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since the eighth session of the Committee on Economic Cooperation and Integration**

Innovation in the public sector

Note by the secretariat

I. Introduction

1. The present note presents good practices and policy recommendations on innovation in the public sector. It is based on the presentations and discussions at the substantive segment of the sixth session of the Team of Specialists on Innovation and Competitiveness Policies (TOS-ICP), held in Geneva on 10 and 11 October 2013. It reflects and benefits from the experiences of all relevant participating stakeholder groups, including national government agencies, academic institutions, the private sector and international organisations.¹

2. The note was originally submitted to the eighth session of the Committee on Economic Cooperation and Integration as document ECE/CECI/2014/3. At the time, the Committee agreed that the note should “be circulated to member States and relevant stakeholders for further elaboration by means of interactive electronic discussions” (ECE/CECI/2014/2 para. 47 p.10). The present note reflects the results of these discussions.

3. The note is structured as follows. After the Introduction, the second section sets out why it is important for the public sector to innovate. The third section addresses some conceptual and measurement issues that at present still limit our ability to identify good practices. The fourth section discusses the main ways in which innovation in the public sector differs from its business sector counterpart, the challenges that arise from these differences, and their implications for policies promoting innovation in the public sector. The fifth section covers policy examples to encourage, manage and scale-up innovations. The sixth section summarizes the main conclusions and recommendations.

¹ The presentations can be found at <http://www.unece.org/index.php?id=33189>.



II. The significance of innovation in the public sector

4. Innovation is traditionally thought of as the province of the business sector, with the government responsible for creating a business climate friendly to innovators. However, Governments and government agencies at national, regional and local levels play an important economic role that goes far beyond their function as facilitators of business activity. They are also providers of key public goods and services.

5. Among these are, for instance: education; health care; income redistribution and welfare; justice and law enforcement; disaster prevention and relief; public transport and infrastructure; and public administration in general. Altogether, public expenditure accounts for between a third and a half of Gross Domestic Product in the countries of the UNECE region. The public sector employs between 15 and 40 percent of all workers in the member States of the European Union. Public sector innovation can thus have a large, positive impact on economies given the size of public sectors.

6. In the business sector, innovation is driven by competition (including from abroad), by market demand, and by new technological developments which open up previously unavailable opportunities. The benefits of innovation in the business sector accrue to everyone in the form of new, better, cheaper or more environmentally friendly products and services, and more and better paying jobs. These drivers and benefits of innovation apply – with modifications – to the public sector as well.

7. Investment capital and increasingly also highly qualified workers are mobile within and across borders and tend to move where they find the most favourable conditions. Among these conditions are the public goods and services which Governments are expected to provide. In this sense, Governments, at all levels, face competition in a way similar to companies.

8. Consumers have long been used to demanding new and improved products and services from businesses. Citizens are increasingly demanding the same of Governments. Concomitantly, the public sector has to respond to changing attitudes and values in society. Citizens increasingly expect to be actively involved in defining and shaping what the public sector is offering them, where in the past they were mere passive recipients of public services.

9. Some of the innovative technologies which are opening up new opportunities for commercial innovation can also open up new opportunities for service design and delivery in the public sector.

10. Public sector innovation can be part of the solution for budget pressures which create the need to do more with fewer resources, and for new societal challenges such as population ageing and environmental degradation which require either new or modified public services.

11. Therefore, public sector innovation also has an important role to play in helping Governments respond to the United Nations post-2015 Development Agenda, which challenges Governments to combine economic development with social inclusion and environmental sustainability.

12. Moreover, recent research by the European Union suggests that innovations in public administration and in public services also lead to more innovation in the business sector.²

13. For these reasons, innovation has to be a policy focus not just in the business sector, but also in the public sector, if countries want to reap the full benefits that innovation can provide in terms of sustainable prosperity and better solutions for social and environmental challenges.

III. Conceptual and measurement issues

14. Overall, innovation in the public sector is still a relatively young field. The process of identifying good practices is only beginning. There is a need to further clarify what should be considered as public sector innovation and, sometimes, even to delineate the boundaries between the public and private sectors for this purpose. Based on a clear concept of what public sector innovation is, a factual basis has to be created for comparing various public sector innovation initiatives and approaches, both within and across borders; in order to measure their impact and identify good practices.

15. According to the OECD Frascati Manual,³ the government sector comprises “all departments, offices and other bodies which furnish, but normally do not sell, to the community those common services, other than higher education, which cannot otherwise be conveniently or economically provided, as well as those that administer the state and the economic and social policy of the community”, as well as “non-for-profit institutions controlled and mainly financed by government, but not controlled by the higher education sector.” However, in many countries, the higher education sector is also largely or even entirely run by the state and could, thus, arguably be included in the government sector.

16. The United Nations Classification of the Functions of Government distinguishes ten main groups of government activities.⁴

17. Based on these definitions and classifications, the European Union’s pilot Public Sector Innovation Scoreboard 2013⁵ proposes to define public sector innovation as a “new or significantly improved service, communication method, process or organizational method” in the above sectors. Compared to corresponding definitions of innovation in the business sector, the focus in the public sector is thus more on services than on products, and on communicating with citizens rather than on marketing to customers.

18. The measurement of the extent and impact of innovation in the public sector currently relies on a mix of hard data, survey evidence and case studies. Apart from the European Public Sector Innovation Scoreboard mentioned above, the Public Sector Innovation Observatory of the OECD, and the European and United Nations Public Sector Awards are examples of international measurement efforts. These initiatives have led to the identification of some typical enabling factors, drivers of, and barriers to public sector innovation.

19. There are considerable differences across countries. Some are at relatively early stages where, for instance, innovation consists primarily of deploying information and

² European Public Sector Innovation Scoreboard 2013 (http://ec.europa.eu/enterprise/policies/innovation/files/epsis-2013_en.pdf).

³ OECD (2002), Frascati Manual: Proposed Standard Practice for Surveys on Research and Experimental Development, 6th edition.

⁴ <http://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=4&Lg=1&Top=1>.

⁵ http://ec.europa.eu/enterprise/policies/innovation/files/epsis-2013_en.pdf.

communication technologies to improve the delivery of selected public services. Others have embraced new ways of designing public services, and have begun to create systematic innovation programmes, some of them led by dedicated units or entities at high government level.

20. However, in most countries, there is still a lack of data on many public sector innovation activities, and the existing data are often not comparable across countries and over time. Transition economies face particular challenges in terms of data availability and comparability, largely due to methodological differences in data collection. The adoption of international standards remains a work in progress.

IV. Differences between innovation in the business sector and the public sector

21. The main differences between innovation in the business sector and the public sector relate to the incentives and rewards for innovation, and to the mechanisms in place to identify and grow successful innovations, and to abort unsuccessful ones at a low cost.

22. In the business sector, the incentives for and rewards to successful innovation are immediate in the form of higher profits. Which innovations are successful is determined through competition in the market place. Innovation is an entrepreneurial activity which carries high risks and high rates of failure. The market weeds out the unsuccessful innovations quickly, before they consume too many resources. And the market channels those resources to the successful innovations, in the form of higher profits, or the expectation thereof. Thereby, it enables these successful innovations to be grown into large businesses serving many consumers and employing many workers.

23. In the public sector, incentives and rewards are typically much more attenuated. Public goods and services are usually provided either free of charge or, at most, on a cost-recovery basis. Indeed, the reason why certain goods and services are best provided by the public rather than the business sector is that the market would fail to generate adequate provision. As a result, innovation in the public sector does not generally lead to higher profits. Different mechanisms are, therefore, needed to encourage and reward innovation in the public sector.

24. By the same token, risk of failure is generally accepted as an integral part of the innovation process in the business sector, and as a necessary element in the process of discovering successful innovations. This risk is accepted because private investors knowingly risk their personal fortunes in the pursuit of personal gain.

25. In the public sector by contrast, there is generally far less appetite for risk and tolerance for failure. Constitutional, legal and political constraints are often put in place to limit the risk of failure, and for good reason: in the public sector civil servants are operating with taxpayer money. Ethical and regulatory considerations may thus constrain civil servants engaging in innovation or “public intrapreneurship”. Different mechanisms are thus needed in order to discover successful innovations.

26. Moreover, while profits and the expectation thereof, determine how many resources a business has access to, budgets, and hence resource access in the public sector, are more typically determined on a cost or needs basis. Unlike in the business sector, successful innovators in the public sector thus cannot necessarily expect to be rewarded automatically with larger budgets and more resources. Different mechanisms are therefore needed in the public sector to steer resources towards successful innovations and to stimulate their dissemination.

V. Policies to encourage, manage and scale-up innovation in the public sector

27. Comparative analysis suggests a number of ways in which to address the problems of rewarding innovation, limiting the costs of failed innovations, identifying successful innovations, and scaling them up.

28. High-level political backing is essential to drive innovation in the public sector. High-level commitment can encourage innovation by signalling to all levels of the public sector hierarchy that innovation should be seen as a core activity, which will be rewarded, for instance in terms of career progression.

29. Innovation should be mainstreamed across all departments and levels of government, so that systematic barriers to innovation can be identified and addressed. Ideally, public sector innovation should also be fully integrated into national innovation policies in general. However, even the most advanced countries have not yet achieved full integration.

30. High-level commitment can also help to overcome risk aversion at lower levels of the hierarchy by ensuring that there is a public mandate for innovation and that the public understands the risks involved. By the same token, high-level leadership is critical to ensure that successful innovators in the public sector obtain the resources necessary to scale up their innovations, if necessary at the expense of less successful departments or entities.

31. While the profit motive cannot be used to encourage and reward innovation in the public sector, there are a number of examples where awards and other forms of public recognition of successful public sector innovation have been used. These include, for example, the White House Champions of Change programme in the United States, where anyone can nominate innovators in various fields of public service, and every week the most deserving are honoured with an invitation to the White House.

32. Another example is the European Public Sector Awards, which are handed out every two years by the European Institute of Public Administration (EIPA). They give recognition and publicity to the best efforts from 38 European countries. They also contribute to the dissemination of good practices and the scaling up of successful innovations by collecting and publishing the results of evaluations of over 800 public sector innovation initiatives which have been submitted for the awards. This database will soon be made available on an electronic knowledge platform online in order to facilitate learning and the diffusion of effective innovations.

33. A third example is the United Nations Public Sector Awards, which are given out every year by the United Nations Public Administration Network (UNPAN) in recognition of innovative practices in five categories of public service delivery from around the world. Based on the applications received for these awards, UNPAN has compiled a database with almost 1,200 cases which is available online.⁶

34. In addition to rewarding and publicizing successful public sector innovations, the initiatives above can also play key roles in the development of innovation skills within the public sector. EIPA, UNPAN and various national public administration academies offer training materials and courses in this regard.

⁶ [http://unpan.org/DPADM/UNPSDayAwards/KnowledgeBaseofUNPublicServiceAwards/
tabid/1260/language/en-US/Default.aspx](http://unpan.org/DPADM/UNPSDayAwards/KnowledgeBaseofUNPublicServiceAwards/tabid/1260/language/en-US/Default.aspx)

35. While high-level leadership and commitment is important for the reasons outlined above, this does not mean that public sector innovation should be driven from the top down. Rather, the top-level leadership should create the framework conditions, with the actual innovation, preferably, coming from the bottom up for two reasons.

36. First, given the inherent risks of innovation and the limited tolerance for failure in the public sector, it is important to adopt a flexible approach that facilitates policy experimentation. By giving lower levels of administration the authority to act and to innovate, experiments can be conducted with limited risk. An element of competition can also be introduced in this way.

37. Second, international experience suggests that innovation in the public sector is more likely to succeed where the implementing agents and recipients are in closest contact. It is crucial for successful innovation to start with the outcomes to be achieved (rather than the activities to be implemented) and to take the perspective of the end user of the public service. Following closely the experience of the recipients of public services (“customer journey mapping”) can help identify problems, which can then be used as the basis for generating a range of ideas through participatory processes that bring together users and providers of public services. In order to facilitate a user-centric approach, public innovation policies should not be set only at the national or regional level, they should also be fine-tuned and implemented at the level of cities and municipalities.

38. Decentralised public sectors may be particularly good at allowing experimentation at low cost, encouraging competition, and ensuring close contact between implementing agents and customers. Well-managed federalist structures can also improve transparency and accountability. In this regard, it is important that authority to act on innovation is combined with a certain degree of autonomy in raising revenues and deciding expenditures. Where this autonomy is lacking, the incentive to lobby higher levels of government for subsidies may overwhelm incentives to innovate.

39. Nonetheless, the case study evidence from the European Public Sector Awards database does not suggest that federalist countries fare systematically better at public sector innovation. Among the potential drawbacks of decentralisation are high costs of policy coordination and other costs caused by incoherent policies across jurisdictions (an issue which may be more salient for larger than for smaller countries).

40. Another important approach to identify successful initiatives that can then be scaled up, and to learn from failures, is prototyping and piloting. Several leading government agencies have created “laboratories” in which innovative solutions to service creation and delivery can be tested at a small scale and low cost, before being rolled out on a larger scale (also referred to as, “hold harmless structures”).

41. Modern information and communication technologies play a key role in public sector innovation. A commitment to e-Government can reduce bureaucracy and administrative costs and can increase the efficiency of government operations and service delivery. It can also improve transparency and accountability.

42. The most advanced public sector entities are moving beyond tools which deliver efficiency improvements and cost savings, but where citizens are still largely viewed as passive recipients of public services. Instead, the most advanced programmes use electronic means of communication to create platforms for genuine two-way interaction between the public sector and citizens.

43. Citizen participation holds a number of promises including: delivering public services more efficiently; creating public services which meet the real needs of citizens; monitoring quality more effectively; identifying “chain deficiencies” which may

compromise service delivery; and enabling citizens to create their own services based on government inputs (such as open government data).

44. Introducing e-Government practices throughout government hierarchies and across departments is a complex process which often meets significant resistance from inside government. It is, therefore, critical to have leadership from the very top and adequate resources to drive the innovation agenda – a point which applies to public sector innovation in general.

45. Among the challenges of implementing e-Government solutions is a lack of ICT literacy and access to electronic communication devices. In particular, there is an inter-generational “digital divide” which makes it important to train prospective users of e-Government services. Another challenge is security, particularly in areas such as digital ID cards, digital payment gateways, and electronic access to public buildings.

VI. Main conclusions and policy recommendations

46. Public sector innovation is still a relatively novel field, and the factual basis for policy evaluation and for making policy recommendations remains limited. More work is needed to measure the impact of innovation policies in the public sector and to learn how to best encourage it and how to overcome barriers.

47. With this caveat in mind, the following good practices and recommendations might usefully guide policy in this area:

(a) Provide high-level political leadership to encourage innovators, to mitigate the risk aversion inherent in the public sector, and to steer resources towards successful innovations;

(b) Encourage experimentation and competition at lower levels of government, in order to facilitate learning from experience, to limit the costs of failure, and to scale up initiatives that have been proven to work;

(c) Create awards and other forms of public recognition for successful innovators to encourage innovation and to facilitate the spread of successful initiatives across the public sector;

(d) Collect and analyse systematically the evidence from successful and unsuccessful innovations in order to identify systematic drivers and barriers to public sector innovation;

(e) Create networks and knowledge platforms to support the development of critical innovation skills in public officials;

(f) Mainstream innovation throughout all government departments and levels;

(g) Integrate public sector innovation policies into the overall national innovation policy strategy;

(h) Take advantage of new two-way communication technologies to harness the knowledge of end users and the resources of civil society to re-design existing services and their delivery, and to co-create new services and new ways of delivery; and

(i) Cooperate internationally to advance innovation in the public sector. Some of the most important challenges faced by public authorities, such as population ageing or environmental pressures, are common to all countries. Pooling together policy experiences facilitates the identification and dissemination of good practices.