

## **PUBLIC SECTOR INNOVATION IN THE EUROPEAN UNION AND EXAMPLE OF GOOD PRACTICE**

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### **Abstract:**

Innovation is a dynamic process which identifies the problems, challenges and development of new, creative ideas, and the selection and implementation of new solutions. The decisive factors for promoting innovation are modernisation and the promotion of creativity. Innovation is vital for increasing public sector efficiency and for delivering new and higher quality services. Some of these services affect the whole economy or key sectors within the economy, and are also important for quality of life in general. To achieve the objectives of public sector innovation, motivation factors must be present.

The objective of this paper is to present and analyse the significance of innovation in the public sector of the European Union in general, and to give an insight into some examples of good practice in EU Member States in the field of public sector innovation. A descriptive and analytical approach is used to achieve this objective. Based on a review and analysis of the literature, the meaning of innovation in the public sector, its objectives, motivation factors and barriers, and the results of existing surveys will be presented, as well as examples of good practice in EU Member States.

The existing surveys show that innovation plays an important role in the public sector. Innovation improves quality of service delivery and reduces costs, which is also evident from the examples of good practice presented in the paper.

*Keywords: innovation, public sector, European Union, surveys, good practice*

## 1. INTRODUCTION

Innovation is a dynamic process which identifies the problems, challenges and development of new, creative ideas, and the selection and implementation of new solutions. Innovation is no longer entirely the preserve of the private sector; it is also increasingly widespread in the public sector. Recent interest in public sector innovation is linked to the expectation that innovation will help the public sector to improve its performance. There is an essential need for a new creative public sector. In order to arrive at innovation in the public sector, we have to understand the need for a new mode of governance and the role of the public sector in the creative economy (European Public Sector Innovation Scoreboard (EPSIS) – Methodology report, 2012, p. 5; Sørensen & Torfing, 2012, p. 4).

Public services and public administration represent a significant part of European socioeconomic activity. The role of public services is important, which makes its contribution to innovation extremely significant. Europe seeks to be a dynamic and innovative knowledge-based economy, and public services are among the most knowledge-intensive and value-added of all sectors. A major driver for innovation is cooperation with other public organisations, universities, unions and NGOs, which complements private sources of knowledge. Innovation is vital for increasing public sector efficiency and for delivering new and higher quality services. Some of these services affect the whole economy or key sectors within the economy, and are also important for quality of life in general (Thenint, 2010, pp. 3, 7).

In the current situation resulting from the financial and economic crisis, innovation and creativity in the public sector are even more important, so countries should focus more on promoting innovation in the public sector. Resolution of the issue of public finances will require improvements to the quality of financial forecasting and management in order to avoid resource disruption. The understanding and appraisal of innovation in the public sector is likely to become very important in the coming years (Thenint, 2010, p. 14).

## 2. PUBLIC SECTOR INNOVATION

### 2.1. Definition of public sector innovation

The concept of innovation in the public sector is combined with the overall definition of innovation and with individual types of innovation in the public sector; these are product innovation, process innovation, organisational innovation and communication innovation. The definition of innovation takes into account the fact that innovation must have been implemented and that it constitutes significant changes compared to existing practices. Innovations therefore comprise new or significant changes to services and goods, operational processes, organisational methods, or the way an organisation communicates with users (Bloch, 2011, p. 13). Recent surveys on public sector innovation, such as Innobarometer and MEPIN, use the following definitions of public sector innovation.

'A *product innovation* is the introduction of a service or good that is new or significantly improved compared to existing services or goods in your organisation. This includes significant improvements in the service or good's characteristics, in customer access or in how it is used. A *process innovation* is the implementation of a method for the production and provision of services and goods that is new or significantly improved compared to existing processes in your organisation. This may involve significant improvements in, for example, equipment and/or skills. This also includes significant improvements in support functions such as IT, accounting and purchasing. An *organisational innovation* is the implementation of a new method for organising or managing work that differs significantly from existing methods in your organisation. This includes new or significant improvements to management systems or workplace organisation. A *communication innovation* is the implementation of a new method of promoting the organisation or its services and goods, or new methods to influence the behaviour of individuals or others. These must differ significantly from existing communication methods in your organisation' (Bloch, 2011, p. 14; European Public Sector Innovation Scoreboard (EPSIS) – Methodology report, 2012, pp. 4–5).

Innovations are implemented through innovation activities. Innovation activities include in-house activities, such as in-house research and development, planning and design, market research and other user studies, feasibility studies, testing and other preparatory work for innovation; training and education of staff for innovation, external R&D and other consultancy services for innovation; other

external know-how, acquisitions of machinery, equipment and software for innovation (Bloch, 2011, p. 17).

Innovations can be implemented by means of innovation cooperation. Innovation cooperation is active participation with enterprises or other public organisations on innovation activities. Possible partners for cooperation are enterprises or public organisations as suppliers, enterprises or public organizations as clients, and universities, government research institutions, other public organisations and citizens as users. Innovation cooperation refers to cooperation at any stage of the innovation process (Bloch, 2011, pp. 18-19).

## **2.2. Public sector innovation objectives and motivation factors**

The most common objectives for innovation in the public sector are improved efficiency (costs per service, reduced administration), improved transparency, improved quality of service and improved user satisfaction. But there are also more specific objectives, such as addressing social challenges (aging population, healthcare, education, public safety, environment and reductions in greenhouse gas emissions), complying with new regulations, policies or other politically mandated changes, improving working conditions for employees, and so on (Bloch, 2011, pp. 7, 21; Thenint, 2010, p. 12).

An innovative public sector is one that offers high-quality services, particularly a new service or new aspects, ease of use, access, timeliness, actions to strengthen relations between the public sector and citizens in areas such as public information, taxation, education, healthcare, etc. (Bloch, 2011, pp. 3-4).

To achieve the objectives of public sector innovation, motivation factors must be present. A number of economic, industrial, political, relational and personal factors can motivate public sector innovation. Economic motivators are the cost-effective and productive administration and management of the civil service (for example, financial management, health services, tax collection and educational services). Political motivators refer to political support and votes gained through being seen to perform better than opposing political actors. Personal factors refer to policymakers, managers and professional workers that may gain personal satisfaction, motivation and status among their professional community and society by improving public services (Agolla & Van Lill, 2013, pp. 167-171; Bloch, 2011, pp. 3–4).

Motivation factors for innovation in the public sector may differ between individuals and within the organisation as a whole, but many individual factors are also relevant for the organisations. For example, innovation motivations for individuals in the public sector are career, idealism, professional recognition, power, self-fulfilment and money. On the other hand, innovation motivators for public sector organisations include the propagation of a policy, idea or rationale, increased funding, problem-solving, more staff and public relations (Bloch, 2011, p. 8; Thenint, 2010, p. 7).

## **2.3. Barriers to public sector innovation**

Innovation in the public sector is usually hindered by a lack of competition and limited financial incentives for improvement. Different barriers can be identified that hinder innovation in the public sector. One is definitely the absence or inadequacy of resources, which is identified as a main barrier to innovation. This is not only a lack of financial support but also shortages in the relevant skills and human resources, or in the opportunities to enlist other support services required for the implementation of innovations. Another barrier is risk aversion and accountability. Public organisations are wary of undertaking or implementing changes which may result in an increased probability of risk for users and civil servants. They are very careful to enact changes that may result in negative outcomes. Moreover, the pace and scale of change can present a barrier, as many public administrations and services have been subject to a large number of radical changes or reforms that can create an unstable environment with little opportunity to assess the impact of the innovations introduced. Another barrier is public resistance to change, as the public is often resistant to reorganisation and changes in the way public services are delivered, especially when it is not sufficiently informed of the benefits of the changes. Size and complexity is another barrier identified: the public sector has complex, large-scale organisational entities that can develop internal barriers to innovation. These barriers can consist of localised skills shortages and gaps, a lack of cooperation within the organisation, a lack of clear agreement, communication difficulties, lack of incentives for

staff to innovate, and inadequate time allocated to innovation. There may also be a lack of structures and mechanisms for the enhancement of organisational learning and the diffusion of good practice. Technical barriers are also evident in the fact that there may be a lack of technological solutions to the problem at hand. Last but not least, a lack of flexibility in laws and regulations can also present a barrier to innovation (Bloch, 2011, p. 22; Carstensen & Bason, 2012, pp. 3–5; Thenint, 2010, pp. 6, 18–19).

### **3. RECENT STUDIES ON PUBLIC SECTOR INNOVATION IN THE EUROPEAN UNION**

The number of conceptual and empirical studies on public sector innovation has been on the rise since the late 1990s. There are a number of particularly important surveys from the past few years, three of which were carried out in 2010. The first was a pilot survey for measuring innovation across the public sector conducted by NESTA; it covered health and local government organisations in the UK. The second was a research project entitled 'Measuring Public Innovation in the Nordic Countries (MEPIN)', and the third was the European Commission's Innobarometer Survey. In 2011 and 2012 the European Commission also compiled the European Public Sector Innovation Scoreboard (European Public Sector Innovation Scoreboard (EPSIS) – Methodology report, 2012, pp. 6–7).

#### **3.1. NESTA pilot survey**

The National Endowment for Science, Technology and the Arts (NESTA), the lead agency in the development of public sector innovation measurement in the UK, conducted a pilot survey on public sector innovation in 2010. The survey covered two sectors: health (NHS) and local government. In total, 64 NHS organisations and 111 local government organisations took part in the survey. It collected detailed information on a range of external organisations as a source of ideas for innovation and on their role in developing innovation. It also collected information on the methods used to obtain external knowledge and the recipients of this knowledge within the respondent organisation (European Public Sector Innovation Scoreboard (EPSIS) – Methodology report, 2012, p. 7; Measuring Innovation in the Public Sector: A Literature Review, 2011, p. 4).

The results of the survey show that the conditions for innovation could potentially provide the greatest opportunity to improve innovation in the surveyed organisations. The key impact of the innovation surveyed was made by improvements in efficiency. The greatest potential opportunities for improving the conditions for organisations to innovate lie in their incentives and in autonomy. The survey results suggest that most ideas are sourced from outside the organisation and that the organisations are less effective in sharing best practice, which may hinder wider diffusion of new ideas. Participating organisations with innovation strategies are more innovative than those without. The results show a lack of a systematic approach to managing innovation across the organisations surveyed. The critical organisational enablers of innovation are management information, internal and external connectedness, access to support and skills, the use of incentives and rewards, and the quality of information and communications technology infrastructure (Hughes, Moore & Nimesh, 2011, pp. 9–32).

#### **3.2. MEPIN project**

The MEPIN project ('Measuring innovation in the public sector in the Nordic countries') developed a survey questionnaire for innovation in the public sector. Pilot versions of the MEPIN questionnaire were implemented in 2010 in public sector organisations from central, regional and local government in five Nordic countries: Denmark, Finland, Iceland, Norway and Sweden. Four countries included hospitals, and two also included secondary schools. In total, 2,012 public sector organisations participated in the survey. The project's objective was to develop a measurement framework for collecting internationally comparable data on innovation in the public sector. The data contributes to an understanding of what public sector innovation is and how public sector organisations innovate. It also planned to develop metrics for use in promoting public sector innovation (Bloch, 2011, p. 3; European Public Sector Innovation Scoreboard (EPSIS) – Methodology report, 2012, pp. 6–7).

The results of the survey show that in Finland, Norway and Sweden, around 80% of public sector organisations have introduced innovation (almost 90% in Denmark and Iceland). In Denmark, Finland, Norway and Sweden, product or process innovations are more common, while organisational and

communication innovations are more common in Iceland. The results show management to be the most important driver of public sector innovation and a lack of funding as the most important barrier to innovation (Bugge, Mortensen & Bloch, 2011, pp. 12–26; European Public Sector Innovation Scoreboard (EPSIS) – Methodology report, 2012, p. 9).

### **3.3. Innobarometer**

In 2010 the European Commission used a survey-based approach in the Innobarometer 2010 Analytical Report on Innovation in Public Administration. All 27 European Union countries, plus Norway and Switzerland, were included in the survey. The survey was limited to organisations active in public administration, and 3,699 responses were obtained. The objective of the survey was to study the innovation strategies of the European public administration sector in response to changing constraints and opportunities (European Public Sector Innovation Scoreboard (EPSIS) – Methodology report, 2012, p. 7; Innobarometer 2010 Analytical Report: Innovation in Public Administration, 2011, p. 8).

The results show that the likelihood of service innovation increases with the size of the institution. The most important driver of innovation in the public sector is the introduction of new laws and regulations. The major sources of information that supports innovation are ideas from staff and management and input from clients or users. The most important barrier to public administration innovation is a lack of resources. The positive effects of innovation are improved user access to information due to service innovation, improved user satisfaction and faster service delivery (European Public Sector Innovation Scoreboard (EPSIS) – Methodology report, 2012, p. 10; Innobarometer 2010 Analytical Report: Innovation in Public Administration, 2011, pp. 8–9).

In 2011 the European Commission issued the Innobarometer 2011 ('Innovation in the Public Sector: Its Perception and Impact on Business'). The report gives an insight into how public sector innovations are perceived by individuals in private sector companies. Private sector companies are potentially the main beneficiaries when the public sector provides innovative services. The results concerning innovation in the public sector show that the majority of respondents do not think that the public sector is helping their company to innovate in terms of creating the right conditions for innovation and of delivering training systems to enable staff to innovate. A majority of respondents think that public services need to work harder at becoming more innovative. Over half the respondents agreed that information and advice about innovation was readily available but that they did not receive support in terms of quality of advice and of making procedures for obtaining financial support easy to use (Innovation in the Public Sector: Its Perception and Impact on Business, 2012, pp. 4–5).

### **3.4. European Public Sector Innovation Scoreboard**

European Commission supports a substantial research programme on public sector and social innovation. It started in 2011 and examines issues such as measurement and evaluation, financing and other barriers to scaling up and development. The European Public Sector Innovation Scoreboard will become a basis for further work to benchmark public sector innovation. It will explore with Member States whether it is appropriate to bring together new learning experiences and networks for public sector leaders at the European level. The report covers all 27 Member States and other countries participating in the Entrepreneurship and Innovation Programme. The aim of the report is to raise the visibility, debate and level of understanding of innovation in the public sector. It should help to improve the quality of the debate, and support Member States to develop policies to support public sector innovation (European Public Sector Innovation Scoreboard (EPSIS) – Methodology report, 2012, p. 32; Public Innovation Scoreboard, 2012).

## **4. EXAMPLES OF GOOD PRACTICE IN THE FIELD OF PUBLIC SECTOR INNOVATION IN EU MEMBER STATES**

Successful innovations can deliver substantial cost savings for service providers and service users. Innovation is seen through more efficient administration or service delivery, as well as through different and more effective service design. Innovation applies across all areas of the public sector and covers services and processes. Innovation is motivated by the need to do new things or existing things better,

quicker and more cheaply (Rivera León, Simmonds & Roman, 2012, p. 2). Examples of good practice can help other countries to make their public sector more innovative, to become more cost effective and to increase satisfaction on the part of public service users.

#### **4.1. Portugal's SIMPLEX Programme**

The SIMPLEX Programme was launched in 2006. The objectives of the programme were to make the lives of citizens and businesses easier, to strengthen users' trust in public services, to reduce the costs incurred by citizens and businesses, and to improve efficiency in public administration. To move from the law-abiding stage to more integrated and user-friendly services, information and communications technology provided the necessary tools, such as interoperability, web services and e-identification. Three types of innovation were implemented: first, process and organisational innovation (at the service level), which involved the improvements in internal processes and in relationships with customers; second, integrated inter-organisational process innovation, which corresponded to improvements in the patterns of interaction and collaboration between services; third, product innovation, which was implemented by providing new services and using different channels, including the co-production of services. Public sector innovation in Portugal was explicitly promoted by the launch of the SIMPLEX programme. At least 10% of the measures launched under the programme every year stemmed from suggestions made by individuals. Most of the programme's measures stemmed from the interaction of central public administration with local-level public administration (Rivera León, Simmonds & Roman, 2012, p. 25).

Estimates were made of the significant savings for citizens and businesses. The savings achieved from the switch to online certificates were estimated at EUR 51.6 million. Support from the country's prime minister was also an important factor in success. The design and management of the programme was assigned to the Administrative Modernisation Coordination Unit, a cross-cutting structure integrated into the Presidency of the Council of Ministers. The programme has been subject to one independent evaluation, carried out by the OECD in 2008, and the overall assessment was very positive. The SIMPLEX programme was active until mid-2011 (Rivera León, Simmonds & Roman, 2012, p. 25).

#### **4.2. UK's Red Tape Challenge**

The Red Tape Challenge, introduced in 2011, is a cross-government initiative coordinated by the Department for Business Innovation and Skills and the Cabinet Office. The aim of the Red Tape Challenge is to implement the goals of the UK Cabinet's 'Plan for Growth'. The initiative is innovative because it uses new media tools and the internet to collect the views of stakeholders affected by the regulations. Departments analyse the information collected from reviewers and then prepare proposals to scrap, reduce or improve regulation. Their proposals are further debated by the Cabinet Office and by business innovation and skills ministers, and then forwarded for regulatory amendment 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. Over 50% of the decisions made following Red Tape Challenge reviews of 1,500 regulations had resulted in the scrapping of or improvements to regulations by May 2012 (Red Tape Challenge – progress to date, 2013; Rivera León, Simmonds & Roman, 2012, p. 30).

By June 2012 the changes included significant deregulation in the employment field, where it is estimated to deliver over EUR 45 million per year in cost savings to employers. Plans are also in place to save businesses at least EUR 1.2 billion over five years with changes to environmental regulations. The use of crowd-sourcing techniques has given greater voice to people and SMEs, and enabled them to contribute directly to changing regulations in a transparent and user-friendly way. The Red Tape Challenge has changed the culture of the formerly slow-paced central public administration into a more dynamic and responsive one (Rivera León, Simmonds & Roman, 2012, p. 30).

#### **4.3. E-procurement in Lithuania**

In 2008 Lithuania launched the Central Public Procurement Information System by implementing the 'Development of public procurement information system project', supported by EU structural funds and co-funded by the Lithuanian government. The system covers all public procurement processes in Lithuania, from 'e-searching' to 'e-awarding'. By September 2009 the system was already mandatory

for the publication of tender documents, including specifications, explanations, questions and answers, and for the implementation of not less than 50% of procurement volumes per year. E-contracting is available, but not mandatory. Everyone with an interest in public procurement has free access to published information 24 hours, seven days a week from any location with an internet connection (Rivera León, Simmonds & Roman, 2012, p. 31).

One of the main benefits of the system is an increase in public procurement transparency. Since 2010 it has been mandatory to publish public procurement plans, technical specifications of tenders and all public procurement reports for the year. Around 75% of all published tenders in 2011 were implemented via the e-environment. Another major achievement is that the system has helped to cut costs for public administration and the private sector. E-procurement brings savings of up to 30%, requires less time and cuts the risk of human error. E-procurement also creates competition between potential contractors, which helps to reduce the costs of the goods or services purchased. The potential savings in 2010 due to e-procurement amounted to between EUR 174 and 261 million (Public Procurement Office in Lithuania, Central Public Procurement Information System and Central Risk Management Analysis System, 2013; Rivera León, Simmonds & Roman, 2012, p. 31).

## 5. CONCLUSION

In terms of innovation, the public sector has traditionally been viewed as being radically different to the private sector. The public sector is often seen as a regulatory framework for innovation in the private sector and as a passive recipient of innovation from the private sector. In recent years, public sector innovation has become increasingly regarded as a central factor in sustaining a high level of public service for citizens and businesses, as well as addressing social challenges and improving welfare (Bloch, 2011, p. 3).

Innovation plays an important role in the public sector. Innovation can improve the quality of service delivery and reduce costs. Moreover, performance improvements and efficiency are important factors for promoting public sector innovation, along with a number of other specific factors, such as social challenges, compliance with new regulations and policies, improvements to working conditions for employees, and so on. At a time of global economic crisis in particular, public sector innovation is likely to become a way of sourcing radical solutions.

Innovation is more likely to happen in environments in which the culture encourages innovation and rewards new ideas. Therefore, motivation factors must be present in terms of economic, industrial, political, relational or personal factors that stimulate public sector innovation. On the other hand, organisations and individuals face a variety of barriers that hinder innovation. Innovation is most commonly hindered by the absence or inadequacy of resources, but there is also risk aversion and accountability, public resistance to change, the size and complexity of public sector organisations, and technical barriers.

To fully identify the situation regarding innovation in the public sector, an increasing number of conceptual and empirical studies and surveys has recently been conducted. In addition to these studies and surveys, the transfer of good practice can help other countries to make their public sector more innovative, become more cost-effective and increase satisfaction on the part of public service users.

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