable fact that pollution, greenhouse gas emission and other environmental problem related and very complex set of issues are establishing a solid claim for collective action. A collective action can be feasible within a city where local level of governance and end-users of public services and citizens are creating a risk-community and they are experiencing either positive or negative environmental trends in their daily lives.

Bigger scope for experimentation in the given federal institutional setting

The relatively great autonomy of the city of Vienna played an important role to imagine, develop and implement SmartCity Wien initiative. It is mainly due to the federal system which provides higher autonomy in terms of financial autonomy (i.e. the latter one provides the necessary financial flexibility) as well as functional autonomy. As it was indicated earlier, decision-making and implementing powers at sub-national tiers are more or less outbalanced in case of Austria (See Exhibit 10). It offers wider arena for experimentation because the opportunity for decentralised initiation is always at hand, not to mention that Viennese people tend to try out new solutions in a smarter way.

Awareness of the increasing need to change to meet economic, social, environmental challenges

There is much room for improvement in environmental-aware living in Vienna. With urban development (50% of the total area is green/open space) and the increase of population (+9.4% over the last ten years), city management faces more and more problems that are becoming more interdisciplinary, such as the issue of how to curb greenhouse gas emissions (in 2006, CO2 emission per capita was 5.19 tonnes/inhabitant) by preparing for climate change is of key importance (the share of used renewable energy is less than 15% within the total consumption).

Considering the modal split, in 2008, merely 35% of the citizens of Vienna used public transport. Since the Covenant of Mayors platform Austria envisages further increase in the number of urban population, there is a commitment to networking among cities and municipalities and to find ways for coping with challenges (e.g. to increase the willingness of people by 5 percentage points to ride bicycle instead of using cars by 2020; to decrease the car-usage from 31% to 23% within the total modal split by 2020).

Economic mainspring

An impulsive intensive is the belief that if Vienna is the first in some smart solutions, it then can take advantage from those of being sold to other cities (otherwise, Vienna will have to buy from others later on). Vienna’s intention is to position itself as a city of competence in research and development and innovation. As a consequence, Vienna SmartCity initiative serves as a pioneering project to establish and demonstrate marketable solutions in favour of a more sustainable and liveable city. In sum, beyond the ecological, social rewards, the economic aspect is also relevant that drives the innovation.

Mutual commitment of public sector and end-users

Apart from the fact that the political will and commitment is of paramount importance as well as the political entrepreneurship – i.e. the innovative activity within the public administration and
bureaucracy (Edwards et al. 2002; Hederer, 2007) –, smart citizens are also crucial with regard to the realisation of the vision of a smart city. A crucial part of any smart city initiative in the globe is whether the citizens can seize the opportunity to use the new interior and way of living in the given city. Smart city therefore requires smart citizens that can be engaged in smart solutions in a day to day manner (e.g. for being aware of the inefficient/wasteful feature of the heating system and to be committed to better insulation methods). Environmental protection has been pursued for years in the city Vienna, citizens therefore became socialised for behaving smart by using new technologies making the city more sustainable. 96 Citizens must learn from each other, however, the environment-aware behaviour is sparked and instilled into citizens already in the kinder garden.

Basically, this programme requires a multi-actor/multi-agent framework that can cooperate for a relatively long period of time by showing intensive involvement of relevant stakeholders. In doing so, Vienna defined three forums that will build the framework, such as producing a “smart” development path towards energy efficiency and climate protection by making close ties with the preparation of the Urban Development Plan. Additionally, the results of the programme are well visible and intended to maintain the commitment by providing longer term perspectives with strategic goals to address over time complemented with short term measures to be taken (these are important inputs without having any binding aspects for the City of Vienna). The results were as follows: Smart Energy Vision 2050 – Strategische „Roadmap 2020 and beyond”; and Action Plan for 2012-2015. These formed the three stakeholder forums.

Dynamic view is encoded into the Smart City Wien

On the one hand, the initiative also relies on utilisation of already existing knowledge thesaurus over the topic by using the results of projects that are linked to the concept of “smart city”:

- Climate Neutral Urban Districts in Europe (CLUE): the objective of the CLUE regional development project is increased regional capacity in policy development to facilitate implementation and assessment of new solutions and technologies to support low carbon economy in urban areas. Furthermore a shared perception on Climate Neutral Urban Districts in the partnership is a project aim. To achieve this, developing the relation between urban development policy and climate mitigation measures is a must.

- TRANSFORMATION Agenda for Low Carbon Cities: the project supports cities in favour of realising the EU 20-20-20 targets (e.g. by establishing Smart Energy City Handbook; Smart Energy Cities Planning Master Classes).

On the other hand, Smart City Wien has a dynamic view which is required when it comes to sustainable urban development. The project is open for initiatives and other projects whose spirit and aims are in line with the targeted goals. Under this angle, “Smart City Wien” seems to be a framework rather than a complex and highly detailed action plan that would be inflexible to future challenges. Additionally, it will serve as a basis for future Urban Development Plan Vienna (2014).

Regarding the barriers of such initiative, the real difficulty comes from a complex set of activities that policymakers should address over time: they have to raise awareness, involve meaningfully all the relevant stakeholders, coordinate among them, and keep up their commitments over time.

96 “Climate Protection Program” (KLIP) was enacted in two phases, first in 1999 and KLIP II will also be valid up until 2020. The aim is to curb the annual increase in emissions of CO2. KLIP II embraces 37 sets of measures with more than 380 individual measures in fields like energy efficiency, mobility, town-structure, procurement etc.
5.8.3 Conclusions

Taking into account the fact, which was emphasised by Pelkmans (2007), that the business community is becoming even more concerned about EU leadership in tackling and managing climate strategies; smart city initiatives can mitigate this phenomenon by demonstrating that the principle of subsidiarity is of key importance and public and private sector can enhance the viability of climate strategies at the lower tiers of government as well. This initiative can confirm the capability and willingness of lower tiers of government to be committed in contributing to the fulfilment of climate strategy at local levels in favour of a more sustainable city lifestyle in terms of ecological, technological and economic dimensions as well. The case study also points to the importance of long-term thinking. For instance, citizens become sensitive to environmental challenges and revise their behaviour accordingly along a learning process which starts already in the kindergarten.
### Annex II. Policies/initiatives for public sector innovation in selected countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Aims or policy targets</th>
<th>Policy documents</th>
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<tbody>
<tr>
<td><strong>Australia</strong></td>
<td>2011: The Bargaining Framework balances the workplace interests of the Australian Government with those of APS employees; The aim of the Bargaining Framework is to implement the Government’s workplace relations policy with respect to APS employment; 2011: Telework policy is to foster for example workplace innovation;</td>
<td>2011: Australian Public Service Bargaining Framework 2011: Telework policy 2011</td>
</tr>
<tr>
<td><strong>Austria</strong></td>
<td>2012: Participating in the project NOMAD as &quot;Policy Formulation and Validation through non-moderated Crowd Sourcing&quot; in fields like environment, health, social services etc. Nomad’s vision is to provide decision-makers with fully automated solutions for content search, acquisition, categorisation and visualisation that work in a collaborative form in the policy-making arena. Target group: Policy makers in any level of administration; Politicians, Members of National or European Parliament; Non-governmental organisations (NGO’s), participating in policy formulation on any subject; Citizens; Enterprises (from VSE's to SME's to LE's) participating in public policy discussion. (See: <a href="http://www.epractice.eu/en/cases/nomad">http://www.epractice.eu/en/cases/nomad</a>) 2010: Action Plan - The objectives of the National Action Plan, which was endorsed in July 2010, are to support environment and climate protection through sustainable public procurement and to implement the principles of Austria’s sustainability strategy from 2002. The total-cost-of-ownership approach shall be applied (incl. costs for recycling) to secure cost truth.</td>
<td>2012: Policy Formulation and Validation through non-moderated Crowd Sourcing. 2010: Austrian Action Plan for Sustainable Public Procurement (Österreichischer Aktionsplan für nachhaltige öffentliche Beschaffung)</td>
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<tr>
<td><strong>Belgium</strong></td>
<td>2010: The main aim is to foster sustainable development in Wallonie in a more vigorous way by taking into account six axes. One of the measures is the establishment of Employment-Environment Alliances. The Plan also puts aside € 5 million to —transversally promote sustainable development through all public policies (Wallonie, 2010, p. 48).</td>
<td>2010: Marshall Plan 2.Green</td>
</tr>
</tbody>
</table>
### Canada

2011: Expert Panel’s recommendations aimed at:
(i) creating an Industrial Research and Innovation Council (IRIC) to deliver the federal government’s business innovation programs. The creation of an arm’s-length funding and delivery agency – the Industrial Research and Innovation Council – would begin to streamline the process as the development of a common application portal and service to help businesses find the right programs for their needs (a “concierge”).
(ii) Transform the institutes of the National Research Council into a series of large-scale, collaborative centres involving business, universities and the provinces.

2009: Saskatchewan is adopting a new, results-based model for environmental regulation that will improve protection of the environment, while promoting innovative new tools in environmental management, including the Saskatchewan Environmental Code.

### China

2011: 12th Five Year Plan is among other things to:
(i) reduce administrative burdens on companies;
(ii) tackle ageing society related social problem (i.e. China is the only country in the world with more than 100 million old people) establish a social care service system “with home-based care as the foundation, backed up by community-based services and supported by institutional care”.

### Czech Republic

2012: First Healthcare Reform Bill - A new system of electronic tenders will be introduced for the drugs reimbursed within the Czech mandatory health insurance system (estimated savings: CZK 500 million);
2012: Cutting red tape - The Czech government is to reduce the administrative burden for companies by 30% by 2013 and created a new website www.zjednodusujeme.cz for stakeholders to point out at burdensome legislation. Some activities related to eGovernment took place, such as building a network of contact points Czech POINT or Public Administration Portal. In the future, the CR would like to focus also on projects specifically aimed at reducing administrative burdens for citizens.
2008: Fixed co-payments for prescription drugs is being changed, Czechs will pay CZK30 per prescription.

### Denmark

2011: With the mindset of MindLab, co-creation infiltrated into the strategic planning as well in coping with climate change. Denmark has built a new brand, supported by the Climate Consortium Denmark, called “State of Green – Join the future. Think Denmark” for the energy, wind power and water treatment industries.

2009: Healthcare Innovation Centre is a strategic initiative whose major objectives are as follows: to improve the quality and efficiency of health services; to disseminate the innovation work in progress along 14 hospitals with 40.000 employees in the Capital Region of Denmark; to involve all the relevant stakeholders (employees, patients, designers, business community). The Centre’s Advisory Board is to find ways for public-private innovation collaboration.

### Estonia

Legislation review aimed to detect potential obstacles in legislation that need to be removed for implementing open data initiatives is underway and will be completed in 2012 as well as Green Paper and community-based public services roadmaps

### Finland

2012: The objective is that the elderly will be given the possibility to maintain their capabilities, form social bonds and engage in

2012: draft Act on Care Services for the Elderly;

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stimulating activities. Institutional care will only be considered if absolutely necessary to providing the elderly person with a life of the appropriate safety and dignity. Municipalities must provide systematic support for the elderly.

2003-2012: Municipal reform has been underway from 2003 in order to tackle social and health care service related issues in a more effective way. The number of municipalities was reduced, and the regional policy shifted its focus from “support the weakest” to “support the strongest”. Because small municipalities are not able to serve the same spectrum of services by its own. Co-operation among municipalities therefore was encouraged.

### France

2011: "Adm’innov" Programme - it entailed the creation of a portal marked the closing of the one-day 'Carrefour Adm’innov' forum on innovative administration which was organised by the Directorate-General for State Modernisation (Direction générale de la modernisation de l’état (DGME), in French). Adm’innov enables State civil servants to contribute directly to service improvement by sharing their ideas for simplifying and enhancing service provision with citizens, businesses, local authorities and associations.

### Germany

2012: Participating in the project NOMAD as "Policy Formulation and Validation through non-moderated Crowd Sourcing" in fields like environment, health, social services etc. Nomad’s vision is to provide decision-makers with fully automated solutions for content search, acquisition, categorisation and visualisation that work in a collaborative form in the policy-making arena. Target group: Policy makers in any level of administration; Politicians, Members of National or European Parliament; Non-governmental organisations (NGO’s), participating in policy formulation on any subject; Citizens; Enterprises (from VSE’s to SME’s to LE’s) participating in public policy discussion. (See: http://www.epractice.eu/en/cases/nomad)

### Greece

2012: Participating in the project NOMAD as "Policy Formulation and Validation through non-moderated Crowd Sourcing" in fields like environment, health, social services etc. (See: http://www.epractice.eu/en/cases/nomad)

### Hungary

2012: Open eGovernment initiative is to ground for citizens who then can express their thoughts and suggestions over health care, public administration, environmental protection related issues etc. The decision-makers are also encouraged to make feedbacks to display suggestions.

### Iceland

2009: Constitutional Council was quite active on Twitter, Facebook, Youtube and Flickr with the purpose of receiving relevant suggestions of the society.

### Ireland

2011: Public Service Reform Plan aims at: placing customer service at the core of everything we do; maximising new and innovative service delivery channels; radically reducing our costs to drive better value for money; leading, organising and working in new ways; and putting strong focus on implementation and delivery.

### Italy

2008: PAQ - www.qualitapa.gov.it - is the Italian institutional gateway to quality and performance improvement in public administrations. The portal, managed by the Public Administration Department,
was launched in 2008 and has now reached 10,000 registered users – mostly civil servants and public sector experts. The main issues tackled are: performance management, customer satisfaction and services’ improvement, citizen engagement, self-assessment through the CAF model and, more generally, anything is related to innovation in public sector!

The portal proposes and makes available tools, materials, guidelines, databases and practices for supporting public administrations in evaluating their organizational performance and improving the quality of their services for users and citizens. The portal features as well interviews, cases and experiences which aim at promoting, disseminating and sharing practices.

Using PAQ, public administrations may also access reserved areas for collaborative work and content exchange, as well as for using forum and web 2.0 tools.

| Japan          | 2011: Strategic focus is on the following fields with the view of improving the service quality and accessibility: health, childcare, tourism, business support services and distribution services |
|               | 2010: Japan’s Public Projects Review aims to facilitate effective policy planning, efficient budget execution, and to anchor accountability and transparency of central government. |
|               | 2010: 100 Actions are tailored towards maximizing the market’s function through reimagined Public-Private Cooperation |
| Latvia        | 2009-2012: The structural reforms aimed at reducing the public administration. The number of public government institutions was reduced by 34%. The number of states agencies reduced by 59%. Further steps are planned for rise of efficiency of public government. |
|               | The Plan for Optimizing Public Administration targets an: effective, professional, society orientated public administration. Actions are mainly driven by employment reduction (In 3 years time number of people employed was reduced by 20 thousand people, -25%). |
| Lithuania     | 2010: Adaptation of Performance Management in Lithuanian Public Sector |
|               | 2011: Modern State Governance Pursuance New Quality of Services. |
|               | 2010: The Government of the Republic of Lithuania decision for The Concept of Public Service Improvement, 2th June of 2010 |
| New Zealand | **2011**: The main purposes of the Declaration on Open and Transparent Government are as follows:  
| to enhance external engagement in policy-making;  
| to create value from innovative reuse of government data;  
| to strengthen public trust in government through transparency. |
| **2010**: The objectives of the Investment Statement are as follows:  
| to support a strong government financial position under the worldwide economic crisis by enabling greater scrutiny to management of assets and liabilities;  
| to provide a regular statement of the government investment to ensure greater certainty to citizens and businesses who will then make better planning decisions. |

| Norway | **2012**: Semicolon II-project is to test and establish methods, tools and performance indicators that can be used as the basis for recommendations and standards for enhancing collaboration across the public sector in Norway. Among other things, the project is to identify obstacles for collaboration and prescribe strategies and solutions to overcome these. |

| Poland | **2011**: Central Records system The system was able to organize ongoing cooperation and an electronic flow of information between all institutions involved in the process of business registration – Ministry of Internal Affairs and Administration, Office for Foreigners (Records of foreigners staying in Poland), The Office of the Chairman of the Council of Ministers (the co-called Polish Expatriates Card, Ministry of Justice (KRK), Central Statistical Office (REGON), Ministry of Finance (Tax Offices / Central Register of Entities National Register of Taxpayers - CRP KEP), Social Security Institution (ZUS) / Agricultural Social Security Fund (KRUS).  
| **2009-2013**: ePUAP2 - The project "Electronic Platform of Public Administration Services" is to be extended with additional services by aiming at: increasing the number of online services available to the public including the registry services, widening the scale of usage of public electronic services, integrating subsequent systems of public administration and business on ePUAP portal, defining new processes of customer and business services. ePUAP2 is to transform Poland into a modern and citizen-friendly country. |

| Portugal | **2012**: In Portugal there are two seminal initiatives of civil society that scrutinize the budget and the budget process. The budget watch (2012) results will be available soon) and the open budget initiative. They start producing results. But it is also important that the Council for Public Finances, an independent body predicted in the memorandum is also implemented. |

| Russia | **2010**: On-line Portal “www.gosuslugi.ru” has decreased financial costs and increased satisfaction of the public. All necessary documents and information of public services are available online. Public information services have been carried out by means of the one-stop centers since 2006, which are now 265 centers in 59 Russian regions.  
| **2010**: The necessity of Regulatory Impact Analysis was stipulated in the Government Order № 336 enacted in May 2010. Regulatory Impact Analysis (RIA) procedures are required for all new federal acts. |

| Slovakia | **2011**: electronic census;  
| **2011**: Central Metainformation System of Public Administration | **2011**: Open Government Information and Data Re-use Programme;  
| **2010**: Investment Statement of the Government of New Zealand | **2012**: Semicolon II | **2011**: Central Records and Information on Economic Activity;  
| **2009-2010**: ePUAP2 | **2012**: The Budget Watch | **2010**: Public Services Online Portal, One-Stop Centers;  
| **2010**: Regulatory Impact Assessment (RIA) | **2011**: eGovernment services |
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(MetaIS) - It incorporates information on operating the information systems of public administrations, eServices, as well as other technological and administrative data, which is then published by the given institution that manages the public administration information system;

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<tr>
<th>Country</th>
<th>Year</th>
<th>Description</th>
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<tbody>
<tr>
<td>Slovenia</td>
<td>2010</td>
<td>Exit Strategy has repeatedly confirmed the inevitable role of public sector modernisation in tackling challenges facing Slovenia. Objectives: reduction and rationalization of public administration (e.g. a 25% reduction of administrative barriers for the business sector), integration of ministries, an annual reduction of employment in the public sector by 1% and freezing of budgetary funds at the previous years’ levels, also for promotion and rewarding of work performance.</td>
</tr>
<tr>
<td>South Korea</td>
<td>2012</td>
<td>Government-to-government cooperation system to be used between Korea and Italy, Turkey, Panama in the fields of eGovernment practices/systems. The Ministry of Public Administration and Security launched an e-government export support commission jointly with major IT companies. The commission is serving as a communication channel between the public and private sectors, while carrying out mediation efforts to prevent excessive competition among Korean IT enterprises in overseas markets and sharing cooperation projects promoted between Korea and foreign countries. The Ministry of Knowledge Economy revised criteria for evaluating appropriate practices. New criteria for approving the subcontracting of SW projects ordered by government agencies is established and started to use from June 2012.</td>
</tr>
<tr>
<td>Sweden</td>
<td>2011</td>
<td>eGovernment solutions - (i) The Swedish employment agency Arbetsformedlingen launches a free-of-charge application enabling smartphone holders to look for a job via their phones. It is designed for people speaking foreign languages as well (Arabic, English, French, Russian and Spanish). (ii) Sweden’s public administrations, municipalities and health care are turning to free and open source software solutions, following legal clarifications made to a public procurement framework contract. The aim is for businesses, public sector actors and other organisations in Sweden to join together in contributing to the development of services innovation and thus develop competitiveness in the economy as a whole. The strategy has drawn upon the lessons of a dialogue with companies, organisations and public sector actors at local, regional and national level.</td>
</tr>
<tr>
<td>Switzerland</td>
<td>2012</td>
<td>Participating in the project NOMAD as “Policy Formulation and Validation through non-moderated Crowd Sourcing” in fields like environment, health, social services etc. (See: <a href="http://www.epractice.eu/en/cases/nomad">http://www.epractice.eu/en/cases/nomad</a>)</td>
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<tr>
<th>Location</th>
<th>Year</th>
<th>Description</th>
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<tbody>
<tr>
<td>the Netherlands</td>
<td>2011</td>
<td>Data.overheid.nl is the open data portal established by the Dutch government. The portal contains information about open government data and the national registry of references to existing open data sets. The portal focuses on public government. Geographical data sets are also displayed and opened for the public.</td>
</tr>
<tr>
<td>the UK</td>
<td>2011</td>
<td>The Government works closely with partner organisations in order to: - help build the innovative capacity of businesses throughout the UK; - increase take-up of the innovation advice and support services being funded and delivered through the various bodies and agencies in Scotland, Wales and Northern Ireland; and - ensure coherence between the initiatives and investments being carried out in each of the Devolved Administrations with UK programmes and priorities, so as to maximise their reach and impact.</td>
</tr>
<tr>
<td>U.S.</td>
<td>2011</td>
<td>Healthcare, state-of-the-art communication service</td>
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<td></td>
<td>2011</td>
<td>The Jumpstart Our Business Startups Act. The Act provides for smaller investments with fewer restrictions. The goal is help fledgling companies raise money via crowdfunding sites.</td>
</tr>
<tr>
<td></td>
<td>2012</td>
<td>Participating in the project NOMAD as &quot;Policy Formulation and Validation through non-moderated Crowd Sourcing&quot; in fields like environment, health, social services etc. (See: <a href="http://www.epactice.eu/en/cases/nomad">http://www.epactice.eu/en/cases/nomad</a>)</td>
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<td>2012</td>
<td>Policy Formulation and Validation through non-moderated Crowd Sourcing.</td>
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<td>2012</td>
<td>Innovation and Research Strategy for Growth</td>
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<td></td>
<td>2012</td>
<td>The Jumpstart Our Business Startups Act</td>
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<td></td>
<td>2012</td>
<td>Crowdfunding initiative - The Jumpstart Our Business Startups Act</td>
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Annex III. Definition of key terms

A definition of public sector

Defining the “public sector” in the domain of “public sector innovation” by a standard and hence widely used single definition is difficult although the Innovation Economics discipline has been dealing with the topic for decades (Hall – Rosenberg, 2010).

The “System of National Accounts” (SNA) emphasises that there are at least two aspects to be considered when studying the public sector: (i) market/non-market activities and (ii) control and financing. Public sector can be defined as all activities (let those be either market or non-market) that are controlled and dominantly financed by public authorities on different institutional level of the administration.

According to SNA, public sector includes (i) the general government sector and (ii) the public corporation sector (Exhibit 19). General government sector refers to all governmental units, social security funds and non-profit, non-market public or private institutions. Public corporation sector comprises all of the institutional units that produce for the market (Hammouya, 1999).

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Exhibit 19. Public sector on the basis of SNA 93

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A definition of government sector

Among the abundantly endowed literature dealing with government sector, one of the most pivotal definitions appears in OECD’s Frascati Manual (OECD, 2002) and it is also used by the EPSIS Report (2012). According to the Frascati Manual, the government sector encompasses “[...] all departments, offices and other bodies which furnish, but normally do not sell to the community, those common services, other than higher education, which cannot otherwise be conveniently and economically

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97 See the “System of National Accounts”, which was the output of collaborative efforts of the following organisations: Commission of the European Communities, IMF, OECD, U.N and World Bank. Brussels/Luxembourg, New York, Paris, Washington, D.C., 1993
provided, as well as those that administer the state and the economic and social policy of the community. (Public enterprises are included in the business enterprise sector.)” (OECD, 2002:62).

From a structural and domain-wise aspect, the government sector “should include all bodies, departments and establishments of government – central, state or provincial, district or county, municipal, town or village – that engage in a wide range of activities, such as: administration; defence and regulation of public order; health, education, cultural, recreational, and other social services; promotion of economic growth and welfare; and technological development. The legislature, the executive, departments, establishments and other bodies of government should be included, irrespective of their treatment in government accounts. Government-administered social security funds are also included. It is immaterial whether they are accounted for in ordinary or extraordinary budgets, or in extra-budgetary funds.” (OECD, 2002:63).

This policy brief follows the definitions of the OECD, as presented above. As for the functional breakdown of governance, the policy brief uses the so-called COFOG (Classification of the Functions of Government) classification developed by the United Nations (Exhibit 20).

Exhibit 20. COFOG classification (1-digit level)

| 01 - General public services | 06 - Housing and community amenities |
| 02 - Defence                 | 07 - Health                          |
| 03 - Public order and safety | 08 - Recreation, culture and religion|
| 04 - Economic affairs       | 09 - Education                       |
| 05 - Environmental protection| 10 - Social protection               |

Source: UN, COFOG

A definition of public sector innovation

According to the Oslo Manual, “an innovation is the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organisational method in business practices, workplace organisation or external relations” (p. 46). Although the Oslo Manual does not provide a specific definition for public sector innovation, it may be derived that in the context of the public sector, the minimum requirement for an innovation is that it must be new or significantly improved for the public sector at different institutional levels.

However, using the definition of the Oslo Manual on innovation would be rather problematic in case of public sector innovation because its categories of product or marketing innovation may entail interpretation-related problems due to the specific features of public sector (including policy formulation and service delivery). As a consequence, this policy brief is equipped with recent considerations over public sector innovation echoed for example by Innobarometer 2010.

Innobarometer 2010 (2010:13) considers public sector innovation as “[...] any novel, or significantly improved (without indicating precisely what a ‘significant improvement’ might be) service, communication or organisational method”. In elaborating this definition and complementing the mentioned types with process innovation, this policy brief joins to the line of thinking of the EPSIS Report (2012) indicated earlier:

Innovations in services: A product innovation is the introduction of a service or good that is new or significantly improved compared to existing services or goods in the given public organisation. This
includes significant improvements in the service or good’s characteristics, in customer access or in how it is used.

**Process innovation:** Process innovation is the implementation of a method for production and provision of services and goods that is new or significantly improved compared to existing processes. This may involve equipment and/or skills or support functions, such as IT, accounting and purchasing.

**Organisational innovation:** According to INNOVA Final Report\(^{98}\), organisational innovation refers to changes in the structures and processes of a public organisation that result from implementing new managerial and working concepts and practices.

**Communication innovation:** It refers to the implementation of a new method of promoting the organisation or its services and goods, or new methods to influence the behaviour of individuals. These must be distinguished significantly from existing communication methods in your organisation.

However, ideas may be generated within the public organization or may be purchased/adopted from outside (Damanpour – Evan 1984). This policy brief also takes into account that the public sector can adopt business sector solutions (innovative process, organisational and communicational practices) and also the tertiary sector’s solutions.\(^{99}\) Innovation thus has become a means of effecting changes that are needed to meet the new strategic challenges (Schumpeter 1934; Damanpour – Schnieder, 2006). The increasing tension incites EU Member States towards a more disciplined public finance. Innovation in the case of public sector cannot be interpreted merely as something new, but rather something better in terms of service quality/accessibility and cost-effectiveness.

**A definition of policies**

A **policy** is defined here as “a deliberate act of government that in some way alters or influences the society or economy outside the government”.\(^{100}\) Policies include, but are not limited to, taxation, regulation, expenditures, legal requirements and prohibitions, as well as the provision of consulting, coaching and training. Governments include those on local, regional, national or European level. As regards **innovation policy**, theoretical and empirical evidences joins to the line of thinking emphasising the role of innovation policy in support of economic and social objectives both in the short and in the long run. Innovation policy embraces the analysis of innovation programmes in order to provide credible advices to the policymakers and other relevant stakeholders.

In principle supporting innovation within the public sector are not unambiguous since the term “**policy**” does not necessarily equal to “**initiative**”. What is more, structural reforms are always accompanied with innovations. As a consequence, looking also at structural reforms in carrying out policy mapping can get us closer to recent trends in policies supporting innovation in public service provision. It holds even if the benefits of structural reforms often take longer time to be fully materialised (OECD, 2012:12).

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\(^{98}\) See: Rubalcaba – Hipp (2010)

\(^{99}\) Historically, a number of key innovations have also been adopted from the third/not-for-profit sector. For instance, social work, probation and children’s services started life in various forms in the UK under charitable auspices.

Annex IV: An example for the realisation of the EPIC programme

**Intervention logic**

- To raise institutional knowledge and awareness of existing public innovation results and transferability (Action 1 – “policy making”).
- To raise EU citizens’ awareness on how to be an active part of local level public policy decision making through co-creation (Action 2 – “public awareness”).
- To create institutionally supported permanent mechanisms to create and channel innovative public administrative solutions among local institutions for the purpose of welfare and sustainable environment (Action 3 – “innovation factory”).
- Assistance to create strong political commitment on local and national level in order to act as a driving force for public sector innovation among responsive and sustainable public services (Action 4 – “political commitment”).
- Providing technical assistance for high quality program coordination and implementation by DG Enterprise (Action T - technical assistance).

**Potential indicators**

- number of campaign or event (output - Project Progress Report)
- number of public innovation communities created by the action (output - Project Progress Report)
- number of successful pilot projects
- time, cost and energy savings (baseline - ex-ante survey, result - ex-post survey)
- rate of content public service client (result - ex-post survey)
- welfare indicator

**Action 1 – Policy making**

**Objectives**

To promote knowledge transfer among local public organisations in order to exchange experience, best practices and discuss public sector innovation related activities and policy papers as well as action plans. Providing permanent connection channels among local public bodies from different member states and constant flow of best practices from more developed regions to deprived areas.

To form joint action plans at local or regional levels; and policy suggestions at national and EU level. Public sector innovations cover optimising internal procedures and regulations, forming management strategies, organisational structures, preparing methodology papers, conducting policy analyses and creating a responsive management system required citizen's needs or economic, social and environmental challenges.

**Justification**

Local public institutions are more isolated from EU-wide and inter-member state innovation and knowledge transfer than central governmental organisations. This is due to information asymmetry, lack of language skills, low context attitude and under-financing. More active and regular relationship
among local public institutions would accelerate community wide information flow among local organisations. Annoying daily practices in office bureaucracy are still a burden for citizens and SME’s. Strong language support and utilisation of mobile ICT technologies is necessary for full impact. Positive administrative practices must be spread among local institutions for mutual benefit of all EU citizens.

**Target groups can be defined as:**

- civil servants at any kind of local public institution
- state employees in local municipalities, hospitals, public schools, state owned public organisations

**Beneficiaries:**

- municipalities, public administrative institutions, local authorities (NUTS II or below)
- public service organisations fully owned by the state
- local governmental and administrative offices (NUTS II or below)

**Potential partners:**

- municipalities, public administrative institutions, local authorities (NUTS III and below)
- non-governmental organisations representing related groups of people or companies
- ministries and central governmental institutions
- chambers, sectoral and other representative organisations
- public service providers (public and private)
- public or private research institutes

**Suggested eligible activities:**

- organising conferences, workshops and other interactive activity
- forming joint action plans, implementing joint policies and local actions resulting welfare and better quality of life
- providing a solid institutional background for future joint activities of participants
- webpage creation and operation of online community activity
- creation of online community on local institutional cooperation, online knowledge base and data base
- creation of long-term and active organisational connection among large number of local institutions
- creating policy and methodology papers, related policy analyses or evaluations
- marketing and promotion of project scope and objective
- translation for printed, audio-visual content or daily conversation for any partners' language
Similarly, further Action lines can be defined and programmed accordingly. As far as the justification goes, Action 2, 3, and 4 can be described as:

**Action 2 – public awareness**

To support audio-visual campaigns, local public events, forums and publicity activity to promote citizens’ awareness on the necessity of public administrative procedures and regulations. The action will bring closer the public officers and researchers to citizens in order to improve daily operations. Constant dialogue through institutionally stipulated local communities supported by online communication and various voluntary community services will accelerate the improvement of local public services.

**Action 3 – innovation factory**

Innovation factories are joint civil and governmental organisations to provide a motivating and active environment for creative and meaningful public policy solutions for the long run. Innovation factory works as a permanent research, monitoring, planning, implementing and coordinating body for joint local initiatives. The action creates joint public innovation centres among local administrative bodies from different member states in order to provide the permanent and continuous improvement of public services for better quality of life.

**Action 4 – political commitment**

The action focuses on motivating local politicians and politically appointed commissioners to commit themselves to pursue public sector innovation. The action facilitates knowledge transfer and attitude development of political actors toward responsive and sustainable public services.