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Trends and Challenges in Public Sector Innovation in Europe

Thematic Report 2012 under Specific Contract for the Integration of INNO Policy TrendChart with ERAWATCH (2011-2012)

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This report is based on the work of the TrendChart country correspondent network to whom recognition is due.

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Introduction

The European TrendChart on innovation is the longest running policy benchmarking tool at European level. Since its launch in 1999 it has produced annual reports on national innovation policy and governance, created a comprehensive database of national innovation policy measures and organised a series of policy benchmarking workshops. The coverage was expanded towards research policy with the launch of the parallel ERAWATCH initiative in 2004.

The policy monitoring databases of INNO Policy TrendChart and ERAWATCH were merged in 2007, with the creation of a joint European Inventory of Research and Innovation Policy Measures by the European Commission with the aim of facilitating access to research and innovation policies information within Europe and beyond.

With a view to updating the innovation policy monitoring, the European Commission DG Enterprise and Industry commissioned the ERAWATCH Network ASBL to provide an enhanced overview of innovation and research policy measures in EU Member States as well as countries participating to the Competitiveness and Innovation framework Programme (CIP) and specific third countries. The contractors are also undertaking activities with a view to the full integration of the INNO Policy TrendChart and ERAWATCH services.

In order to complement the collection and update of research and innovation policy measures, a trend report on innovation policy, an overview report on innovation funding in the EU and an analytical thematic report will be elaborated once per year in 2011 and 2012. Public sector innovation was selected as the theme for 2012.

The objective of this report is to identify the main patterns and characterisation of Public Sector Innovation (PSI) in the European Union. It studies the perceptions of PSI in the EU, drivers and barriers to PSI, and lessons learned from the implementation of PSI in specific sectors. The report is based on country reports produced by the TrendChart country correspondents performing selected interviews with public officials and academics from 25 Member States (i.e. EU27 with the exception of Cyprus and Luxembourg). The cross-country report uses the grounded theory method for qualitative data analysis, and is probably the first qualitative empirical attempt to study Public Sector Innovation across different countries and multicultural contexts in the European Union.

The report is organised in 8 Sections, including the Executive Summary (Section 1), and a Methodological note (Section 2). Section 3 sets the context of the analysis by discussing the literature on Public Sector Innovation, regarding definitions, characteristics, sources and approaches, and factors and preconditions of PSI. Sections 4 to 7 are the result of the cross-country analysis, enriched with insights from the literature and evidence from other empirical exercises and sources when relevant. Section 4 discusses the perceptions of PSI across Member States, and Section 5 presents drivers and barriers to PSI. Section 6 is the core of the analysis, presenting evidence of successful and less-successful PSI through selected examples across Member States. Section 7 looks forward, analysing the perceptions on the potential for future PSI in the EU. Section 8 concludes and assesses challenges ahead.

Disclaimer

It should be noted that the content and conclusions of this report do not necessarily represent the views of the European Commission. The report is the responsibility of the authors alone.

The present report is based on the analysis of the INNO Policy TrendChart database and on the information provided in the TrendChart mini country reports, and it is not a result of a full-fledged survey of countries.

1. Executive summary

This report presents an overview of Public Sector Innovation (PSI) in the European Union as revealed by a pan-EU survey carried out in autumn 2012. The study sought to gather the perceptions of public officials and national experts alike as regards the development of public sector innovation across the EU. The report brings together the findings of 25 individual country reports prepared by the respective TrendChart country correspondents, which combine both qualitative material derived from interviews with selected public officials and academics and more objective data from national statistics offices and elsewhere.

The survey results reveal a consensus across countries and public administrations as to what is meant by PSI. Innovation is seen as a means to address growing budgetary pressures, through more efficient administration or service delivery, and new societal demands, through different and more effective service design. It applies across all areas of the public sector and it covers services and processes and is motivated by the need to do new things or existing things better, quicker, and cheaper. The only definitional issue identified is a blurring between politically determined governmental reforms (e.g. deregulation, 'agencification') and public sector innovation more narrowly understood (e.g. quality certifications for the provision of social services, e-prescriptions). There is also evidence of moving to the point where all EU member states will consider PSI to be a national requirement and a means by which to drive continuous improvement in public service design and delivery.

In a time of economic crisis, Public Sector Innovation is likely to be accepted as an imperative for governments in order to find radical solutions to protect services while cutting costs dramatically

The economic crisis is clearly pulling governments in two directions. On one hand, there is sustained political pressure for administrations to come forward with radical solutions to protecting services while cutting costs dramatically. On the other, the crisis has forced the removal of 'research and development' budgets that are needed to design and pilot these radical undertakings. However, it seems highly likely we will look back on this period as a turning point and the point in time when all governments came to accept that PSI is an imperative for all.

The principal drivers of public sector innovation are threefold: political ambition, public demand, including business and third sector, and tightening resources. In the European Union, one should add a fourth driver, which is the collective articulation of some or all of these forces for change. There is very much less evidence of positive financial incentives being an important driver of innovation, in the way that the profit-motive works in the private sector. However, incentive schemes cannot necessarily only be financial incentives based on performance, but also other types of rewards in the form of '*recognition*' given to the innovators. Moreover, in some cases evidence shows that internal incentive structures also play a pervasive role towards PSI. Making innovation work requires certain other qualities too: several contributors argued that leadership, culture and institutional capacities (including skills) were all important factors. All things being equal, when such qualities are in abundant supply, successful innovation is very much more likely.

Successful innovations can deliver substantial cost savings for service providers and service users. For example, Portugal's SIMPLEX Programme for administrative simplification and eGovernment is estimated to have generated savings of €51.6m for citizens and businesses. Similarly, the UK's Red Tape Challenge has delivered many economies including a package of employment tribunal reforms that is estimated to deliver over €45m a year in cost savings to employers, while planned reforms to environmental regulation are expected to save businesses at least €1.2b over 5 years. E-procurement initiatives in Lithuania, following reforms in 2008, have resulted in costs savings of at least €176 million in the 2-year period since 2010, following the introduction of a new full service system. Lastly, the National Revenue Agency of Bulgaria has estimated that citizens are expected to save approximately €2m per year from the use of a new twelve-digit Personal Identification Number (PIN).

The unsuccessful projects presented in this report point to the very real risks attendant on implementing large-scale innovations in complex and politically sensitive arenas. Perhaps more importantly, they reveal substantial obstacles in legislative systems, institutional autonomy and the skills and attitudes of civil servants.

There is a sharp divide between EU MS around PSI, with a smaller number of leading MS (longstanding commitment, widespread experience, demonstrable success) and a longer list of MS that might best be described as 'innovation followers.' The leading edge seems to comprise three things: (i) mega projects, that are concerned to transform the cost-performance of whole systems; (ii) many more inter-agency initiatives, to streamline individual agencies' processes but also to add new value / functionality to those processes; (iii) increased bottom-up input, whether that is from relatively junior staff or public consultation and even 'trendy' use of social media and crowd-sourcing techniques. EU MS 'followers' are continuing to focus on digitising aspects of their public administration in the main, and have yet to find a way to embed these principles across the public sector more generally.

Innovation leaders in the EU are more concerned about finding radical new approaches to define and deliver public services, whereas innovation followers are still concerned with fundamental reforms of public institutions

On the subject of learning, several of the more 'experienced' member states have created national institutions or programmes to promote PSI. These structures support individual administrations' PSI projects, and monitor and research past experiences (to underpin national and institutional learning). This may be an approach that the European Commission should encourage others to emulate. The Commission might be more proactive in its support for this kind of inter-agency and inter-regional learning process, perhaps looking to H2020 as a platform / source of funding for launching coordination activities, or EU co-financing through cohesion funds in order to stimulate Public-Private-Partnerships. For instance, the 'responsible research and innovation' concept of H2020 includes a commitment to support new governance arrangements, and as such it may be possible to create a major EU-level public sector innovation 'laboratory' within what was the former Science in Society programme. PSI could be also taken forward in the European Semester process as a strengthened surveillance framework, monitoring the economic situation and potential imbalances in member sates, as well as their policy responses in terms of financial and economic governance.

Learning platforms should be open to the private sector and other users more broadly. Much of the learning - from successful and unsuccessful projects - is arguably being captured most completely by a small number of large users and their consultants, and in many cases knowledge within organisations is not fully exploited. Other possible actions might include the building up of a more comprehensive EU-level list of case studies. Crucially, these case studies should include a cost benefit analysis that observes convention as regards both cost models and analytical treatment of for example inflation and opportunity costs.

On the subject of measurement, while the 2012 European PSI Scoreboard (EPSIS) struggled with data limitations, the feedback from officials consulted as part of this study suggest that further efforts to develop the measurement and benchmarking of PSI would be of interest to most if not all member states, and as such this is an area where the Commission should continue to show leadership.

While the OECD has embarked on a major initiative (Observatory of Public Sector Innovation), there is a strong sense that enough is known about the issues for the Commission to launch a series of additional and substantive measurement (research) exercises in conjunction with the member states, perhaps using Article 185 as the instrument, and bringing together a cross-section of 'voluntary' EU MS. The opening projects may look to target two or three 'sectors,' perhaps including key aspects of public administration, healthcare provision and energy and environment (inasmuch as these address directly various grand challenges). We see a prima facie case for launching some transversal exercises too, to explore critical success factors in inter-agency work, managing political and legal interfaces or codifying the safe use of novel tools and techniques like crowd sourcing.

2. Methodological note

This report is the result of a cross-country analysis of country reports produced by TrendChart country correspondents based on structured interviews with public officials and academics from 25 Member States in the European Union (i.e. the EU27 with the exception of Cyprus and Luxembourg).

A grounded theory method was used for the analysis. This method is an analytical framework based on an inductive approach to formulating conclusions, starting from the collection and interpretation of qualitative data rather than testing a hypothesis formulated in advance. This exploratory method allows for the flexibility needed in analysing qualitative information collected through interviews and fieldwork. The qualitative data obtained through the country reports passed a process of constant filtering and cross-country comparisons, which resulted in the identification of main patterns of ideas and perceptions exposed by the interviewees. These patterns were coded in specific categories and grouped under the main sections presented in this report. Additionally, the qualitative data was enriched by literature, following the usual '*forensic*' process used in the public sector based on online searches and reference-tracing and document review. The structure presented here should enable the reader to have a clear picture of the landscape of public sector innovations in the European Union.

Given the research design and the analytical method used, this study also has some limitations relative to the validity of the inferred results. Data collection for the empirical insights of the report is only based on the interviews performed by the TrendChart country correspondents with 105 key stakeholders, which were selected on their potential of having *first-hand insights* into how innovation happens in the public sector. This information however, often obtained through tales of personal experiences, poses the threat of subjective bias. This report thus, has to be read through the lens of the perceptions of public officials engaged in public sector innovation activities across Member States. In order to counteract these pitfalls, the study is enriched with literature, which served as guidance, and to some extent confirmation, of the qualitative analysis, and help identifying the most appropriate analytical framework for presenting the collected perceptions.

Despite the limitations, this study is the first qualitative empirical attempt to study Public Sector Innovation across different countries and cultural contexts in the European Union.

3. Short story of public sector innovation

This section presents briefly the main concepts and definitions discussed in the literature with respect to PSI, in order to contextualise and frame the empirical analysis of the sections to follow (Sections 4 to 7).

3.1 Defining and characterising Public Sector Innovation

Researchers first began to examine PSI in the 1970s, with the study of Roessner (1977) being probably the first one directly examining innovation in the public sector. While public administrations have always innovated, occasionally if not continuously, the serious study of innovation in the public sector is quite recent. It has an academic tradition stretching back 30 years at most; perhaps half of the time people have been looking at innovation and technological change in the private sector. The balance of effort has swung in favour of the public sector in the past decade, but even in 2012, there are at least 10 times more studies on innovation in the private sector as compared with innovation in the public sector. So, theories, tools and data on public sector innovation are nowhere near as advanced as they are for the private sector. This field is still very much work in progress.

Up to the early 2000s, most academic research was from a management or entrepreneurial perspective, and mainly dominated by case studies that compared the organisational characteristics of the public sector with the private sector (i.e. (Perry and Rainey, 1988)). The management research in the 1980s and 1990s focused on the adoption of New Public Management (NPM), supporting major organisational changes to reduce hierarchical structures and apply practices in use in the private sector (Arundel, 2012). The NPM and government reform was a political movement at first, becoming later a subject for academic study. It was seen as a solution to a perceived lack of innovation in the public sector, due to an aversion to risk and an anti-innovation public sector culture (Windrum, 2008). The NMP sought to focus public administration on performance (outcomes) by breaking up monoliths and introducing an element of competition to generate improved efficiency, etc. (i.e. 'marketisation' of the public sector).

Since the 1990s research on PSI has grown rapidly. When one looks at the temporality of the blibliometrics, PSI as a field of study has notably peaked after 2005, when the number of articles published on the topic raised to between 12 and 42 per year between 2005-2008 vs. 1 and 6 per year in the 1990s (ANAO, 2009b). Thus, one might argue that the scope of what we understand as PSI has gradually expanded over the last 30 years, both in respect to what it is and where it occurs. So, the new public management is an organisational reform that aims at doing what public administrations always did but more efficiently (i.e. in terms of price and quality). Over time, one can see the extension of these efficiency and innovation efforts extending from core administrative functions to the full complement of public services (including public private hybrids). If the location has broadened, so too has the notion of innovation, with wholly new ways of doing government or providing public services being conceived (e.g. co-production) along with new services and functions (e-government).

As a consequence, several definitions of PSI have emerged, from the more generalist focusing on changing ideas and behaviours (Mulgan and Albury, 2003, Damanpour and Wischnevsky, 2006, NAO, 2006), to those emphasising the value creation of new products, processes or business practices that result in improvements in terms of efficiency, effectiveness or quality (Mulgan and Albury, 2003, Walker, 2006). Innovation can be brought to the ways the policies are designed, and the tools used for defining, implementing and enforcing them (i.e. finding new rules, new programme or project implementation pathways). Innovation can also bring change to the governance of public services, by improving their level of accountability and transparency, their performance, or the user involvement and satisfaction level. Moreover, new forms of management, which deal with organisational design, new budgeting tools or better management of human resources in agencies, may also be seen innovative and can have an impact on the outcomes of the public policies implemented by the respective public body.

Literature on PSI is steadily growing, but continues to be pretty much in development. According to Fuglsang (2010), theories of PSI have changed focus from an imposed policy-driven change to an interest in internal problem solving capabilities. Currently, coherence and consistency in what constitutes PSI throughout the academic literature are lacking. Public sector innovation can be seen as the phenomenon of bringing newness and change to the functions and/or the ways of functioning of the government organisations, be they ministries, central or local agencies or any public entity that implement public policies.

The OECD (2012) defines public sector innovation as the 'implementation by a public-sector organisation of new or significantly improved operations or products', covering both the content of the services and products, and the instruments used to deliver them.

Governments can and do innovate in a variety of different ways. More than a definition, most studies often focus in proposing a typology of PSI as a means of characterisation, with the most common typologies following the Oslo Manual

definition of innovation (OECD, 2005), identifying product, process, organisational and communication innovations (i.e. as in the Measuring Public Innovation in the Nordic Countries (MEPIN) study (Brugge et al., 2011)) in the public sector. Other 'out-of-the-box' typologies include '*democratic innovation*' in the public sector, or new practices for increasing democratic engagement with citizens (AuditCommission, 2007); '*conceptual innovation*', including new missions, new world views, objectives, strategies and rationales; '*policy innovation*', defined as incremental changes due to learning and radical changes driven by conceptual innovations (Windrum, 2008); '*strategic innovation*', or re-positioning the authority in line with new corporate objectives or new 'customers' (AuditCommission, 2007), or changes to an organisation's activities, services or processes, or by building new capabilities within an organisation (Hughes et al., 2011); '*system innovations*', or those transforming the governance structures (IDeAKnowledge, 2005); '*position innovation*', referring to new contexts or 'customers'; '*governance innovation*', or new forms of citizen engagement and democratic institutions; and '*rhetorical innovation*', or the introduction of new language and new concepts (Hartley, 2006).

Moore (2005) in contrast proposes two different models to understand innovation in the public sector. One based on specific break-through innovations that have a major impact; and the second, focusing on innovative organisations and continuous improvement. This division is similar to the split between radical and incremental innovation in the innovation management literature, with the former having the power to transform socio-economic systems while the latter is very much more pervasive and wrings the last ounce of efficiency of current systems. Moore argues that each model focuses on different things, with the former relating to what constitutes an important innovation and the processes that enable it to spread; and the latter, focusing on issues such as organisational structures, financing, cultures, etc.

A recent definition by Christian Bason, Head of Innovation of MindLab, Denmark's public sector innovation agency reads "*public sector innovation is the process of creating new ideas and turning them into value for society*" (Bason, 2010). In his view, the building of a public sector innovation ecosystem goes "*through four simultaneous shifts in how the public sector creates new societal solutions: a shift from random innovation to a conscious and systematic approach to public sector renewal; a shift from managing human resources to building innovation capacity at all levels of government; a shift from running tasks and projects to orchestrating processes of co-creation, creating new solutions with people, not for them; and finally, a shift from administrating public organisations to courageously leading innovation across and beyond the public sector*".

In brief, the literature shows that public sector innovations can be fit into conceptual typologies in many different ways. Moreover, it results evident that the type of innovation will impact on the process of transfer of the innovation, including how the innovation is documented and the methodology to be used for sharing the innovation.

3.2 Sources and approaches to characterising Public Sector Innovation

Another way of characterising and defining PSI is by looking at the different patterns, approaches and sources of the innovation. Defining conceptually these approaches will help the reader to understand more clearly for instance, the barriers and drivers to PSI (see section 5). Understanding the sources and approaches to PSI helps in identifying the issues that require careful attention during the implementation process. Moreover, a systems analysis of the different patterns helps in identifying stable and unstable innovations that can be helpful in predicting the long-term chances of success of the innovation (Glor, 2002).

Glor (2002) identified three types of patterns based on the different '*dynamics*' of the innovation: the individual's motivation related to innovation (1); the culture within the workplace as influenced by its external environment (2); and the challenge presented by the innovation (3). These are not only ways of studying PSI, but are also encountered in practice as concrete ways for stimulating innovation.

But, why do governments innovate (1)? Various motives for PSI are mentioned in the literature. These can be broadly divided in **extrinsic motives** and **intrinsic motives** (OECD, 2009, Glor, 2002). The extrinsic motives are related to the role of government in facing the challenges of modern society, including growing demand for responsive government (Vigoda-Gadot et al., 2008); more client-oriented and individualised public service delivery (Bowden, 2005); the need for policy instruments that stimulate sustainable development; and dealing with citizen's discontent with performance of public sector organisations. These motives are called extrinsic, because it is not the process innovation itself that forms the motive, but rather the direct effects of innovations that help governments meet different challenges (Nauta and Kasbergen, 2009). Intrinsic motives for PSI are relative to learning (from failure) or 'learning-by-doing' (Bessant, 2005). The rationale is that even a failed innovation is good because it triggers a learning loop, which requires experimentation, taking risks and experiencing failure (OECD, 2009).

Regarding the organisational culture (2), the 'traditional' view sees the source of innovations as predominantly **'top-down'**, or initiated by high-level policy decisions at the ministerial or political level and implemented through the actions of senior management (Hartley, 2005). This traditional view was confronted in the early 2000s by Borins (2000), who found empirically that the initiators for the majority of innovations in the public sector were **'bottom-up'**, started from middle management and front line staff. Since then, it is acknowledged that innovative ideas come from both sides of the divide, from low levels and middle management up to senior management and politicians. However, even if the sources of the innovation are relatively easy to identify, for Arundel (2012) one of the problems of this branch of literature is that there is no agreement on what defines 'top-down' and 'bottom-up' PSI, with some studies separating both management levels (Borins, 2000), and some others making no clear distinctions (NAO, 2006). Thenint (2010) distinguishes between policy driven, top-down and bottom-up innovations, and argues that policy driven changes are not always novel and may not necessarily count as innovations. In contrast, Mulgan and Albury (2003) define 'bottom-up' innovations as those that originate in an organisation or network within the delivery system, regardless of whether the innovation was originated with front-line staff, middle management, or senior management, as long as these are involved in the provision of the government's services.

A second set of contrasting approaches related to the organisational culture is **conscious innovation** and **unconscious innovation** (Nauta and Kasbergen, 2009). Conscious innovation is the result of a goal-driven and intended process to arrive to an innovation. This approach to innovation is more linked to extrinsic motives than to intrinsic motives, and more to the private sector, rather than the public sector. An example of conscious innovation is provided by Lewis and Moultrie (2005), showcasting public organisations seeking actively 'innovation on purpose' through innovation laboratories. In contrast, unconscious innovation is often perceived as 'innovation by accident', or an 'unexpected discovery'. Intrinsic curiosity and a discontent with current ways of working are major sources for this approach to innovation. Linking to the first set of approaches to organisation culture, the top-down approach creates conscious innovation, while unconscious innovation is more linked to the bottom-up approach (Nauta and Kasbergen, 2009).

Finally, regarding the challenge of the innovation (3), PSI can either be a minor challenge, posing a **low risk** to individuals or organisations; or a major challenge, posing a **high risk**.

3.3 Factors and pre-conditions for Public Sector Innovation

3.3.1 Preconditions inherent to public sector organisations

Are there basic or essential preconditions of public sector innovations? As it will be discussed further in Section 5, there will be always internal and external pressures on

the public sector to innovate. However, some empirical studies have argued that the level of innovation is most likely to increase and be sustained if it is actively encouraged, recognised and rewarded by and within organisations (ANAO, 2009a). Among these essential preconditions for PSI, there are the following:

- **Culture, strategy and human capital**. Top-level managers and agency heads are critical in setting strategic directions to the organisations they lead, and can ensure that appropriate resources and attention are directed to medium and long-term issues where innovation is critical.

Moreover, innovation is more likely to happen in environments where a culture that encourages and rewards new ideas exists. A culture of trust, which gives authority to translating innovative ideas into practice, and embedding respect and good communication are thus essential. The ANAO (2009a) also highlights the need to accept and learn from mistakes, avoiding the '*blame game*', as learning from mistakes also helps in reinforcing an innovation culture within public organisations. In contrast, a culture of risk management with recognition and reward for delivery of outcomes must be encouraged (EURIM, 2002). Even in the cases when '*unconscious innovations*' happen (see Section 3.2), an **innovation strategy** that promotes a **systemic approach** that drives the promulgation of policies and procedures, allocates the necessary resources to promote innovation, assesses results and disseminates knowledge, is more likely to have an impact in raising innovation performance. Finally, as part of the organisational strategy of public organisations, the **recruitment, retention, training and development of staff** are also a key element to encourage PSI, as these would enhance innovation capacity. Rebuilding the public sector skills base at all levels (i.e. not just at top levels) is needed by focusing on competences to plan, procure, implement and monitor partnership projects successfully. Ideally, an analysis of future skills needs against existing skills would help identify where resources might be best allocated. **Incentives and rewards** are needed in order to encourage innovators and innovative initiatives to flourish. Recognition and award schemes are powerful mechanisms for maintaining an innovation culture through peer recognition, the dissemination of knowledge, adoption and simply 'fresh' thinking.

- **Leadership and innovation champions**. Innovation has top-down, horizontal and bottom-up dimensions (see Section 3.2), and thus leadership facilitates intra and extra-organisational learning at all levels.

Ways to enhance the innovation dynamics include achieving strategic alignment across an organisation, understanding boundaries, empowering staff to take initiatives, collaborating across work units, and disseminating knowledge (ANAO, 2009a). '*Innovation champions*' –or those individuals who are willing to invest resources and organisational capacity for designing, implementing and evaluating innovation (IDeAKnowledge, 2005)-, can be critical in order to turn an idea into action. However, leadership does not always need to be attributed to the role played by one individual. In some cases, a '*collective or distributive model of leadership*' is more appropriate given the variety and complexity in organisational contexts. These emergent approaches to leadership also allow staff and teams working together to develop their own sense of meaning rather than having it imposed by other more powerful in the organisational hierarchy (Lawler, 2007). Finally, the degree of innovativeness and entrepreneurship within public sector leaders differs significantly between countries, and at different times, and is influenced by the context of the day (see next bullet point). When the environment is resource tight, turbulent, or both, the risk for individual leaders and innovation champions is often excessive, and the type of entrepreneurship that emerges is different in nature (Bernier and Hafsi, 2007).

- **Understanding the environment**. Organisations should establish their strategic directions and set the best way to allocate their available resources to meet their objectives, based on a good understanding of the focus of their organisations, the internal dynamics and its external environment (i.e. including views from their clients, users and other stakeholders).

In the public sector, the core objectives of the organisations are established through legislations, regulations, and government policies and priorities. This environment changes constantly and public organisations need to be flexible enough to respond to these changes. Understanding the environment is thus a key initial step to assure innovativeness. **Capturing evidence** and having **access to information** through qualitative (i.e. through informal stakeholder consultations, engagements, etc.) and quantitative data is key in understanding the environment and reacting to it. Developing a proactive, outward and forward-looking culture is needed.

- **Organisational capabilities and innovative capacity**. Building organisational capability to support PSI is needed, which might involve direct costs (i.e. training, equipment, IT systems), and opportunity costs (i.e. time).

Building capabilities will require empowering and supporting staff responsible to bring innovative solutions into action, which in turn necessitates leadership, investment and commitment. Once again, organisational flexibility and agility is needed in order to shift and obtain necessary skills and resources to meet emerging needs and opportunities (i.e. through establishing taskforces, working groups, steering committees and networks).

- **Good governance.** Following the Worldwide Governance Indicators project[1], governance is represented by the traditions and institutions by which authority in a country is exercised (Kaufmann et al., 1999).

There are six dimensions of the quality of governance that might be considered important to understand the framework conditions in which PSI happens: the participation of citizens in the political processes and the accountability of the government in respecting their freedoms; political stability and the absence of violence; government effectiveness and the quality of public services and policy formulation and implementation; regulatory quality or the presence of market friendly policies; and the respect for the rule of law and control of corruption. All these factors are part of the environment and framework conditions stimulating PSI.

3.3.2 Success factors of the implementation of Public Sector Innovation initiatives

Implementing innovations successfully in the public sector depends on factors that go beyond public sector organisations, and that are frequently external and political. One key success factor frequently discussed in the literature is **sustained support of politicians, officials and suppliers** (EURIM, 2002). According to Mulgan (2007), political leaders and officials can establish a culture in which innovation is seen as natural. This support is needed in order to reduce the risk inherent in large projects for organisations whose structures may change before the implementation of PSI is complete. It requires cultural change on the part of politicians and suppliers, as they should not work for short-term profits, proprietary lock-ins, complex performance measures and inflexible terms and conditions.

The causes of PSI failure are listed in many reports (including in this report, see Section 6). The most frequently discussed can be summarised as:

- *Failure to set clear objectives*, including failure to undertake a proper analysis of needs
- *Over ambition*, not only of what can be done in theory, but also of what can be done in practice given the people (i.e. failure to engage people with the right skills), time and budgets available.
- *Delays*, notably at the start of the projects with delays in the planning and procurement

[1] See - http://info.worldbank.org/governance/wgi/resources.htm

- *Lack of top management commitment and involvement,* including lack of experience in how to get value for money (i.e. lack of understanding of what things cost)
- *Failure in project or team management,* because of shortage of staff, lack of experience, unclear roles and responsibilities, weak financial control, weak market awareness, and weak risk management.

Many of these factors are discussed with empirical examples in Section 6.

4. Perceptions of public sector innovation across countries

4.1 Understanding public sector innovation from the public servants' perspective

This section presents the results of the series of interviews performed in the summer of 2012 with the purpose of identifying what public officials understand as innovation in the context of their country. Figure 1 shows selected definitions of public sector innovations in several countries, illustrating the diversity of definitions encountered.

However, at the bottom of it, the public officials interviewed had generally similar views on what can be considered as public sector innovations. Broadly speaking, the opinions can fit within two categories: perceptions based on whether an organisation knows where it is going (1), and those related to whether the organisation knows how to get there (2). On one hand, a larger number of interviewees defined public sector innovation in terms of outcomes or results of public sector activities ranging from efficiency improvements to citizens' participation in public service design (i.e. the *'where'* the public sector is going). On the other hand, the perceptions of PSI relate to specific types of improvements brought to the processes, organisation and management tools used by public sector entities (i.e. the '*how*' to achieve innovation in the public sector).

These different perceptions will be discussed in the next sub-sections. However, drawing from Yapp's problem-type model, each has different implications in relation to innovations and improvements (Yapp, 2005). That is, when an organisation knows where it is going and how to get there, the approach to PSI is more related to *operational management*. In the cases where the organisation does not know where it is going but has an idea on how to get there, PSI relates more to *direction setting*. In contrast, when the organisation knows where it is going but do not know how to get there, PSI requires *process development* tasks. Finally, when an organisation neither knows where it is going or how to get there, PSI will relate to *concept creation*. From all four types, the last three require strong leadership to support imagination and concept creation, to set direction and develop processes to support improvement and innovation.

Figure 1 Different definitions of Public Sector Innovation across Member States

Country	Perceived definition of PSI
Denmark	There is a shift from managing human resources to building innovation capacity. The public sector is seen as a platform to solve problems in the Danish society. It is not just about reducing costs, but also involving the users, working with them and across departments, in order to develop joint solutions. It is not just serving the public sector itself but it is a platform for society as a whole. More focus is given to the quality of the services delivered in order to achieve better outcomes.
Finland	A means to tackle grand challenges (i.e. ageing population) and to address the issues faced by the Nordic welfare model
France	Integrating novelty in administrative management and in the relations towards public service users, PSI is meant to address three challenges: • Higher demand for innovation of the public service users, mainly due to new innovation habits coming from the private sector or commercial services; • Budgetary cuts in public expenditures; • Higher demand for innovation of the administrative staff, focusing on a modern public management.

Country	Perceived definition of PSI
Ireland	Flexibility and the delivery of streamlined services as part of the reformed Public Service
Netherlands	• Stimulating knowledge and innovation in realising societal objectives and solving societal challenges, of which innovative service provision is one aspect. • Stimulating innovation to improve the process of public service provision.
Spain	Public Sector Innovation can take three forms: • Incremental innovation, through the introduction of new management and operational tools (i.e. computerisation) • Radical innovations, or 'ruptures' in only a specific sector • Systemic innovations, implying changes that affect the system as a whole, or large parts of it.
United Kingdom	The view of PSI has shifted away from the notion of systems innovation, processes and technology, towards a focus on capabilities and leadership. While improvements may be generated through innovative ways to deliver services (either through process or technological innovations), the key to their effectiveness is their successful implementation, which can only be achieved through institutional capabilities and strong leadership. There is also a move towards designing a different relationship with the public, towards involving users in the co-design of services -by giving more focus on user experience, capabilities and leadership.

Source: Trendchart Public Sector Innovation Country Reports 2012

4.1.1 Public sector innovation as renewed processes, organisation and management

PSI is perceived in many cases as improvements brought to the processes, organisation and management tools used in public sector organisations. The different definitions are broadly three:

- PSI is seen as *new or improved processes or services* in Bulgaria, Estonia, Finland, Greece, Lithuania, Malta, the Netherlands, Slovenia, Slovakia and Sweden.

In Bulgaria, PSI is a process or product that leads to better government or a better way of functioning of the public administration. Innovation in services was more emphasised in Finland, Ireland, and Denmark. For instance, in Finland, the Ministry of Employment and the Economy foresees changes in the way services will be provided in the future, as more services will be needed as a consequence of the ageing population. In Slovakia, PSI also consists in new implementation processes that are able to deliver better services.

- *PSI as new forms of organisation and management in public sector organisations* is the perceived definition of PSI in Finland, Germany, Slovenia and Slovakia.

New organisational arrangements are seen as PSI in Slovakia, as ways of cutting costs and improving the results of public sector activities. Some interviewees, in particular in Germany and Finland, also mentioned Public-Private Partnerships (PPPs) as important public sector innovations. In Finland, "*PPPs are seen as a way to introduce new innovations and produce more user-friendly services. Especially PPPs are important since it is evident that no single party alone can solve the grand challenges of today's society. In addition, these partnerships can ensure that services reach also underprivileged groups of citizens who live in the margins of the society*". In Germany, cooperation with the private sector through PPPs is a priority of the Federal Government programme directed towards modernising the public administration. They are seen as a means of organising tasks better and providing services in a more cost-effective way.

- The *introduction of new operational and management tools*, such as ICT applications and information systems in the public sector, human resources management tools, or appraisal and evaluation methods, are instances of PSI in Bulgaria, Denmark, Germany, Estonia, Greece, Lithuania, Malta, the Netherlands, Poland, Portugal, Romania and Spain.

E-Government and the digitisation of services can be ranked as the most prevalent perception of PSI in the EU, as the two concepts are hard to differentiate from each other in many Member States. Officials from twelve countries considered that the use of ICT by the government constitutes an innovation (see Figure 2). More interesting is that such tools are considered means to achieve further goals of the public sector, from providing more efficient or inclusive services, to enhancing participation in policy-making. However, there are also views contradicting this idea. In the UK, for instance, one interviewee pointed that "*if you start from the assumption that the drive for innovation in the public and private sectors is technology then you are just looking at easy solutions, but it is not challenging the bigger system that costs a lot of money. It is just driving faster solutions but it is not changing the mainstream*".

Human resources management is also an important dimension of public sector innovation in Austria, Germany, Spain and the United Kingdom. In Germany, emphasis is given to the role of lifelong learning, human resources management responding to demographic change, including more flexible working times, and health management. In Spain, one interviewee considered that PSI is also defined by promoting the use of the creativity of the public servants in reaching their objectives.

Figure 2 What constitutes Public Sector Innovation in your country?

Type of PSI	Perceived definition	Country
Renewed processes and services	Process innovation/improvement	BG, EE, DE, GR, LT, MT, NL, SI, FI, SE, SK
	Service delivery	IE, DK, FI
	Public procurement	IE, FI, NL, SE
New forms of organisation	Organisational design	DE, LT, SI, SK
	Public private partnerships	DE, FI
New management and implementation tools	ICTs/ Digitisation of services/ E-Government	BE, DK, DE, EE, GR, IT, LT, MT, NL, PL, PT, RO
	Human resources management	AT, DE, ES, UK
	Monitoring and evaluation	ES

Source: Trendchart Public Sector Innovation Country Reports 2012

4.1.2 Public sector innovation as contributor to specific outcomes of public sector activities

The two most important roles that public sector innovations are expected to play relate to the **improvement of the quality of service delivery** and **cost reductions**. Across administrations in the EU, public sector activities will be considered innovative if, irrespective of the type of changes they make to the configuration of public sector entities, they lead to diminishing the costs of service delivery and/or raising the quality of services. The majority of today's EU public administrations seem to be striving for the same goals in this respect (see Figure 3). For instance, in the UK, the underlying rationale for PSI seems to be strongly driven by the imperative to deliver the same quality of services but at a lower cost to the state. In Austria, the issue of reducing administrative costs has been included by the ruling coalition in the government programme for 2008-2013, though there is slow concrete progress made on this respect. In Finland, the quality of services is really important, as the service providers are required to tackle increasing demand and simultaneously improve both quality and individual offering. This causes pressure also for the public sector services and calls for new innovations and operation models as the '*one-size-fits-all*' solutions are no longer viable.

Performance improvements and **efficiency** are also on the governments' agendas for promoting public sector innovations, as they introduce more ways to measure progress and results, and become more outcome-oriented. These innovations relate to New Public Management (NPM) approaches that are pursued in countries such as Austria, Estonia, Hungary, Finland, Germany, Italy, Lithuania, Poland, and Sweden. In Italy, while in the past there was a perception linked to the idea of organisational efficiency and process improvement, now the innovation in the public sector is increasingly perceived as a change oriented towards outputs and outcomes that should be meeting the stakeholders' needs and demands. In Estonia, optimisation

of processes and resources, quality management, and cost effectiveness are key words for goals of public sector innovations. While in Lithuania, improvement of organisation of public administration by promoting quality and performance management systems is an important aspect of PSI (e.g. ISO, Common Assessment Framework (CAF), European Foundation for Quality Management (EFQM), and Balanced Scorecard).

For several countries, public sector innovations should also go beyond cost reductions and serve the purpose of **reducing the administrative burden** on companies, non-profit-organisations or citizens (i.e. in Austria, Latvia, the Netherlands, Belgium, Bulgaria, Romania and the UK).

Becoming **more transparent** and encouraging more **stakeholder participation** is a further rationale of why public services need to be innovative. This is strongly linked to new governance models of the public sector that put the citizen at the centre, and is perceived as an important strive for the future in Spain, Lithuania and the United Kingdom. In the UK, "*there is quite a lot of focus on user experience, i.e. ensuring that public services are person centred. In part, this is a response to rising public expectations, but is also due to the changing nature of the problems faced by public services. For example, in health, many problems are chronic rather than acute, thus building services around individuals has become increasingly important and relevant to quality and effectiveness*".

Figure 3 PSI as outcomes of public sector activities

Outcomes of public sector activities	Country
Raising quality in service delivery	AT, BG, DK, GR, ES, FR, IT, LV, LT, HU, MT, NL, PT, SK, FI, SE
Reducing administrative burden and achieving simplification	AT, DE, LV, NL, BE, BG, RO, UK
Cost reductions	AT, CZ, DK, IE, GR, FR, LV, HU, MT, NL, SK, FI, UK
Participative public services	ES, LT, UK
Performance improvements and efficiency	HU, FI, AT, DE, PL, SE, IT, EE, LT
Transparency of public sector activities	ES, LT, UK

Source: Trendchart Public Sector Innovation Country Reports 2012

4.2 Approaches to the diffusion of public sector innovation in practice

The diffusion process of public sector innovations across the EU is strongly dependent on the internal political and administrative context. The perceptions of public servants on how innovations should be promoted in their administrations could also reflect the organisational culture within each country. This section briefly presents the landscape of how public sector innovations are believed to happen in the EU.

Organisational cultures as an approach to PSI vary across Member States, and can be broadly categorised into two types. While some interviewees put more emphasis on the need for **top-down** approaches, others point to the need to allow more **bottom-up** approaches to PSI. However, there is no clear consensus or definition of what constitutes 'top-down' and 'bottom-up', and what determines the clear difference between both approaches. In all cases, top-down approaches indicate the origin of the initiative as being *pulled-from-the-top* by high management levels, or even from an specific central institution or agency (i.e. the government); whereas bottom-up approaches relate to efforts *being-pushed* from individual public servants within a public sector organisation (i.e. regardless of the management level or seniority), or even by society at large (i.e. the citizens, or civil society organisations).

Following the public servants' perceptions, **top-down** approaches and policies fostering PSI are considered most important in France, Lithuania, Malta and Bulgaria. In Bulgaria, interviewees perceive institutions of the central government as more innovative due to the clearer procedures they use, better-enforced regulation, better administrative capacity and human resources.

Bottom-up approaches to PSI are considered as most important and with higher chances of being innovative in the Netherlands and the United Kingdom. In the

Netherlands both approaches to PSI are acknowledged and well defined (see Figure 5). However, great emphasis is given to the idea of conceding more trust to public officials, allowing more autonomy and room for experimentation and facilitating self-organisation. In addition, *allowing more room for innovation to happen* at the local is a common reflection of the public officials interviewed. For instance, the Danish and Italian interviewees noted that the public sector faces more direct pressure to innovate at the local level, as this is the level of government that interacts the most with citizens and companies and also meets the most serious challenges, which may be why their role is more prolific at the bottom levels.

Figure 4 Approaches to Public Sector Innovation in various countries

Country	Approach
The Netherlands	• Top-down approach: the government takes the lead in initiating and coordinating innovations, focused on the content (i.e. defining goals and ambitions and introducing standards and protocols). • Bottom-up approach: the government pays more attention to self-organisation of the sector and stimulates citizens to initiate innovations and involves them in the entire innovation process.
Denmark	Being innovative in the public administration turns out to be rather different at the national level and at the regional and municipal level. The municipalities meet the most serious challenges: both, the demands from the government to cut costs and the demands for more and better services from their citizens. As a consequence, a lot of public innovation happens at the regional level.
United Kingdom	By 2009, both the Cabinet Office and the Government more broadly had recognised that a top-down approach to PSI policy was not enough and that to make its implementation effective, there was a requirement for local public sector staff engagement. Consequently the emphasis within government shifted from specific public service intervention towards policy intervention that helped 'transform' the practice of government.
Italy	There is a marked difference between national and local administrations, where the first ones are less permeable to innovation and specially to bottom-up innovations emerging from the internal needs of the administrations; while the local administration has been positively impacted by the closeness of citizens, after the establishment of the direct election of the Major (Decree 267/2000).

Source: Trendchart Country Reports on Public Sector Innovation in the Netherlands, Denmark, Italy and in the United Kingdom, 2012

4.2.1 Emergence of institutional and governance structures for the promotion of Public Sector Innovation

After scoping the PSI implementation approaches of the Member States, a 'mixed' or 'scattered' approach can be added to the top-down and bottom-up styles of PSI diffusion (see Figure 5). Top-down processes are the most prevalent ones across the EU. In six countries, it is the Federal Chancellery or the Prime Minister's Office together taking strategic leadership in coordinating across ministries for PSI. However, in most cases, PSI is in the hands of the Ministry of Interior, which often operates in this field through a specific public administration reform unit. In Germany, for instance, the Ministry of Interior is coordinating a comprehensive programme promoting PSI since 2006. The programme was renewed in 2010 and named '*Network-based and Transparent Administration*', aiming to "*increase efficiency of public administration, increase transparency of administrative procedures, reduce bureaucratic burden and improve user-friendliness of public services, and more comprehensive use of e-government*". In France, a cross-governmental unit called the General Direction for State Modernisation is meant to encourage innovation in every administrative department. Ireland and Greece are two further cases where a special Ministry was created to deal with administrative reform as a consequence of the economic and financial crisis.

Figure 5 Institutional and governance structures for PSI diffusion in the EU

PSI Diffusion	Type of implementation	Countries
Top-down	Federal Chancellery / Prime Minister's Office	AT, BG, EE, IT, LV, MT
	Ministry of Interior Special unit / Ministry dealing with PSI	CZ, DE, LT, NL, PL, SK, ES FR, IE, GR
Scattered implementation	Several bodies at central or local level coordinating different dimensions of PSI	BE, HU, PT, RO
Bottom-up	External independent semi-public bodies pushing new directions for PSI	DK, FI, SE, UK

Source: Trendchart Public Sector Innovation Country Reports 2012

For several other countries, the competencies for innovation promotion are not kept in a single public body, but rather scattered across the central and/or local administration. For instance, in Belgium, the Federal Service for ICT is the organisation recommended as dealing with PSI, but further competencies in this field are diffused at the regional level in Flanders, Wallonia or Brussels as well. In Portugal, there are several administrative bodies nominated as responsible for a specific type of PSI (modernisation of public services, ICT in public administration, or human resources management). This is also the case in Romania, where in spite of the existence of a special unit for Administrative Reform within the Ministry of Interior, there is a blurred line of competencies between it and the Prime Minister's General Secretariat for instance.

Furthermore, countries such as Finland, Spain, Sweden and the UK indicated the existence of specific bodies that coordinate measures to foster PSI. For example, in Sweden, VINNOVA coordinates several government institutions, municipalities and county councils, and works together with the National Council for Innovation and Quality for the Public Sector, created in 2011. Similarly, innovation management for the public sector is an aspect gaining momentum in Finland, where Tekes, the Finnish Funding Agency for Technology and Innovation, has started programmes that encompass innovations in social and healthcare services, work life balance and public procurement. In the UK, there are several institutions coordinating public sector innovation efforts. The Cabinet Office and the Department for Business and Skills are also part of the process, as is NESTA, UK's innovation foundation. The Cabinet Office established the Behavioural Insights Team (or "Nudge" Unit), whose mission is to find innovative ways to "enable people to make better choices for themselves[2]". By using an approach borrowed from behavioural economics and psychology, as well as trial-and-error experiments as main instruments of its work, the team has already identified public savings of over €360m[3].

One commonality of the bottom-up approaches to PSI is the increased attention paid to the **importance of the design** of public services delivery, processes or organisation. Furthermore, establishing **Innovation Labs** as entities facilitating the development of PSI models has become a trend in recent years. Labs are generally cross-government bodies or independent organisations whose mission is to generate ideas for the renewal of the government's (or also the social and private sectors') operations. They put collaborative practices and co-creation of PSI at the heart of their activities. Denmark is a leading example in Europe through the establishment of MindLab in 2002. It defines itself as a *"cross-ministerial innovation unit, which involves citizens and businesses in creating new solutions for society [...] a physical space – a neutral zone for inspiring creativity, innovation and collaboration"*[4]. In Finland, the Helsinki Design Lab, an initiative of Sitra, the Finnish Innovation Fund, has started to engage with government decision-makers to understand "the

[2] See - http://www.cabinetoffice.gov.uk/behavioural-insights-team

[3] See - http://www.cabinetoffice.gov.uk/news/governments-nudge-unit-goes-global

[4] See - http://www.mind-lab.dk/en/about_mindlab.

architecture of problems" and provide solutions to them through strategic design[5]. In the UK, NESTA has established its own Public Services Lab[6], developing schemes of diffusing innovation in UK's central and local services. To count only a few, such initiatives are appearing outside Europe as well, driven by the public sector, taking into consideration the emergence of the Australian Centre for Excellence in Public Sector Design in 2012[7], or the Innovation Lab in the US Office of Personnel Management[8].

All in all, the diffusion of innovation across the EU seems to be taking two different routes. On the one hand, the top-down, centrally driven approach is adopted by most Member States, with nation-wide innovation programmes and strategies ongoing in this field, which take a more incremental route. On the other hand, there is a fast-growing "factory" of PSI agencies, independent or hybrid bodies that tackle the public sector from an ecosystem perspective, aiming to trigger changes in governance frameworks rather than in the management or ICT infrastructure for example. While these developments are new and are not to be considered a panacea to public sector problems or used in isolation, they seem to have the potential of a more disruptive impact on the results of specific public sector activities.

It is notable that countries such as the UK or Scandinavian states are at a rather more advanced stage of placing such bottom-up approaches closer to the core of how the public sector innovates, while the Netherlands and Italy as well mention their strive towards achieving these models. While there are examples of independent similar initiatives in the rest of the Member States, the majority are still not making the clear shift towards this paradigm. Possible reasons for this state of play could be spotted in the next chapter on drivers and barriers to public sector innovations. The underlying motivations and incentives for innovating and renewing public services and administration can raise thought for designing and further researching public sector innovations.

5. Drivers and barriers to Public Sector Innovations

This section of the report analyses the perceptions of public servants on the topic of what stimulates public sector innovation in the Member States. In general, public management literature mentions the presence of leadership, larger or tighter budgets, various incentive schemes or management techniques as possible answers. From the discussions with public officials further research questions emerged. For instance, does the public sector need an overarching body in charge of fostering innovation in the government services? Was the economic crisis seen as a driver or a barrier to public sector innovation?

The cross-country comparative analysis across MS pointed to three central categories of drivers and barriers for public sector innovation: **internal** factors, **external** factors, and **political** factors. These generic categories are also commonly discussed in the literature, and evidenced through different empirical qualitative exercises (i.e. see (Borins, 2001)).

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[5] See - http://helsinkidesignlab.org/

[6] See http://www.nesta.org.uk/areas_of_work/public_services_lab

[7] See - http://minister.innovation.gov.au/katelundy/MediaReleases/Pages/Newcentretoenhancepublicsectorinnovation.aspx

[8] See Kolawole, Emi, August 2012: *Office of Personnel Management's "Innovation Lab" a portal to Silicon Valley*, http://www.washingtonpost.com/national/on-innovations/office-of-personnel-managements-innovation-lab-a-portal-to-silicon-valley/2012/08/02/gJQA3iyDSX_story.html

5.1 Internal drivers and barriers

Internal barriers and drivers are those that arise within the bureaucracy/organisation. These can be either internal problems within an agency or department, management, or staff; but also hostile or sceptical attitudes; turf fights; difficulty in co-coordinating organisations; logistical problems; difficulty in maintaining the enthusiasm of programme staff; difficulty in introducing new technology; union opposition; middle management resistance; public sector opposition to entrepreneurial action; and inadequate time or lack of incentives to innovate (Borins, 2001).

Some research suggests that the most frequent driver for innovation in the public sector is **internal problems** within an agency or department (Borins, 1998). Moreover, innovators are more likely to respond to internal problems before they reach crisis proportions (Levin and Sanger, 1994). In contrast, internal strategies (i.e. risk aversion of managers, management resistance to change), can also act as barriers to innovation. Empirical evidence (i.e. (NAO, 2006)) has found that one of the most frequent barriers to PSI is the reluctance to embrace new ways of working. Another barrier is the way bureaucracy is organised, as the hierarchy in public sector organisations reduces the chances that management will adopt new ideas, and thus inhibits employees from offering suggestions. A study focusing on the winners of the *Innovations in American Government* programme identified a variety of internal problems as barriers to PSI, including failing to respond to a changing environment, inability to reach a target population, inability to meet demand for a programme, resource constraints, and inability to coordinate policies (Borins, 2000).

Good management and leadership can play an important role in PSI. Several studies have corroborated this. For instance, Parna and Tunzelman (2007) found that '*personal leadership or committed key individuals*' was the most important among 25 internal and external factors supporting successful innovation in Denmark and Finland and one of the most important factors in the United Kingdom and Estonia. The same sort of findings emerged in the MEPIN study in Nordic countries (Brugge et al., 2011), where internal management was the most important of 10 drivers for innovation. The evidence from the literature shows that PSI is more likely to happen when it receives the support of senior management as 'champions'.

The cross-country analysis in the EU identified the following two internal barriers and drivers (see also Figure 6):

- Human resources-related factors, including education and training schemes to public servants, availability of incentives to innovate, and good management and leadership
- Bureaucracy and organisational structures and design

Figure 6 Internal drivers and barriers to Public Sector Innovation

Driver/Barrier		Countries
Human resources-related factors	Education and training of public servants	BE, BG, ES, FR, IT, NL, RO, SK
	Availability of incentive schemes for motivating public servants	LV, MT, ES. LV, NL, RO, SI, UK
	Leadership and good management	CZ, DK, EE, IT, LT
	Other*	LT, DK
Bureaucracy and organisational structures and design	Internal organisational processes	ES, IE, RO, SI, SK
	Performance management, including monitoring and evaluation practices	BG, IE, ES, IT, GR
	Internal innovation culture	DK, FR, LV, LT, RO, BG

Source: Trendchart Public Sector Innovation Country Reports 2012

Notes: * Other human resources-related factors include the availability of time to devote to innovation (Denmark); and shortages in personnel (Latvia).

5.1.1 Human resources-related factors

High importance is placed on improving the **education and training offered to public servants** as a driver to PSI, both to experienced senior management and to middle management and front line staff, in countries like Belgium, Bulgaria, France, Italy, Netherlands, Romania and Slovakia. Furthermore, the presence of **incentive schemes for motivating public servants** to be more innovative is considered a potential key driver of PSI in Latvia, Malta, Spain, the Netherlands, Romania, Slovenia and the United Kingdom. In Spain, the argument was around the existence of incentives offered to the most innovative public servants, units or departments, by "*including the participation of the innovators in the benefits of the cost reductions*" achieved. However, incentive schemes are not necessarily only financial incentives based on performance, but also other types of rewards in the form of '*recognition*' given to the innovators. This is for instance the case in Malta, where an employee sponsorship programme is in place to support public servants to develop academically and receive further education and training.

In some cases internal **incentive structures** also play a pervasive role towards PSI. For example, a public servant in Latvia was concerned about the potential consequences of introducing an innovation that would lead to cost-reductions in the public sector, because such innovation could pose the risk of budget cuts and reductions for the innovative departments. This poses the question on how to reconcile the interests of public servants who tend to measure themselves by the amount of budgets they are managing, versus the public interest of rationalising the expenditures of the government as a whole. In some cases, the incentives are such that for a budget to be maintained from one year to the other, there is a need that all budgets are fully executed. Most of the times, this stimulates overspending, rather than savings. Changes in the budgeting and human resources management system in public organisations would need to take these aspects into consideration. In addition, while not specifically mentioned by any public servant interviewed, it is important to note the detrimental role that vested interests of public officials and rent-seeking type of behaviours generally have on public service innovation.

The need for fostering **leadership, good management and 'inspiring' public managers** driving the innovation in the public sector is felt in Denmark, the Czech Republic, Estonia, Italy, Latvia, Lithuania and the United Kingdom. Specifically, in Lithuania, the existence of a strong leader and qualified staff were key drivers of institutions leading public sector innovations. A public servant in Denmark believed that innovations happen when "*managers are motivating public sector employees by engaging themselves in the implementation of innovations and allowing the staff to devote time to that as well*". In Italy, there is a perceived need for a stronger leadership that would enable innovations to be scaled up at national level. Similarly, in the United Kingdom, there is recognition of the essential role that leadership plays in achieving the goals of their organisations and implementing programmes successfully.

5.1.2 Bureaucracy and organisational structures and design

Broadly speaking, organisational structures and design, through management tools, performance targets or strategic steering mechanisms, as well as the '*internal innovation culture*' are seen as factors that can enable or hamper public sector innovations.

In Lithuania, public servants reflected on the role of bureaucracy and **organisational structures** in driving and impeding public sector innovation. For instance, a study on the administrative structures of Lithuanian municipalities in 2010 revealed that ***functional structures*** dominate in most municipalities. Although, functional structures allow institutions to efficiently use their current resources, these can also introduce formal boundaries among different divisions. This weakens the link between departments, complicates implementation of various PSI initiatives and weakens the institution's ability to change. In the case of many PSI initiatives in Lithuania this preparatory stage of coordination is too often short or skipped altogether.

Improvements to the **design of internal organisational processes** are seen as a driver of PSI in Spain, Ireland, Slovakia, Slovenia and Romania, particularly in the sense of enhancing cooperation and closer links with citizens and the private sector. The examples of how the public sector is incorporating the use of design thinking in delivering public services in the UK, Denmark or Finland are proofs of the interest the governments show in developing this stream of innovations.

Moreover, **performance management** and **monitoring and evaluation practices** were also considered as drivers of PSI in Bulgaria, Ireland, Spain, Italy, Latvia and Greece. They considered the transformation of public administrations towards more results-oriented activities and processes as incentivising innovation.

While a common denominator in several countries, **internal innovation culture** was not defined in very specific terms. Public servants in France believe it is driving the introduction of a growing number of innovations in the French public administration. In Denmark, the innovation culture would be enhanced if public managers would engage in creating a motivational environment for the public servants by engaging themselves in innovation and allowing the staff to devote time to it as well. Both Latvia and Lithuania believed that a change in the mindset of civil servants would contribute to forming an internal culture fostering innovations. *Internal innovation culture* can therefore be seen as a less tangible factor that spans across types of management measures that could be taken to stimulate the various organisations to innovate.

5.2 External drivers and barriers

External drivers and barriers are those that exist in the external environment. These can spam from a crisis, particularly one that has potential negative publicity, either current or one that is anticipated to happen in the future (Borins, 2000); increasing demand for services by businesses or citizens; to public doubts about the effectiveness of programmes; difficulty in reaching a programme's target group; opposition by those affected in the private sector, including entities that would experience increased competition; general public opposition or scepticism; rules that hinder collaboration; and lack of innovative suppliers or resistant users.

From the cross-country analysis, a wide range of countries mentioned the **collaboration between the public and private sector** as well as the **co-creation and involvement of service users** in the process of designing services as potentially disruptive elements that would bring renewal to the public services (see Figure 7). The presence of **awards** for innovative public sector initiatives or units, the existence of **international good practices** and **international rankings** are further incentives that may drive the introduction of innovative practices in government organisations. Countries like Austria, Bulgaria, Ireland, Lithuania, Portugal and Romania have started organising award ceremonies that offer recognition to public sector innovators. They are also opportunities to learn from the experiences of other organisations pursuing similar goals, which helps diffuse innovations.

Figure 7 External drivers and barriers to Public Sector Innovation

External drivers and barriers	Countries
International good practices and knowledge transfer	BE, ES, LT, DE, MT, NL RO, SK
International rankings	DE, HU, PT
National awards	AT, BG, IE, LT, PT, RO
Co-creation / service user participation / collaboration between public-private sectors	BE, DE, DK, ES, FI, NL, PT, RO, UK
Citizens and businesses demands	FR, LV, LT, HU

Source: Trendchart Public Sector Innovation Country Reports 2012

The public servants also recognised that international good practice examples such as the ones promoted by the OECD, the European Commission or within informal networks such as the European Public Administration Network (EUPAN), as well as international rankings are followed with interest, and are motivating the change in

internal structures, processes or services towards PSI. In the Netherlands, Romania and Slovakia there is a constant need for **knowledge transfer and exchange** with European public administrations.

It is interesting to note that the majority of civil servants interviewed mostly mentioned the external environment as a stimulating factor for innovations, and not as a barrier.

5.3 Political drivers and barriers

Political drivers and barriers are those that arise primarily in the political environment, including externalities/policy and political decisions; budget reductions or inadequate funding/resources; concern over political 'embarrassment'; creating an opportunity for opposition party scrutiny; criticism (Mulgan and Albury, 2003, Potts and Kastelle, 2010); new laws or legislative or regulatory constraints; new policy priorities and political opposition.

Looking at examples from the literature, a study on PSI in the United States identified as key political drivers election mandates, pressure by politicians, and leadership changes that covered both appointments from outside the organisation as well as choosing someone internally (Borins, 2000). However, the political environment does not always act as a driver. For instance, the NAO found that a 'risk of public failure/uncertainty' only accounted for 3% of the citations of barriers within surveyed participants (NAO, 2006); while the MEPIN study found that less than 10% of respondents in Nordic countries gave a high level of importance to 'risk of failure' as a barrier to PSI (Brugge et al., 2011). In contrast, the most common cited barriers in a PSI survey study in Australia are budget restrictions, cited by 62% of all respondents (APSC, 2011).

From the cross-country study in the EU, the following three political drivers and barriers emerged (see Figure 8):

- Budget reductions, availability or inadequate funding resources;
- Policy decisions and requirements at EU level; and
- Laws and regulations

Figure 8 Political drivers and barriers to Public Sector Innovation

Political drivers and barriers	Countries
Budget reductions/restrictions	CZ, DE, EE, IE, GR, FR, LT, HU, PT
Availability of funding/financial resources	BE, FR, LV, RO, SK
EU policy decisions (i.e. EU funds) and requirements at EU level	CZ, EE, GR, IE, ES, LV, LT, HU, MT, PL, PT, SI
Political support	LT, RO
(More flexible) Laws and regulations	LT, HU, RO

Source: Trendchart Public Sector Innovation Country Reports 2012

5.3.1 Budget reductions, availability or inadequate funding resources

One of the main political factors mentioned among public servants are **budgets and financial resources** in the public sector, though there are differing views regarding whether it is the lack or the availability of financial resources that stimulates innovation in the public sector. A majority of Member States agreed that the major driver behind PSI is the **shortage of financial resources** or **budget restrictions**, which constitute a big stimulator to public institutions to be more innovative in their activities. This factor is strongly linked to the financial constraints brought by the economic and financial crisis. For instance, in Germany, the need for stricter rationing of financial resources is engrained in Article 115 of the German Constitution, according to which the Federal Government's annual budget deficit may not exceed 0.35% of GDP per year from 2016 onwards. This has put pressure on public institutions to find new ways of delivering services. Ireland, Greece, Italy and Portugal all mentioned the need to reduce public expenditure as a consequence of the large public debt. On this

background, PSI has been also seen as a necessity for the governments to comply with limited resources in periods of crisis.

In contrast, the **availability of financial resources** or direct budget allocations to innovative public sector activities is also among the political drivers of PSI in the EU. While there was no clear indication as to how such financial allocations are made (i.e. to specific projects, units or governmental programmes), in countries like Belgium, France, Latvia, Romania and Slovakia this idea points to the need for room for manoeuvre and **increased flexibility in the use of public funds**.

5.3.2 Policy decisions and requirements at EU level

A variety of external political drivers and barriers to PSI were identified across Member States. The most recurrent were **EU requirements and EU funds** as drivers for PSI. In Lithuania, for instance, the EC requirements are thought to contribute to introducing clear standards along which countries can develop. Only in the case of Romania were these perceived as barriers, due to the regulatory requirements needed to apply to the funds, together with the lack of flexibility to comply with the rules.

In the cases of the contracting economies of Greece, Ireland, Portugal, Spain and Italy, requirements at EU level stemming from the pressure of the financial markets and the Memoranda of Understanding signed by these countries with the European Commission and with other international organisations such as the International Monetary Fund, are also important political drivers of PSI.

5.3.3 Political support

Even though it is by definition one of the most important factors shaping the activities of the public sector throughout the world, **political support** was cited as a key driver of public sector innovation in just three EU member states: Hungary, Lithuania and Romania. In Lithuania, our contributors noted the importance of a large number of senior government officials with a strong commitment to innovation and the political will to make PSI a flagship programme. In Hungary, our interviewees argued that political support is necessary to move forward with innovations however political interest also brings its own challenges as the reputational risks for politicians often cause them to micro-manage the public administration, sometimes imposing unnecessary burdens and possibly even altering objectives. Both countries noted political instability as a factor affecting the continuity in implementation of programmes, which hampers innovation.

5.3.4 New laws and regulations

Changes in regulations are also considered as political drivers of PSI, especially when these allow more flexible activities within the government and provide a wider range of services that are more tailored to the citizens' and businesses' demands. An example of this is Lithuania, noting that there might be changes needed in personal data protection requirements in the public sector, because due to strict requirements many of the current initiatives (e.g. security cameras in public buses; visual maps of cities; 'radar' of multiple violations of traffic rules) face(d) implementation problems. In Hungary, changes in labour market regulations that make the employment of civil servants more flexible would bring benefits to the activities of the public sector as well as the private sector.

6. Selected examples of Public Sector Innovation

6.1 Successful cases

6.1.1 E-Government

Our survey found E-government was the most widespread category of public sector innovation, with examples ranging from the introduction of online filing of tax returns through to open government and on to e-health. Although this is not a surprising finding of the characterisation of PSI's landscape in the EU, it is important to acknowledge that there are also other initiatives related to organisational change –less tangible- that are introduced to solve clear market failures (see sub-sections below). The use of ICTs in government, as well as the introduction of other technical aspects, seems to be a 'pre-condition' for aiming at having other forms of PSI –or *Government 2.0 practices*- related to inclusion, social participation, co-creation, etc.

The OECD identified Information and Communication Technologies (ICTs) as one of the most innovative approaches in service delivery that enable governments to meet new demand for online services, to tailor services to individual needs through service personalisation, and to reduce transaction costs (OECD, 2012, forthcoming). The 2012 edition of the United Nations e-Government Survey confirms this almost universal commitment, and also places 7 EU member states in the top 10 countries globally as regards the extent and level of sophistication of e-government implementation.

In the EU, most countries have been making large use of ICTs in public sector renewal projects and have been promoting the development of e-Government services. The online availability of public services in the EU has been on a rapid rise in the past years, with 84% of public services having online presence in 2010, several countries reaching 100% accessibility online (e.g. Austria, Italy and Sweden), and the gap evening out between the EU15 and EU12[9].

Our country correspondents confirm continuing progress in online service delivery in most EU member states, with the very great majority having put in place e-government strategies and launched various ICT projects to improve the quality and functionality of public services while also producing public sector efficiencies and streamlining governance systems. Among the e-government leaders, innovative technology solutions are gaining recognition as a means by which to deliver social gains and inject a little extra economic dynamism through the improved functioning of core services. In addition, the use of ICT is seen by the private sector as having a positive impact on government efficiency[10].

Public servants in twenty countries in our survey mentioned examples of new digital services as good practices of PSI. While some countries, such as Romania, also mentioned the improvement of the ICT infrastructure for the purposes of simplifying internal administrative processes as examples of ICT projects, in general the use of technology in the public sector has been associated with direct impacts of improving policy and service delivery for external stakeholders. Especially in the case of successful examples, e-Government has been used to contribute to delivering projects of administrative simplification, reduction of administrative burden for businesses

[9] More people across the EU now have access to public services online, according to Europe's 9th e-Government Benchmark Report. Putting more Government services online helps cut costs for public administrations and also reduces red tape for businesses and citizens. Digitizing Public Services in Europe: Putting ambition into action - 9th Benchmark Measurement, Cap Gemini et al, for the European Commission (http://ec.europa.eu/information_society/newsroom/cf/item-detail-dae.cfm?item_id=6537).

[10] WEF 2012: Global IT Report 2012, indicator 10.03, p. 393. The findings show predominantly positive responses of business leaders measuring to what extent the use of ICT improved government efficiency. The average score is of 4.58 points out of 7 at the EU27 level, with countries such as Sweden (5.9) and Estonia (5.5) ranking the highest.

and citizens, increasing participation in policy-making, or improving public procurement processes. There are also successful cases linked to the fields of healthcare, education and social security services.

Typical examples of ICT projects are the introduction of **digital ID cards for citizens** in Estonia, Austria and Malta. The development of the e-signature for easing the registration of new start-ups is also a good example in Poland and Bulgaria. In addition, there is a rising interest in **open government** and open data projects, which imply the publication of statistics of higher detail and quality, increasing the transparency of public sector activities. Initiators of such projects are for instance in Austria, where a transparency database was introduced compiling all federal benefits to natural and legal persons. In Ireland, a newly developed tool called '*DecisionMap*' encourages the use of publicly available data to support decision-making in the public and private sectors[11]. In Greece, the *opengov.gr initiative* brought increased transparency to employment processes in the public sector by providing a platform for advertising open positions in the government, and facilitating the use of public consultations for all public sector policy initiatives.

As with other aspects of e-government, we see marked differences in the timing of the digitalisation of public services with much of Scandinavia's outward facing services, for example, having 'gone online' more than ten years ago. In Estonia and Finland, for example, such digital tax services were introduced in the early 2000s. In Finland, the tax system facilitates the process of filling in forms by providing citizens with a pre-filled tax form that only needs to be approved if correct. This ensures flexibility to possible changes and saves time to the citizens.

The UK Inland Revenue launched a nationwide, electronic, tax-filing system for individual taxpayers in 2006, which uses a self-assessment system to calculate their personal tax liability. The system relies on user convenience and early notice of the level and timing of outstanding liabilities (with clear guidelines on certain provisions and offsets) to increase the proportion of the population whose total income, from all sources, is made visible. This has increased the level of taxes collected and reduced levels of tax evasion. Meanwhile, by law, businesses in France with an annual turnover of €15m must file and pay their corporate taxes electronically. The Irish Revenue Department believes electronic tax filing reduces errors due to manual processing of tax claims. The Revenue Online Service facilitates the filing and payment of taxes online. It also allows taxpayers to carry out inquiries on their existing tax status and review their earlier tax transactions. Customers who use the E-filing system are given digital certificates that allow them to digitally sign legally enforceable tax returns.

The following boxed sections present a series of specific cases of ICT-based innovation in the public sector, which are presented here to illustrate the sorts of work that is underway across the EU.

Figure 9 The National Revenue Agency in Bulgaria

The twelve-digit Personal Identification Number (PIN) provides free access to the online services of the National Revenue Agency (NRA) without the need to buy an electronic signature. Since the beginning of 2012, physical persons can check their social security income, daily, total and overtime working hours declared by their employer, employer's transfers to the Supplementary Compulsory Pension System, status of all labour contracts ever reported by the employer. Furthermore, citizens can submit applications for the issue of various kinds of official documents by the NRA. The PIN will soon be also available to legal entities too.

The NRA introduced the PIN to aid lower income persons to have the same level of access to the services of the agency as the rest. As Bulgaria is the lowest income nation in the EU-27 there are many people who cannot afford to buy electronic signatures and annual subscriptions to them. The administrative innovation was introduced as part of the implementation of the NRA's Strategy Plan for the period 2011-2015 and the wider Government of Bulgaria efforts for e-services. The Strategy Plan is available on the official NRA

[11] See http://www.decisionmap.ie/

website www.nap.bg or directly under the following link http://nap.bg/document?id=2749.

On the basis of the number of PINs issued until now and preliminary estimations by NRA, savings that citizens are expected to realise amount to approximately €2 million per year. This includes the saved annual payments for electronic signatures and the initial investments for the device that were necessary to be purchased by the citizens before. Another hardly quantifiable but relevant benefit consists in the enhanced protection of the security rights of employees. Anytime they can control whether their employer has correctly registered their labour contract and whether social security contributions to the Supplementary Compulsory Pension System have been duly transferred.

Two factors have been critical in the success if this innovation: demand analysis and proper planning. NRA has consistently analysed demand for its services since its establishment a decade ago and has picked up on client demands to provide simpler but still secure access. Piloting and the proper planning of implementation are key to success in such systems, which require high security of transactions.

Source: TrendChart Country Report on Public Sector Innovation in Bulgaria and interviews with NRA officials, 2012

Another identified pattern is the increased use of ICTs as an interface between businesses, citizens and the tax collectors through ***e-tax platforms***. Around eight countries have introduced new services that make it easier to submit tax declarations or to pay taxes online. Successful examples are found in Greece, where the tax authorities have introduced a web-based platform for such purposes; or in Romania, where a similar online platform was launched in 2011. In Spain, the National Agency for Fiscal Administration created a virtual tax office that enables citizens to solve tax issues online.

Figure 10 The "Diavgia" transparency initiative in Greece

The Transparency Initiative (Diavgia) was introduced in Greece in 2010. The initiative applies to the whole public sector including both central and regional government. The legislation introduced postulates that all public decisions should be published on the internet and therefore no decision is valid without a publication reference number. All decisions are published in the initiative's web site (http://et.diavgeia.gov.gr), which automatically provides the references number at the time of publication. Thus citizens or businesses have access to all administrative decisions, spending actions, laws and regulations through a single entry point.

The debt crisis and the need to cut public expenses brought the issue of corruption and lack of transparency at the front of the policy agenda, as they are among the factors negatively affecting public spending. The Government, which was elected in 2009, considered the lack of transparency in public decisions as one of the enabling conditions for corruption and thriftlessness. Thus, in 2010 the government introduced several initiatives aiming at increasing transparency, accountability and public consultation. The Transparency Initiative introduced with the law 3861/2010 and it is one of the innovations initiated at that time aiming at fighting corruption and reduce waste of public money.

The main benefit obtained through the initiative is that all decisions, including decisions on contracts and payments of public money, are now publicly available. Although, transparency alone cannot eliminate corruption, the fact that all transactions are publicly available increases the possibility of decisions intending to favour corruption to be discouraged. In addition, it is expected that the initiative will contribute to restricting the wasteful use of public money. "Diavgia" also triggered citizens' initiatives for exploiting the provided information in a meaningful way. For example, the platform http://publicspending.medialab.ntua.gr/en/#/~/total, offers a user-friendly means of visualizing where public money is spent in Greece.

In terms of lessons learnt, two issues are important and should be taken into consideration for improving the initiative:

- Bureaucracy: This law actually introduces one more layer of processing before a decision is valid, since Diavgia, now after the issue of a decision, an additional step is added before the decision can be applied, which risks creating more delays.
- Deficiencies in the tagging and searching functionality of the application could harm the ability to use the provided information. Therefore, it is critical to improve the way the information is presented and the search capabilities of the web site so that the requested information could be easily retrieved and presented in a meaningful way.

Source: TrendChart Public Sector Innovation Country Report in Greece, 2012

Figure 11 Jelgava e-Municipality in Latvia

In recent years the Jelgava city has made a major effort to enhance urban safety. Carrying out of several mutually complementing projects in the framework of Latvia and Lithuania Cross-border Co-operation Programme under the European Territorial Co-operation Objective (2007-2013) with latest being „Creation of disaster management system in neighbouring regions of Latvia and Lithuania, Phase II", has yielded

spectacular results. A joint civil protection plan for the city and the adjacent regions of Jelgava and Ozolnieki has been developed, which sets the procedure on how to prevent and eliminate possible damage to humans and the environment as fast as possible. The possible disasters in industrial objects and on roads, the social, health, natural disasters, agricultural and other risks have been assessed.

The Jelgava City Municipal Emergency Information Centre (hereafter named the "Centre") - a comprehensive communication and information gathering mechanism - was launched in February 2011 to provide direct communication between the citizens of Jelgava, infrastructure maintainers, operational services, state and local authorities, companies and the civil defence commission. The Centre's principal function is to collect information for the needs of civil protection and to provide it to the disaster management services. In 2011 this initiative received the Latvian ICT award "Platinum Mouse" in the category "The best e-municipality".

The Centre includes four units: crisis elimination control centre, operational control unit of the municipal police, traffic control centre and united dispatcher point where the control system of problem registering is used. The citizens may contact the Centre at telephone number 8787 to report problems and the system handles an average of 60 calls daily. The Centre, in cooperation with municipal, national and regional institutions, collects operational data, processes and disseminates those to the responsible services and performs action control. The Intelligent Transport Management System - also managed from the Centre - provides an inter-connected operation of traffic signals that makes it possible to optimise the flow of transport on the transit and main streets reducing the number of traffic accidents.

The Centre already shows good results – it ensures non-intruding safety measures in everyday life, guarantees faster response to potential emergencies, and enhances active involvement of citizens in making the city Jelgava a safer place.

Source: TrendChart Public Sector Innovation Country Report in Latvia, 2012

Figure 12 The SIMPLEX Programme in Portugal

The SIMPLEX Programme was launched in 2006 and had four main objectives: to make citizens' and businesses' life easier; to strengthen users' trust on public services; to reduce the costs incurred by citizens and businesses, thereby enhancing competitiveness; and to improve efficiency in Public Administration. SIMPLEX combined cutting red tape and e-government policies in a single programme. ICT provided the necessary tools (such as interoperability, web services and e-identification) for simplification initiatives to move from the law-abiding stage to more integrated and user-friendly services, based on life-events. Simplification allowed reducing bureaucracy, redesigning and reengineering internal procedures.

SIMPLEX gave rise to three types of innovation: (1) Process and organisational innovation, at service level, involving the improvement of internal processes and the relationships with 'customers'; (2) Integrated inter-organisational process innovation, corresponding to improvements in the patterns of inter-action and collaboration among services; and (3) Product innovation, by providing new services, using different channels, including the co-production of services. The last two types of innovation have been inter alia stimulated by the adoption of an event-life approach and by the development of a Public Services Interoperability Platform. Aimed at enabling the interoperability of the information systems of the different public services for different purposes, this platform may also be considered as an innovation per se. On the other hand, it has been instrumental in the achievement of product innovations, such as the Citizen's Card.

The launching of the SIMPLEX programme marked a new phase in the promotion of PSI in Portugal. At least 10% of the measures launched under the SIMPLEX programme every year stemmed from suggestions made by individuals. Further, most of the measures of the SIMPLEX programmes stemmed from the interaction of the central public administration with the local level public administration.

SIMPLEX had an execution rate of 83%. Estimated savings for citizens and businesses were very significant: the achieved savings from the recourse to on-line certificates were estimated to reach €51.6m. An important success factor of SIMPLEX was the support from the Prime Minister. Originally, the design and management of the programme was assigned to the Unidade de Coordenação da Modernização Administrativa – UCMA (Administrative Modernisation Coordination Unit), a cross-cutting structure integrated in the Presidency of the Council of Ministers. In 2007, the former coordinator of UCMA was empowered as Secretary of State for Administrative Modernisation, reporting to the Presidency's Minister.

The programme has been subject to one independent evaluation, carried out by OECD in 2008, whose overall assessment is very positive. The evaluation report identified several issues, which should have been responded in order to ensure further success. These were mainly: acknowledging the digital divide, by keeping different channels operational, particularly for the citizens with lower digital literacy; training civil servants and providing incentives to foster their commitment to simplification measures; establishing budgetary mechanisms for cross-funding of inter-Ministerial projects; and developing common frameworks for cost-benefit and business case analysis.

SIMPLEX was active until mid-2011. After the 2011 elections, the programme was discontinued.

Source: TrendChart Public Sector Innovation Country Report in Portugal, 2012

Figure 13 The National Electronic System for Online Payments of Taxes and Levies (SNEP) in Romania

The Romanian Ministry for Communication and Information Society in partnership with the Ministry of Administration and Home Affairs and the Ministry of Public Finances launched the revised platform for online payments in 2011, called the *National Electronic System for Online Payments of Taxes and Levies (SNEP)* using a credit card (www.ghiseul.ro). The online payment system was also implemented in partnership with the Association for Electronic Payment of the main Banks for Romania, which also provided financing for the initiative. All Romanian central and local public institutions that levy taxes are obliged to enrol in the national online payment platform SNEP according to an agreed calendar. The latter foresees the gradual registration of the public institutions within approximately twenty months from the start of the operation of the platform.

The implementation of SNEP brought with it several innovations in the context of Romania: the national interoperability platform for online payments of taxes and levies; the possibility, for the tax payer, to visualise all the payments due to public institutions registered in the online platform; standardisation of tax and levies register (nomenclature) used in the online systems of local and central public administration; national standardisation of the interoperability between the local and central online systems for the payment of taxes and levies; standardisation of data security; and national standardisation of payments processing and reimbursements. Moreover, SNEP is continuously updated with information from the registered institutions and users.

However, this is not a clear-cut case of success. So far, the uptake of the system by local administrations is ongoing, though it has experienced slow progress, with local public institutions taking long time to register in the system and offering this service to citizens. The latter have highlighted the need for improvement of the registration process for taxpayers, which in the case of some local authorities still require an offline step that takes citizens to the counter. In addition, the private sector does not have the option of paying taxes online through this facility; therefore this is a further direction to expand these services.

Source: TrendChart Public Sector Innovation Country Report in Romania, 2012

The leading edge in eGovernment appears to be pushing in two related directions, one of which is more sophisticated technologies (mega projects) while the other is concerned with system-wide connections and coherence and in particular interagency coordination. The examples from Sweden are instructive in this regard, where more than 20 years of eGovernment initiatives have produced many benefits and where recent efforts have produced services that link back into the data and functions of several agencies (e.g. drivers-license), improving the user-friendliness for citizens and businesses. The country's eGovernment Delegation is currently working on initiatives to further deepen the coordination between agencies, for example by creating a central "my pages" for private individuals that have a number of on-going matters with several public organisations, i.e.: job seekers, parents with small children etc.

Figure 14 The eGovernment delegation in Sweden

The eGovernment Delegation in Sweden has the responsibility to strengthen the development of eGovernment in public administration and establish better opportunities for interagency coordination. The remit also includes to coordinate the IT-based development projects of government agencies and to follow up their impact on citizens, business operators and public administration employees. It has the role to summon authorities with large electronic infrastructures so they can share good practice and develop joint systems that improve the workflow for civil servants and the services towards citizens.

Swedish eGovernment initiatives have a relatively long history and are well developed in an international comparison. However, agencies have called for more coherent management, financing and coordination of eGovernment projects and greater scope for collaboration. The government adopted the eGovernment action plan in 2008 and the Delegation was appointed in 2009 and will end its work in 2014.

Implementing eGovernment has been proven to have great benefits for private individuals, businesses and civil servants by making a larger share of public services available to individuals for self-help and self-service, improving effectiveness for agencies as well as the everyday life of citizens and business. Also eGovernment has made possible for services that involve contacts with several agencies (e.g. drivers-license, business operations) to be gathered in one place, improving the user-friendliness for citizens and businesses. The Delegation is currently working on initiatives to further deepen the coordination between agencies, for example by creating a central "my pages" for private individuals that have a number of on-going matters with several public organisations, i.e.: job seekers, parents with small children etc.

Sweden has for a long time been in the forefront in terms of IT usage and Internet connectivity among the population. Sweden's public administration is an early adopter of eGovernment, but the Delegation has facilitated development and innovation through combining and enhancing public administration service.

The City of Stockholm has made one of Sweden's largest investments in eGovernment and reports savings in public administration during 2009-2011 by more than €15m. A survey conducted in 2011 reveals that 60%

of Sweden's governmental agencies experience significant efficiency gains due to eGovernment.

Source: TrendChart Public Sector Innovation Country Report in Sweden, 2012

Common lessons drawn by the interviewees from the implementation of eGovernment practices are the need to ensure that online services are performed in conditions of high data and transactions security, as well as the establishment of the demand for such services. Starting the projects at small scale through piloting is an advisable lesson to follow. In general, the introduction of eGovernment services has revealed to increase transparency, citizen engagement and efficiency of the government's operations, and to diminish the possibilities of corruption.

6.1.2 Administrative simplification

The World Bank's 2012 Ease of Doing Business Report is an indicative measure of the performance of countries in reducing red tape and of the state of play in terms of how European (and global) economies facilitate issues such as the starting of a business, obtaining construction permits, paying taxes or enforcing contracts. The highest ranked European country is Denmark, on the 5th position worldwide, followed by Norway and the UK (Singapore, Hong Kong, New Zealand and the United States topped the ranking)[12]. If aggregated, the EU27 would on average rank around the 40th place, with high variation of scores, the lowest being Malta, placed on position 102, and Greece and Italy (positions 78 and 73 respectively). There is therefore large room for innovation in efforts to reduce administrative burden and design more business-friendly regulation.

Smart regulation and administrative simplification have been a focus of government reform for several years, with the European Commission launching a series of initiatives in the past decade, notably presenting a new programme for measuring administrative costs, in 2007, and making a commitment to reduce the administrative burden of EU legislation by 25% by 2012. In line with this broader European 'project,' almost all of our country correspondents identified several national projects dealing with the **reduction of administrative burdens.** They cited these as successful examples of PSI in twenty EU countries.

Cutting red tape has been successfully attempted horizontally implying an intelligent re-thinking of regulations, administrative processes, organisation and services offered. The examples from the Member States range from deregulation, facilitation of issuing of permits, to administrative simplification of internal procedures directly impacting service delivery.

The lists of reform programmes we have been provided with suggest there may be quite marked differences in the scale or intensity of effort being devoted to this agenda, across EU member states. With the Austrian and Belgian examples (Figures 15 and 16) representing a rather more comprehensive assault on the costs and inefficiencies associated with unnecessary governmental red tape, while other examples, such as the Czech Point portal, are very much narrower in their scope and objectives.

The cost savings for businesses and the wider economy can amount to quite large figures, when aggregated. According to a status report published by the Austrian Federal Ministry of Finance in October 2012, 134 reduction measures have been implemented, while 37 additional measures are still in preparation, and concludes that the 25% reduction target of €1.1b, based on the standard cost model, can be achieved.

Figure 15 Reducing administrative burdens for businesses in Austria

In 2006 the Austrian Government launched an initiative aimed to reduce administrative burdens induced on Austrian businesses. The results of a baseline measurement completed in June 2007 have shown that the

[12] See - World Bank, Doing Business, http://www.doingbusiness.org/rankings

Austrian economy faced administrative (mostly information related) burdens amounting to €4.3b equalling 1.6% of GNP. Costs were assessed by using the EU's standard cost model. Administrative costs taken into account incurred as a result of 5687 information obligations in 561 legal provisions mainly caused by regulations from the Ministry of Finance (especially arising from tax law) and the Ministry of Economy and Labour (at the time) (especially deriving from employment and social insurance law and trade and commercial law).

The Austrian government set net reduction targets of 25% for each ministry in November 2007. The Federal Ministry of Finance was chosen to coordinate this initiative and takes care of the comparability of results and compliance to common standards since then. A working group with representatives from all ministries was established to ensure a smooth steering of the initiative.

The overall reduction had to be achieved in two phases: Initially, reductions for national induced burdens have had to be achieved until 2010 while reductions for EU induced burdens have had to be achieved until 2012. Although there are several delays in implementing the initially 165 selected reduction measures, whose implementation is also carefully monitored by the Austrian Chamber of Economy representing the business-enterprise sector, a series of successful examples can be identified such as:

- Endorsement of the eInvoicing guideline and electronic invoicing to the Federal State (which results in a de facto equal treatment compared to paper invoicing) as of 1 January 2013.
- Launch of the business service portal 'USP.gv.at' in an all-out operation as of May 2012 which helps businesses to fulfil their administrative information obligations by reducing their administrative burdens (e.g. recurrent provision of the same information to different public administrations with single sign-on procedure).
- Simplification of statistical declarations (e g. in the field of R&D or in the field of road transport and rail transport statistics), etc.

Source: TrendChart Public Sector Innovation Country Report in Austria, 2012

Figure 16 The AVANTI Plan in Belgium

The AVANTI Plan is a strategic plan set by the Strategic Committee of the Public Service of Wallonia (SPW) and approved by the Walloon government in February 2012. The AVANTI acronym stands for "Allons vers une Administration Nouvelle Transversale et Innovante", or "Let's move towards a new, cross-cutting and innovative administration". For the AVANTI plan, a dedicated team composed of members from the General Secretariat and the Directorate General for Personnel and General Affairs backs the Strategic Committee composed of Directors of all SPW directorates.

The rationale for the AVANTI plan is the necessity to have a common vision within the public administration. In the recent context of economic crisis and budgetary constraints, its stakeholders see the plan as tool for more efficiency. The AVANTI plan is part of the wider Declaration on Regional Policy for 2009-2014, a strategic document on the modernisation of the Walloon government. This is done in partnership with EASI-WAL, the Walloon Commissariat for administrative simplification. The plan is aimed at providing a crosscutting line of action and to ensure better relevance and consistency among programmes and policies. The recently adopted plan for sustainable development of the SPW will also be integrated in the AVANTI plan. The Strategic Committee of the SPW has adopted it on the 20th of October 2011.

Reflections on this strategic plan started in 2009, were materialised in June 2010, and incorporated in budget acts since 2011. Its implementation started in early 2012. The strategic plan is divided into 74 initiatives and 5 axes: performance measurement; activity control; enhanced cooperation; Human Resources Management; and ICTs. By the end of 2012, 20 initiatives have been identified as priorities. They concern the implementation of a common methodology for project management, a common methodology for process management and a framework for several projects. Some of the on-going projects concern the implementation of European directives (to reduce payment delays), and modernisation workshops. The plan is now going through its operational phase, where goals are being materialised in concrete perspectives and actions.

The benefits expected from the AVANTI plan are to improve professionalism but above all public service delivery. It is a result-oriented plan aimed at improving service quality with the implementation of performance indicators and management by objectives. It is expected to produce a big change and the onset of a strong dynamics for innovation. Communication is a key success factor for the Plan as it involves public agents engagement. Internal communication actions are planned and will take place in the coming months. In addition, a recommendation from the Court of Auditors highlighted the need for structural leadership at the head of the Strategic Committee of the Public Service of Wallonia SPW. This triggered actions by the Walloon government in this direction

Source: TrendChart Public Sector Innovation Country Report in Belgium, 2012

Among the most prevalent examples is the **single point of contact** for businesses and citizens, or the so-called '***one-stop shops***'. This was for example mentioned as a successful PSI example in Greece, where KEP was created – a network of one-stop shops facilitating the easier contact and acquisition of official documents between citizens and public administration. Slovenia also mentioned the successful

introduction of such a service. However, it is important to bear in mind that the single point of contact has been a legal requirement in every EU country since 2009, and what we are recording here is the implementation of this requirement by several latecomers.

Figure 17 The 'Czech POINT' Project in the Czech Republic

The Czech POINT project – single contact points of public administration, or the Czech Submission, Verification and Information National Terminal, is a project aimed at the reduction of redundant bureaucracy in the relation citizen – public administration. Until now, a citizen had to run around several offices to deal with a single matter. In order to improve this situation, the Czech POINT serves as an assistance point of public administration with the purpose to "let the data circulate, not the citizen".

The project aims at establishing a guaranteed service for communication with the state through a single universal point, where citizens can obtain and verify data from both public and non-public information sources, certify official documents, convert written documents into electronic and vice versa, obtain information on the progress of administrative proceedings related to a citizen, as well as to submit submissions to initiate proceedings of administrative bodies. Thus, the goal is to maximise the use of information owned by the state together with minimising requirements on citizens.

In 2007, the Ministry of Interior of the Czech Republic launched Czech POINT as a pilot project with several tens of contact points, in the connection with its e-Government policy (the project is co-financed from the Structural funds – Integrated Operational Programme). Today, there are almost 6,900 of Czech POINTs operating at all of the Czech regional authority offices, at the majority of municipal authority offices, and at selected offices of the Czech Post, business chambers, notary offices and Czech embassies abroad.

The Czech POINT project brings a considerable facilitation of communication with the state administration. There is great time saving in comparison to previous practice. In the final phase of the project, it should enable citizens to arrange their matters from their homes using internet. There is an enormous interest in using benefits of the project by the public as well as by public administration offices. Up to September 2012, the contact points had provided 5.5 million statements to citizens. At the same time, public offices used the system to convert 10 million documents.

Source: TrendChart Public Sector Innovation Country Report in the Czech Republic, 2012

Figure 18 The '*Ensemble simplifions*' collaborative platform in France

Ensemble.simplifions.fr (http://www.ensemble-simplifions.fr/) is a collaborative platform created in 2009 by the General Direction for the State Modernisation. It is one of the instruments of the national policy on digital administration (as well as the creation of "mon.service-public.fr" which is the national platform for all online administrative procedures).

The aim is to improve the quality of the public service, with a focus put on the public service user (whereas all administration reforms have long been seen from the administration point of view).

In that perspective, a collaborative Internet platform has been created, where anyone can have an input on State modernisation: this website can put into debate the needs and expectations of the population towards administration, along the major events of one's private, citizen and professional life (for instance, birth of a child, wedding, renewing of IDs, enterprise creation, etc.). So far, more than 100 new procedures, in a wide range of activities have been introduced. Related to individuals, the most important include a sole online procedure in case of ID loss and renewal; in case of death, a sole online declaration for all administration and organisms; easier online school registration in case of moving; online pregnancy declaration (health and social insurance). Services to enterprises include online easier procedures when transferring to the head office; easier online declaration for exports; online database for different public supports. For local authorities, the services include the harmonisation of data transfer between the national administration and the local authorities; online declaration for census; and online ERDF application procedures. Associations benefit from services such as online procedures for creation, modification and dissolution of an association; and online European Social Fund (ESF) application procedure.

For each of this event, web 2.0 facilities are used: online surveys, forum, social networks, etc. All the propositions are then analysed by the administration and some of them become major changes in the public administration management. For instance, from this platform came up the wish for online electoral registration: it has now been turn into a major success and widely used by citizens, whereas the administration did not foresee at all the need for the creation of this service. Besides, a panel of 5,600 individuals and 2,400 enterprises have been constituted to keep a closer link with the administration.

Source: TrendChart Public Sector Innovation Country Report in France, 2012

The simplification initiatives have sought to discard redundant or duplicative legislation, shorten new laws to make them easier to understand and less ambiguous (with detail where needed tackled in for example accompanying codes or standards) and to reinvent the processes by which citizens or businesses make use of or comply with various aspects of legislation, from employment law to tax. There was also an

increased commitment to the systematic measurement of the costs and benefits of different regulations and elements of administration, a discipline that is expected to attenuate the implementation of unnecessarily complex laws.

While the main focus has been on efficiencies and cost saving, most governments link the regulatory reform and simplification agenda with improving public services for citizens and businesses. In that sense, service quality and service effectiveness remains a foundation stone even within the context of widespread austerity measures. There is moreover a clear interrelationship between many aspects of simplification and the eGovernment initiatives discussed in the preceding section.

The UK government had adopted the 25% target defined by the EU, but aimed to deliver those savings by 2010 rather than 2012. The country's 'red tape challenge' mobilised the general public and businesses in identifying unnecessary regulations and also in coming forward with ideas for possible smarter ways of achieving the same desirable outcomes. In the interim, the coalition government has gone even further in its attempt to keep regulation in balance and has implemented the One-in, One-out rule for domestic regulation. It has also begun publishing quarterly reports (Statement of New Regulation [SNR]) that present an overview of the regulations introduced *and* withdrawn in the period. The estimated administrative burden is aggregated for all new regulations and all outgoing laws, with the ambition that the individual additions should be as light touch as is reasonable and that the overall balance should be zero or better (i.e. a cumulative lowering of the costs for business)[13].

Figure 19 The Red Tape Challenge in the United Kingdom

The Red Tape Challenge is a cross-government initiative coordinated by the Department for Business Innovation and Skills (BIS) and the Cabinet Office. It was introduced in 2011 to implement the goals of the UK Cabinet's "Plan for Growth" issued in March 2011, which set out actions to improve the country's competitiveness. The Red Tape Challenge consists of a public review of the UK's stock of regulation on more than 20 themes and over 21,000 UK Statutory Instruments. They range from regulation affecting the retail or manufacturing sectors, through to rules impacting the civil society or entrepreneurs adopting disruptive business models.

The initiative is innovative through the way it uses new media tools and the Internet platform for collecting the views of the stakeholders affected by the regulations challenged on a monthly basis. The information collected from the reviewers is analysed by the Departments and is added to the evidence collected on the specific theme from previous consultations and assessments. The Departments then propose proposals to scrap, reduce and improve regulation. Their proposals are further debated in "Star Chambers", chaired by the Cabinet Office and BIS Ministers, also involving key Coalition advisors. Based on their recommendations, the Departments forward the proposals for regulatory changes to the Committee on Reducing Regulation in the Cabinet Office and other Cabinet sub-committees, where a final collective agreement is made and promoted for implementation.

By May 2012, over 50% of the decisions made following the Red Tape Challenge reviews of 1,500 regulations across 8 themes resulted in scrapping or improving the regulations. The changes made by June 2012 include significant deregulation. For instance, in the employment field, the changes in a package of employment tribunal reforms is estimated to deliver over £40 million (over €45m) per year in cost savings to employers. There are also planned reforms to environmental regulation to save business at least £1 billion (€1.2b) over 5 years, while keeping important protections (Defra). In addition, RTC also resulted in a consultation on proposals to simplify the EU Emissions Trading System, to reduce the administrative burden of compliance, e.g. by replacing 13 sets of regulation with one. Revised regulations will take effect from January 2013 (DECC).

Using crowd-sourcing techniques gave more voice to people and particularly more SMEs and enabled them to contribute directly to changing regulations in a transparent and user-friendly way The strong leadership coming from the Ministers and the peer pressure stemming from the over 30,000 commenters s contributed to an accelerated decision-making process. This changed the culture of the formerly slow-paced central public administration into a more dynamic and responsive one, attuned to the current fast-paced times.

Source: TrendChart Public Sector Innovation Country Report in the United Kingdom, 2012; and http://www.redtapechallenge.cabinetoffice.gov.uk

[13] See - www.bis.gov.uk/assets/biscore/better-regulation/docs/o/12-p96a-one-in-one-out-third-statement-new-regulation.pdf

In implementing measures of administrative burden reduction, some lessons learnt include the need for a more targeted approach to reducing administrative burden, and not an all-encompassing one, tackling the wide range of regulations in place. Often, very good coordination between different administrative units is needed to improve the efficiency of the implementation.

6.1.3 Public procurement

More than half of our country correspondents cited examples of innovation relating to public procurement. Almost all process improvements in relation to public procurement were related to the introduction of an online platform that offers more transparent information or easier application processes for tenders. Eleven countries mentioned the importance of administrative simplification in the field of public procurement. This emphasis on e-procurement arguably reflects concerted action by the European Commission to make this approach the rule rather than the exception for all member states (i.e. by mid-2016, e-procurement needs to become the standard method of procurement in the EU). Public administrations implementing e-procurement report efficiency gains equal to savings between 5% and 20% of their procurement expenditure[14].

One example of this proliferation of e-procurement is Lithuania, which reformed its public procurement system in 2008 and estimates that the new system has produced cost savings of at least €176m in the 2-year period since 2010, following the introduction of the full service (see Figure 20). The critical success factor of the Lithuanian case was a wide agreement in Government to transfer public procurement to the electronic environment as a key priority. However, the complexity and lack of user-friendliness of the current features and systems are still to be tackled. In addition, the legal framework is more adapted to the traditional processes, the lack of awareness about e-documents and digital signature and unwillingness to adopt the system underline the need for further efforts for user interface improvement, training and standardisation to make this PSI even more successful.

Figure 20 Renewing the central public procurement information system in Lithuania

The Central Public Procurement Information System (CPP IS) was launched in Lithuania in 2008 by implementing the "Development of public procurement information system project" supported by EU structural funds and co-funded by the Lithuanian Government. CPP IS covers all public procurement processes as defined by the Public Procurement Law of Lithuania: from e-searching to e-awarding. CPP IS was launched on a pilot basis in mid September 2008, and by mid September 2009 it was already mandatory to publish tender documents, including specifications, explanations, questions and answers in CPP IS with notice about tenders and to implement not less than 50% of procurement volumes per year through CPP IS. E-contracting is available, but not mandatory. All interested in public procurements have free access to published information 24 hours, 7 days a week from any location with internet connection.

One of the main benefits of the system is an increase of public procurement transparency. For example, from 2010 it is mandatory to publish the following: public procurements plan for a year, technical specifications of large tenders (from 2012 it is mandatory for all tenders) and all public procurement reports. Overall result is significantly above initial expectations – about 75% of all published tenders in 2011 were implemented via e-environment.

Another major achievement of CPP IS was that it helped to cut costs both for public administration and private sector. For example a study carried out by „Mercell Lithuania" Ltd analysed processes of procurements carried out by companies.[15] Study has shown that e-procurements help to save up to 30% - compared to traditional ones e-procurements require less time, help to avoid human failures due to the lack of competence of responsible persons or lack of market research. E-procurements also create competition among potential contractors, which helps to reduce costs of purchased goods or services. MoE, based on estimates of related studies carried out in EU (i.e. e-procurement helps to save 10-15% of total public procurement value), assessed that in 2010 potential savings due to e-procurement could amount to LTL

[14] See European Commission, 2012: *Delivering savings for Europe: moving to full e-procurement for all public purchases by 2016,* http://europa.eu/rapid/press-release_IP-12-389_en.htm?locale=en

[15] http://www.verslosavaite.lt/index.php/Pirkimai-internetu-padeda-sutaupyti-iki-30-proc.html

600-900 million (€174-261 million).

Source: TrendChart Public Sector Innovation Country Report in Lithuania, 2012

Public procurement is also widely promoted as a means by which to drive innovation in public services, with large public sector clients or groups of clients being encouraged to commission a greater proportion of goods and services that are novel or innovative in nature. While such solutions may cost substantially more in the short term, they are deemed to have the potential to yield increased social value or cost savings in the longer term. As with eProcurement, the European Commission has been championing what it calls 'pre-commercial procurement.' In this case, the public sector does not simply buy a service but uses an R&D contract to pay a supplier or suppliers to develop and demonstrate a novel solution that the organisation may go on to purchase subsequently. This kind of risk-sharing model can provide the impetus to help the private sector develop ideas to a point that they can work at a scale or price early markets can cope with and which they may not be able to arrive at on their own. The US government's Small Business Innovation Research (SBIR) programme is widely cited as an example of the successful deployment of public sector purchasing power to drive private sector innovation. The scheme has been copied in other countries, including for example the UK, which implemented the SBRI in the early 2000s and has re-committed to the programme in the past three years. The programme is using public funds to drive innovation more generally, and not just in the public sector, so for example, the Environment Ministry funded a competition to develop new ultra-low energy light bulbs that will last several decades. Elsewhere, the UK Home Office and Department for Transport financed a competition to develop a cost-effective device for the police and other law enforcement bodies to use to detect when people have taken illegal drugs (e.g. cannabis, cocaine, etc).

Finland has also been in the frontline of fostering PSI through public procurement, with measures to stimulate the demand-side, and at the same time contribute to offering improved public services and fostering a green economy. Estonia is also following up on this path, including demand-side innovation support measures through public procurement in the innovation policy planning after 2014.

6.1.4 Health and e-health

Innovations in healthcare are highly represented in the literature on PSI (Nauta and Kasbergen, 2009). This perhaps reflects the fact that the costs of public healthcare are equivalent to around 10% of GDP for most countries, with those costs rising under the twin pressures of an ageing population and an increasing expectation of public healthcare systems solving almost any aspect of morbidity. Most EU member states have national policies that seek to improve quality of service and health outcomes (including equality of outcomes), while also reducing costs. According to Arundel (2012), innovation in health services is often subject to unique drivers and conditions that are not shared by public administrations, and hence they are very context-specific.

Several countries indicated the introduction of **innovations in the provision of social services** such as healthcare as successful examples of PSI. These examples are, however very sensitive to the national configuration of social policies and the constellation of actors engaged in implementing it. Moreover, the innovations mentioned by public officials relate to the micro-level of the provision of social services and do not give the clearer picture of how they connect to overarching policy changes or other factors.

From the point of view of the interviewed public officials, these innovations are mostly related to the use of ICT tools for simplifying the processes of reaching or engaging the end-users of the services. This is particularly the case for **eHealth projects** including the development of national platforms for information and enhanced interaction with patients, or the introduction of **health insurance cards**. Other countries, such as Malta, have made the transition to e-health by providing online access to medical records to patients and doctors. Based on the examples provided in the figures below,

it is possible to argue that the introduction of eHealth has brought substantial cost savings and efficiency gains, as for instance in Estonia (Figure 22).

Denmark is a good example of a country working to exploit technological developments to deliver healthcare services at home or remotely (Figure 21). The country aims to reduce the demand for costly hospital provision on the one hand and to improve patient experiences on the other by making services more immediate and personal.

Figure 21 Innovation through telemedicine in health care services in Denmark

Denmark is ranked among the leading countries for uptake of ICT solutions in the healthcare system. The country aims to make patient data more accessible throughout the entire health service, in order to make service provision more efficient and reduce costs. For this reason, e-Health solutions are considered the most promising tools. Since the health services are mostly administered at regional and local level, the innovations come from the bottom-up in Denmark, and make use of new technologies such as smart phones. Three of the most emblematic examples are:

- *The regional hospital in Horsens.* This hospital is the only one in Jutland where they are working systematically with innovation for five-six years. They started with the vision to become an "Ihospital" (see http://www.ihospital.dk). This means the introduction of new technologies, but also a large number of experiments with patient involvement to develop new approaches to nurse care.
- *A suitcase for telemedicine.* This project allows distance treatment of Chronic Obstructive Lung Disease (COLD). It is developed together with a suitcase to treat people at a distance. As a result of this, the region could decrease the number of days spent at the hospital from five to one and the patients can now stay at their home under treatment, which is better for the patients.
- *Usage of a mobile phone for wound diagnosis.* Mobile phones are used to take pictures of an infected wound, they send the pictures to a specialist and then the specialist, based on a wound database decides the right treatment. In this way the local nurse can get specialist advice, there is no waiting time to see a specialist and the number of amputations has been reduced by 25%.

These innovations demonstrate that eHealth solutions can be a pathway to solving the needs of the current society and improving the quality of health services delivery in times of economic constraints.

Source: TrendChart Public Sector Innovation Country Report in Denmark, 2012.

Figure 22 The Electronic Health Record in Estonia

During the last decade, Estonia became well known as a country with advanced e-services. In 2005, as the recipient of the structural aid, the Estonian Ministry of Social Affairs launched a new e-health concept by phasing in four e-health projects: the Electronic Health Record (EHR), Digital Images, Digital Registration and Digital Prescription. The result of implementing these e-health projects was the Electronic Health Record that was launched in 2008.

The e-health programme aimed to decrease the level of bureaucracy in the doctors work process; increase the efficiency of the health care system; make the time-critical information accessible for the attending physician; and develop health care services that are more patient friendly and have higher quality.

As of September 2008 the health care service providers were mandated to forward medical data to the Estonian National Health Information System (ENHIS). The first applications of ENHIS were launched in fall 2008 and the gradual development of the system will continue until 2013. Today the health information system is a database that is a part of the state information system. The health care related data is processed in this database in order to conclude and execute the health care services provision contract, ensure patients' rights, protect public health and quality of health care services, maintain the registers of health conditions as well as to manage health care.

Increasing digitisation will translate into huge efficiency gains for the Estonian healthcare system and thus save money for society. 90% of all hospital discharge letters and 15% of outpatient consultation notes are being made available in the EHR system today. 80% of all prescriptions in 2010 were electronic prescriptions. More than 95% of Estonian doctors have used the EHR already. Many citizens, too, are interested in accessing their EHR data. More than 30,000 Estonians have done so already.

The implementation of the EHR has brought several lessons: creating such a complicated IT system needs very careful planning and testing; the cooperation between all stakeholders of the health care system (including patients, doctors, health organisations etc.) needs to be established in the very beginning of the process; the needs of the stakeholders (doctors, patients, hospitals etc.) have to be taken account, otherwise the system will not function properly; the e-health system needs to be user-friendly in order to save the doctors' time for patients not using the e-health system; and the technical capacity needs to be tested several times in order that the system does not collapse when a high number of users are using the system at the same time.

Source: TrendChart Public Sector Innovation Country Report in Estonia, 2012

Based on the Spanish experience, the implementation of the eHealth programme highlighted the need to achieve regional eHealth interoperability and strike a good balance between national and regional priorities (see Figure 23). A flexible demand management process is also needed in order to enable quick assessment of the regional Health authorities' IT needs, on an ongoing basis, adopt funding decisions and guarantee timely procurement and delivery of the IT products and services. In addition, depending on the type of programme, as in the Greek e-prescription case (see Figure 24), it is also important to take into account the potential lack of access to internet or computer illiteracy, and develop alternative mechanisms of implementation at least in an initial phase.

Figure 23 The National Digital Health Card in Spain

Article 57 of the Spanish Law of Cohesion establishes that citizens' access to health services will be facilitated by use of an individual health card (tarjeta sanitaria individual), as the administrative document that accredits its holder and provides certain basic data. In order to facilitate collaboration, quality, and continuity of services, each card includes a standardised form of basic identification data for the holder, and indicates in which autonomic health service the person is enrolled. The main beneficiaries are almost all stakeholders including patients, health authorities (government and policy makers) and health professionals. The Programme is being implemented throughout the Spanish National Health System.

The implementation of the different actions comprised in this initiative is managed by Red.es (attached to the Ministry of Industry, Tourism and Trade), the regional Health Departments and the Ministry of Health and Social Policy. The Ministry of Health and Social Policy has developed a unified database of personal health cards for all the country and is coordinating the implementation of a pilot project that will enable the exchange of clinical data between regions through the National Health System central node infrastructure. The Central Node is not a centralised EHR system and will not store data but rather facilitate access to datasets stored in each of the regional health nodes. A joint committee composed by both ministries and the regional Department of Health carries out the coordination of the activities developed in each region.

With a view to improve the provision of healthcare services, more than 60,000 PCs have been delivered and installed in over 5,600 health care centres. Around 232,000 healthcare professionals work in these centres where 28,3 million citizens receive medical attention. The Healthcare Online Programme has also contributed to boost the implementation of the e-prescription and e-dispensing services. Another major achievement has been the enlargement and reinforcement of the National Health System central node infrastructure, which has now the appropriate security requirements to enable the exchange of clinical data between regional Health authorities. Furthermore, the Programme has validated a new management model in the National Health System in which the Ministry of Industry, Tourism & Commerce through its public entity Red.es, plays the role of technological partner of the regional Departments of Health and the Ministry of Health and Social Policy. Healthcare Online has also helped to raise awareness among all stakeholders regarding the key elements that need to be tackled to achieve the objectives set by the Spanish eHealth agenda.

Ultimately, the main beneficiaries will be the citizens whose health information will be more easily accessible by the healthcare professionals, enabling them to make more informed medical decisions.

Source: TrendChart Public Sector Innovation Country Report in Spain, 2012

Figure 24 The e-prescription initiative in Greece

Greece's e-prescription initiative changes the way doctors' prescriptions for medicines and diagnostic tests are issued, distributed and checked. The introduction of the system affects patients, doctors, pharmacies, social security funds and public administration. The on-line platform started its operation in January 2011 covering a small number of social security funds. All doctors affiliated with the National Health System issue their prescriptions for medicines and tests electronically using the e-prescription platform. The prescriptions are filed and can be retrieved and executed by the pharmacy, clinic, diagnostic laboratory etc. Also, the information on the transaction is directed to the social security funds for the clearing of the payment. This system replaces the existing paper-based system of prescriptions issued by the doctors affiliated with the National Health System

Spending per capita for medical services in Greece is among the highest in Europe while the quality of the provided services is quite low. Spending on medicines amounted to €5b corresponding to 40% of the public funding to the social security funds. It is estimated that the fraud including: issuing of prescriptions without the knowledge of patients, systematic prescription by doctors of expensive drugs of a particular company, unnecessary prescriptions etc, corresponds to 20-25% of the expenditures on medicines. The introduction of e-prescription aimed at reducing the high pharmaceutical cost by preventing fraud and to provide reliable statistical data for the design of public health policy. The main expected benefit is the saving of around €1b annually from the elimination of fraud. In addition there are several benefits for patients, doctors, pharmacies, social security funds and the public administration:

- For patients. Reduction of the prescription errors that amounted to 60% in the former paper based system; elimination of queues in social security funds services front desk for the approval of the

prescription; and elimination of bureaucracy by removing the process for the approval of prescriptions.

- For Doctors. It is estimated that each doctor will save around 100 hours per year.
- For Pharmacies. The clearing of the payments for prescriptions can be done immediately.
- For Social Security Funds. Automated validation of prescriptions should reduce incidence of fraud; eliminate the cost of paper, which is estimated at €2.3 per prescription; and better monitoring of expenditures.
- For Public administration. Reliable statistical data for informed policy making; better monitoring of the system.

A precondition of the smooth operation of the system is the broadband internet connection of all doctors with the system. However, internet connection or even computers with printers are not available in many remote areas with no permanent presence of doctors. As the new system did not allow the parallel use of the old paper based system several patients in remote rural areas experience problems in getting their prescriptions.

Source: TrendChart Public Sector Innovation Country Report in Greece, 2012

Non-ICT related examples can be found in Italy, where the introduction of ISO certifications for the health sector resulted in a perception of a better quality of the health services. There is also a major programme of reform underway in the UK, where the government's Health and Social Care Bill (due to be considered by the House of Lords) makes provisions for a number of key changes to the National Health Service, including: giving groups of General Practitioners (GP) and other healthcare professionals – clinical commissioning groups – 'real' budgets to buy care on behalf of their local communities; shifting many of the responsibilities historically located in the Department of Health (the ministry) to a new, politically independent NHS Commissioning Board; the creation of a health specific economic regulator with a mandate to guard against 'anti-competitive' practices; and moving all NHS trusts to foundation trust status.

These organisational reforms, or innovations, seek to locate decisions about the balance of healthcare service provision with the primary healthcare providers that work most closely with local communities. This is expected to produce more appropriate service mixes, and to create quasi-markets for the provision of healthcare services which it is hoped will improve both the quality and price of those services.

6.1.5 Social participation and open government

PSI in governance usually implies the concept of '*distributed innovation*' in which knowledge within and outside a public organisation is shared in an evolutionary dialogue (Bowden, 2005). This usually signifies a new role for citizens, in which they pass from passive 'consumers' of public policies to active producers. In these cases, public and private motives interact and blend together, and attempts to keep them separated can be counterproductive (Nauta and Kasbergen, 2009). These also might include innovative arrangements to reach a certain goal, such as unique public-private-partnerships (PPPs).

There are cases of PSI projects that could be considered instances of public sector **thinking "out of the box"**. The UK, Ireland and Denmark offer interesting successful examples where public services have been reinventing themselves in order to create an ecosystem for innovation at the local level. In the UK, the use of crowd sourcing as a tool of consultation was taken up in many recent programmes, such as the UK Red Tape Challenge (Figure 19) or the Cabinet Office's *Tell Us How* scheme[16] (an internal crowd sourcing platform for public servants who can suggest ways of improving service delivery). Germany has also advanced in this direction as part of its public sector innovation programme, by opening a portal of Geodata for localising statistical data on various types of maps[17]. In addition, it has also organised the contest

[16] See http://www.cabinetoffice.gov.uk/content/tell-us-how

[17] See http://www.geoportal.de/DE/Geoportal/geoportal.html?lang=de

"Apps for Germany", which resulted in the development of applications that rely on public data. The winners were awarded funds to develop for instance an application for services such as maps of neighbourhoods with facilities for parents and children, or an application for developing indexes of regional attractiveness[18].

In general, the new applications can be used as a source of information on where social issues are taking place at a level that was not possible until now. This may enable the government to allocate resources more efficiently and have better evidence for policy interventions, or solve specific issues directly through citizen participation.

Figure 25 The Fixyourstreet.ie website in Ireland

"fixyourstreet.ie" is an open-source online service where citizens can report issues to their local authority. The service consists of a publicly accessible web site with associated mobile technologies on which non emergency issues such as graffiti, road defects, issues with street lighting, water leaks/drainage issues, and litter or illegal dumping can be reported. The South Dublin County Council first introduced the FixYourStreet.ie web site in August 2011 as a means of mapping problems reported by residents. Since then, the service has been extended to a number of other local authorities and the Government has announced that it will be extended to all local authorities.

The FixYourStreet.ie facility allows residents to get feedback on how the issues they raised are being dealt with. The Programme for Government, published by the newly elected government parties in March 2011, contained this commitment to reforming local government: "*In local services, we will establish a website – www.fixmystreet.ie – to assist residents in reporting problems with street lighting, drainage, graffiti, waste collection and road and path maintenance in their neighbourhoods, with a guarantee that local officials will respond within two working days*." The information provided by residents via the FixYourStreet.ie web site allows local authorities to identify where issues are occurring and to allocate resources to deal with those issues.

A key benefit of the FixYourStreet.ie web site is the very rich data that it provides local authorities on where issues are taking place that have been reported by residents. This provides local authorities with information on the location and frequency of issues reported by residents that they could then use in terms of the prioritisation of resource allocation. As the web site was only launched in August 2011, it is too early to quantify the benefits to the participating local authorities.

One of the success factors is that the IT platform underpinning the FixYourStreet.ie web site is an open source and therefore is relatively inexpensive to maintain (and to develop ancillary functionality).

Source: TrendChart Public Sector Innovation Country Report in Ireland, 2012

The Total Place programme in the UK represented an innovation by examining local public services in a holistic way, taking the eco-system approach to improve service delivery, lower costs and ensure collaboration between the public, private and social sectors. As shown in Figure 26, the programme brought tremendous benefits to rationalising funding flows in the communities. The programme's model was taken further in recent ideas from the Innovation Unit, a not-for-profit social enterprise and NESTA, who encouraged the re-thinking of local services at an even more "radical" level termed ***radical efficiency***[19]. The concept not only aims at improving the existing services and cost-cutting, but also at creating new and different services with much better outcomes for the users. One example is the *Transforming early years programme,* in which children centres in six UK localities found new service models of reaching more families in need and saved costs[20]. A basic principle is the partnership with the users and changing perspective on how things function by for instance looking at other potential users who are not reached. The *Radical efficiency* programme is also an example of how design thinking based on prototyping and trials was applied to improving public services.

[18] See - http://www.verwaltung-innovativ.de/cln_339/nn_684674/DE/Presse/PM/PresseArchiv/2012/20120306__minister__zeichnet__apps__gewinner__aus.html

[19] See NESTA, 2010: *Radical Efficiency. Different, better, lower cost public services and http://innovationunit.org/knowledge/our-ideas/radical-efficiency*

[20] See http://www.innovationunit.org/our-services/projects/transforming-early-years for further information on learning from the implementation, service design and prototyping of the programme.

Figure 26 The Total Place Programme in the United Kingdom

The Total Place Programme was initiated by the UK Government in 2009 and was driven by HM Treasury and the Department for Communities and Local Government with the support of further institutional and social partners. The initiative was a response to the economic downturn. Its main purpose was to offer an innovative "whole area" approach to improve frontline public services that can lead to lower costs. It also sought to introduce new ways of working, through collaboration and local leadership, within the context of limited resources. Total Place tied in with the Building Britain's Future agenda of building the next generation of public services, in which front-line delivery organisations collaborate effectively to deliver more user-focused services and individual entitlements.

The initiative involved 13 pilot places that engaged in a financial mapping of their budgets and looked outside existing structures and processes to identify what needed to be changed in the way public funds are spent in the local community. On the one side, the pilots undertook the analysis from the top-down perspective, taking a holistic view on the supply of public services and on the bottlenecks in their provision. Total Place also engaged in a bottom-up analysis of the local services, which helped identify how they meet the customers' current needs and what future demands may be.

Total Place was really significant in a number of ways. It was driven by the frustration of central government with the inability of local public sector players in areas such as health and local authorities, to work together. Being driven by the Treasury was very important. It contributed to the possibility of scaling-up the initiative because innovation in the UK is not just about thinking of new things and creating ideologies, it is actually about putting them into practice.

The key to Total Place was that it examined all public services in a holistic way rather than focusing on health, welfare, etc. as individual services. It alerted local leaders to the significance of funding flows and how they can be controlled at a local level, thereby removing central government control over huge amounts of resources whilst ensuring they addressed local priorities.

The lessons learned in the implementation of the measure are that the new ways of working pioneered by leading local areas can be replicated everywhere by: starting from the citizen viewpoint to break down the organisational and service silos which cause confusion to citizens, create wasteful burdens of data collection and management on the frontline and which contribute to poor alignment of services; and providing strong local, collective and focused leadership which supports joined up working and shared solutions to problems with citizens at the heart of service design.

Source: TrendChart Public Sector Innovation Country Report in the United Kingdom, 2012

6.1.6 Education

EU member states invest heavily in their national education systems and most are continuously refining national policy and implementation strategies in order to improve educational attainment and optimise organisational efficiency. These are not static systems, and education is constantly adapting to meet the needs of the 21st century.

Our country correspondents primarily fed back examples of change that related to digital technology, and particularly the provision of services and advice through an online medium. Clearly, the ICT revolution has many more profound implications for education. It demands new content and teaching methods in order for young people to sat abreast of the new technologies and the ever changing skills required to master those applications. ICT also provides opportunities for transforming pedagogy, because it provides unparalleled levels of access to external information, new means of presenting and engaging with the information or knowledge and new ways of collaborating on learning. From electronic whiteboards to lap tops for all.

There are numerous non-technological experiments or innovations, such as inquiry-based science education (IBSE), which the Commission has supported quite extensively as a means by which to combat the widely reported 'flight from science' by young people. Elsewhere we see experimentation with new governance structures and increased autonomy for head teachers (e.g. Italy) or experiments with new performance measurement systems designed to incentivise individual schools to perform to their best abilities. There are experiments with different forms of financial assistance, such as the UK's Education Maintenance Allowance, which had for more than a decade, helped to support substantially higher levels of participation in post-16 education. In vocational training, we have modern apprenticeships, or international distance learning. Indeed, globalisation also exerts social and economic pressure, and provides opportunities for wider and richer learning.

On the other hand, economic recession, demographic pressures, and environmental stability are primarily felt as pressures rather than opportunities-though in responding to them, educators are coming up with innovations that enrich learning and help them in dealing with specific challenges.

Figure 27 The web portal for Slovak Universities

The Central web-portal for Slovak Universities provided by the Slovak Ministry of Education is a new platform that offers structured information on the quality of higher education. The web-portal publishes extensive information on teaching and research in Slovak Universities. In 2011 the web-portal started publishing information on the numbers of entrants and graduates by University; unemployment rates by graduates (by University and field of study); starting salaries by graduates (by University and field of study); fees and typical costs of life; opinion by students on quality of education; volume of foreign grants obtained by particular Universities; data on international student mobility; lists of the University teaching staff.

In addition, the portal also includes an e-Education module, which provides a means for recording and storing university e-courses. This supports the sharing of knowledge among professors and cooperation in designing better classes together. In addition, it enables a better overview of the classes on offer for external partners in the private sector, making it easier for them to find common ground and support the universities and the classes. The e-Education portal also provides students with the possibility to learn from the class materials posted online.

The Central web-portal is a very useful aid for potential University students, as it came as an answer to the lack of objective information on higher education institutions. The project is based on ideas on information 'asymmetry' developed by the Nobel Prize winners in economics George Akerlof and Joseph Stiglitz. The web-portal aims at decreasing information asymmetry between providers of education (Universities) and 'customers' – students, their parents and broader public. At the same time, its goal is to create more competition among higher education institutions, which should lead to more engagement in improving the quality of education.

Source: TrendChart Public Sector Innovation Country Report in Slovakia, 2012

6.1.7 Public-private-partnerships

Public-private partnerships (PPPs) have been much in evidence in the recent past, and are seen by many as being a powerful addition to governments' policy toolkits, sitting between a public-only intervention and a wholly-market based approach. PPPs are generally understood to be a good mechanism by which to reduce the extent of public responsibility (political, financial and managerial) in those areas where a quasi-market can be established. In principle, a PPP model provides the public sector with an ability to choose where to intervene with access to additional capital investment funds on the one hand and management and delivery skills on the other. Moreover, the fact that the private sector has access to reasonably predictable long-term income streams means they will often be prepared to underwrite part of the upfront costs and also accept a share of the risk in both the construction and operation of whatever agency or services are involved. Nevertheless, it is important to note that the setting up of PPPs has also been poised by instances of failure in several cases across the EU, due the potential risks of bad contractual design, lack of transparency, high costs or corruption that such hybrid organisations are particularly prone to. PPP initiatives have been used in areas from transport (e.g. the Beiras Litoral and Alta Shadow Toll Road, Portugal; the M5 tolled motorway, Hungary; the Perpignan Figueiras Rail Concession) to the criminal justice system (PFI prisons in the UK).

Innovative policy measures fostering public private partnerships are mentioned specifically in two countries: Germany, and the Netherlands. Here, the policy framework was renewed by further refining the legal aspects of establishing such cooperation projects and by forwarding research on optimal organisational design. Especially the German case shown in Figure 28 below gives an alternative idea for tacking the high risks PPPs bring for the public and private sector. The introduction of a more transparent mechanism for creating PPPs, and the facilitation of such endeavours by a specialised entity are key innovations.

Figure 28 Public-private-partnership models for public investment in Germany

The German Federal government regards Public Private Partnerships (PPP) as an important element of a modern and efficient public administration. Promoting PPP models is part of the government's effort for

more innovation in public administration, particularly in the area of infrastructure investment. This not only includes transport infrastructure but also public construction projects, e.g. new building of offices. PPP should help to cut costs of such investment by about 10%, which contributes to budget consolidation. PPP models are also intended to speed up investment and provide higher quality of infrastructures by making a better use of know-how of the private sector. At the end, user satisfaction should be higher with PPP models compared to traditional public investments.

The Federal Ministry of Finance (BMF) and the Federal Ministry for Transport, Construction and Urban Development (BMVBS) founded the 'ÖPP Deutschland AG (Partnerschaften Deutschland)' ('PPP Germany Corp. [Partnership Germany]') in 2008 to further promote the use of PPP models in public administration. ÖPP Germany continues earlier attempts that have been organised within a PPP competence centre and PPP task forces within the BMF and BMVBS. ÖPP Germany is supposed to improve the legal and organisational environment for PPP use by public authorities. It provides consultancy services to public bodies at the federal, state and local levels in the context of PPP projects. It also gets involved in setting up, planning and managing PPP projects. Public bodies that signed a framework agreement can only use services of ÖPP Germany. ÖPP Germany is owned by public bodies (57%) and private sector organisations through a holding company (43%). Shares in this holding company were sold to private investors across Europe based on a public tender. ÖPP Germany has published a number of documents on PPP models for specific areas of public investment, ranging from road construction, hospitals and schools to IT projects, public lighting and medical technology.

The results shown in the mid-year report 2012 of ÖPP Germany provide evidence that PPP projects have been producing visible benefits in terms of cost reduction for the public sector. In comparison with conventional infrastructure investments, PPP projects have brought efficiency advantages, as their productivity was 13.6% higher in the first half of 2012.

Source: TrendChart Public Sector Innovation Country Report in Germany, 2012

6.1.8 Success factors and lessons learned from successful PSI in the EU

During the review of the selected examples, it was not possible in every instance to provide a comprehensive set of reasons of why the innovation was successful. It is clear that these assessments are subject to interpretation and an individual's subjective view of what constitutes an innovation. Nevertheless, there are a number of factors, or shared characteristics from the selected examples of Public Sector Innovations, that may contribute to the initiation, development and implementation of innovations (see Figure 29). In many cases, these factors are dependent of the type innovations introduced and the sectors of implementation. However, in most of the cases, the success factors are very much linked to factors within public sector organisations, related to management structures and support from leaders and high-levels of hierarchy.

These derived lessons are not a recipe for successful innovation, but only indicators of potential contributory factors in the scope of the selected cases. They can also be interpreted as a set of broad policy recommendations.

Figure 29 Success factors and lessons learned of Public Sector Innovation in the European Union

Sector of application	Success factors	Lessons learned
E-government	• Support from high-levels of management • Ensuring the online services are performed in conditions of high data and transactions security • Training civil servants and providing incentives to foster their commitment for simplification measures • The 'friendliness' of the only systems towards the users (citizens and business) is an important determinant of success	• Acknowledging the digital divide, particularly for citizens with lower digital literacy • Ensuring that there is demand for the new services introduced • Local institutions usually take longer to adhere to online systems • Careful planning is needed for implementing large IT platforms • The IT systems need to be user-friendly • The technical infrastructures need to be robust
Administrative simplification	• Continuous communication between all public agents involved, notably through internal communication actions • Strong leadership from high-levels of hierarchy, and direct involvement in promoting the initiatives • Peer pressure from contributors and users (citizens and businesses)	• A more targeted approach to reducing administrative burdens and more coordination between different administrative units could ensure a more efficient implementation of PSIs
Public procurement	• Wide agreement across government on the urgent need to transfer public procurement to an electronic environment • Knowledge transfer from other countries or similar initiatives, EU policies and regulations regarding e-procurement • Using a gradual step-by-step implementation process • Commitment of all stakeholders involved • Engagement of users and producers in the planning and design phases of PSI projects	• More emphasis should be given to the user-friendliness of procurement systems • Innovations might require further needs to re-adapt legal frameworks • The digital divide and digital illiteracy should be acknowledged • Training and standardisation are also needed • Resistance and prejudice of various stakeholders needs to be taken into account
Health and e-health	• Finding the right balance between regional/local and national interests and priorities	• Cooperation from all relevant stakeholders needs to be established from the beginning • A flexible demand management process must be put in place • E-health initiatives need to account for the technical divide in order not to discriminate towards people that is not computer illiterate or does not have access to technology
Social participation and governance	• Leader support from high-levels of government	• A citizen perspective/viewpoint should be used • Provide strong local, collective and focus leadership is key
Education	• Use of a partnership approach involving all relevant constituents in the design and implementation of PSI • Keeping projects on-time and budget	• Utilising efficiently expertise from both the public and private sectors

6.2 Less successful examples

6.2.1 Administrative simplification

There are several remarks from public officials about the lack of success of some measures aiming at the simplification of administrative procedures in the public sector. The reasons generally mentioned for such failures were the **poor internal organisational structure** or **low managerial capacity** to implement them. In Bulgaria and Romania, for instance, the Action Plans for the reduction of the administrative burden by 20% and 25% respectively until the end of 2012 (in line with the Commission's target) are not close to being reached. Also, in Estonia, a measure for introducing service standards in the local administration was not well implemented across all municipalities.

In Spain, a measure introducing the single contact point for businesses was problematic because single contact points in the country have multiplied to serve several policy areas separately, without a proper evaluation of their rationale, creating confusion among Spanish users. Another less-successful example in Spain relates to the transformation of several Spanish public organisations into politically independent Public Agencies that were intended as being performance oriented and autonomous. However, the pre-existing **rigid organisational structure**, the **lack of leadership** and the **resistance of the personnel to change** diminished the positive impact of the measures.

Figure 30 The UNITAS project in Slovakia

The UNITAS is a major national reform programme launched in 2010, which was intended to deliver wide-ranging improvements in efficiency and effectiveness of the Slovak financial authorities. The project ran into difficulties in late 2011 and the authorities had not fully recovered the situation 12 months later.

The project involved several interconnected projects aimed at unifying of tax, duties and social insurance payments by 2013. The UNITAS project intended to: decrease the number of administrative units and administrative staff; cut costs for reporting and collecting payments related to taxes, duties and social security payments; fight tax evasion and increasing revenue from obligatory tax and social security payments.

The UNITAS projects contained both organisational changes (reform of the tax, duties and social security administration) and new software solutions aimed at interconnecting partial reporting systems. The first part of the project (interconnecting tax and duties systems) concluded in February 2012, the second part (interconnecting, tax and duties systems with the social security payments) will be complete by the end of 2012. The cumulative costs and benefits of the UNITAS projects across the period 2010-2017 were estimated at €243m for the costs and €328.4m for the benefits (cost savings). However, difficulties with project implementation – see below – have rendered this cost-benefit analysis redundant.

The Operational Programme Information Society supported the software solution part of the project.

As for the organisation changes, the project had achieved some progress. The tax offices were merged with the duties offices and the new Financial Office created in 2011. The merger helped cutting personal costs related to collection of taxes and duties. Costs of the software solution were estimated in €24.5m. The project, however, coped with great technical and managerial difficulties.

Our interviewees said there were several reasons why the UNITAS projects had failed to make sufficient progress, which included a degree of mismanagement and inexperience among the project team. The project leaders unexpectedly changed major contractors in November 2011. The new contractor, however, failed to provide complex services related to introduction of the software solution. As a consequence, the Slovak tax collection system came close to collapse in March 2012, when citizens and firms were submitting annual tax statements. The tax collection rate decreased in the period April-June 2012. The Director of the Financial Office had to resign and the Minister of Finance acknowledged personal responsibility for the project mismanagement. Staff in the tax offices had to process tax submission on paper. Problems with the replacement of software solutions opened ways for tax evasion and tax frauds. In June 2012, the future of the UNITAS project was unclear and several commentators speculated that the project may not be completed fully before 2016.

Source: TrendChart Public Sector Innovation Country Report in Slovakia, 2012

6.2.2 E-Government

Innovations that were implemented unsuccessfully by public administrations often have an ICT component. One commonality of the failed projects was the need to be

implemented at a large-scale, generally at national level. This made the projects highly complex, and made the project management difficult to handle. A further cause for failure of such innovations was the lack of prior assessment of the users' actual needs, which led to very low usage of the technologies introduced, and thus conducting to the inefficient expenditure of public funds.

The UK Parliament's Public Administration Committee (PAC) has recently published a report looking in to the government's track record in IT, which is colourfully entitled, Government and IT "A recipe for rip-offs": time for a new approach (28 July 2011, HC 715). The report found several common shortcomings that had led to very substantial cost overruns, major delays and even failed projects. While scale and complexity were very clearly fundamental challenges, there were many more specific concerns raised about the potentially negative impact of government culture, behaviour and skills. The report expressed concern about the over-reliance on a small number of very large suppliers (an "oligopoly" of contractors), a shortage of suitable skills and experience within Whitehall itself and an inability of senior officials to think through the problems arising from legacy information technology (IT) systems. The Committee was most critical about weaknesses in the Government's capacity to plan and drive through systemic change in the way it exploits IT in delivering public services. It seems unlikely that these sorts of problems are unique to the UK, and the PAC report and the UK government's constructive response to it, may make helpful reading for other public administrations.

Figure 31 Long-drawn process of implementing e-governance in Latvia

While the topic of e-governance has been on the national policy agenda in Latvia since the adoption of the Concept in 2002, recent international benchmarking exercises still reveal Latvia's notable lag behind many neighbouring countries in terms of introducing eGovernment systems. In 2012 it was ranked 42nd in the world according to the United Nations' index for the development of e-governance thus placing it last among the ten Northern European countries (Estonia – 20th, Lithuania – 29th). The Concept and the range of subsequent strategies, programmes and action plans (e.g. Development programme of electronic governance for 2005-2009; Development plan of electronic governance for 2011-2013) elaborated with an aim of modernising public administration for improving the quality and efficiency of public services in Latvia have in several cases been accompanied by a rather slow and cumbersome implementation of the envisaged practical measures.

According to some national analysts, the development of eGovernance in Latvia has more frequently been driven by the availability of the EU funding and the initiative on behalf of individual institutions rather than the daily needs of people. There have also been delays in the full implementation of a range of measures, including the introduction of e-signature in 2006 that has witnessed considerable financial public investments but rather limited uptake both due to the initially involved direct costs for users, lack of information, passivity of public authorities and the comparatively limited scope of services open to the use of e-signature. This has had an effect on the slow progress made also with regard to other components of eGovernment as, for instance, eHealth, where Latvia is among the last EU countries to introduce such a system.

It is, nevertheless, worth noting that eGovernment benchmark survey 2010 ranked Latvia 15th among 32 European countries surveyed in terms of the online availability of public services. The results of the survey also showed that Latvia has demonstrated marked improvements (more than 25 percent) on this indicator over the year 2010. Among the recent practical achievements one could list the establishment and the expansion of the national eProcurement system, the set up of new state and municipal information systems and the launch of the eGovernment one-stop-shop portal www.latvija.lv providing both a public services directory and eServices. Moreover, the web-based document flow system (DAUKS) has been launched, allowing the standardised and automatic circulation of documents between the State Chancellery and the ministries.

Last but not least, the years 2011-2012 finally marked the introduction of ID cards and virtual signature. This step has also slightly boosted the number of the users of electronic signature from 12,000 in 2011 to 37,300 by October 2012. Yet for the time being it still makes up only 1.8% of the population in Latvia, showing the need for further efforts in popularising this means of eGovernance in Latvia.

Source: TrendChart Public Sector Innovation Country Report in Latvia, 2012

6.2.3 Performance management

Several countries mentioned the blockages encountered during the implementation of the *Common Assessment Framework* (CAF) as examples of initiatives with poor results. This has mainly been put in connection with the insufficient development of

governance tools for performance management and monitoring and evaluation systems. Such issues were raised in Austria, Belgium, Estonia and Greece. This points to the need for a more thorough study of the barriers encountered in implementing this initiative and the solutions that could be brought to it.

The introduction of performance monitoring systems has been problematic in some countries as well. This is the case of Lithuania, which introduced PSI initiatives that were very large in scope and aimed to radically change the current structures, however resulting in severe difficulties during the implementation phase.

Figure 32 Civil service reform in Lithuania

Lithuania is considered to have the most comprehensive and the most coherent approach to civil service reform among the new EU Member States.[21] However, if compared to some older EU Member States Lithuanian civil service is not so modern. One of its key weaknesses is slow progress of public administration towards results (and not process) based management.

In 2010 Office of Prime Minister has prepared a new version of Law on civil service[22]. New draft legislation has been prepared with an aim to modernise current civil service, to change the current civil service system by moving away from process towards results-based management approach. New legislation intended to modernize the salary system, foresaw the possibility of senior civil service, simpler and more modern hiring procedures, new motivation system and many more relevant changes. All changes were part of consistent and systematic civil service reform proposal. The proposed changes would have radically improved civil service in Lithuania by making it more efficient and effective by raising the quality of public services provided for citizens and business with lower or at least the same budgetary costs. All civil servants would have been affected by the reform. However the new legislation was not adopted in the Parliament.

The key reason for this failure was the lack of understanding of the potential impact of this reform in the Parliament and thus lack of critical number of members of the Parliament supporting the reform and making it another flagship initiative in a country. Furthermore, the new Law on civil service was drafted and presented without any support from external experts from e.g. international organisations such as World Bank or International Monetary Fund. Opinion of external experts, based on extensive evidence of results of similar reforms from other countries, could have changed opinion of legislators towards this reform.

Civil service is being reformed. However this is done not in systematic way as was proposed in new Law on civil service, but in more fragmented way. For example, separate amendments to the Law introduced as of 2013 simpler and more innovative methods for hiring public servants, promote generic skills such as leadership or communication, introduced 4 years tenure for executive officials at the ministries, changes of the assessment of civil services by linking performance to results and strategic planning process. However these are rather slow incremental improvements and not a radical reform. Elements, which were the backbone of the proposed new version of Law on civil service – reform of salary system to make it more explicit and transparent and introduction of new measures to raise motivation of civil servants – are not yet implemented. There are expectations that they would be on the agenda of a new Government coming to office at the end of 2012.

Source: TrendChart Public Sector Innovation Country Report in Lithuania, 2012

6.2.4 Health and e-health

A particular application of ICT projects is e-health programmes aiming at modernising health systems across Member States. While the number of less successful e-health programmes that were implemented in the Member States is lower than the amount of successful e-health cases, this type of project was commonly associated with a **lack of proper planning** and **realistic targets**. Moreover, these projects usually exceeded their planned budgets and foreseen costs. In the Czech Republic, the introduction of health registry cards by the Ministry of Health proved to be a highly complex endeavour, which had to be cancelled.

[21] See for example Sigma paper 44 on Sustainability of civil service reforms in Central and Eastern Europe five years after EU accession, available at: http://rcpar.org.server320.dnpserver.com/mediaupload/publications/2009/20090507_Sigma_PAR_in_CEE_after_EU_accession.pdf

[22] New version of Law on civil service is not publicly available thus not provided in this report.

Figure 33 Health Registry Cards (IZIP) in the Czech Republic

The project of Electronic Health Registry Cards (IZIP) was launched in 2002 by the VZP (General Health Insurance Company), state-owned and the biggest health insurance company (with more than 6.5 million clients) in the Czech Republic. The IZIP company operating the health registry cards is a private company, however, with 51% of its shares are owned by the VZP insurance company since 2011.

The electronic health registry cards contain medical information of individual patients, available on internet with a high level of protection against misuse. The system enables interconnection of healthcare, patients and health insurance companies. It serves for transfer of information between a doctor and a patient or between patient's doctors, as it contains information on history of patient's insurance, overview of healthcare provided, reimbursed fees and balance dues for medication. Provision and operation of the card is free for the clients of the VZP.

The introduction of the project relates to the efforts of the Ministry of Health towards computerisation of the Czech healthcare system and increase of the efficiency of communication between a doctor and a patient. Until 2012, 2.5 million patients, 20 thousands medical practitioners and 8 thousands medical facilities registered into the system. During ten years of its existence, the project accounted for CZK 1.8 billion (approximately €70m) spent by the VZP insurance company. However, in mid-2012, after ten years, the IZIP was terminated by decision of the prime minister and the minister of health of the Czech Republic, as the project was found non-functioning and insufficiently utilised. Detailed findings of the project's audit are unfortunately not available. During its operation, the project was often criticised due to low transparency of financial flows and insufficient utilisation of the system. The insufficient utilisation is partially caused by low willingness of practitioners to communicate electronically, namely with their employers and commercial insurance companies, as shown in a recent survey on this issue.

Nevertheless, the Ministry of Health prepares a new project for computerisation of the Czech healthcare which should connect electronic systems of particular health insurance companies (including introduction of health registration cards) functioning separately at the moment.

Source: TrendChart Public Sector Innovation Country Report in the Czech Republic, 2012

Figure 34 The E-receipt project in Finland

The idea behind an e-Receipt is good – the doctor makes and signs the prescription electronically, and all prescriptions are saved in a national database, called the Receipt Centre. The Centre is maintained by Kela (the Social Insurance Institution of Finland). Any pharmacy utilising the e-Receipt system in Finland can deliver medication to the citizen. After a planning phase of several years, the system was first piloted in 2010 followed by launch in 2012. The implementation phase extends to March 2013. The innovation affects all citizens as paper versions become unnecessary, and a patient can collect the prescribed medication from any pharmacy in Finland.

The renewal would not have been possible without a change in Finnish legislation. The new law entered into force April 1st 2007. The aim of the change was to increase patient and medicine safety as well as to ease and make the prescription and delivery process of a receipt more efficient. The system also allows the authorities to gather necessary information for health care purposes.

The renewal of the receipt system has been said to create savings, improve the safety of patients (the doctor can for instance easily see all prescriptions of a patient at once and make necessary changes immediately), and exploitation of receipts will become more difficult. On the other hand the planning phase was prolonged and the start of implementation phase required extensive information and education campaigns. Furthermore, the new system adds to the administrative burden of doctors before it has been adapted. It may take a few years before the actual benefits (in terms of savings, increased efficiency) become detectable.

The innovation is based on IT system(s) that change rapidly. There is a risk of planning a system that already is outdated once released. The challenges increase if the field utilises a variety of IT systems instead of standardised one. A prolonged project often stands for increasing costs, which was also the case with e-Receipt.

Source: TrendChart Public Sector Innovation Country Report in Finland, 2012

6.2.5 Social participation and open government

Lessons from the Irish case below show that the main reasons of failure are related to the technical aspects of the implementation of PSI or ICT related issues, such as a the lack of a meaningful testing of the technical systems; and software problems including design weaknesses that reduce user's confidence. Moreover, lack of transparency also proved to be a crucial factor of failure, particularly in the planning and implementation phases.

Figure 35 eVoting in Ireland

Electronic voting was first introduced on a pilot basis in the 2002 general election and in the 2002 Nice

Referendum, in three constituencies. The Government signalled its intention that e-voting would be extended to the whole country for the next general election. A number of reasons had been advanced for the introduction of e-voting, one of which was that it might help to reduce the cost of holding elections, particularly in terms of the counting of votes. Another benefit cited was that it would increase Ireland's standing and prestige as a knowledge economy.

A confidential report expressed concerns over the security of the voting machines but despite this, the Government pressed ahead with its plans to introduce e-voting for the local and European parliament elections in 2004. The Government appointed a Commission on Electronic Voting in 2004 which was tasked with producing a report within eight weeks on whether e-voting should proceed or not. Its initial assessment was that it did not have sufficient confidence in the e-voting system selected by the government. The Commission issued its final report in 2006 and was then disbanded. E-voting has never since been used in an election in Ireland since the pilot in 2002.

The Irish e-voting initiative can be described as a total failure. The government purchased over 6,000 e-voting machines in 2003, which were never used. The machines had to be stored at considerable expense before a decision was taken in 2012 to sell them for scrap. The cost of the e-voting initiative has been estimated at over €55m.

Critics of e-voting have maintained that no meaningful testing of the system was carried out and that the software used was not fully finalised. There are also questions as to whether a complete functional specification had been developed for the e-voting system. Criticism was also expressed that the process of introducing e-voting had been flawed with insufficient attention being given to researching the most appropriate system. The Commission on Electronic Voting noted that there had been design weaknesses in the software used and this had reduced its confidence in the software. There was also concern among the general public that the Government had not been transparent in releasing reports, which were believed to have been critical of the e-voting system.

Source: TrendChart Public Sector Innovation Country Report in Ireland, 2012

6.2.6 Social security

Our country correspondents provided just one example of a failed innovation in the social security arena, which was an early-retirement scheme in Austria. No doubt there are other examples of failed initiative in other countries, however the lessons from this particular case do seem to have a more general resonance. From the Austrian failed case, we conclude that Governments need to take into account the perverse incentives a specific regulation may introduce. This means better (ex-ante) impact assessments and better evidence supporting the decision-making process. Otherwise, unexpected results of the policies can lead to tremendous increases in the costs incurred in the public budgets.

Figure 36 Early retirement scheme in Austria

The Austrian pension system suffers from the fact, that the actual retirement entry age was 57 (women) respectively 59 (men) in 2011, although the statutory retirement age is 60 for women (born before 1960) and 65 for men (born before 1955). Currently more than 80% of the Austrian labour force accesses retirement pensions before attaining the statutory retirement age, which causes not only less contributions to the public pension funds, but also absolutely more cash outflows from the public pension funds.

In course of a large reform of the pension system in 2000 resulting in a decision for a stepwise increase of the de facto retirement age, the "Hacklerregelung" was introduced as a sort of security guarantee for the elder part of the Austrian labour force by excluding long-time contributors to the pension system born before 31.12.1958 (women) respectively 31.12.1953 (men) from an increasing earliest possible retirement age without being forced to penalty (i.e. discount) for early retirement (at the age of 55 for women and 60 for men). In addition, a preferential regulation was introduced for heavy workers (the so called "Hackler" in Viennese colloquial language). Today, the "Hacklerregelung" is the only possibility for the healthy part of the population to attain earlier than statutory retirement without penalty discounting.

While the literal heavy workers justification for early retirement was absorbed in a manageable way, the long-term contribution approach (40 years for women and 45 years for men) became heavily demanded by parts of the elderly labour force and caused an unexpected pre-drawing of early retirement applications (and approvals), also by professional groups who were initially not targeted by this measure (civil servants without tertiary education; elementary teachers etc.). In 2010, 73% of all early retirements were executed on basis of the "Hacklerregelung", which causes a heavy burden for the public budget, which has to co-finance the self-governing pension system in Austria. Conceptualised as instrument to signal security and to appease a certain group of voters (e.g. heavy workers), the "Hacklerregelung" turned out to become a perverse incentive for early retirement.

In order to reduce the public budget deficit, which expanded due to the financial crisis and its aftermath as of 2008, the rules for applying the „Hacklerregelung" were modified again in 2010. An important element was to substantially increase the costs of "buying back" school- and tertiary education years to make them eligible as contribution years. More important, however, is that as of 2014, the entry year for attaining the

"Hacklerregelung" will be increased by 2 years (for women from 55 to 57 years of age and for men from 60 to 62 years of age), which resembles the regular – however penalty based - early entry scheme for attaining a retirement pension. If the Austrian labour force continues to access retirement several years before attaining the statutory retirement age the opportunity costs can amount up to €5b yearly.

Source: TrendChart Public Sector Innovation Country Report in Austria, 2012

7. Potential for future Public Sector innovations

In carrying out fieldwork, the study team invited all interviewees and other contributors to reflect on the potential for further innovation in the public sector nationally and in particular the potential for innovation in public administration.

The individual suggestions comprised both work-in-progress, as with the Romanian project to redesign the corporate governance of public enterprises by introducing private sector specialists and structures, and to-do-lists as with the Slovakian ambition to use organisational innovation to improve the quality of public services across the system (while reducing costs). Elsewhere, contributors outlined their personal views on key opportunities which ran the full spectrum of possibilities and was summed up by our Swedish discussion partner who observed "there is potential everywhere."

7.1 Points of convergence

There were several patterns evident in national perceptions of future possibilities, which included: an almost universal recognition of public procurement as a means by which to 'buy-in' innovative solutions; and a similarly widespread commitment to the further extension of e-government to most if not all areas of public service provision, to reduce costs while also improving the functionality, speed and user experience.

The Latvian government hopes public procurement (pre-commercial procurement) may unlock important new products and services, however it recognises that the scale of its national procurement activities is almost certainly too small to provide the financial platform for experimentation with novel solutions. In this case, public procurement seems likely to work only if Latvian public-sector clients are able to come together with their neighbours in the Baltic region or selectively with other countries or regions elsewhere in the EU. These public procurement initiatives are well advanced in several EU member states, with countries like the UK having implemented a version of the US-based small-business research initiative (SBRI) for example, in the late 1990s.

The e-government 'project' is also moving beyond the core of public administration to encompass a majority of other services too, from health to economic affairs to public utilities. The depth of ICT-based functionality is also expected to continue to increase.

There were also numerous references to the need to strengthen the links between national, regional and local public administrations, to improve coherence / consistency of service provision and quality on the one hand and the efficiency and effectiveness of e-government models on the other. Finland for example has suggested that innovation at the local level is the new frontier.

7.2 Other notable opportunities

Several countries reported ongoing or anticipated national projects to introduce different versions of 'management-by-results,' which ranged from quite comprehensive proposals for the introduction of performance-based budgeting in Austria through to the implementation of a Common Framework for Assessment (CFA) in Greece, which will be used to assess the performance of administrative units and civil servants. France is similarly reported to be looking at opportunities to increase the use of performance standards and norms as a reference point for the assessment of the public administration. This decision is motivated by the economic

crisis and a growing view that public services should be judged routinely on their performance and value for money.

Elsewhere there were suggestions about the opportunities for increased standardisation of certain 'back-office' functions, such as human resource management, payroll, security, ICT procurement, and so on. This it is argued should reduce unnecessary variation on the one hand, facilitating institutional specialisation around core functions and value added, and allowing the entire pubic estate to gain efficiencies and quality enhancements through economies of scale. In Portugal, the government has created a new high-level body to manage the recruitment of both senior civil servants and the managers of state enterprises in an effort to reinforce a more general commitment to a meritocratic system where appointments are made in the light of demonstrated past performance judged on standard criteria. This offers some small economies over the previous approach, but is critically expected to help to spread a new culture throughout all levels in the public sector. One might imagine that the more open and transparent process of making senior appointments might reduce the influence of patronage or at its worst cronyism within the public service.

We also heard of several cases where countries are working hard to shrink their public administrations while minimising any deleterious effects on the quality of their services, through a determined process of simplification of services and de-duplication of controls / governance on the one hand and the consolidation of smaller public administrations and services in larger and more efficient bureaucracies on the other. Commentators also see there is potential for further '*agencification*' and outsourcing and taking this to a new level, new public-private partnerships hold out the potential for both novel service models and leveraging public finances.

7.3 Evident differences among Member States

Considering the feedback provided overall, there is a marked difference in the focus and tone of the national 'to-do-lists' that splits between those countries that have been at the forefront of public sector innovation for several decades, such as Belgium, Denmark, the Netherlands, Sweden or the UK, which all report quite sophisticated ambitions, and the larger group of 'follower' member states, which are still very much concerned with more fundamental reforms of public institutions, '*quasi-marketisation*' and the widening of e-government.

The innovation leaders speak about radically new approaches to defining and delivering public services (beyond core public administration functions), with for example, Belgium and the UK launching quite substantial pilots to explore the value and feasibility of co-production methodologies: reconceptualising key aspects of healthcare provision for example (rethinking the boundaries between professionals and patients, strengthening the principles of mutuality and reciprocity). Elsewhere we heard about crowd-sourcing and other variants of public-driven innovation (e.g. employees, users, citizens) as a means by which to reveal new possibilities and design radically different methodologies and solutions. In the UK, this idea of open innovation and open solutions – using new social media – is taking hold in several areas of public service delivery, from healthcare to welfare.

Hungary for example sees a pressing need for fighting corruption and improving inter-agency cooperation, while Poland is embarked on a national project to upgrade the ICT infrastructure of its public institutions to secure important efficiency gains.

Intriguingly, there is a clear message regarding the centralisation of support functions, while frontline services are developing in a manner that permits very much higher levels of user specialisation: massification and standardisation appear to be running in parallel with increasingly bespoke service delivery.

8. Conclusions and challenges ahead

This report presents an overview of Public Sector Innovation (PSI) in the European Union as revealed by a pan-EU survey carried out in autumn 2012. The study sought to gather the perceptions of public officials and national experts alike as regards the development of public sector innovation across the EU, mapping specific examples of innovations on the one hand and detailing motivations and lessons learned on the other.

The public sector has a great potential for innovation, a potential that is increasingly recognised across Member States. Innovation in the public sector is predominantly seen as a means to address either growing budgetary pressures, through more efficient administration or service delivery, or new societal demands, through different and more effective services. Moreover, PSI can make a profound difference in improving service to the public and creating public value.

In the great majority of Member States, public sector innovation is driven 'top-down' by politicians or senior officials seeking to deliver vote-winning service improvements or budget saving efficiency gains. This is perhaps to be expected given the scale of most public administrations and the attendant risks for both citizens and politicians of a well-meaning but ill-considered innovation. Innovation is inherently uncertain and the challenge of doing it successfully, or without grave and negative consequences is arguably more profound for the public sector as compared with the very great majority of businesses. In a minority of countries, bottom-up approaches are also increasingly reported. This is generally in addition to the top-down strategy, which appears to hold in all countries. This 'bottom-up' approach is partly cultural (e.g. strong in Scandinavia), but is also particularly evident in those Member States where public sector reform and innovation is well established and has already produced more decentralised administrative and delivery systems. Within these less hierarchical structures, even quite junior members of staff are encouraged to come forward with any ideas they may have for improving service delivery (quality) or any other aspect of organisational performance. Citizens, in the broadest sense of the word, are also increasingly consulted on outline proposals for service improvement and given opportunities to challenge or redirect suggested strategies.

The pan-EU survey has led to the identification of specific barriers to PSI, among which the main are: a shortage of available resources, people and money; risk aversion of large public-sector bureaucracies; and political factors, such as political influence and micro-management. The later pose a particular challenge for more radical innovation. These barriers or impediments to innovation in the public sector do not look dramatically different to those found in the private sector and tracked regularly through the Community Innovation Survey.

The innovation process occurs in specified sectors of the public sector. In addition, it happens at different levels, involving a wide range of different institutions and actors within the public policy governance system, and at various geographical levels (national, regional, local). We learned from the survey that some of the most important innovations occur at the regional level or at the point between service delivery and service use, and in many countries this direct experience produces immediate and sometimes vocal feedback that may also manifest itself in the ballot box. The connection between public administration and the social contract is very much more obvious at the local level as compared with the national and international arenas.

Our survey found E-government was the most widespread category of public sector innovation, with examples ranging from the introduction of online filing of tax returns through to open government and on to e-health. Our country correspondents confirm continuing progress in online service delivery in most EU member states, with the very great majority having put in place e-government strategies and launched various ICT projects to improve the quality and functionality of public services while also producing public sector efficiencies and streamlining governance systems. Among the

e-government leaders, innovative technology solutions are gaining recognition as a means by which to deliver social gains and inject a little extra economic dynamism through the improved functioning of core services. The leading edge in eGovernment appears to be pushing in two related directions, one of which is more sophisticated technologies while the other is concerned with system-wide connections and coherence and in particular interagency coordination.

Smart regulation and administrative simplification have been a focus of government reform for several years, with the European Commission launching a series of initiatives in the past decade, notably presenting a new programme for measuring administrative costs, in 2007, and making a commitment to reduce the administrative burden of EU legislation. In line with this broader European 'project,' almost all of our country correspondents identified several national projects dealing with the reduction of administrative burdens. The associated simplification initiatives have sought to discard redundant or duplicative legislation, shorten new laws to make them easier to understand and less ambiguous (with detail where needed tackled in for example accompanying codes or standards) and to reinvent the processes by which citizens or businesses make use of or comply with various aspects of legislation, from employment law to tax. While the main focus has been on efficiencies and cost saving, most governments link the regulatory reform and simplification agenda with improving public services for citizens and businesses. In that sense, service quality and service effectiveness remains a foundation stone even within the context of widespread austerity measures.

More than half of our country correspondents cited examples of innovation relating to public procurement. Almost all process improvements in relation to public procurement were related to the introduction of an online platform that offers more transparent information or easier application processes for tenders. This emphasis on e-procurement arguably reflects concerted action by the European Commission to make this approach the rule rather than the exception for all Member States. Public procurement is also widely promoted as a means by which to drive innovation in public services, with large public sector clients or groups of clients being encouraged to commission a greater proportion of goods and services that are novel or innovative in nature.

Most EU Member States have national policies that seek to improve quality of service and health outcomes (including equality of outcomes), while also reducing costs. Several countries indicated the introduction of innovations in the provision of social services as successful examples of PSI. These examples are, however very sensitive to the national configuration of social policies and the constellation of actors engaged in implementing it. Moreover, the innovations mentioned by public officials relate to the micro-level of the provision of social services and do not give the clearer picture of how they connect to overarching policy changes or other factors. From the point of view of the interviewed public officials, these innovations are mostly related to the use of ICT tools for simplifying the processes of reaching or engaging the end-users of the services. This is particularly the case for e-health projects including the development of national platforms for information and enhanced interaction with patients, or the introduction of health insurance cards.

EU Member States invest heavily in their national education systems and most are continuously refining national policy and implementation strategies in order to improve educational attainment and optimise organisational efficiency. Our country correspondents primarily fed back examples of change that related to digital technology, and particularly the provision of services and advice through an online medium. Clearly, the ICT revolution has many more profound implications for education. ICT also provides opportunities for transforming pedagogy, because it provides unparalleled levels of access to external information, new means of presenting and engaging with the information or knowledge and new ways of collaborating on learning. There are numerous non-technological experiments or innovations, such as inquiry-based science education (IBSE), which the Commission has supported quite extensively as a means by which to combat the widely reported

'flight from science' by young people. Elsewhere we see experimentation with new governance structures and increased autonomy for head teachers (e.g. Italy) or experiments with new performance measurement systems designed to incentivise individual schools to perform to their best abilities.

Public-private partnerships (PPPs) have been much in evidence in the recent past, and are seen by many as being a powerful addition to governments' policy toolkits, sitting between a public-only intervention and a wholly-market based approach. PPPs are generally understood to be a good mechanism by which to reduce the extent of public responsibility (political, financial and managerial) in those areas where a quasi-market can be established. In principle, a PPP model provides the public sector with an ability to choose where to intervene with access to additional capital investment funds on the one hand and management and delivery skills on the other. Innovative policy measures fostering public private partnerships are mentioned specifically in two countries: Germany, and the Netherlands. Here, the policy framework was renewed by further refining the legal aspects of establishing such cooperation projects and by forwarding research on optimal organisational design.

There were several patterns evident in national perceptions of future possibilities for Public Sector Innovation, which included: an almost universal recognition of public procurement as a means by which to 'buy-in' innovative solutions; and a similarly widespread commitment to the further extension of e-government to most if not all areas of public service provision, to reduce costs while also improving the functionality, speed and user experience. The e-government 'project' is also moving beyond the core of public administration to encompass a majority of other services too, from health to economic affairs to public utilities. The depth of ICT-based functionality is also expected to continue to increase.

Several countries reported ongoing or anticipated national projects to introduce different versions of 'management-by-results,' which ranged from quite comprehensive proposals for the introduction of performance-based budgeting in Austria through to the implementation of the Common Assessment Framework (CAF) in Greece, which will be used to assess the performance of administrative units and civil servants. This decision is motivated by the economic crisis and a growing view that public services should be judged routinely on their performance and value for money. We also heard of several cases where countries are working hard to shrink their public administrations while minimising any deleterious effects on the quality of their services, through a determined process of simplification of services and de-duplication of controls / governance on the one hand and the consolidation of smaller public administrations and services in larger and more efficient bureaucracies on the other.

The need to find ways that more effectively create public value in an environment of constant change has become an ongoing project across Member States and public services. However, innovation is often dependent on the structures, institutions and networks already in place, and thus it takes different paths and forms in different countries. This is also the case for public sector innovation. Moreover, PSI is shaped by a unique configuration of incentive structures, resource availability, and goals, which requires specific configurations in order to capture its internal dynamics and complexity (OECD, 2009).

Given the fact that the inquiry of Public Sector Innovation is pretty much being developed at the current time, it seems imperative to increase and put in place mechanisms for the assessment and monitoring of innovative practices in the public sector, not only quantitatively as have been the initial attempts, but also qualitatively through monitoring platforms and exhibiting good practices.

Appendix A Contact points for Public Sector Innovation in EU Member States

Country	Organisation
Austria	Federal Chancellery, Innovative Administrative Development Unit
Belgium	OPTIFED – newly created cell for implementing good practices in service delivery at Federal level Service Public Fédéral (SPF) Personnel et Organisation (P&O)
Bulgaria	Council of Ministers, Administrative Reform Unit, Secretariat of Administrative Reform Council
Cyprus	Ministry of Interior
Czech Republic	Ministry of Interior – Public Administration Department
Denmark	MindLab – Cross Ministerial Innovation Unit (as of January 1st 2013 owned by the Ministry of Business and Growth, the Ministry of Employment and the Ministry of Children and Education)
Estonia	Government Office of Estonia
Finland	Ministry of Finance
France	DGME – General Direction for State Modernisation
Ireland	Department for Public Expenditure and Reform
Italy	UPMPA - Programme of Modernisation of public Administration Office
Latvia	State Chancellery, Department for public administration and development of human resources
Lithuania	Ministry of Interior, Public Governance Policy Department, Public Administration Division
Luxembourg	Ministry of the State Affairs
Malta	Office of the Prime Minister, Management Efficiency Unit and Malta Information Technology Agency
Netherlands	Ministry of the Interior and Kingdom Relations (BZK)
Portugal	ESPAP – Organisation for Shared Services for Public Administration
Romania	Ministry of Administration and Home Affairs, UCRAP – Central Unit for Public Administration Reform
Slovakia	The Government Office of the Prime Minister
Slovenia	Ministry of Justice and Public Affairs
Spain	Ministry for Treasury and Public Administration Services
Sweden	Ministry of Health and Social Affairs - Minister for Public Administration and Housing Office; The National Government Service Centre
United Kingdom	Cabinet Office, Minister for Government Policy

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