The Strategic Use of Public Procurement for Innovation in the Digital Economy

SMART 2016/0040

Comparative analysis of results from benchmarking national policy frameworks for innovation procurement

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pwc

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1 Introduction

The strategic use of innovation procurement can help tackle social and global challenges, being a tool to modernise the public sector and speed up the time-to-market of innovations. However, its potential is not fully exploited.

PwC is supporting DG CONNECT in benchmarking the policy framework of innovation procurement of all EU Member States, Norway and Switzerland. This is the first attempt to systematically collect data on innovation procurement. The aim of the benchmarking is to map the progress made in each country on implementing a mix of policy measures to mainstream innovation procurement across all sectors of public interest. It allows to evaluate their performance in this field and assess the maturity of their policy system, enabling the European Commission to better develop policy recommendations to strengthen the public demand drive for innovation in the whole EU.

The key output of this exercise is a set of 30 country factsheets (available as a separate appendix) that assess the national policy frameworks for innovation procurement in each country according to the same criteria set out in the benchmarking methodology (available as a separate appendix).

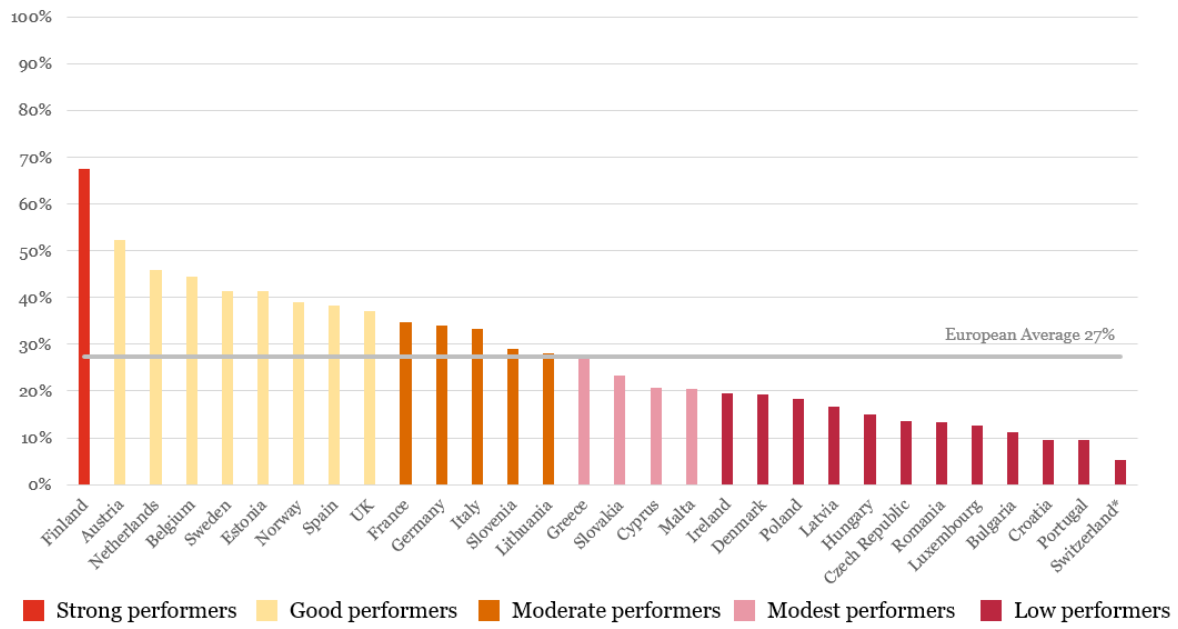
This document provides an in-depth comparative analysis of results achieved by countries in each of the 10 indicators – and their relative sub-indicators – used to assess the implementation of innovation procurement. In addition to presenting national scores, an analysis of the main differences and commonalities between countries and clusters of countries is also provided.

2 Key findings

2.1 Ranking and outputs

The following graph presents the overall ranking of the 30 countries on the basis of the scores assigned to the 10 indicators that are compounded into one total score according to the benchmarking methodology.

Figure 1 – Overall ranking and clustering



All countries are clustered into 5 groups according to their standard deviation (s-score) from the average. This indicates their **degree of advancement on the innovation procurement policy framework**. The table below lists the total scores of the countries clustered into the 5 groups.

Table 1 - Individual country scores, s-scores and clustering

Country	TOTAL	S-score	Cluster
Finland	67,6%	2,8	Strong performer
Austria	52,3%	1,7	Good performer
Netherlands	45,9%	1,3	Good performer
Belgium	44,4%	1,2	Good performer
Sweden	41,5%	0,1	Good performer
Estonia	41,4%	1,0	Good performer
Norway	38,9%	0,8	Good performer
Spain	38,3%	0,8	Good performer
UK	37,0%	0,7	Good performer
France	34,6%	0,5	Moderate performer
Germany	34,1%	0,5	Moderate performer
Italy	33,3%	0,4	Moderate performer

Country	TOTAL	S-score	Cluster
Slovenia	28,9%	0,1	Moderate performer
Lithuania	28,0%	0,0	Moderate performer
Greece	26,9%	-0,02	Modest performer
Slovakia	23,3%	-0,3	Modest performer
Cyprus	20,8%	-0,4	Modest performer
Malta	20,6%	-0,5	Modest performer
Ireland	19,6%	-0,52	Low performer
Denmark	19,2%	-0,54	Low performer
Poland	18,4%	-0,6	Low performer
Latvia	16,7%	-0,7	Low performer
Hungary	14,9%	-0,9	Low performer
Czech Republic	13,6%	-0,9	Low performer
Romania	13,3%	-1,0	Low performer
Luxembourg	12,6%	-1,0	Low performer
Bulgaria	11,1%	-1,1	Low performer
Croatia	9,6%	-1,2	Low performer
Portugal	9,5%	-1,2	Low performer
Switzerland*	5,3%	-1,5	Low performer

**The total score for Switzerland was calculated taking into account all the indicators except for Innovation friendly public procurement market. This is due to the lack of data from the EU Single Market Scoreboard.*

The **highest score is achieved by Finland** (67,6%), followed by Austria (52,3%), the Netherlands (45,9%) and Belgium (44,4%). The **average** of the 30 countries considered (EU28, Norway and Switzerland) is **27,4%**, highlighting that **innovation procurement policy frameworks are still rather immature** in the majority of the countries. More than one third of the countries (12) do not reach a 20% overall score. There appears to be room for improvement also among good performers, which have not reached a 60% score.

Finland is the only **strong performer** with an s-score that is more than 2 points above the European average. It is followed by a group of **good performers** composed by Austria, the Netherlands, Belgium, Sweden, Estonia, Norway, Spain and the UK. This group of countries has an overall s-score between 0.5 and 2 points above the European average. It is followed by the **moderate performers**, namely France, Germany, Italy, Slovenia, and Lithuania, which have an s-score between 0 and 0.5 points above the European average. Below the European average there are the **modestly performing countries** (Greece, Slovakia, Cyprus and Malta), with an s-score that is maximum 0.5 points below the European average, and the **low performers** (Ireland, Denmark, Poland, Latvia, Hungary, Czech Republic, Romania, Luxembourg, Bulgaria, Croatia, Portugal and Switzerland) with an s-score that is more than 0,5 points below the European average.

Overall, it can be concluded that **the innovation policy framework across Europe is working at just above one fourth (27,4%) of its potential power**. Therefore, strengthening the investments in rolling out a more comprehensive policy framework for innovation procurement across Europe can significantly increase the positive impact that innovation procurement can bring to the European economy. Hopefully this benchmarking analysis can inspire Member States to analyse and adjust their set of national policy initiatives in order to improve their future performance in this field.

3 Analysis of results per indicator. Commonalities and disparities between countries

This section presents the results of the benchmarking analysis **for each indicator** and a summary of the evidence collected to justify these scores (more specific evidence is included in the country fact sheets). In addition, this section presents a preliminary analysis of commonalities, disparities and trends per indicator.

3.1 Indicator 1 – Official definition

The table shows the results obtained by each country on the "official definition" indicator. The total score is calculated as the average of 4 sub-indicators, namely "official definition for innovation procurement", "official definition for R&D procurement", "official definition for PCP", "official definition for PPI procurement".

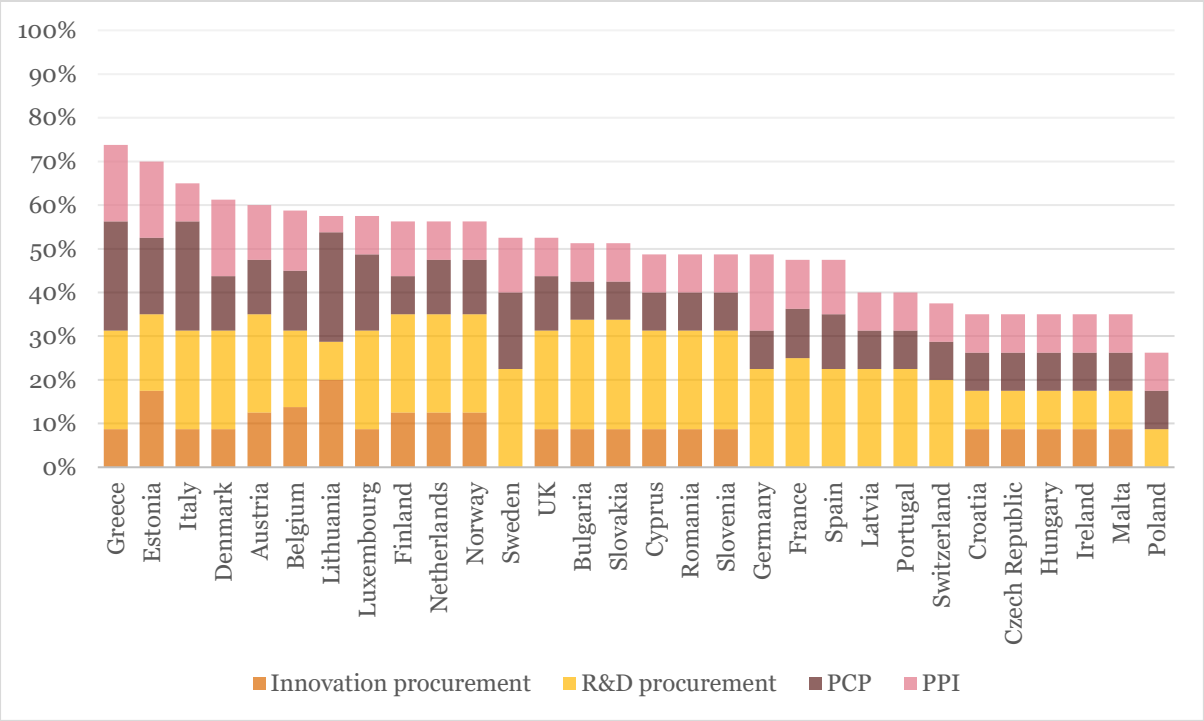
Table 2 – Indicator 1: scores

Country	Innovation procurement	R&D	PCP	PPI	Total
Austria	50%	90%	50%	50%	**60,0%**
Belgium	55%	70%	55%	55%	**58,8%**
Bulgaria	35%	100%	35%	35%	**51,3%**
Croatia	35%	35%	35%	35%	**35,0%**
Cyprus	35%	90%	35%	35%	**48,8%**
Czech Republic	35%	35%	35%	35%	**35,0%**
Denmark	35%	90%	50%	70%	**61,3%**
Estonia	70%	70%	70%	70%	**70,0%**
Finland	50%	90%	35%	50%	**56,3%**
France	0%	100%	45%	45%	**47,5%**
Germany	0%	90%	35%	70%	**48,8%**
Greece	35%	90%	100%	70%	**73,8%**
Hungary	35%	35%	35%	35%	**35,0%**
Ireland	35%	35%	35%	35%	**35,0%**
Italy	35%	90%	100%	35%	**65,0%**
Latvia	0%	90%	35%	35%	**40,0%**
Lithuania	80%	35%	100%	15%	**57,5%**
Luxembourg	35%	90%	70%	35%	**57,5%**
Malta	35%	35%	35%	35%	**35,0%**
Netherlands	50%	90%	50%	35%	**56,3%**
Norway	50%	90%	50%	35%	**56,3%**
Poland	0%.	35%	35%	35%	**26,3%**
Portugal	0%	90%	35%	35%	**40,0%**
Romania	35%	90%	35%	35%	**48,8%**
Slovakia	35%	100%	35%	35%	**51,3%**

Country	Innovation procurement	R&D	PCP	PPI	Total
Slovenia	35%	90%	35%	35%	**48,8%**
Spain	0%	90%	50%	50%	**47,5%**
Sweden	0%	90%	70%	50%	**52,5%**
Switzerland	0%	80%	35%	35%	**37,5%**
UK	35%	90%	50%	35%	**52,5%**
European average	**32%**	**77%**	**49%**	**42%**	**49,6%**

The European average for indicator "official definition" is 49,6%. The best performing countries are Greece, Estonia, Italy, Denmark, and Austria, which have recorded an overall score of 60% or above. The ranking is provided in the figure below.

Figure 2 – Indicator "Official Definition" overall ranking



The definition of R&D procurement is the definition most clearly and accurately spelled out in national legislation (reaching an average score of 77%). PCP and PPI are also defined clearly and accurately, reporting average scores of 49% and 42% respectively. All the countries analysed have at least reported a legal basis for the development of R&D procurement, PCP and PPI, meaning that they are ready to develop an R&D procurement/PCP/PPI strategy.

To the contrary, innovation procurement is defined across Europe in the least clear and accurate way, with an average score of 32%. Only one country has a definition for innovation procurement in its national legal framework and 8 countries do not have any form of official definition for innovation in the context of public procurement. Moreover, 11 countries have a definition that is not in line with the EU definition. This may be largely due to a commonly observed misinterpretation that innovation procurement encompasses only the innovation partnership procedure. In order to encourage more procurers to undertake innovation procurements, it is important that this is clarified in the future.

For each of the 4 definitions of indicator 1, the analysis distinguishes 4 categories of countries:

- Countries where the definition has been included in legislation

- Countries where the definition is included in "non-legal documents", e.g. policy documents or guidelines for public procurers
- Countries where the definition is not included in national legislation or official guidance documents, but national legislation provides a "legal basis" for the development of the type of innovation procurement analysed
- Countries which have not foreseen an official definition and do not envisage a legal basis for the development of the analysed type of procurement.

For each of the 4 categories of countries, the table indicates whether the definition reaches full coverage (definition is applicable to all types of public procurers across the whole country) or not (e.g. only in a certain region, or only for a specific type of public procurers) and whether the definition is in line with the EU definition.

The following paragraphs provide a detailed breakdown of the evidence collected per sub-indicator.

3.1.1 *Official definition for Innovation Procurement*

The table below illustrates to which extent an official definition for innovation procurement has been introduced in each country.

	Definition in legislation	**Definition in non-legal document (guidelines…)**	**Only legal basis No definition**	**Nothing (legal basis not transposed)**
Full coverage and in line with EU definition		EE (1)	BG, CY, CZ, DK, EL, HR, HU, IE, IT, LU, MT, RO, SI, SK, UK (15)	
No full coverage but in line with EU definition		BE (1)		
Full coverage but not fully in line with EU definition		AT, FI, NL, NO (4)		
No full coverage and not in line with EU definition	LT(1)			
Nothing				CH, DE, ES, FR, LV, PL, PT, SE (8)

One country has introduced a legal definition of innovation procurement in the national legislation (LT). However, this definition is only partially in line with the EU definition.

In 6 countries (AT, BE, EE, FI, NL, NO) a definition of innovation procurement is available in official guidance documents:

- In Estonia the definition in guidance documents is applicable to all procurers across the whole country and is in line with the EU definition.
- In Belgium, there are guidelines that provide a definition which is in line with the EU definition, but they are only applicable to Flemish procurers.
- In 4 countries (AT, FI, NL, NO), the definition in the guidance is applicable countrywide but is not in line with the EU definition. For example, the guidance note published by the Norwegian Agency for Public Management and e-Government (Difi) includes procurements that use new innovative approaches in the procurement process itself but do not necessarily result in the procurement of any type of innovation.

In 15 countries (BG, CY, CZ, DK, EL, HR, HU, IT, IE, LU, MT, RO, SI, SK, UK) there is no official definition of innovation procurement in legislation or guidance documents but there is a definition of innovation in the national legislation in line with the EU definition, providing a legal basis for the development of innovation procurement in the country.

Finally, in 8 countries (CH, DE, ES, FR, LV, PL, PT, SE) there are no definitions for innovation procurement and for innovation, neither in national legislation nor in national guidance documents.

3.1.2 *Official definition for R&D procurement*

The table below illustrates to which extent an official definition of R&D procurement has been introduced in each country.

	Definition in legislation	**Definition in non-legal document (guidelines…)**	**Only legal basis No definition**	**Nothing (legal basis not transposed)**
Full coverage and in line with EU definition	BG, FR, SK (3)	BE, EE (2)	CZ, HR, HU, IE, LT, MT, PL (7)	
No full coverage but in line with EU definition	AT, CY, DE, DK, EL, ES, FI, IT, LV, LU, NL, NO, PT, RO, SE, SI, UK (17)			
Full coverage but not fully in line with EU definition				
No full coverage and not in line with EU definition	CH (1)			
Nothing				

Over two thirds of the countries (21) have included a definition of R&D in the context of procurement in national legislation:

- 3 countries (BG, FR and SK) included the definition of R&D in the context of public procurement in national public procurement legislation. The definition is applicable to all types of public procurers in a way that is in line with the EU definition.
- In 17 countries (AT, CY, DE, DK, EL, ES, FI, IT, LV, LU, NL, NO, PT, RO, SI, SE, UK) the definition of R&D in the context of public procurement is available only in the national public procurement legislation for the defence sector. Despite being coherent with the EU legislation, in these countries the definition is only available within one sector.
- In Switzerland, there is a definition of R&D in the context of public procurement in national legislation that is applicable only to the federal government. However, it is not in line with the EU definition and not applicable to all types of public procurers.

2 countries (BE and EE) have not provided a definition of R&D procurement in national legislation but have foreseen one in official guidelines.

7 countries (CZ, HR, HU, IE, LT, MT, PL) do not have a definition of R&D procurement in national legislation nor in non-legal documents. However, they have identified in national procurement legislation what is considered R&D in the context of public procurement via CPV codes which are applicable to all public procurers in the country and in line with the EU definition of the R&D CPV codes. These CPV codes provide a legal basis for developing R&D procurement in the country.

There are no countries where the definition or the legal basis for R&D procurement have not been transposed, i.e. the category "nothing" is empty.

3.1.3 *Official definition for Pre-Commercial Procurement (PCP)*

The table below illustrates to which extent an official definition for PCP has been introduced in different countries.

	Definition in legislation	**Definition in non-legal document (guidelines…)**	**Only legal basis** **No definition**	**Nothing (legal basis not transposed)**
Full coverage and in line with EU definition	EL, IT, LT (3)	EE, LU, SE (3)	BG, CH, CY, CZ, DE, FI, HR, HU, IE, LV, MT, PL, PT, RO, SK, SI (16)	
No full coverage but in line with EU definition		BE (1)		
Full coverage but not fully in line with EU definition		AT, DK, NL, NO, ES, UK (6)		
No full coverage and not in line with EU definition		FR (1)		
Nothing				

Under this sub-indicator, two main groups of countries emerged. A group of countries present an official definition of PCP in official non-legal documents, such as guidelines. A second group of countries only provide a legal basis to implement PCP at national level. Finally, a limited number of countries include a definition of PCP in national legislation.

With regard to the first group, 11 countries (AT, BE, DK, EE, ES, FR, LU, NL, NO, SE, UK) have included a definition of PCP in non-legal official documents:

- 3 countries (EE, LU, SE) define PCP in guidance documents which provide a countrywide applicable definition in line with the EU definition.
- In Belgium, the guidance document defined PCP only for the Flanders region.
- In 6 countries (AT, DK, NL, NO, ES, UK) guidance documents are applicable across the country but the definition is not coherent with the EU definition.
- In France the definition of PCP is not applicable to all procurers in the country (only to those in the national innovation procurement road mapping exercise) and not in line with the EU definition. According to this definition, PCP cannot include the sale of resulting innovative product. However, it includes the sale of the resulting innovate solutions (the limited set of products or services resulting from the R&D), but does not include commercial volumes of the innovative solution (as this would require the suppliers to undertake quantity production which cannot be part of R&D).

The second group of countries (BG, CH, CY, CZ, DE, FI, HR, HU, IE, LV, MT, PL, PT, RO, SK, SI) do not have an official definition for PCP, neither in national legislation nor in official guidance documents, but provide the legal basis to implement PCP (R&D services exemption in their national public procurement law), which is applicable to all public procurers in the country and in line with the EU procurement directives provisions.

Finally, a limited number of countries (EL, IT, LT) have introduced the definition of PCP in national legislation which is applicable in the whole country and is in line with the EU definition.

There are no countries where the definition or the legal basis for PCP procurement have not been transposed, i.e. the category "nothing" is empty.

3.1.4 *Official definition for Public Procurement of Innovative solutions (PPI)*

The table below illustrates to which extent an official definition for PPI has been introduced in each country.

	Definition in legislation	**Definition in non-legal document (guidelines…)**	**Only legal basis No definition**	**Nothing (legal basis not transposed)**
Full coverage and in line with EU definition		DE, DK, EE, EL (4)	BG, CH, CY, CZ, HR, HU, IE, IT, LU, LV, MT, NL, NO, PL, PT, RO, SI, SK, LT, UK (20)	
No full coverage but in line with EU definition		BE (1)		
Full coverage but not fully in line with EU definition		AT, ES, FI, SE (4)		
No full coverage and not in line with EU definition		FR (1)		
Nothing				

With regard to this sub-indicator, the analysed countries can be divided in two groups. The first group includes 10 countries (AT, BE, DE, DK, EE, ES, FI, FR, SE, EL), which have defined PPI in non-legal documents:

- 4 countries (DE, DK, EE, EL) have introduced a definition of PPI fully in line with the EU definition and applicable to all public procurers.
- In Belgium, the definition of PPI is in line with the EU definition but only applicable to the Flanders region.
- 4 countries (AT, ES, FI, SE) have a PPI definition in non-legislative documents applicable to all public procurers but not in line with the EU definition. For instance, in Spain, the PPI definition included in the guidelines published by the Ministry of Economy only covers products that still need to be developed while existing products not widely commercialised are not covered (PPI is confused with innovation partnerships).
- France provides a PPI definition in national guidance, but it is not applicable to all public procurers (i.e. only to the procurers included in the national innovation procurement road mapping exercise) and it is linked only to solutions that have been released to the market since less than 2 years (no link to the 20% early adopters on the market is done).

The second and bigger group includes the remaining 20 countries (BG, CH, CY, CZ, HR, HU, IE, IT, LT, LU, LV, MT, NL, NO, PL, PT, RO, SI, SK, UK). They have not introduced a definition of PPI neither in national legislation nor in official guidance documents. However, in these countries the legislation still provides a legal basis for procurers to implement PPI, in particular by allowing contract award and performance monitoring based on innovative solution characteristics.

No country has included a definition of PPI in its national legal framework.

There are no countries where the definition or the legal basis for PPI procurement have not been transposed, i.e. the category "nothing" is empty.

3.2 Indicator 2 – Horizontal policies

This indicator reflects the extent to which innovation procurement has been incorporated as a strategic tool or objective in 7 horizontal policy areas.

The table below provides the score of Indicator 2 for each country. The total score is calculated as the average result of 7 sub-indicators, namely "R&D policy", "innovation policy", "public procurement policy", "competition policy", "economic and financial policy", "entrepreneurship policy", "regional/urban policy".

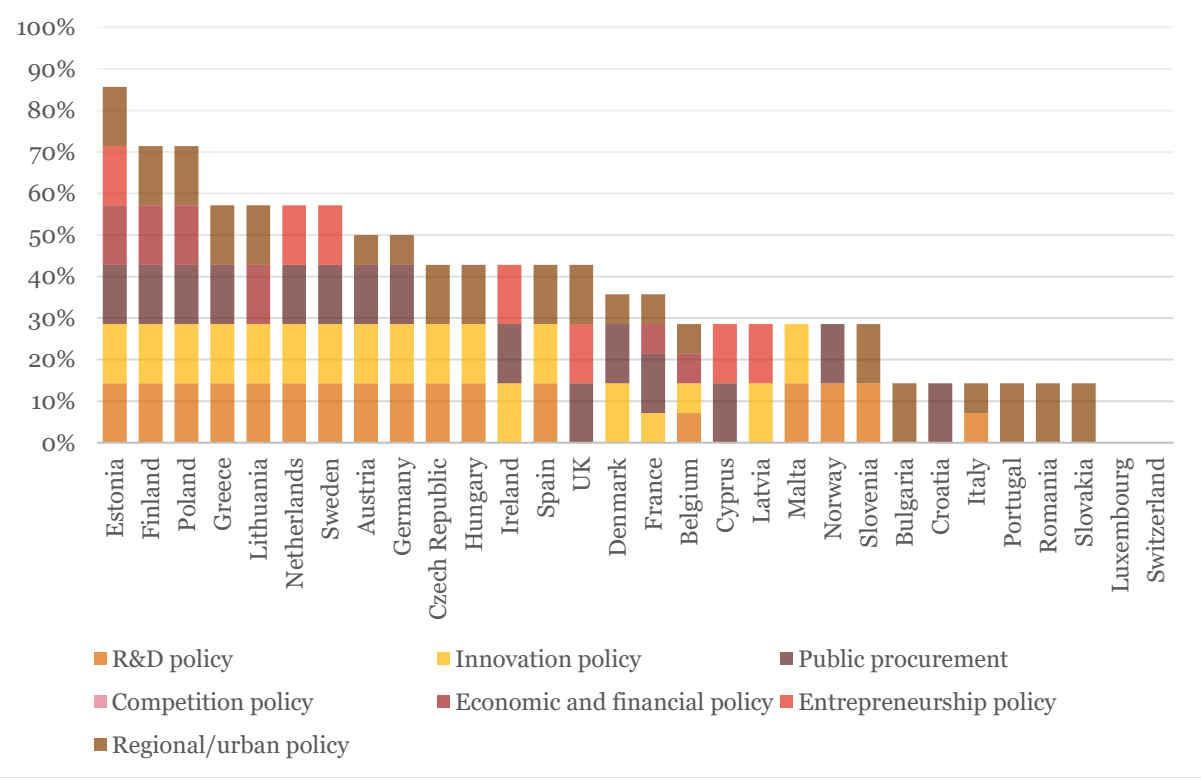
Table 3 - Indicator 2: scores

Country	R&D policy	Innovation policy	Public procurement	Competition policy	Economic and financial policy	Entrepreneurship policy	Regional/urban policy	Total
Austria	100%	100%	100%	0%	0%	0%	50%	**50,0%**
Belgium	50%	50%	0%	0%	50%	0%	50%	**28,6%**
Bulgaria	0%	0%	0%	0%	0%	0%	100%	**14,3%**
Croatia	0%	0%	100%	0%	0%	0%	0%	**14,3%**
Cyprus	0%	0%	100%	0%	0%	100%	0%	**28,6%**
Czech Republic	100%	100%	0%	0%	0%	0%	100%	**42,9%**
Denmark	0%	100%	100%	0%	0%	0%	50%	**35,7%**
Estonia	100%	100%	100%	0%	100%	100%	100%	**85,7%**
Finland	100%	100%	100%	0%	100%	0%	100%	**71,4%**
France	0%	50%	100%	0%	50%	0%	50%	**35,7%**
Germany	100%	100%	100%	0%	0%	0%	50%	**50,0%**
Greece	100%	100%	100%	0%	0%	0%	100%	**57,1%**
Hungary	100%	100%	0%	0%	0%	0%	100%	**42,9%**
Ireland	0%	100%	100%	0%	0%	100%	0%	**42,9%**
Italy	50%	0%	0%	0%	0%	0%	50%	**14,3%**
Latvia	0%	100%	0%	0%	0%	100%	0%	**28,6%**
Lithuania	100%	100%	0%	0%	100%	0%	100%	**57,1%**
Luxembourg	0%	0%	0%	0%	0%	0%	0%	**0,0%**
Malta	100%	100%	0%	0%	0%	0%	0%	**28,6%**
Netherlands	100%	100%	100%	0%	0%	100%	0%	**57,1%**
Norway	100%	0%	100%	0%	0%	0%	0%	**28,6%**
Poland	100%	100%	100%	0%	100%	0%	100%	**71,4%**
Portugal	0%	0%	0%	0%	0%	0%	100%	**14,3%**
Romania	0%	0%	0%	0%	0%	0%	100%	**14,3%**
Slovakia	0%	0%	0%	0%	0%	0%	100%	**14,3%**
Slovenia	100%	0%	0%	0%	0%	0%	100%	**28,6%**
Spain	100%	100%	0%	0%	0%	0%	100%	**42,9%**
Sweden	100%	100%	100%	0%	0%	100%	0%	**57,1%**
Switzerland	0%	0%	0%	0%	0%	0%	0%	**0,0%**
UK	0%	0%	100%	0%	0%	100%	100%	**42,9%**
European average	**53,3%**	**56,7%**	**50%**	**0%**	**16,7%**	**23,3%**	**56,7%**	**36,7%**

The best performing country is Estonia (where innovation procurement is recognised in all horizontal policies except for competition policy), whereas Luxembourg and Switzerland are at the bottom of the ranking because innovation procurement is not recognised in any horizontal policy. A number of countries that use ESIF funds to a large extent (Bulgaria, Portugal, Romania, Slovakia) recognise innovation procurement only in their ESIF supported regional/urban policy. However, these countries do not have any other national horizontal policy or strategy for supporting innovation procurement at national level in areas that are not supported by ESIF funds. The European average of this indicator is 36,7%. 16 countries score below the European average.

In terms of horizontal policy support to innovation procurement, across all countries and among all the horizontal policies observed, "Regional/Urban policy" and "R&D and Innovation policy" are the policy fields that score the highest on endorsing and promoting the strategic importance of innovation procurement. This is mainly due to the fact that innovation procurement is inextricably tied with R&D&I activities. They are followed by "public procurement policies". Endorsement of innovation procurement in "entrepreneurship, economic / financial policy" (as a mechanism for enabling structural reforms and public sector modernisation) and in "competition policy" are still points to be improved across all countries.

Figure 3 – Indicator "Horizontal policies" overall ranking



The next paragraphs provide a detailed breakdown of each horizontal policy considered.

3.2.1 *Public Procurement Policy*

	Applicable to all procurers country wide	Not applicable to all procurers country wide	No recognition
Public Procurement Policy	AT, CY, DE, DK, EE, EL, FI, FR, HR, IE, NL, NO, SE, UK, PL (15)		BE, BG, CH, CZ, ES, HU, IT, LT, LU, LV, MT, PT, RO, SI, SK (15)

15 countries (AT, CY, DE, DK, EE, EL, FI, FR, HR, IE, NL, NO, SE, UK, PL) recognise the strategic importance of innovation procurement in modernising public services in their public procurement policy that is applicable to all procurers in the country.

- In some countries innovation procurement is well structured in the national public procurement strategy and concrete actions are foreseen to realise it. For example in Denmark, the national strategy on public procurement clearly describes the tools to be used to develop innovation procurement and the actions implemented to support the different forms of innovation procurement, e.g. PCP, PPI. Similarly, Greece foresees actions to promote and disseminate innovation procurement in the country, including sectorial studies and awareness raising activities.
- In other countries, such as Austria and the Netherlands, innovation is anchored in the public procurement policy. However, innovation is encouraged via dedicated national action plans rather than via public procurement legislation, where innovation is a secondary objective.
- In Cyprus, the promotion of innovation in public procurement is mentioned as one of the objectives set out in the public procurement strategy.

In 15 countries (BE, BG, CH, CZ, ES, HU, IT, LT, LU, LV, MT, PT, RO, SI, SK) public procurement policy have not explicitly recognised the strategic importance of innovation procurement yet.

3.2.2 *Entrepreneurship policy*

	Country wide	Not country wide	No recognition
Entrepreneurship policy	CY, EE, IE, NL, LV, SE, UK (7)		AT, BE, BG, CH, CZ, DE, DK, EL, ES, FI, FR, HR, HU, IT, LT, LU, MT, NO, PL, PT, RO, SI, SK (23)

7 countries (CY, EE, IE, NL, LV, SE, UK) recognise the importance of innovation procurement in creating business opportunities for entrepreneurs and boosting the scaling up of small companies in their entrepreneurship policy that is applicable across the whole country:

- In Cyprus, Ireland and the Netherlands, the use of innovation procurement in this policy area is focused on the creation of more competitive enterprises in the country. The Netherlands explicitly targets SMEs and startups, whereas in Ireland innovation procurement is used as a tool to foster the participation of SMEs to public tender procedures.
- In Estonia, innovation procurement is embedded in a strategy addressing different sectors including entrepreneurship. The "Estonian Entrepreneurship Growth Strategy 2014-2020" covers a variety of sectors with the aim to create a market for innovative solutions through the use of innovation procurement.

In the remaining 23 countries (AT, BE, BG, CH, CZ, DE, DK, EL, ES, FI, FR, HR, HU, IT, LT, LU, MT, NO, PL, PT, RO, SI, SK) entrepreneurship policy does not recognise the strategic importance of innovation procurement for entrepreneurs and small company growth.

3.2.3 *Economic and financial policy*

	Country wide	Not country wide	No recognition
Economic and financial policies	EE, FI, LT, PL (4)	BE, FR (2)	AT, BG, CH, CY, CZ, DE, DK, EL, ES, HR, HU, IE, IT, LU, LV, MT, NL, NO, PT, RO, SE, SI, SK UK (24)

Only 6 countries (BE, EE, FI, FR, LT, PL) recognise the strategic importance of innovation procurement for economic growth and for optimising financial sustainability of public services in their economic and financial policy:

- In 4 countries (EE, FI, LT, PL) innovation procurement is included as a strategic tool within economic and/or financial strategies that support the overall growth and competitiveness of the whole country. To achieve this objective, these strategies are usually interconnected with sectoral strategies. For example, in Poland the "Strategy for Responsible Development 2020" has a horizontal impact across several policy sectors, including transport, environment, energy and ICT. In Finland, innovation procurement is often used to channel investments and procurement budgets towards the development of new services and products and urban regions.
- In France and Belgium the strategic role of innovation procurement for economic and financial policy is also recognised, but not in a way that is applicable to all procurement areas in the country. In France, it applies only to public procurers that are involved in the national innovation procurement road mapping exercise: a number national central public bodies, i.e. the State (e.g. the Ministries), its "operators" (*établissements publics*) and hospitals. In Belgium it applies only to the region of Flanders.

The vast majority of the EU countries (24) have not recognised the strategic importance of innovation procurement in their economic and financial policies yet.

3.2.4 *Competition Policy*

	Country wide	Not country wide	No recognition
Competition policy			AT, BE, BG, CY, CH, CZ, DE, DK, EE, EL, ES, FI, FR, HR, HU, IT, IE, LV, LT, LU, MT, NL, NO, PL, PT, RO, SI, SE, SK, UK (30)

No country has so far included provisions on innovation procurement in its competition policy to ensure a transparent, non-discriminatory level playing field for all economic operators on its procurement market.

3.2.5 *Regional/urban policy*

	Country wide	Not country wide	No recognition
Regional/Urban policy	BG, CZ, EE, EL, ES, FI, HU, LT, PL, PT, RO, SI, SK, UK (14)	AT, BE, DE, DK, FR, IT, (6)	CY, CH, HR, IE, LV, LU, MT, NL, NO, SE (10)

In 14 countries (BG, CZ, EE, EL, ES, FI, HU, LT, PL, PT, RO, SI, SK, UK) the strategic importance of innovation procurement for regional/urban development is recognised in the national regional and urban policy framework for the whole country. In these national strategies, in most cases the regional actions in the innovation procurement field are foreseen in the context of the ESIF smart specialization strategies that are implemented by regional authorities.

6 countries (AT, BE, DE, DK, FR, IT) do not recognise the strategic importance of innovation procurement for regional/urban development for the whole country, but only in certain regions:

- In Italy, several Italian Regions explicitly indicate PCP and PPI in their 2014-2020 Operational Plans. The sectors where they are applied have been identified by each Region in accordance with the smart specialization strategy documents (S3).
- In Austria even without a national strategic framework for regional and urban policies, there are regions that have developed their own policy dedicated to innovation procurement. In

particular, the Vienna's RTI strategy "Innovative Vienna 2020" recognises innovation procurement among its instruments to foster the innovative development of the region.

- Germany has a strategic framework for regional and urban policies, but innovation procurement is included as a specific objective. However, innovation procurement is envisaged at regional level in the context of Green Public Procurement, e.g. North-Rhine Westphalia.

In 10 countries (CY, CH, HR, IE, LV, LU, MT, NL, NO, SE) there is no recognition of the strategic importance of innovation procurement in regional/urban policies at national or regional level.

3.2.6 *R&D&I policy*

	Country wide	Not country wide	No recognition
R&D policy	AT, CZ, DE, EE, EL, ES, FI, HU, LT, MT, NL, NO, PL, SE, SI (15)	BE, IT (2)	BG, CH, CY DK, FR, HR, IE, LU, LV, PT, RO, SK, UK (13)
Innovation policy	AT, CZ, DE, DK, EE, EL, ES, FI, HU, IE, LV, LT, MT, NL, PL, SE (16)	BE, FR (2)	BG, CH, CY, HR, IT, LU, NO, PT, RO, SI, SK, UK (12)

R&D and innovation policies have been grouped together because most countries develop a combined R&D and innovation strategy. In a limited number of countries (DK, FR, IE, IT, LV, NO, SI) only one of these two horizontal policies recognises the strategic importance of innovation procurement.

- In 15 countries (AT, CZ, DE, EE, EL, ES, FI, HU, LT, MT, NL, NO, PL, SE, SI) innovation procurement is included as a strategic tool within a horizontal R&D strategy at national level.
- In 16 countries (AT, CZ, DE, DK, EE, EL, ES, FI, HU, IE, LV, MT, NL, NO, PL, SE) innovation procurement is included as a strategic tool within a horizontal innovation strategy at national level.
- In France, Belgium and Italy, the strategic relevance of innovation procurement is recognised in R&D or innovation policies not applicable to all entities in the country. In the Italian case the National Research Plan (2015-2020), focusing on R&D, foresees among its objectives the promotion of public demand for innovative solutions. Under this framework the competent Ministry has put in place a "Pre-Commercial Procurement Program" only for the former "cohesion objective regions". In Belgium, only the R&D&I policy of the region of Flanders recognises the strategic importance of innovation procurement.

In 9 countries (BG, CH, CY, HR, LU, PT, RO, SK, UK) both the R&D policy and the innovation policy do not recognise the strategic importance of innovation procurement.

3.3 Indicator 3 – ICT policy

As ICTs are catalysers for innovation and public sector modernisation, embedding innovation procurement as a strategic tool or objective in the digital/ICT policy of the country can be a particularly effective approach towards a widely-spread adoption of innovation procurement. Whilst improving the quality and efficiency of public services with innovative ICT solutions, innovation procurement can also foster company growth in the ICT sector itself. Therefore this indicator reflects to which extent innovation is embedded as a strategic priority in the ICT policy.

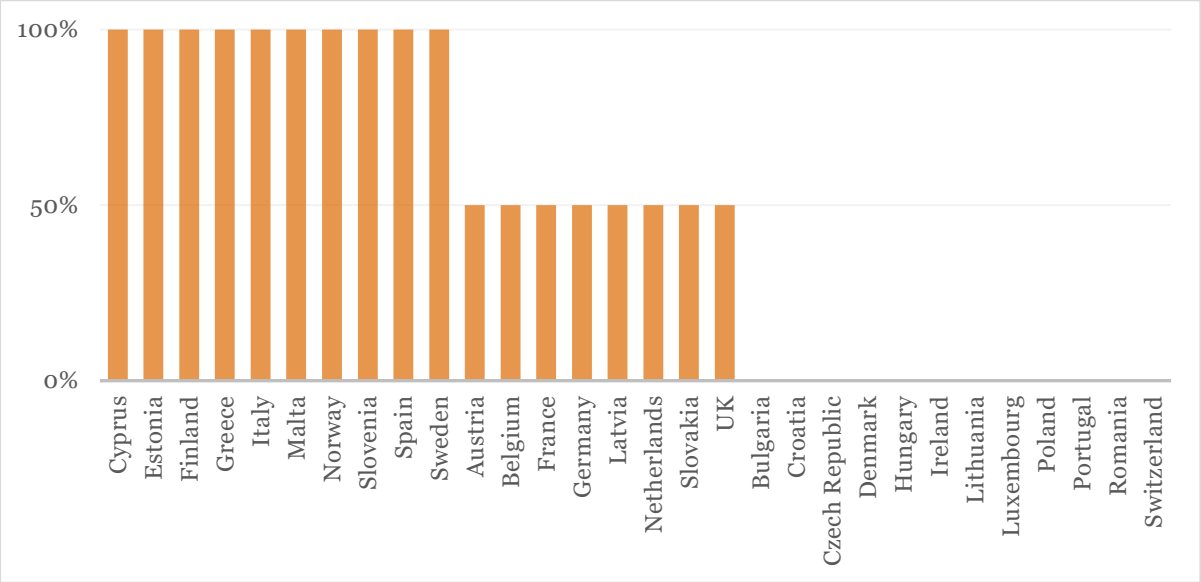
The table below provides an overview of the overall scores (0%, 50% of 100%) obtained by different countries for this indicator.

	Direct and full recognition (100%)	Indirect or Partial recognition (50%)	No recognition (0%)

ICT policy	CY, EE, EL, ES, FI, IT, MT, NO, SE, SI (10)	AT, BE, DE, FR, LV, NL, SK, UK (8)	BG, CH, CZ, DK, HR, HU, IE, LT, LU, PL, PT, RO (12)

The majority (two thirds) of the countries do not recognise, or recognise only partially/indirectly the role of innovation procurement as a strategic tool in ICT policies. This highlights the room for improvement to anchor innovation procurement more strategically in national ICT policies across Europe. As ICTs are key catalysers for economic growth and public sector modernisation, it is important that countries invest time and effort in this. Indeed, most of the countries that are lagging behind on anchoring innovation procurement into their national ICT policy tend to be those that are lagging behind on innovation procurement / public sector modernization in general. The average score for this indicator is 47%.

Figure 4 – Indicator 3 overall ranking



Overall, 18 countries include innovation procurement as part of their national digital/ICT policies.

- In 10 countries (CY, EE, EL, ES, FI, IT, MT, NO, SI, SE) the use of innovation procurement is directly linked to a specific objective identified in the national digital/ICT strategy.
- In 8 countries (AT, BE, DE, FR, LV, NL, SK, UK) there is an indirect or partial reference in the national digital/ICT strategy to the strategic importance of innovation procurement.

In the remaining 12 countries (BG, CH, CZ, DK, HR, HU, IE, LT, LU, PL, PT, RO) the national digital/ICT strategy does not recognise the strategic importance of innovation procurement.

The table below presents the evidence collected for the first 18 countries.

Country	Evidence
Countries where innovation procurement is directly linked to a specific national digital/ICT strategy objective	
Cyprus	The **Digital Cyprus Strategy**[1] foresees under the Objective Entrepreneurship, Measure entrepreneurship a concrete action on Pre-Commercial Procurement. In particular it foresees a new funding Programme to support Pre-Commercial Procurements in the ICT sector

[1] http://www.mcw.gov.cy/mcw/dec/digital_cyprus/ict.nsf/3700071379D1C658C2257A6F00376A80/$file/Main%20document%20digital%20strategy.pdf

	launched by public organizations where innovative companies or research organisations could participate.
Estonia	In the area of ICT, the "**Digital Agenda 2020 for Estonia**" lists innovation procurement among the fundamental principles for the development of Estonian information society through "*the public sector's active role in the uptake and procurement of innovative solutions and shaping the overall conditions for development*". In particular, it states that "*Public sector will be a smart customer, ensuring that in public procurements as much freedom as possible is left for offering innovative solutions, thereby contributing to the development of the ICT sector*". [2]
Finland	The **Handi program**, the "Digitalisation of state procurement" program by the Ministry of Finance in Finland, has as one of the goals to enable more innovations in the field of public procurement[3]. The program contains for example an obligation for the state contracting authorities to publish the procurement plans well in time before the actual procurement notice to allow the economic operators more time to innovate. "**Digital Finland Framework**" (2018) refers to public procurement (only in a picture though, not in the text) as a demand-side tool able to support the strategic priority of investing in innovative digital technologies.[4] Emphasis on using the demand-driven mode is put especially in the area of digital platforms for deploying and further developing new enabling technologies and applications, including those based on artificial intelligence IoT, 5G and cyber security. "*Digital platforms are an outstanding means to deploy and further develop new enabling technologies and applications, including those based on artificial intelligence IoT, 5G and cyber security. Platforms should primarily be developed industry-lead, but there are many domains and purposes where public sector driven or mixed public-private mode is most appropriate. (public procurement is then shown in a picture as a possible resource that can be used)*"
Greece	Actions to develop a framework for innovation procurement and PCP in the digital policy area are also envisaged in the **National Digital Strategy 2016-2021.** The strategy, prepared by **General Secretariat for Digital Policy** of the Ministry of Digital Policy, Telecommunications and Information, reports in in its Proiority 4.1 a "Support for research and development Research and Technological Development (ETA) includes among its objectives: "*a framework for the procurement of innovative services and pre-commercial procurement (Priority 4.1)*".[5]
Italy	In the ICT field, the document "**Strategy for digital growth 2014-2020**[6]" identifies as "*a priority objective: the use of PCP and PPI in order to stimulate the demand for innovative goods and services based on digital technologies in compliance with the European Digital Agenda*" and sets a KPI target to increase by 40% the value spent on innovation procurements. The **three-year plan for IT in the Public Administration 2017-2020**[7] encourages all public administrations that are responsible for IT purchases to encourage innovation procurement, including PCP and PPI, and gives recommendations to public procurers to encourage innovation in public procurement "*by specifying the problem to be solved instead of the solution to be procured, by considering to organise preliminary market consultations with industry before procuring and by using appropriate innovation procurement procedures*".
Malta	The Digital Malta strategy[8] has set an explicit objective (nr 30) to encourage ICT innovation in public procurement: "*Government will use its position as a major procurer to stimulate demand for innovative ICT. It will encourage collaboration between local players and, as*

[2] https://www.mkm.ee/sites/default/files/digital_agenda_2020_estonia_engf.pdf

[5] http://www.opengov.gr/digitalandbrief/wp-content/uploads/downloads/2016/11/digital_strategy.pdf
[6] https://www.agid.gov.it/it/agenzia/strategia-quadro-normativo/crescita-digitale-banda-ultra-larga
[7] https://pianotriennale-ict.italia.it/assets/pdf/Piano_Triennale_per_l_informatica_nella_Pubblica_Amministrazione.pdf
[8] https://digitalmalta.org.mt/en/Pages/Strategy/Digital-Government.aspx

	an early adopter, it will act as a showcase for locally-produced technology. Innovative policies will improve procurement cycles and deliver better value".
Norway	Under ICT policy, **Norwegian digital agenda** considers innovation procurement among its strategic tools.[9] "*A conservative estimate of ICT procurements in the public sector in Norway in 2014 is put at NOK 16.6 billion. It is important to secure the best possible returns on these investments. Creating more professionalised digitisation projects in the public sector is a key element to this end. Such professionalisation will also help stimulate innovation within industry... Action under Part III ICT policy for value creation and inclusion: The Government will strengthen innovation and business development inside welfare technology through the use of open standards and wider use of innovative procurements*".
Slovenia	In the ICT field, the **Agenda Digital Slovenia 2020 - The strategy for the development of the information society by 2020** defines innovation procurement as a strategic priority to achieve its objectives.[10] In the strategy, pre-commercial public procurement for the development of innovative solutions is encouraged through the use of open public and research data, open platforms and cloud computing for faster transfer of solutions to the market. "*By means of PCP in cloud computing, the future internet and big data, and by financial incentives to RDI projects for making open standardised platforms and development of new technologies, products and services, Slovenia will encourage the private sector to develop innovative products and services and make a prompt transition of results of data technologies to the market*". €4 mn is foreseen (from ESIF) for supporting PCP projects in ICT.
Spain	The Spanish **Digital Agenda**[11], managed by the **Ministry of Energy, Tourism and Digital agenda**, confers to innovation procurement a role to boost the development of the ICT sector. "*Goal 5: Boost R&D&I in Information and Communications Technologies. It is a basic principle that public investment in R&D&I in ICT would lead to a greater amount of investment by the private sector. This is why the proposal here is to use public procurement and public - private collaboration strategically...*" The national Spanish plan for encouraging the development of natural language processing, machine translation and conversational systems in Spanish official and co-official languages, the **Plan de Impulso a la Tecnologia del lenguaje**[12], also refers to innovation procurement "*with the aim to bring Spanish industry to the innovation frontier to make it competitive on a global scale, while taking advantage of these innovative capabilities to substantially improve public service. For this we must (using innovation procurement) overcome the paradox by which the supplier does not invest in innovative products, which previously require an investment in R & D, for lack of clear demand, and the buyer does not demand innovative products because there is no available offer, adequate and economical for the pending challenges.*"
Sweden	In the field of ICT, the **Digital Strategy for sustainable digital transformation in Sweden**[13] refers to innovation procurement as one of the tools that public authorities should use to drive the sustainable digital transformation of the country. "*Public procurement should be used to a greater extent as a proactive tool for promoting the development, use and implementation of digitally driven innovations.* *Innovation procurement and innovation partnerships are important tools as well as the conscious use of open source solutions, standards and test beds. Even project competitions can be an important tool for stimulating increased development of digitally driven innovations*".
Countries where innovation procurement is an indirect or partial reference in the national digital/ICT strategy to the strategic importance of innovation procurement	

[9] https://www.regjeringen.no/contentassets/07b212c03fee4d0a94234b101c5b8ef0/en-gb/pdfs/digital_agenda_for_norway_in_brief.pdf
[10] http://www.mju.gov.si/fileadmin/mju.gov.si/pageuploads/DID/Informacijska_druzba/pdf/DSI_2020_3-2016_pic1.pdf

[13] https://www.regeringen.se/49adea/contentassets/5429e024be6847fc907b786ab954228f/digitaliseringsstrategin_slutlig_170518-2.pdf

Austria	In the field of ICT, not the overall country's Digital Roadmap strategy[14] but two parts of it, namely the **Internetoffensive Österreich[15]** and the **creative industries strategy (Kreativwirtschafts-strategie)[16],** recognise the importance of public procurement as a strategic tool to foster the competitiveness of national industries, especially also for SMEs and Start Ups. "*The Commitment of the public sector to the nationwide implementation of "innovation oriented public procurement" can contribute to the spread of innovative business models and the creation of new startups*".
Belgium	At national/federal level, the **2015-2020 Digital Belgium strategy**[17] does not specifically encourage innovation procurement but recognises it indirectly through the importance of procuring new technologies to improve government efficiency. Under priority 3 "digital government", action 4 "operational efficiency" of the strategy states that "*government management will be encouraged to carefully follow up ICT government contracts and to create efficiencies by further digitizing services and processes. The government will also utilise new technologies, such as social media and big data, and shall do so with a clear objective: providing better services at lower cost*".
France	The **2015 French national digital strategy "Digital Republic in Action"**[18] has an action "*Action publique 2020: pour une transformation du service public*", but this action does not mention innovation procurement, or the role of government to boost digital innovation/deployment of innovative solutions through public procurement. Only one part of the French ICT policy, on cybersecurity, recognises the role of innovation procurement. The "**French national digital security strategy**"[19], indeed, states that "*By supporting investment, innovation and exports, also via public procurement, the State will develop a favourable environment for French companies in the digital sector offering secure products and services*".
Germany	In the area of ICT, the **Digital Agenda 2014-2017[20]** identified 7 main areas where action is needed to achieve its overall objectives. One of these areas is public administration, where there is an indirect recognition of innovation procurement because giving public procurement a more innovative focus is seen as a key principle to implement the digital transformation of the sector, in particular "*to reduce the reliance of government IT on closed global IT and cloud computing ecosystems and to support innovative companies and boost competition in the IT sector*". The **Digital Strategy 2025** (adopted in 2016) does not refer to innovation procurement.
Latvia	The Information Society development guidelines 2014-2020, which is the Latvian strategy for digitisation[21], does not specifically mention innovation procurement foresees some activities that indirectly recognise the importance of innovation procurement: it sets as objectives "to involve experts in public administration who know how to convert needs into clearly defined functional demands" and "to support the purchase of SME research services in order to increase demand for innovative solutions and the innovation performance of innovative companies".
Netherlands	The **2016 Dutch digital agenda for the Netherlands** does not explicitly mention innovation procurement but recognises its importance indirectly by recognising the key role of the public sector to drive forward digitisation through its role as buyer for innovative solutions. "*Given the broad impact of digitisation, the role of the government extends further than the simple reinforcement of preconditions and safeguarding public interests. The government is also an actor in this transition, for example, as a buyer of innovative ICT products and services and as a digital service provider for citizens and businesses.*" A broad

[14] https://www.digitalroadmap.gv.at/en/
[15] https://www.internetoffensive.at/aboutus/eckpunkte-fuer-eine-ikt-strategie-fuer-oesterreich/
[16] https://www.interregeurope.eu/fileadmin/user_upload/tx_tevprojects/library/Creative%20Industries%20Strategy%20for%20Austria.pdf
[17] http://digitalbelgium.be/en/5-priorities/digital-government/
[18] http://www.gouvernement.fr/la-republique-numerique-en-actes
[19] https://www.enisa.europa.eu/topics/national-cyber-security-strategies/ncss-map/France_Cyber_Security_Strategy.pdf
[20] http://www.bmwi.de/EN/Topics/Technology/digital-agenda.html
[21] http://www.varam.gov.lv/in_site/tools/download.php?file=files/text/Darb_jomas/elietas//Information_Society Development_Guidelines_2014_2020.docx

	analysis across different sectors aims to implement innovative solutions through public procurement across all top sectors where the government is a key customer. In addition, the ministry of interior, responsible for digitalisation, is currently developing a specific **action plan for innovation & innovation procurement in the field of ICT.** This action plan (*innovatiepact*) is based on a report of a committee of the ministries of interior affairs and economic affairs on future digitalization[22]. The national government will spend €200 mn on realising a digital infrastructure per year[23]. According to the RIO Report 2015, a multiple sector action agenda has been set also in the field of nano-technology and bio-based economy.
Slovakia	Slovakia's **digital growth and Next Generate Access infrastructure strategic document 2014-2020**[24] does not explicitly mention innovation procurement but recognises its importance indirectly by identifying that "*increasing the openness of ICT public procurements towards technology innovation and approaches is desirable, which would lead to simpler and less expensive solution variants than originally planned. The modalities of electronic public procurement will be updated in order to easily implement demand-driven projects in public administration in the form of innovative solutions and to encourage effective participation of small and medium-sized businesses in such areas as open data, mobile applications for eGovernment services, green information and telecommunication technologies and applications for social networks*".
UK	In the field of ICT, the UK Government's **Digital strategy**[25] does not explicitly mention innovation procurement but recognises its importance indirectly by stating that the government "*will use public procurement more effectively to encourage better pre-market engagement, shaping specifications to take advantage where appropriate of the market's latest offerings and innovations, will make available a forward looking pipeline of digital work, updated quarterly to enable businesses to invest in capability and resources appropriately; and will encourage suppliers who are new to government (in particular SMEs) to undertake bidder training to lower the effective barrier to entry to the procurement market*".

3.4 Indicator 4 – Sectoral policies

This indicator reflects to what extent innovation procurement is endorsed as a strategic priority in a policy framework or action plan in each of the 10 sectors of public sector activity identified in the EU public procurement directives.[26]

The indicator "sectoral policies" is a multi-dimensional indicator with 10 sub-indicators corresponding to the 10 areas of public sector activity. The table below provides the overall scores obtained by each country per sub-indicator.

Country	Healthcare and social services	Public transport	General public services	Construction sector	Energy sector	Environment sector	Water sector	Public order, safety, security and defence sector	Postal sector	Education,recreation, culture and religion	Total
Austria	100%	100%	100%	100%	100%	100%	0%	0%	0%	0%	**60%**

[22] https://www.rijksoverheid.nl/documenten/rapporten/2017/04/18/rapport-van-de-studiegroep-informatiesamenleving-en-overheid-maak-waar
[23] https://www.digicommissaris.nl/image/2016/12/22/digiprogramma_2017-989810276.pdf
[24] http://www.informatizacia.sk/ext_dok-strategicky_dokument_2014_2020_en/16622c
[25] https://www.gov.uk/government/publications/government-digital-strategy/government-digital-strategy
[26] The following 10 sectors are defined in the EU public procurement directives: (I) healthcare and social services; (II) public transport (such as railway, urban railway, tramway, trolleybus, bus services, airport and port related activities); (III) general public services, public administration (covering e-government), economic and financial affairs; (IV) construction, housing and community amenities; (V) energy (covering exploration, extraction, production, transport and distribution of energy such as electricity, gas, heat, oil, coal and other solid fuels); (VI) environment; (VII) water; (VIII) postal services; (IX) public order, safety, security and defence; (X) education, recreation, culture and religion.

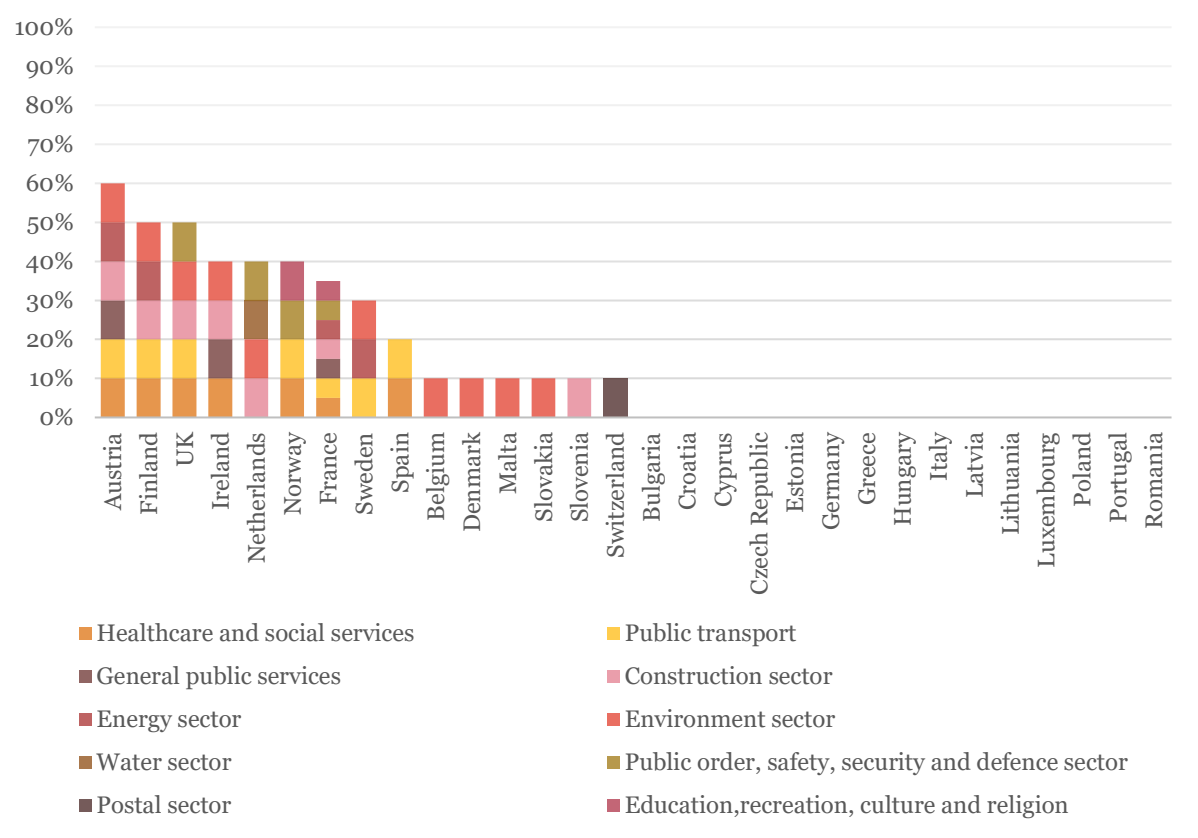
Country	Healthcare and social services	Public transport	General public services	Construction sector	Energy sector	Environment sector	Water sector	Public order, safety, security and defence sector	Postal sector	Education, recreation, culture and religion	Total
Belgium	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	**10%**
Bulgaria	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Croatia	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Cyprus	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Czech Republic	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Denmark	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	**10%**
Estonia	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Finland	100%	100%	0%	100%	100%	100%	0%	0%	0%	0%	**50%**
France	50%	50%	50%	50%	50%	0%	0%	50%	0%	50%	**35%**
Germany	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Greece	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Hungary	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Ireland	100%	0%	100%	100%	0%	100%	0%	0%	0%	0%	**40%**
Italy	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Latvia	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Lithuania	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Luxembourg	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Malta	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	**10%**
Netherlands	0%	0%	0%	100%	0%	100%	100%	100%	0%	0%	**40%**
Norway	100%	100%	0%	0%	0%	0%	0%	100%	0%	100%	**40%**
Poland	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Portugal	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Romania	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Slovakia	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	**10%**
Slovenia	0%	0%	0%	100%	0%	0%	0%	0%	0%	0%	**10%**
Spain	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	**20%**
Sweden	0%	100%	0%	0%	100%	100%	0%	0%	0%	0%	**30%**
Switzerland	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	**10%**
UK	100%	100%	0%	100%	0%	100%	0%	100%	0%	0%	**50%**
European average	**21,7%**	**21,7%**	**8,3%**	**21,7%**	**11,7%**	**33,3%**	**3,3%**	**11,7%**	**3,3%**	**5,0%**	**14,2%**

No country has incorporated innovation procurement in the national strategies for all 10 areas of public sector activity yet. The best performers in this field are Austria (60% score, meaning innovation procurement is recognised in 6 out of 10 areas of public sector activity) and the UK and Finland (50% score), followed by Ireland, the Netherlands and Norway (with 40% score). The European average of this indicator is 14,2%. This rather low European average is due to the fact that 15 out of 30 countries have not incorporated innovation procurement in the strategy for any area of public sector activity yet.

Considering separately each sub-indicator, innovation procurement is most frequently embedded as a strategic priority in policy frameworks and action plans of the environmental sector (in approx. 33% of countries), followed by the health and social services, public transport and construction sectors (in

approx. 22% of countries). Sectors where innovation procurement is usually not embedded as a strategic priority in policy frameworks include the energy and the security and defence sectors (in approx. 12% of countries), general public services (in approx. 8% of countries), education/cultural sector (in approx. 5% of countries) and finally in water, and postal sectors (in approx. 3% of countries).

Figure 5 – Indicator "Sectoral policies" overall ranking



3.4.1 *Healthcare and social services*

	Applicable countrywide	Not applicable countrywide	Not available
For all types of innovation procurement	AT, ES, FI, IE, NO, UK (6)	FR (1)	
Not for all types of innovation procurement			
Not available			BE, BG, CH, CY, CZ, DE, DK, EE, EL, HR, HU, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK (23)

7 countries encourage the use of innovation procurement in the health and social care sector:

- 6 countries (AT, ES, FI, IE, NO, UK) have included innovation procurement as strategic priority in national policy frameworks and action plans applicable to the whole country and for all types of innovation procurements.
- France implements actions that are not applicable countrywide. The country has developed a roadmap to adapt the work programme of the public sector according to the spending target of the National Pact for Growth, Competitiveness and Employment. The roadmap is not addressed to all public procurers in the country, but only to those affected by the National Pact (i.e. the State - e.g. Ministries, the central authorities - *établissements publics*, and the hospitals). Conversely, non-hospital type health or social care procurers at regional and local level are not concerned.

In 23 countries (BE, BG, CH, CY, CZ, DE, DK, EE, EL, HR, HU, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK) the national strategies for health care and social services do not recognise the strategic importance of innovation procurement for modernising public health and social services.

3.4.2 *Public transport*

	Applicable countrywide	Not applicable countrywide	Not available
For all types of innovation procurement	AT, ES, FI, NO, SE, UK (6)	FR(1)	
Not for all types of innovation procurement			
Not available			BE, BG, CH, CY, CZ, DE, DK, EE, EL, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SI, SK, (23)

7 countries encourage the use of innovation procurement in the public transport sector:

- Innovation procurement is embedded as strategic priority in the whole country and for all types of innovation procurement in 6 countries (AT, ES, FI, NO, SE, UK). One of the most structured strategies in this field the Austrian *Strategy for clean energy in transport* which concedes a pioneering role to the public sector and to innovation procurement in the reconstruction and modernisation of the transport system. In Sweden, sectoral policies are built on continuous consensus of stakeholder groups that work and collaborate in ad-hoc forums. In this context, the group that deals with transportation of the future has recognised innovation procurement as one of the key priorities for the development and modernisation of the public transport sector in the country.
- In one country (FR) the roadmap in the context of transport sector is not addressed to all public procurers in the country, but only to those which are affected by the spending target of the National Pact for Growth, Competitiveness and Employment (i.e. the State - e.g. Ministries, the central authorities - *établissements publics*, and the hospitals). Conversely, regional and local procurers are not concerned.

In 23 countries (BE, BG, CY, CH, CZ, DE, DK, EE, EL, HR, HU, IE, IT, LV, LT, LU, MT, NL, PL, PT, RO, SK, SI) the national strategies for the public transport sector do not recognise the strategic importance of innovation procurement for modernising the transport sector.

3.4.3 *General public services*

	Applicable countrywide	Not applicable countrywide	Not available
For all types of innovation procurement	AT, IE (2)	FR (1)	
Not for all types of innovation procurement			
Not available			BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, HR, HU, IT, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, UK (27)

Overall, in this sector the use of innovation procurement is envisaged in 3 countries.

- 2 countries (AT and IE) have included innovation procurement as strategic priority in policy frameworks and action plans applicable in the whole country and to all public procurers. For example, in Ireland, the Government Public Service Reform Programme includes innovation procurement as the most important instrument to reach 2 objectives: maximising value for money and delivering sustainable public services for tax payers.
- In France, the roadmap published in the context of this sector is not addressed to all public procurers in the country, but only to those which are affected by the spending target of the National Pact for Growth, Competitiveness and Employment (i.e. the State - e.g. Ministries, the central authorities - *établissements publics*, and the hospitals). Conversely, regional and local procurers are not concerned.

In 27 countries (BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, FI, HR, HU, IT, LT, LU, LV, MT, NL, NO, PL, PT, RO, SE, SI, SK, UK) the national strategies do not recognise the strategic importance of innovation procurement.

3.4.4 *Construction sector*

	Applicable countrywide	Not applicable countrywide	Not available
For all types of innovation procurement	AT, FI, IE, NL, SI, UK (6)	FR (1)	
Not for all types of innovation procurement			
Not available			BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, HR, HU, IT, LT, LU, LV, MT, NO, PL, PT, RO, SE, SK (23)

Innovation procurement is embedded as strategic priority in the construction sector in 7 countries (AT, FI, FR, IE, NL, SI, UK).

- 3 countries (IE, NL, UK) have a more systematic and detailed approach to support public authorities to undertake more innovation procurement in the sector. The Irish "Capital Works Management Framework" and the "Construction agenda" adopted by Dutch Ministries of infrastructure and housing represent a sector specific framework for public procurer in the construction sector. In UK the Government Construction strategy embeds innovation procurement as a strategic tool to be used by the public sector to drive changes in the sector. In these 3 countries innovation procurement is applicable countrywide and to all types of innovation procurement.
- In Austria the support to innovation procurement is embedded in national guidelines entitled Austrian federal Guidelines for Building culture and stimulus Program.
- In the Finnish Government Programme 2015-2019 innovation procurement is applicable to all public sector procurers and to all types of innovation procurements.
- The Slovenian Smart Specialization Strategy (S4) sets specific objectives in the field of "Smart buildings and homes, including wood chain" to be achieved also through the smart use of PCPs and PPIs.
- In France, the roadmap published in the context of this sector is not addressed to all public procurers in the country, but only to those which are affected by the spending target of the National Pact for Growth, Competitiveness and Employment (i.e. the State - e.g. Ministries, the central authorities - *établissements publics*, and the hospitals). Conversely, regional and local procurers are not concerned.

In 23 countries (BE, BG, CH CY, CZ, DE, DK, EE, EL, ES, HR, HU, IT, LT, LU, LV, MT, NO, PL, PT, RO, SE, SK) the national strategy for the construction sector does not recognise the strategic importance of innovation procurement yet.

3.4.5 *Energy sector*

	Applicable countrywide	Not applicable countrywide	Not available
For all types of innovation procurement	AT, FI, SE (3)	FR (1)	
Not for all types of innovation procurement			
Not available			BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, HR, HU, IE, IT, LT, LU, LV, MT, NL, NO, PL, PT, RO, SI, SK, UK (26)

4 countries included innovation procurement as strategic priority in policy frameworks and action plans in the energy sector.

- In three countries (AT, FI, SE), innovation procurement is recognised in the energy sector in a way that is applicable to all public procurers and for all types of innovation procurement.
- In France, the roadmap published in the context of the energy sector is not applicable countrywide as it is not addressed to all public procurers in the country, but only to those affected by the spending target of the National Pact for Growth, Competitiveness and Employment (namely, the State - e.g. Ministries, the central authorities - établissements publics, and the hospitals). Regional and local procurers are not concerned.

26 countries (BE, BG, CH, CY, CZ, DE, DK, EE, EL, ES, HR, HU, IE, IT, LT, LU, LV, MT, NL, NO, PL, PT, RO, SI, SK, UK) do not specifically recognise the strategic importance of innovation procurement for the energy sector. Some of those countries have an action plan or strategic framework in the energy sector which only foresees the use of Green Public Procurement or Sustainable Procurement. However, there are no clear references to innovation procurement, PCP and PPI.

3.4.6 *Environmental Sector*

	Applicable countrywide	Not applicable countrywide	Not available
For all types of innovation procurement	AT, BE, DK, FI, IE, MT, NL, SE, SK, UK (10)		
Not for all types of innovation procurement			
Not available			BG, CH, CY, CZ, DE, EE, EL, ES, FR, HR, HU, IT, LT, LU, LV, NO, PL, PT, RO, SI (20)

In 10 countries (AT, BE, DK, FI, IE, MT, NL, SE, SK, UK) innovation procurement is recognised as a strategic tool available for all public procurers and applicable for all types of innovation procurement. Also in this case the actions and objectives are embedded in a specific environmental sector strategy or in high level horizontal policies. The support to innovation procurement is often facilitated by the existence of Green Public Procurement frameworks, which are directly or indirectly linked to innovation procurement practices (e.g. BE, DK, MT, SK).

In 20 countries (BG, CH, CY, CZ, DE, EE, EL, ES, FR, HR, HU, IT, LT, LU, LV, NO, PL, PT, RO, SI) the energy policy does not explicitly recognise the strategic importance of innovation procurement to modernise public service provisioning.

3.4.7 *Water Sector*

	Applicable countrywide	Not applicable countrywide	Not available
For all types of innovation procurement	NL (1)		
Not for all types of innovation procurement			
Not available			AT, BE, BG, CH, CY, CZ, DE, DK, EE, EL, FI, HR, HU, IE, IT, LT, LU, LV, MT, NO, PL, PT, RO, SE, SK, SI, UK (29)

The Netherlands is the only country which has embedded innovation procurement in its water policy. In particular, the Union of Dutch Waterboards has positioned innovation procurement clearly as an

objective in their procurement strategy since 2014.[27] Innovation procurement by water sector procurers is also explicitly encouraged in the Ministry of infrastructure and environment's High Water Protection Programme.

In the remaining 29 countries (AT, BE, BG, CH, CY, CZ, DE, DK, EE, EL, FI, HR, HU, IE, IT, LT, LU, LV, MT, NO, PL, PT, RO, SE, SK, SI, UK) have not included innovation procurement as strategic priority in policy frameworks and action plans of the water sector.

3.4.8 *Public order, safety, security and defence sector*

	Applicable countrywide	Not applicable countrywide	Not available
For all types of innovation procurement	NL, NO, UK (3)	FR (1)	
Not for all types of innovation procurement			
Not available			AT, BE, BG, CH, CY, CZ, DK, FI, DE, EE, EL, ES, HR, HU, IE, IT, LT, LU, LV, MT, PL, PT, RO, SK, SE, SI (26)

4 countries (FR, NL, NO and UK) have included innovation procurement as strategic priority in policy frameworks and action plans of the public order, safety, security and defence sector.

- In 3 countries (NL, NO, UK) innovation procurement is endorsed by national policy frameworks that are applicable country wide and for all types of innovation procurement. In the Netherlands, the Ministry of justice and security has adopted in 2018 its step-by-step plan for innovation procurement[28] while the Ministry of defence has adopted a strategy both for PCP and PPI.[29] In the UK, the National Security Strategy and Strategic Defence and Security Review 2015[30] committed to increase the budget to support the procurement of innovative solutions to the challenges facing the Armed Forces. In Norway, the Strategy for the Norwegian Armed Forces states that the public sector will explicitly focus on innovative SMEs in their procurement procedures in the coming years.
- In France, the innovation procurement roadmap published in the context of this sector is not applicable countrywide as it is not addressed to all public procurers in the country, but only to those affected by the spending target of the National Pact for Growth, Competitiveness and Employment (namely, the State - e.g. Ministries, the central authorities - établissements publics, and the hospitals). Regional and local procurers are not concerned.

26 countries (AT, BE, BG, CH, CY, CZ, DK, FI, DE, EE, EL, ES, HR, HU, IE, IT, LT, LU, LV, MT, PL, PT, RO, SE, SI, SK) have not included innovation procurement as strategic priority in policy frameworks and action plans of the public order, safety, security and defence sector.

[27] https://www.uvw.nl/wp-content/uploads/2018/01/De-waterschapsmarkt-van-de-toekomst-visiedocument.pdf
[28] https://www.pianoo.nl/document/15181/stappenplan-innovatiegericht-inkopen-ministerie-van-veiligheid-justitie
[29] https://www.defensie.nl/onderwerpen/innovatie/front and https://www.defensie.nl/onderwerpen/innovatie
[30] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/555607/2015_Strategic_Defence_and_Security_Review.pdf

3.4.9 *Postal Sector*

	Applicable countrywide	Not applicable countrywide	Not applicable
For all types of innovation procurement	CH (1)		
Not for all types of innovation procurement			
Not applicable			AT, BE, BG, CY, CZ, DE, DK, EE, ES, EL, FI, FR, HR, HU, IE, IT, LT, LU, LV, MT, NL, NO, PL, PT, RO, SK, SI, SE, UK (29)

Only Switzerland has included innovation procurement a strategic priority in its policy framework of the postal sector. In particular, the procurement strategy 2017-2020 of the Swiss Post[31] aims at making the organisation a "discoverer of innovations". It encourages the evaluation of potential suppliers according to a wide range of criteria which include quality, price, product/performance, risks, potential for innovation and performance, ecological aspects and opportunities for electronic communication.

The remaining 29 countries (AT, BE, BG, CY, CZ, DE, DK, EE, ES, EL, FI, FR, HR, HU, IE, IT, LV, LT, LU, MT, NL, NO, PL, PT, RO, SE, SI, SK, UK) have not included innovation procurement as strategic priority in policy framework of the postal sector.

3.4.10 *Education, recreation, culture and religion*

	Applicable countrywide	Not applicable countrywide	Not applicable
For all types of innovation procurement	NO (1)	FR (1)	
Not for all types of innovation procurement			
Not applicable			AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, EL, FI, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, UK (28)

Overall, only 2 countries (FR and NO) have included innovation procurement as strategic priority in policy frameworks and action plans in this sector.

- In Norway the "Long-term Plan for Research in Higher Education" recognises the role of innovation procurement as a tool to increase demand of innovation in the sector. The plan is applicable in the whole country.

[31] Swiss Post, a public Company owned by the Swiss Confederation, is the national postal service of the country.

- In France, the innovation procurement roadmap published in the education sector is only addressed to public procurers included in the spending target of the National Pact for Growth, Competitiveness and Employment (i.e. the State - e.g. Ministries, the central authorities - *établissements* publics, and the hospitals). Regional and local procurers are therefore not concerned.

In 28 countries (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, EL, FI, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, UK) innovation procurement is not included as strategic priority in policy frameworks or action plans in the education, cultural, recreation or religion sector.

3.5 Indicator 5 – Action plan

This indicator reflects to what extent each country has developed a dedicated action plan that foresees specific measures that are not covered by other horizontal policies (see indicator 2) or sectoral policies (see indicators 3 and 4) to encourage innovation procurement in a coordinated way across the country.

The table below provides the overall scores reached by each country that has adopted an action plan. The overall score is calculated as the average result of 9 sub-indicators shown in the columns of the table below.

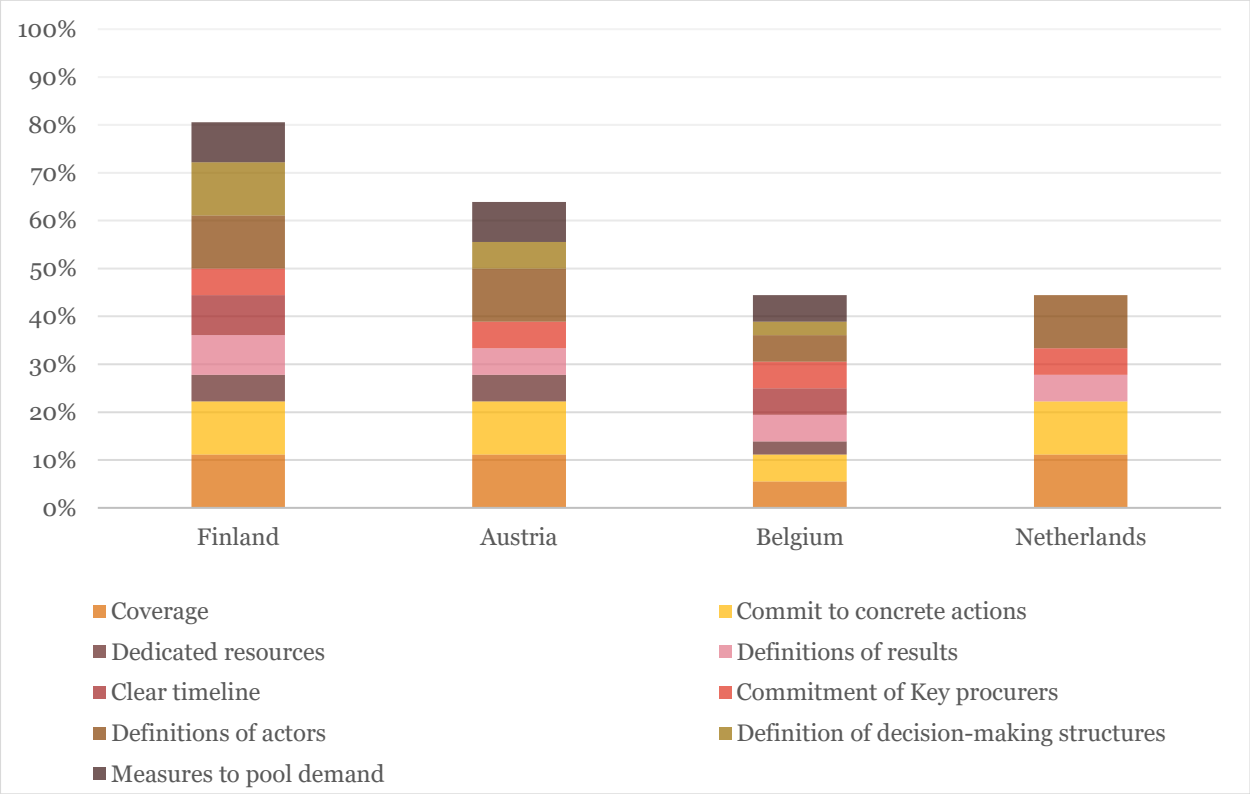
Country	Coverage	Concrete actions	Resources	Def. of results	Timeline	Commitment of key procurers	Definition of actors	Definition of decision-making structures	Measures to pool demand	Total
Austria	100%	100%	50%	50%	0%	50%	100%	50%	75%	**64%**
Belgium	50%	50%	25%	50%	50%	50%	50%	25%	50%	**44%**
Finland	100%	100%	50%	75%	75%	50%	100%	100%	75%	**81%**
Netherlands	100%	100%	0%	50%	0%	50%	100%	0%	0%	**44%**
All other 26 countries	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
European average	**12%**	**12%**	**4%**	**8%**	**4%**	**7%**	**12%**	**6%**	**7%**	**8%**

Only in 4 countries (AT, BE, FI, NL), governments have adopted a dedicated action plan for innovation procurement. The most comprehensive, well-structured and up-to-date action plan has been developed in Finland. More information on each of these 4 countries' action plans is provided in section 3.5.1.

It is worth stressing that 5 countries (DK, EE, EL, FR, SE) have not adopted a stand-alone action plan for innovation procurement for their country but have included specific objectives and concrete measures on innovation procurement in wider national strategies or programmes, often with a dedicated budget and with a clear commitment of key actors. More information on each of these 5 countries action plans is provided in section 3.5.2.

The European average for the indicator "Action plan" is 8%. This is mainly due to the fact that in the majority of the countries (21 countries: BG, CY, CH, CZ, DE, ES, HR, HU, IE, IT, LV, LT, LU, MT, PL, PT, RO, SK, SI, UK, NO) there is no dedicated action plan for innovation procurement, nor a set of coordinated policy objectives and concrete measures for innovation procurement in other global national strategies to mainstream innovation procurement across the whole country. Despite the fact that there may be individual sectoral or horizontal policy initiatives in those countries, they are not part of an overall umbrella strategy to foster innovation procurement more widely across the whole country.

Figure 6 – Indicator "Action plan" overall ranking



3.5.1 *Countries with dedicated innovation procurement action plan*

The following table elaborates on the dedicated innovation procurement action plans in AT, BE, FI, and NL.

Country	Action plan – evidence
Austria	The Action Plan on Public Procurement Promoting Innovation (PPPI) was adopted in 2012 by the Austrian Federal Government as a follow up of the "Austrian Strategy for Research, Technology and Innovation" (2011). It aims at making PPPI an element of demand side innovation policy, complementing supply side measures, and increasing the share of public procurement volume used for innovation. The action plan covers all types of innovation procurement, is applicable across the country and to all public procurers in all sectors and administrative levels and aims at mainstreaming innovation at a large scale. The action plan identifies concrete actions (e.g. the management of a PPPI platform) and defined a clear timeline to implement these actions in the time period 2012-2013. However the timeline in the action plan is not up-to-date any more (there are no actions defined with target completion date beyond 2013). Therefore the score for sub-indicator timeline is 0%. The defined actions and activities are linked to a set of specific objectives which translate the overall strategic objectives and the mission of the action plan. The specific objectives include (i) raising awareness on innovation through public procurement; (ii) fostering dialogue between demand and supply; (iii) qualifying decision makers and procurers for PPPI; (iv) introducing and fostering new approaches for PPPI; (v) establishing a monitoring and benchmarking system; (vi) integrating PPPI actions in sectorial strategies and in different administrative levels. The action plan is financed by the Ministry for Digital and Economic Affairs (BMDW) and the Ministry for Transport, Innovation and Technology (BMVIT). Actions, objectives and dedicated resources are implemented for all types of innovation procurement, but not for all key actors in the country (committed resources to achieve the objectives are clear for the competence centre but not for other ministries and key procurers in the country, the expected results from other actors besides

Country	Action plan – evidence
	the competence centre are defined less clearly) and do not enable to achieve mainstreaming of innovation procurement at a large scale. In terms of governance, the action plan defines actors to achieve different objectives. For example, the key procurement organisation involved in the implementation of the action plan is the PPPI Service Centre.[32] Its services cover three main objectives: raising awareness for PPPI, matching public procurers and potential suppliers of innovative solutions, and increasing the overall share of procurement budgets used for PPPI. The Service Centre operates under the roof of the Austrian Federal Procurement Agency and on behalf of the two ministries responsible for the implementation of the action plan (i.e. the BMWD and the BMVIT). While covering all types of innovation procurement widely across the country, the activities implemented by the Service Centre have not reached yet the stage of being able to mainstream innovation at large scale. As suggested in the evaluation of the PPPI action plan "the necessary political backing exists, it is expressed in several strategic documents but has not reached a sufficient level".[33] It is recognised that a number of "preparatory actions" took place on how to implement PPI in different public sector organisations (including ministries), but they have not been defined in a strategic plan yet. Consequently, a systematic dedication of procurement budgets for the purpose of PPPI activities is currently only observable in the context of PPPI "pilot projects". With regard to decision-making structures, again the interaction between the competence centre and its funding ministries BMWD and BMVIT are clear but the action plan does not define a clear decision making structure with other ministries and key procurers to ensure implementation of the objectives. The PPPI Service Centre participates in regular joint meetings with the two ministries including meetings of the so-called PPI steering group that includes representatives of the higher levels of the ministerial hierarchy. Amongst others, during these meetings the plans of the Service Center activities for the coming year are discussed and defined. The evaluation of the PPI Action Plan implementation raised some concerns related to the governance structure, including the absence of a clear distribution of tasks and roles among ministries (currently based on non-binding agreements) and the challenges faced by actively managing the Action Plan especially with regard to other ministries. Finally, through the involvement of the national central purchasing body BBG the action plan defines concrete measures to pool demand among public and private procurers across the whole country and for all types of innovation procurement, however not at a scale to scale up innovation procurement widely yet.
Belgium	At national level there is no dedicated action plan for innovation procurement, while there is one at regional level, in the Flemish region. The total score for most of the sub-indicators is 50%, as the action plan does not cover the whole country. The score for definition of results and definition of resources is 25% because these aspects are clear for the Flemish government and the PIO programme but are not clearly defined for other key actors/public procurers in the Flemish region covered by the action plan. Flanders has an action plan[34] for innovation procurement and innovative procurement that aims to promote innovation in public procurements of all public procurers in all sectors across the region. In this context innovation procurement covers all types of innovation procurement (both R&D procurement, incl. PCP, and PPI). The Flemish government has adopted the Innovative Public Procurement Program (PIO)[35] to promote innovation procurement in the Flemish region. The first round of PIO has been running from 2009 to 2015, the second from 2016 to 2019. Thanks to this program, all Flemish government and public sector organizations that fall under the Belgian Public Procurement Act can contact PIO for information, advice, guidance and co-financing for innovative purchasing projects. PIO has well-defined action plan with expected results, clear timeline and budget (€5 mn per year from the Flemish government). PIO is supported by the Flemish Ministry of Economy, Science and Innovation, which is also its manager.

[32] http://www.ioeb.at/
[33] https://repository.fteval.at/331/1/I%C3%96B-Evaluierung_Kurzfassung%20EN_barrierefrei.pdf
[34] http://www.innovatieveoverheidsopdrachten.be/over-pio/plan-van-aanpak
[35] http://www.innovatieveoverheidsopdrachten.be/gids-voor-innovatieve-overheidsopdrachten

Country	Action plan – evidence
	PIO has a number of strategic goals: 1) To establish a knowledge centre on innovation procurement; 2) To reach 3% of the Flemish Government's budget for public procurement for innovation procurement; 3) To draft a portfolio of projects and good practices as examples in order to raise awareness about innovation procurement; 4) To stimulate public organisations to participate in EU opportunities of innovation procurement (such as Horizon2020). In Flanders, there are also some examples of action plans at local level, like the Municipality of Ghent, which has its own innovation procurement strategy since 2014[36].
Finland	In December 2017 Finland has adopted a dedicated Action Plan on innovation procurement, which is was initiated by the Ministry of Economic Affairs and Employment. The overall purpose of the action plan is to promote a more strategic approach to innovation procurement at the Government level and enhance management and preparation of procurements in administrative branches. The action plan covers all types of innovation procurement, is applicable across the country and to all public procurers in all sectors and administrative levels and aims at mainstreaming innovation at a large scale. The action plan defines concrete actions. The Action Plan contains 14 different measures divided in four main categories: management, information sharing, skills development, and concrete tools (e.g. risk management tools). The action plan also defines concrete responsible actors for each action to be implemented. For each of the 14 measures, tasks are divided among the responsible actors which range from the competence centre KEINO to all ministries in the central government, the central purchasing body HANSEL, the funding entities Sitra and Business Finland, the training entity HAUS etc. The action plan defines for each action concrete expected results. For example, according to the Action Plan, innovation procurement should be included in the performance management (KPIs) of each public sector organisation to ensure a systematic approach. Furthermore, public organisations should assign a person in charge of achieving the objectives on innovation procurements (so called "change agents") and provide training activities tailored to innovation procurement. The action plan defines a clear timeline to implement all the objectives in two phases. The specific objectives of the Action Plan are: • Promoting a more strategic approach to innovation procurement; • Promoting a better management and preparation of procurements in administrative branches; • Creating a systematic development process for cooperation across central government sectors and administrative branches; • Support to the Government objective to raise the share of innovation procurement of all public procurement to 5% (cf. Indicator "Target"). The second phase of the plan consists of defining supporting activities for each administrative branch. Support and coaching, tailored to the needs of each administrative branch, will be provided to promote the implementation of the measures. The second phase is already underway in the form of coaching meetings for each administrative branch. These meetings will continue until January 2019. As the timeline does not cover long term actions to sustain wide scale implementation yet, the score for the sub-indicator timeline is therefore 75%.Finally, dedicated resources have been allocated by the ministry of economics for the activities in the action plan to be implemented by the national Finnish competence centre on innovation procurement KEINO. However it is not clear which resources are exactly committed by the other key actors listed in the action plan to achieve their objectives in the action plan. The fact that innovation procurement is now addressed in the whole country is also proved by the existence of local initiatives. For example, the cities of Turku and Tampere have their own actions to promote innovation procurement.

[36] http://www.ecoprocura.eu/fileadmin/editor_files/images/Ghent_sustainable_procurement_strategy_and_innovation_charter.pdf

Country	Action plan – evidence
	Finally, through the involvement of the national central purchasing body Hansel and the creation of purchasing groups the action plan defines concrete measures to pool demand among public and private procurers across the whole country and for all types of innovation procurement, however this is not implemented yet at a scale to mainstream innovation procurement widely yet.
Netherlands	The Netherlands has a national Action Plan for innovation procurement since 2013[37]. The action plan commits to concrete actions and objectives. This includes setting up new innovation procurement projects, increasing the use of innovation procurement instruments, activating also local and regional authorities, water and health procurers to use more innovation procurement, developing financial incentives and a monitoring system to report back on innovation procurement implementation progress to the Dutch parliament. The development of the action plan is supported by the formal engagement of some key contracting authorities to the action plan (national government, regional and local authorities, water and health care procurers, other public procurers e.g. energy utilities are not involved) but only one procurer (Rijkswaterstaat) formally committed to achieve the 2,5% target. The key actor for the implementation of the Action Plan is PIANOo[38], the Competence Centre for Public Procurement, including innovation procurement. In this context, PIANOo sets once a year an agenda which plans detailed objectives and initiatives. The action plan does not have specific measures to pool demand, does not defined a specific decision-making structure does not have a clear timeline (milestones defined in the action plan do not go beyond 2015) nor dedicated resources. There is an overall definition of expected results but this is not clearly broken down per actor and there is formal commitment from some key procurers but not from public procurers in all sectors, both of them therefore not fully enabling mainstreaming innovation procurement widely across the country.

Overall, the action plans of the 4 countries include most of the elements analysed in this study. The most comprehensive action plan has been developed in Finland. The paragraphs below provide the most relevant evidence collected under this indicator.

- All the action plans analysed have clearly defined the **coverage** and specified **concrete actions**. Actions are usually defined as a result of the definition of operative goals. For example, in Austria the Action Plan on Public Procurement Promoting Innovation (PPPI) envisages awareness raising activities, established ways to introduce new approaches to PPPI and the integration of PPPI in sectoral strategies and at different administrative levels. In Finland, the Action Plan contains 14 different measures divided in 4 main categories: management, information sharing, skills development and concrete tools (e.g. risk management tools). In the Netherlands, the Action plan for innovation procurement includes activities to develop projects focused on innovation procurement, activities to enhance the usage of innovation procurement instruments at general and sector level, e.g. water and health.
- 3 countries have allocated dedicated **resources** to the action plan (AT, BE, FI). However, the budget allocated in all 3 countries – while allowing to develop pilot projects and organise a number of activities – is not sufficient to mainstream innovation procurement on a large scale.
- In addition, Belgium and Finland defined a specific **timeline** for the implementation of the activities. Also Austria had defined a clear timeline to in the time period 2012-2013. However the timeline in the action plan is not up-to-date any more (there are no actions defined with target completion date beyond 2013).
- **Commitment of key procurers** was identified in all 4 countries.
- In terms of governance, in AT, BE and FI the action plan includes a **definition of both actors and decision making structures**, while in NL only a definition of actors is provided.

[37] https://www.pianoo.nl/document/14291/plan-van-aanpak-programma-inkoop-innovatie-urgent
[38] https://www.pianoo.nl/

3.5.2 *Countries with innovation procurement actions in wider strategies*

5 countries (DK, EE, EL, FR, SE) do not have a stand-alone action plan but have included policy objectives and concrete measures to foster innovation procurement in wider national strategies or programmes, often with a dedicated budget and with a clear commitment of key actors. Even if no score is attributed to these countries, the evidence is reported below for completeness:

- **Denmark.** Within its "Strategy for intelligent public procurement" (2013), the Danish government has defined 7 guiding principles for public procurement that request procurers to implement a list of actions to support innovation procurement practices.
- **Estonia** set up a specific measure under the Estonian Entrepreneurship and Growth strategy 2014-2020 called "State as a smart customer" that is funded by the EU Regional Development Fund (€20 mn per year). It defines objectives to foster innovation procurement in Estonia through a set of actions and a clear timeline. It is managed by Enterprise Estonia (EAS) under the supervision of the Ministry of Economic Affairs and Communications. Implemented activities under this measure include training, guidelines, the development of a monitoring system and the provisioning of financial incentives for innovation procurements to public procurers.
- **Greece.** The Action Plan for national Procurement Strategy (2017) identifies a list of actions to promote innovation procurement in the country, including (i) conducting a special study to promote innovation in the sectors of health, energy, environment and transport, (ii) building knowledge for the public sector and for economic operators regarding the new legislative framework for promoting innovation procurement and (iii) developing support actions and promoting clusters in the relevant field.
- **France**. As explained in Indicator 2, the National Pact for Growth, Competitiveness and Employment (2012) and the following Prime Minister Circular 5681/SG (2013) required each national central authority that is subject to the 2% innovation procurement target to produce a sectoral roadmap for innovation procurement. These roadmaps set a number of initiatives to foster innovation procurement but do not constitute a stand-alone Action Plan in the field.
- **Sweden.** The National Public Procurement Strategy dedicated specific actions and objectives to innovation procurement. Innovation procurement is one of the seven objectives identified in the Strategy which also encourages the use of functional specifications in procurement procedures to foster innovative practices and ideas. The Strategy is implemented by the Swedish national competence centre for innovation procurement, the National Agency for Public Procurement that, together with other Ministries and national Agencies, provides assistance to contracting authorities and defines innovation procurement-related activities according to their own objectives and needs.

3.6 Indicator 6 –Spending target

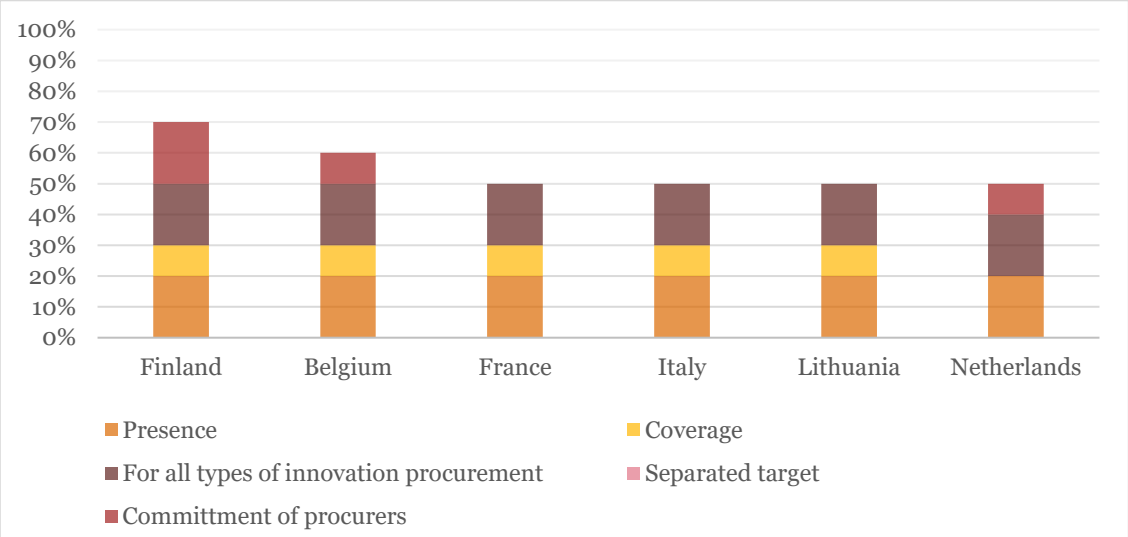
To achieve an equally innovation friendly public sector as in other regions of the world, there should be 2,5% of R&D procurements and 15-20% of PPIs in Europe (as a percentage of total amount of public procurement). This indicator reflects the progress on target setting for innovation procurement across Europe.

The table below provides the overall scores of Indicator "Spending Target" for each country that has fixed a spending target for innovation procurement. The score has been calculated taking into account information collected on the following 5 sub-indicators: presence (is there a spending target in the country), coverage (is the target applicable to all procurers in the whole country), for all types of innovation procurement (as opposed to only for certain types of innovation procurement), separate target (is there a separate target for R&D procurement as well or only for the whole innovation procurement), commitment of procurers (are there official commitments from all procurers covered by the target or only some of them contribute to reach this target).

Country	Presence	Coverage	For all types of innovation p.	Separated target	Commitment of procurers	Total
Belgium	20%	10%	20%	0%	10%	**60%**
Finland	20%	10%	20%	0%	20%	**70%**
France	20%	10%	20%	0%	0%	**50%**
Italy	20%	10%	20%	0%	0%	**50%**
Lithuania	20%	10%	20%	0%	0%	**50%**
Netherlands	20%	0%	20%	0%	10%	**50%**
All other 24 countries	0%	0%	0%	0%	0%	**0%**
European average	**4,0%**	**1,7%**	**4,0%**	**0%**	**1,3%**	**11,0%**

The graph below shows the overall ranking of the "Spending target" indicator. Based on the evidence collected, Finland ranks first, followed by Belgium. The European average for this indicator is 11%. This is due to the fact that 24 out of 30 countries do not have a specific spending target, even though some of them are currently discussing the possibility of introducing it. In 2 countries the government has set the objective to set a target – namely EE (3%) and AT (2%) – but this target has not been officially adopted and implemented yet. In 2011, Spain set up a spending target: the 3% of the General State Administration budget should have been spent on innovation. However, as a result of the economic crisis, since 2013 the target has not been actively implemented.

Figure 7 – Indicator "Spending target" overall ranking



The following paragraphs provide more details on the scope of the targets in these 6 countries (BE, FI, FR, IT, LT, NL).

All the countries that have a spending target have also fixed a specific target for innovation procurement that is applicable to all types of innovation procurement. However, none of these spending targets differentiates between the different kinds of innovation procurement. In addition, the targets are not applicable to all types of public procurers. Even though the targets in all 6 countries are formally non-compulsory, there are some countries (BE, FI, NL) in which formal commitment has been obtained from key procurers to reach the target. In Belgium and Netherlands formal commitments were obtained from some procurers, whereas in Finland from all procurers covered by the scope of the target.

The table below provides an overview of the key characteristics of the targets in the 6 countries.

Country	Target	Country wide applicable	Applicable to all types of innovation procurement	Commitment from key procurers	Separate target
Belgium	3% of the total public procurement budget of the Flemish Government (there are also some spending target set at local level, e.g. Ghent city)	No, at regional level (only in Flanders)	Yes	Partially (some key procurers have committed others not)	No
Finland	5% of total central government's public procurement spending	No, only for national level procurers	Yes	Yes (all procurers covered by the target)	No
France	2% of the total public procurement spending of the State (national ministries) and hospitals	No, only for national level procurers	Yes	No	No
Italy	3% of the total Lombardy region public procurement spending	No, only for the Lombardy Region	Yes	No	No
Lithuania	5% of total central government's public procurement spending	No, only for national level procurers	Yes	No	No
Netherlands	2,5 % of total central government's public procurement spending	No, only for some procurers that signed up to the action plan	Yes	Yes (only some procurers)	No

The highest targets have been fixed in **Lithuania and Finland** (5%), but unfortunately they apply only to central government authorities and not to local or regional or utility type procurers. In Finland, the target has been backed by a structured innovation procurement policy, which has foreseen practical support and monitoring activities, as well as the development of tools to facilitate the implementation of innovation procurement, but unfortunately only at the central government level. The spending target has also been embedded in a number of central government strategic projects with the aim to create an innovation procurement market and support the strategic use of innovation procurement in the whole economy. Despite not being formally obliged, advanced municipalities (e.g. Tampere) and ministries (e.g. Finnish Ministry of Transport) have set their own innovation procurement target.

In the **Netherlands**, the central government set a spending target for innovation procurement at 2,5% of total public procurement spending of the central government.[39] The target only applies to central government authorities, not to local and regional authorities. It comprises all types of innovation procurement (R&D procurement, PCP, PPI). As the target has a non-compulsory nature, only some public procurers (e.g. *Rijkswaterstaat)* have really embraced the commitment to reach the 2,5% target.

In **France**, the National Pact for Growth, Competitiveness and Employment[40] set a spending target for innovation procurement in 2012, to be achieved by 2020. However in this case, the spending target is only for innovation procurement awarded to innovative SMEs and MSBs (Small and Medium Enterprises and Mid-Size Businesses).[41] In addition, the target has been set only for the central public authorities (the State and its operators) and hospitals, whereas local/regional authorities are excluded. In addition, there is no formal commitment from key procurers to achieve the 2% objective.

[39] Brief aan de Tweede Kamer, Naar de top; het bedrijfslevenbeleid in actie(s), 13/09/2011.
[40] https://www.economie.gouv.fr/files/PR-competitiveness.pdf
[41] SMEs: The category of micro, small and medium-sized enterprises (SMEs) is made up of enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding €50 mn, and/or an annual balance sheet total not exceeding €43 mn; MSBs: they have between 250 and 4.999 employees and an annual turnover < €1.5 bn. "Innovative" SMEs are defined in article L. 214-30 of the Monetary and Financial Code (available at http://www.acheteurs-publics.com/marches-publics-encyclopedie/pme-innovantes).

In **Belgium**, 3% of the total public procurement budget of the Flemish Government should go to innovation procurement. The target is applicable to all types of innovation procurement but it is not country wide (only in the Flemish region). The target been backed by a structured innovation procurement policy, which has foreseen practical support and monitoring activities, as well as the development of tools to facilitate the implementation of innovation procurement. There are key procurers at local level (e.g. Digipolis which procures ICT for Ghent and Antwerp city) that have taken the commitment for themselves to even exceed the target and adopted a 10% target for innovation procurement spending.

In **Italy**, the Lombardy Region has decided to allocate at least the 3% of the resources annually spent for the purchase of goods and services from the region's public bodies on innovation public procurement. In addition, the Strategy for digital growth 2014-2020 includes a KPI entitled "volume growth for procurement of innovations", which defines specific targets devoted to innovation procurement. This target does not apply to all public procurement, but only to PPI and to a subset of e-procurement.

3.7 Indicator 7 – Monitoring system

This indicator reflects the progress of different countries on setting up a monitoring system to measure innovation procurement expenditure in the country and to evaluate the impacts of completed innovation procurements.

The following table provides an overview of the different expenditure measurement and impact evaluation systems in place. The breakdown in sub-indicators shows if an expenditure measurement and/or an impact evaluation system is in place (presence), if it is applied to all types of innovation procurement (PCP, PPI and R&D), and widely across the whole country. In addition the last column "structured approach" indicates if the measuring and/or evaluation activity is carried out on a regular basis.

	Measurement system					Evaluation system					
Country	Presence	For all types of innovation procurement	Widely across the whole country	Structured approach	**Measurement system**	Presence	For all types of innovation procurement	Widely across the whole country	Structured approach	**Evaluation system**	**Total - Monitoring system**
Austria	25%	25%	25%	25%	**100%**	0%	0%	0%	0%	**0%**	**50%**
Belgium	25%	25%	25%	25%	**100%**	0%	0%	0%	0%	0%	**50%**
Bulgaria	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Croatia	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Cyprus	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Czech Republic	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Denmark	25%	0%	0%	0%	**25%**	0%	0%	0%	0%	**0%**	**13%**
Estonia	25%	25%	25%	25%	**100%**	0%	0%	0%	0%	**0%**	**50%**
Finland	25%	0%	25%	0%	**50%**	25%	0%	25%	0%	**50%**	**50%**
France	25%	25%	0%	0%	**50%**	0%	0%	0%	0%	**0%**	**25%**
Germany	25%	25%	0%	25%	**75%**	0%	0%	0%	0%	**0%**	**38%**
Greece	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Hungary	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Ireland	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Italy	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Latvia	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Lithuania	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Luxembourg	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Malta	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Netherlands	25%	25%	0%	0%	**50%**	0%	0%	0%	0%	**0%**	**25%**
Norway	25%	0%	0%	0%	**25%**	0%	0%	0%	0%	**0%**	**13%**
Poland	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Portugal	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Romania	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Slovakia	25%	25%	25%	25%	**100%**	0%	0%	0%	0%	**0%**	**50%**
Slovenia	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Spain	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Sweden	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
Switzerland	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	**0%**
UK	25%	0%	0%	0%	**25%**	25%	0%	0%	0%	**25%**	**25%**
European average					**23%**					**3%**	**13%**

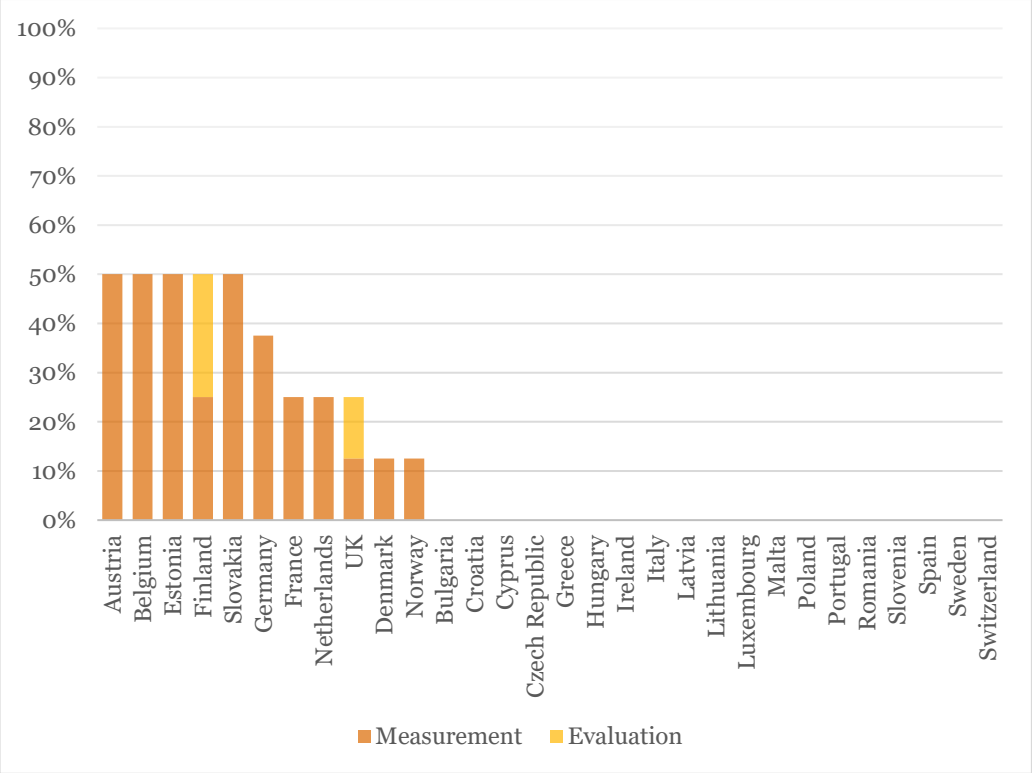
Note: Yes = 25%, No = 0%

The overall ranking of the indicator "Monitoring system" is illustrated in the graph below. No country achieves the maximum score (100%). The countries reporting the highest result are Austria, Belgium, Estonia, Finland and Slovakia. Among these countries, only Finland has started developing both expenditure measuring and impact evaluation activities for all types of innovation procurement across the country.

The European average for this indicator is 13%, which results from the averages for the sub-indicators "measurement system" (23%) and "impact evaluation system" (3%). These scores are affected by the fact that 18 out of 30 countries observed have not set up any form of expenditure measurement or impact evaluation for innovation procurement in their country. In addition, the 12 countries that have started developing some sort of measuring systems have not fully developed them yet (expenditure measurement is often still carried out in a non-systematic way and impact evaluation is still widely missing). As different countries want to know how they perform compared to others, several countries are in fact waiting for an EU wide monitoring system to be setup before investing substantially in national monitoring.

The next paragraphs provide an analysis of the different systems put in place at national level.

Figure 8 – Indicator "Monitoring system" overall ranking



3.7.1 *Expenditure measurement and impact evaluation systems*

11 countries (AT, BE, DE, DK, EE, FI, FR, NL, NO, SK, UK) have developed an approach for measuring the amount of public procurement expenditure spent on innovation procurement.

Among these, 5 countries (AT, BE, DE, EE, SK) have developed a structured measurement system:

- Since 2013, **Austria** has been developing a comprehensive innovation procurement monitoring system. The Action Plan on Public Procurement Promoting Innovation PPPI provides the context for the monitoring and measurement activities, which consists of 4 dimensions, i.e. "reporting",

"assessing", "measuring", and "learning".[42] All these dimensions provide a general overview on the activities carried out by all the actors involved in the system. The "measuring" activity consists of two pilot surveys which regularly monitor innovation procurement at organisational and at project level. This monitoring system is applicable countrywide and for all types of innovation procurement.

- In **Belgium**, under the PIO program, a measurement system has been set up and is applied in the Belgian e-Procurement platform and the regional contract management system (e-Delta). It consists of an indicator and aims at highlighting innovative tenders from the "normal" procurements. The measuring activity is expected to be carried out on a regular basis across the whole country and for all types of innovation procurement. The first round of measuring innovation procurement spending has recently started, and first statistics are expected in 2019.
- In 2017, **Slovakia** has introduced a system to flag green, social and/or innovation procurements in the form used by procurers to publish their tenders. This measurement system, is applicable countrywide and for all types of innovation procurement. However, it does not allow to distinguish between the different kinds of innovation procurement (it only identifies the innovative object of the tender). This system has not produced statistical results yet.
- In **Germany**, the new regulation for statistical data (§98 and §99 of the German Act against Restraints of Competition – Gesetzgegen Wettbewerbsbeschränkungen – GWB) requires procurers to provide specific types of information for all procurement activities. For procurement under the EU threshold, volume, kind of procedure and product group is required. With regard to procurements above the EU threshold, the indication of different categories such as innovation and environment are also required.[43] In the country there have been also other measurement exercises. For instance, the *Bundeswehrhochschule München in* 2016 carried out a pilot measurement of public procurement in the country. The results of this study estimated that, of an overall €350 bn of public procurement expenditure, €40/50 bn, i.e. 11/14% of the overall budget, was spent on innovation procurements.[44]
- A good practice for the collection of data is also the structured system for measuring innovation procurement expenditures put in place in **Estonia**. The country has an effective monitoring system which enables contracting authorities to directly flag potentially innovative tenders on the e-Procurement system, through a survey. This survey is expected to collect on an annual basis data on the amount of innovation procurement carried out in the country.

Despite not having a structured approach to measure innovation procurement in the country, the other 6 countries (DK, FI, FR, NL, NO, UK) have carried out monitoring activities on pilot projects or through single policy initiatives:

- In **Denmark**, the Council for Public-Private Cooperation (ROPS) reports that only 12% of surveyed public buyers have carried out innovation procurement.[45]
- **Finland** does not have a structured system to measure or evaluate the impacts of completed innovation procurement. However, monitoring activities for a subset of innovation procurements have been carried out only in parts of the country. In addition, the Competence Centre for Sustainable and Innovative Public Procurement (KEINO) has the responsibility to monitor innovation procurement, both in terms of its effectiveness and its efficiency. In the coming years it is expected to develop a management-oriented monitoring and evaluation system as well as monitoring and evaluation tools. These include the creation of follow-up indicators, indicators for achieving national targets and to assess and evaluate the effectiveness and efficiency of the innovation procurement processes.
- In **France** there are no structured monitoring and evaluating systems for innovation procurement across the whole country. However, two indicators have been created to evaluate the innovation procurement policy of the State and monitor the achievements of the objectives set by the National Pact for Growth Competitiveness and Employment. The first assesses the number of innovative

[42] https://www.ait.ac.at/fileadmin/mc/innovation_systems/projekte/IOEB/201709___PPPI_Policy_Note___Monitoring_Measurement.pdf
[43] file:///C:/Users/dbianchini00/Downloads/Presentation_Scheel.pdf
[44] https://rio.jrc.ec.europa.eu/en/file/11255/download?token=h70Ot2OW
[45] http://ec.europa.eu/regional_policy/sources/policy/how/improving-investment/public-procurement/study/country_profile/dk.pdf

enterprises benefiting from public procurement contracts, focusing on SMEs. The second requires public procurers to identify when public procurement is innovative.

- The **Netherlands**, after having conceived a method for measuring innovation procurement expenditure, which was applied between 2010-2013 to all types of innovation procurements, is putting in place a new voluntary measurement initiative based on a tool in which public procurers can fill in, on voluntary basis, a number of questions to report to what extent completed public procurements were innovation procurements. However, the measurement system is not structurally implemented yet and is limited also to national authorities.
- **Norway** does not regularly measure innovation procurement expenditure but has only conducted some pilot initiatives.
- In the **UK** regular evaluation and monitoring assessments are carried out only for the activities implemented within the SBRI Programme. In 2014, an analysis of SBRI was conducted by Manchester Institute of Innovation Research (MIoIR) with the European Research Council and OMB Research.[46] Afterwards, recommendations from an independent evaluation on increasing the impact of the program was published in 2017.[47]

In the remaining 19 countries there is no measurement system to monitor expenditure of innovation procurement. In these countries measuring activities are carried out in the context of ESIF funding or are expected to be implemented in the future:

- Countries financing innovation procurements only via ESIF funding (e.g. **Spain**) typically do not have a structural monitoring system for all innovation procurements in the country. They usually only monitor innovation procurement expenditure in the ESIF programmes as this is required by the EC.
- **In Sweden,** an annual evaluation of impacts of selected innovation procurements is being developed. Similarly, Lithuania and Portugal are in the process of developing a monitoring system for innovation procurement.

Interesting evidence collected on the implementation of monitoring and evaluation exercise concerns the methods used. In particular, various instruments are used for such a purpose, including surveys, external independent reviews, combined interim and ex-post evaluations, or one-off project-related evaluations, among others. The main approaches to conduct evaluations of innovation-related procurement initiatives seem to be surveys and qualitative methods (i.e. case studies, interviews with beneficiaries). This fact represents one of the most important limits of the evaluations and monitoring exercises, i.e. the lack of quantitative data and the need for further quantitative approaches.

No country (except for Finland and the UK, as described above) has put in place a structural system to evaluate the impacts of completed innovation procurements.

3.8 Indicator 8 – Incentives

This indicator reflects the progress of using financial or personal **demand-side incentives** to encourage public procurers to undertake more innovation procurements across different countries. It is calculated as the average of two sub-indicators, namely “financial incentives” and “personal incentives”.

The first sub-indicator shows the presence of financial incentives in the country (availability of these type of incentives in the country), whether the incentives are available for all types of innovation procurement (as opposed to only for certain types of innovation procurement), applicable country wide (as opposed to available only in one specific region), whether there are incentives for large scale implementation across the whole country (as opposed to only pilots), whether national top-up funding is provided for procurement cases that are eligible for EU co-financing ("national top-up funding available for EU co-financed procurements"), whether national financial incentives are provided for procurement cases that are not eligible for EU co-financing ("national funding available for non-EU co-financed procurements")

[46] https://www.gov.uk/government/publications/review-evaluation-of-the-small-business-research-initiative
[47] https://www.gov.uk/government/publications/leveraging-public-procurement-to-grow-the-innovation-economy-an-independent-review-of-the-small-business-research-initiative-sbri (2017)

and whether dedicated ESIF funding has been allocated for innovation procurements. Please note that EU (co-)financing can include all types of EU (co-)financing (e.g. ESIF, Horizon 2020, EIB).

The personal incentive sub-indicator shows the availability of personal incentives for public procurers in the country and whether the incentives are available for all types of procurers in the country (as opposed to only for certain types of procurers).

The overall scores of the "Incentives" indicator is provided in the table below.

	Financial incentives								Personal incentives			
Country	Financial Incentives (Presence)	For all types of innovation procurement	Applicable to all procurers country wide	Large scale implementation	National top-up funding available for EU co-financed projects	National funding available for non EU co-financed projects	Dedicated ESIF Funds for innovation procurement	**Financial Incentives**	Personal incentives (Presence)	Applicable to all procurers countrywide	**Personal Incentives**	**Total - Incentives**
Austria	14,28%	0%	14,28%	0%	0%	14,28%	0%	**43%**	50%	50%	**100%**	**71,4%**
Belgium	14,28%	14,28%	0%	0%	14,28%	14,28%	0%	**57%**	0%	0%	**0%**	**28,6%**
Bulgaria	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	0%	**0%**	**0%**
Croatia	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	0%	**0%**	**0%**
Cyprus	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	0%	**0%**	**0%**
Czech Republic	14,28%	0%	0%	0%	0%	0%	14,28%	**29%**	0%	0%	**0%**	**14,3%**
Denmark	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	0%	**0%**	**0%**
Estonia	14,28%	14,28%	14,28%	0%	0%	14,28%	14,28%	**57%**	0%	0%	**0%**	**28,6%**
Finland	14,28%	14,28%	14,28%	14,28%	14,28%	14,28%	0%	**86%**	50%	0%	**50%**	**67,8%**
France	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	0%	**0%**	**0%**
Germany	0%	0%	0%	0%	0%	0%	0%	**0%**	50%	50%	**100%**	**50,0%**
Greece	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	0%	**0%**	**0%**
Hungary	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	0%	**0%**	**0%**
Ireland	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	0%	**0%**	**0%**
Italy	14,28%	14,28%	0%	0%	0%	0%	14,28%	**43%**	50%	0%	**50%**	**46,4%**
Latvia	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	0%	**0%**	**0%**
Lithuania	14,28%	0%	14,28%	0%	0%	0%	14,28%	**43%**	0%	0%	**0%**	**21,4%**
Luxembourg	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	0%	**0%**	**0%**
Malta	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	0%	**0%**	**0%**
Netherlands	14,28%	14,28%	0%	0%	0%	14,28%	0%	**43%**	0%	0%	**0%**	**21,4%**
Norway	14,28%	0%	14,28%	0%	0%	14,28%	0%	**43%**	0%	0%	**0%**	**21,4%**
Poland	14,28%	14,28%	0%	0%	0%	0%	14,28%	**43%**	0%	0%	**0%**	**21,4%**
Portugal	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	0%	**0%**	**0%**
Romania	14,28%	14,28%	14,28%	0%	0%	14,28%	14,28%	**71%**	0%	0%	**0%**	**35,7%**
Slovakia	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	0%	**0%**	**0%**
Slovenia	14,28%	14,28%	0%	0%	0%	0%	14,28%	**43%**	0%	0%	**0%**	**21,4%**
Spain	14,28%	14,28%	0%	14,28%	0%	0%	14,28%	**57%**	50%	50%	**100%**	**78,6%**
Sweden	14,28%	14,28%	14,28%	14,28%	14,28%	14,28%	0%	**86%**	50%	50%	**0%**	**42,8%**
Switzerland	0%	0%	0%	0%	0%	0%	0%	**0%**	0%	0%	**0%**	**0%**
UK	0%	0%	0%	0%	0%	0%	0%	**0%**	50%	50%	**100%**	**50,0%**
Average								**24,8%**			**16,7%**	**20,7%**

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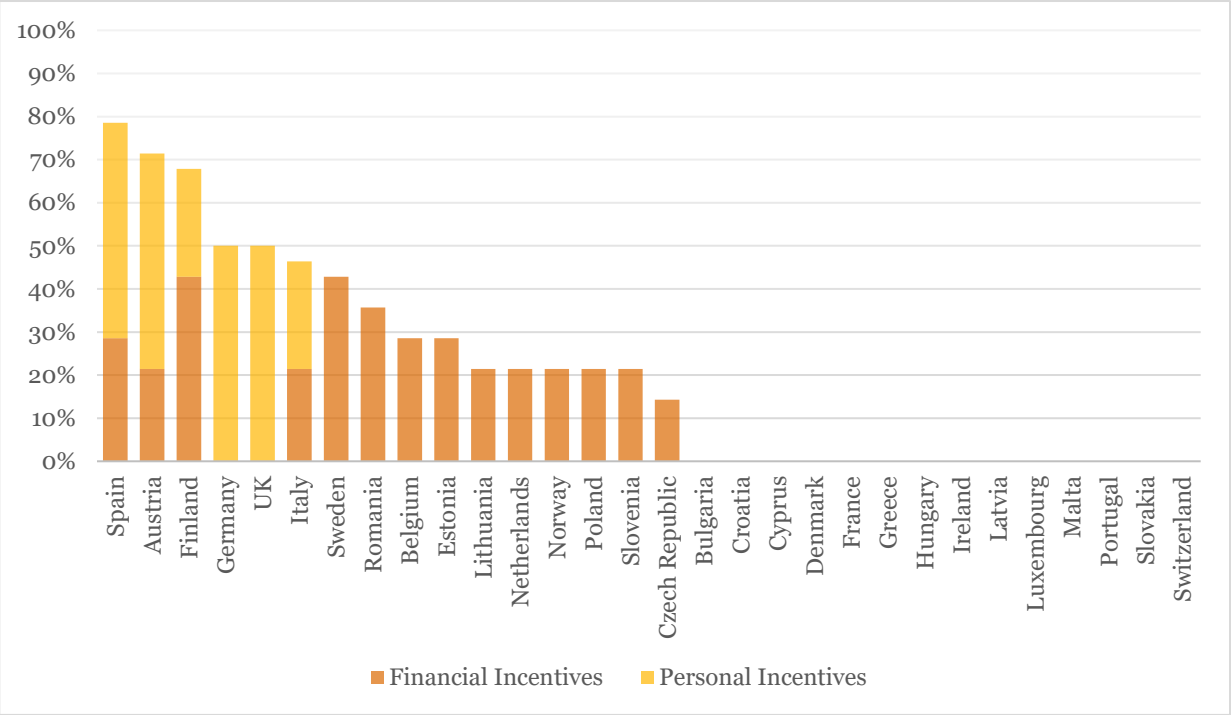
Only 16 countries (AT, BE, CZ, DE, EE, ES, FI, IT, LT, NL, NO, PL, RO, SI, SE, UK) have dedicated incentives for innovation procurement. In this field the best performers are Spain, Austria and Finland, which are also the only countries that have adopted both types of demand-side incentives considered at a country wide scale: financial incentives for procurers to reduce the financial risk of innovation procurement and personal incentives for procurers to encourage more innovation procurement.[48] The European average for the indicator "Incentives" is 20,7%. This value is mainly due to two reasons.

Firstly, 14 countries (BG, CH, CY, DK, FR, EL, HR, HU, IE, LV, LU, MT, PT, SK) have not setup any form of incentive (financial or personal) to encourage public procurers to carry out more innovation procurements. Secondly, in the majority of the countries that have setup incentives, financial incentives are not budgeted to mainstream innovation procurement widely and personal incentives are underused.

The ranking for the 16 countries that have incentives in place is presented below.

Figure 9 – Indicator "Incentives" overall ranking



3.8.1 *Financial incentives*

14 countries (AT, BE, CZ, EE, ES, FI, IT, LT, NL, NO, PL, RO, SI, SE) have set up a financial incentive system to encourage public procurers to undertake more innovation procurement.

The highest score is achieved by Finland, followed by Sweden and Romania.

- In **Finland**, the innovation funding agency Business Finland provides grants to public authorities through the Innovative Public Procurement financing instrument. All public procurers are eligible recipients of funding. The grant covers 40-50% of total costs in the preparation stage of a procurement. It may cover development, piloting and adoption of new products and services. The public procurer should use the grant to source additional expertise, build collaboration, undertake market consultation and carry out pilots or R&D work in order to strengthen cooperation with potential providers and end users and preparation of innovative

[48] Italy has also adopted both types of demand-side incentives, however they are not applicable countrywide.

public procurements. The Finnish financial incentives are available both for cases that can obtain co-financing from EU programmes (as top-up financing for Horizon 2020 and ESIF co-financed innovation procurements) and cases that cannot obtain EU co-financing.

- **Sweden** has set up financial incentives, in the form of grants, to encourage public procurers to undertake more innovation procurements. These incentives are for all types of innovation procurement and applicable to all Swedish public procurers in all sectors and at all levels (local, regional and national). The Swedish financial incentives are available both for cases that can obtain co-financing from EU programmes (as top-up financing for Horizon 2020 and ESIF co-financed innovation procurements) and cases that cannot obtain EU co-financing. Today, a Swedish VINNOVA programme called "Innovation procurement" is specifically designed to finance strategic investments and applications. The amount invested in innovation procurement has varied during the years, but it has accounted on average to approximately €1 mn per year. Sweden has not pre-allocated dedicated ESIF budgets for innovation procurements but if a city or region decides to implement an innovation procurement via its ESIF budget, the VINNOVA funding can in principle top-up this ESIF funding.
- **Romania** has set up financial incentives, in the form of grants, to encourage public procurers to undertake more innovation procurements. These incentives are available for all types of innovation procurement. Romania has foreseen both national program funds and ESIF funds (grants) for innovation procurements, but the budgets foreseen are not designed to incentivise large scale implementation of innovation procurement. Romania does not provide additional national top-up funding for EU (Horizon 2020/ESIF) co-financed innovation procurements.

A second group of countries (BE, EE, ES) set up financial incentive schemes that achieved a score of 57%.

- In **Belgium**, at national level there are no incentives to encourage public procurers to start more innovation procurements, while there are some at regional level. In particular, the Flemish PIO programme offers co-financing to any type of public procurer in Flanders for PCPs and other types of innovation procurements. However the budget of the programme is not large enough to mainstream innovation procurement widely. The PIO co-financing is available both for projects that are not eligible for EU funding and for projects that are eligible for EU funding (procurers that already receive EU funds for their innovation procurement are still eligible for Flemish funding, i.e. the PIO funding can top up the EU funding). Belgium and Flanders have not pre-allocated dedicated ESIF budgets for innovation procurements but if a city/region decides to implement an innovation procurement via its ESIF budget, the Flemish funding can in principle top-up this ESIF funding.
- **Estonia** has not allocated any national funds for financial incentives to encourage public procurers to undertake innovation procurements that are not eligible for EU co-financing. However, it has dedicated a limited amount of ESIF funds (€20 mn) for supporting a few pilot innovation procurements in specific sectors. Also Enterprise Estonia (EAS) does not provide additional national top-up funding for EU (Horizon 2020/ESIF) co-financed innovation procurements.
- The **Spanish** financial incentives scheme is not open to all types of public procurers and procurements in the country and focuses on specific sectors (health and security). It is only available to projects eligible for co-financing from the ESIF programme (as indicated in the smart specialisation priorities of Spain) but not for projects that are eligible for Horizon 2020 funding. In the health domain Spain has been able to stimulate large scale implementation of innovation procurement through ad-hoc programmes: for example, the Programme FID SALUD in INNOCOMPRA-FID 2014-2020 aims to systematically improve public health services portfolio through annual calls for innovation procurement. The programme is coordinated by the Health, Social Security and Equality Ministry and involved all regional health services. So far, more than 40 proposals have been independently assessed by ISCIII (Health Institute Carlos III) and 15 of them have been approved, mobilising approximately €62 mn just in 2015.

A third group of countries (AT, IT, LT, NL, NO, PL SI) achieve an overall score of 43%. Some countries (IT, NL) have not implemented countrywide financial incentive schemes while others (AT, LT, NO)

implemented schemes only for certain types of innovation procurement. The financial schemes implemented in these countries are presented below:

- In **Austria**, financial and practical support by the Ministries and the PPPI Service Centre is provided for certain sectors. The funds available are based on national funding, however, they are not designed to foster large scale implementation of innovation procurement. In addition, financial incentives are not available for all types of innovation procurement and projects already receiving EU funds are not eligible (both for Horizon 2020 and ESIF).
- **Italy** provides financial incentive schemes applicable only at regional level. Conversely, no financial incentives are envisaged at national level. National ministries implements PCP/PPI pilot actions for the 4 convergence objective regions. These actions, implemented within wider funding programmes dedicated to the convergence regions, do not provide financial incentives to regional authorities to implement innovation procurements. At regional level, financial initiatives are offered to public procurers in Lombardy and Sardinia. Both regions have set up calls for interest to select innovation needs and innovation procurement actions to be implemented by public procurers under the Operational Regional Program ERDF 2014-2020.
- **Lithuania** has allocated through Agency for innovation and Technology (MITA) and the Lithuanian Business Support Organisation (LPVA) a limited amount of ESIF funds to support a few PCP procurements.
- In the **Netherlands** there is no national or regional financial incentives programme for innovation procurement. However, financial incentives are available in the sectoral High Water Protection programme. These incentives are not conceived for combination with EU co-financing, are only available for public procurers in the high water field and are not designed to incentivise large scale implementation of innovation procurement.
- In **Norway**, financial incentives to support pilot innovation procurements are envisaged in the context of the National Programme for Supplier Development.
- In **Poland** there are no specific separate financial support schemes for public procurers to incentivise the launch of innovation procurements. However, operational programmes under ESIF have dedicated funding for innovation procurements projects. Thus, financial incentives are allocated only in certain sectors and not designed to mainstream innovation procurement widely across the country.
- In **Slovenia** there are financial incentives co-financed by ESIF funds that are mainly used to support pilot projects, i.e. they are not able to mainstream innovation procurement across the country. There are no national funds available for undertaking innovation procurements that are not eligible for EU co-financing. Slovenia does not provide additional national top-up funding for EU (Horizon 2020/ESIF) co-financed innovation procurements.

The Czech Republic is the country with the least developed financial incentives scheme to encourage public procurers to implement innovation procurement.

- In the **Czech Republic** financial support is provided by the Pre-commercial Public Procurement Programme, i.e. an EU-funded ESIF programme within the Operational Programme Enterprise and Innovation for Competitiveness (2014-2020). It allows to provide grants to public authorities that provide co-financing for pilot PCP projects. However there are no additional national funds that top-up the EU funding to cover the part of the PCP procurement costs that are not co-financed by ESIF. Currently, the city of Prague is the only authority using these ESIF funded incentives.

3.8.2 *Personal incentives*

5 countries (AT, ES, FI, IT, UK) set up personal incentive schemes to encourage public procurers to undertake more innovation procurement.

This kind of non-financial support can take different forms.

- In Austria, Spain and Germany personal incentives are prizes aimed at rewarding top performances among public-sector contracting authorities in the procurement of innovative products and the design of innovative procurement processes.

- In Italy, a personal incentive scheme is reported in Lombardy, where there are bonuses for public servants related to achieving the 3% regional target for innovation procurement, which is also included in the career objectives.
- In the UK and Finland, non-personal incentives take the form of KPIs agreed between the government/ministries and procurers in the country, which set cost reduction and quality improvement levels/targets for public procurements that are implemented by authorities at all levels (e.g. CO2 reduction). These KPIs seriously drive forward innovation procurement in the UK and Finland. In Finland the use of KPIs is however mainly applied at the national level, not so much at local and regional level.

3.9 Indicator 9 – Capacity building and assistance measures

Lack of know-how and experience on innovation procurement is also a significant barrier to innovation procurement. Several countries around Europe have therefore set up measures to build up the know-how of public procurers on innovation procurement and/or to provide tailored case-by-case assistance to public procurers to implement specific innovation procurement projects. To make these measures easily accessible to public procurers in a one-stop-shop, these activities are typically coordinated by a national competence centre on innovation procurement. This indicator tracks progress on the capacity building and assistance measures implemented for innovation procurement across different countries.

The table below provides the overall scores of different countries for the Indicator "Capacity building and assistance measures". The score is based on the 9 sub-indicators listed in the columns of the table.

Country	Central website	Good practices	Trainings and workshops	Handbook or guidelines	Assistance to public procurers	Template tender documents	Coordination	Networking	One-stop-shop	Total score Capacity Building
Austria	83%	83%	100%	67%	83%	0%	0%	83%	83%	**65%**
Belgium	50%	67%	67%	0%	67%	0%	0%	67%	50%	**41%**
Bulgaria	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Croatia	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Cyprus	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Czech Republic	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Denmark	0%	67%	0%	50%	0%	50%	0%	0%	0%	**19%**
Estonia	0%	50%	67%	83%	0%	0%	0%	0%	0%	**22%**
Finland	83%	67%	67%	100%	67%	0%	0%	100%	83%	**63%**
France	0%	0%	83%	100%	50%	0%	0%	50%	0%	**31%**
Germany	83%	83%	67%	83%	83%	0%	0%	67%	83%	**61%**
Greece	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Hungary	0%	0%	17%	33%	0%	0%	0%	50%	0%	**11%**
Ireland	0%	0%	0%	50%	0%	0%	0%	0%	0%	**6%**
Italy	0%	0%	0%	67%	0%	0%	0%	0%	0%	**7%**
Latvia	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Lithuania	50%	0%	83%	83%	50%	0%	67%	0%	83%	**46%**
Luxembourg	0%	0%	0%	83%	0%	0%	0%	67%	0%	**17%**
Malta	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Netherlands	83%	50%	67%	83%	67%	0%	0%	83%	83%	**57%**
Norway	83%	67%	67%	67%	67%	50%	50%	67%	67%	**65%**
Poland	0%	0%	67%	83%	0%	0%	0%	0%	0%	**17%**
Portugal	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Romania	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Slovakia	0%	0%	50%	50%	0%	0%	0%	0%	0%	**11%**
Slovenia	0%	0%	50%	67%	67%	0%	0%	67%	0%	**28%**

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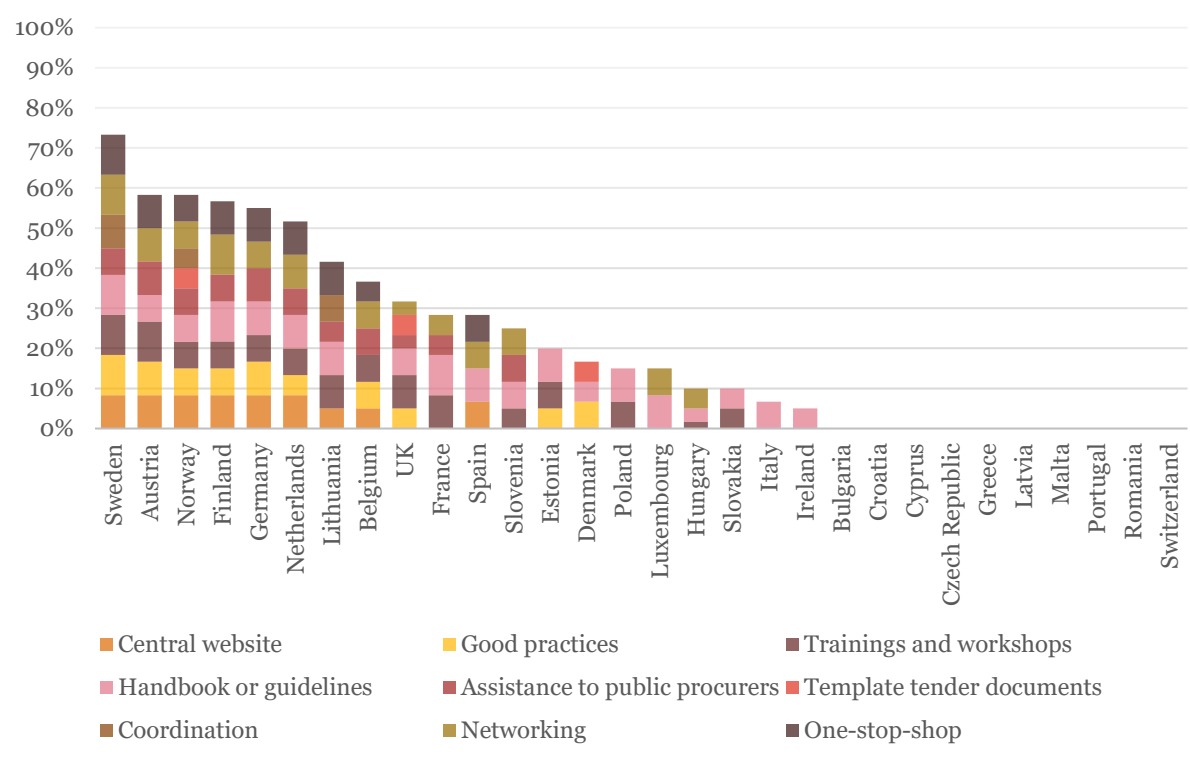
Country	Central website	Good practices	Trainings and workshops	Handbook or guidelines	Assistance to public procurers	Template tender documents	Coordination	Networking	One-stop-shop	Total score Capacity Building
Spain	67%	0%	0%	83%	0%	0%	0%	67%	67%	**31%**
Sweden	83%	100%	100%	100%	67%	0%	83%	100%	100%	**81%**
Switzerland	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
UK	0%	50%	83%	67%	33%	50%	0%	33%	0%	**35%**
European average	**22,2%**	**22,8%**	**34,5%**	**46,6%**	**23,3%**	**5,0%**	**6,7%**	**30,0%**	**23,3%**	**23,8%**

Although 20 countries (AT, BE, DE, DK, EE, ES, FI, FR, HU, IE, IT, LT, LU, NL, NO, PL, SE, SI, SK, UK) foresee regular dedicated capacity building and assistance measures for innovation procurement, these activities are usually only partially developed: in many countries there is still a clear lack of basic capacity building measures, such as a central website on innovation procurement and a one-stop shop / national competence centre for innovation procurement. Available training and assistance initiatives (trainings, networking between procurers, lists of good practice cases, handbooks) are typically not designed and resourced to mainstream innovation procurement at large scale. The number of countries that provide advanced types of assistance is still very low: case specific full-scale practical implementation and legal assistance, template tender documents and coordination support for innovation procurements are scarce.

The average score for this Indicator is 23,8%. In this field, the top performers on this indicator are Sweden (81%), Austria (65%), Norway (65%), Finland (63%), Germany (61%) and the Netherlands (57%).

Figure 10 - Indicator "Capacity building and assistance measures" overall indicator



The table below provides an overview of the capacity-building activities and assistance measures implemented in each country.

Activity	Countries
Central website	AT, BE, DE, ES, FI, LT, NL, NO, SE (9)
Good practices	AT, BE, DE, DK, EE, FI, NL, NO, SE, UK (10)
Trainings and workshops	AT, BE, DE, EE, FI, FR, HU, LT, NL, NO, PL, SE, SI, SK, UK (15)
Handbooks and guidelines[49]	AT, DE, DK, EE, ES, FI, FR, HU, IE, IT, LT, LU, NL, NO, PL, SK, SI, SE, UK (19)
Assistance to public procurers	AT, BE, DE, FI, FR, LT, NL, NO, SI, SE, UK (11)

[49] In Latvia, the Ministry of Finance is currently drafting national guidelines on the innovation partnership procedure (which will be published in the second half of 2018).

Activity	Countries
Template tender documents	DK, NO, UK (3)
Coordination / pre-approval	LT, NO, SE (3)
Networking of procurers	AT, BE, DE, ES, FI, FR, HU, LU, NL, NO, SE, SI, UK (13)
One-stop-shop/competence centre	AT, BE, DE, ES, FI, LT, NL, NO, SE (9)

19 countries developed **handbooks and guidelines** on innovation procurement for public procurers, which clearly appears to be the most accessible capacity building measure. 15 countries also provide **trainings and workshops** on innovation procurement. Other common capacity-building activities implemented include **networking** activities between public procurers (in 13 countries) and **assistance activities to prepare and implement innovation procurements** (in 11 countries). Conversely, only a very limited **tender template documents** for innovation procurements for public procurers and **coordination activities** to pre-approve and/or coordinate innovation procurements across the country are offered (in 3 countries in both cases). Surprisingly, a central website for innovation procurement is only available in 9 countries and an operational one-stop-shop/competence centre for procurers is also only available in 9 countries, although 5 other countries are currently in the process of setting it up (EE, EL, IE, IT, PT).

3.9.1 *Central website*

9 countries (AT, BE, DE, ES, FI, LT, NL, NO, SE) offer countrywide free of charge information on **innovation procurement on a central website**, with 8 of those covering all aspects of innovation procurement (AT, BE, DE, ES, FI, NL, NO, SE), and 5 providing information about initiatives in support of innovation procurement at EU level (AT, BE, DE, ES, SE). In 5 of the 9 countries the information provided also takes into consideration how to mainstream innovation procurement at a large scale (AT, FI, NL, NO, SE). An overview of the evidence collected is provided in the table below. The European average value for this sub-indicator "central website" is 22,2%.

	AT	BE	DE	ES	FI	LT	NL	NO	SE
Central website explains why the policy framework encourages public procurers and gives an overview of policy initiatives to mainstream innovation procurement	√	√	√	√	√	√	√	√	√
The site provides national and EU level references/initiatives that support innovation procurement			√						
Information is offered free of charge by the site	√	√	√	√	√	√	√	√	√
Information on the site covers all types of innovation procurement (i.e. covering R&D procurement, including PCP, and PPI)	√	√	√	√	√		√	√	√
Information on the site is applicable to all public procurers in the country	√		√	√	√	√	√	√	√
Information on the site addresses how to mainstream innovation procurement at a large scale	√				√		√	√	√
Total score	83%	50%	83%	67%	83%	50%	83%	83%	83%

Interesting examples of country level activities are:

- The **Austrian** PPPI website and online platform centralises key information on the legal framework, the political context (action plan), case examples, financial incentives and available assistance for procurers on innovation procurement. However, information about key European

initiatives on innovation procurement that Austrian procurers can benefit from is not up-to-date or missing. On the online platform innovation procurement stakeholders (public authorities and procurers, research institutions, enterprises, citizens, etc.) are free to interact, thus ensuring a greater match between the public needs and the market supply. In other words, the platform is designed to on the one hand allow procurers to specify a challenge, and on the other allow suppliers to present their innovative solutions.

- In **Belgium**, there is a website in the region of the Flanders. The website mainly provides information on what the PIO programme is doing in the Flanders. Information about European initiatives in support of innovation procurement that Flemish procurers can benefit from is missing.
- In **Lithuania**, the Ministry of Economy provides information especially on PCPs on its website, so not all aspects of innovation procurement are covered. Information focuses also on the ESIF funding opportunities for procurers. Information about the wider policy support for innovation procurement, and on how Lithuanian procurers can benefit from key European initiatives on innovation procurement is still missing.
- In the **Netherlands** the Competence Centre for Public Procurement PIANOo also has a well-structured central website, which shares information about national policy initiatives, trainings/seminars and case examples on innovation procurement. There is a lack of information about available assistance and financial incentives for procurers (as there are no national initiatives on this and European funded ones are not visibly promoted).

3.9.2 *Good practices*

In terms of dissemination and exchange of good practices, 10 countries (AT, BE, DE, DK, EE, FI, NL, NO, SE, UK) publish good practice examples on a national website. Despite that, only one country (SE) has obtained a full 100% score as it covers all 6 below aspects related to how good practice examples are made available to procurers. In most countries only national case examples are promoted and examples from other countries (including European funded good practice examples) are missing. The European average for the "Good practices" sub-indicator is 22,8%.

	AT	BE	DE	DK	EE	FI	NL	NO	SE	UK
Publication of good practice examples	√	√	√	√	√	√	√	√	√	√
Publication includes besides national also international / EU funded good practice examples		√	√						√	
Publication of good practice examples is offered free of charge	√	√	√	√	√	√	√	√	√	√
Publication of good practice examples covers all types of innovation procurement	√	√	√	√				√	√	
Good practice examples provided are applicable to all public procurers in the country	√		√	√	√	√	√	√	√	√
Good practice examples are included that demonstrate how to mainstream innovation procurement at large scale	√					√			√	
Total score	83%	67%	83%	67%	50%	67%	50%	67%	100%	50%

Interesting examples regarding country activities in the dissemination of good practices are presented below:

- In **Belgium**, there is only a website which provides case examples in the region of the Flanders and in particular cases funded by the new PIO programme (it lacks references to Belgian cases that were not funded by the PIO programme and case examples from other countries). Both for Belgium and the **Netherlands**, apart from one case in which a local procurer was involved, there are also no EU funded case examples listed.
- **Finland** started publishing case examples recently. However, it lacks examples of innovation procurements that procure R&D such as PCPs.
- **Sweden** regularly publishes new national case examples. The examples present through in-depth analysis and interviews how the procurement was prepared, implemented, what the challenges were and which results were achieved for both procurers and companies. The examples cover all types of procurements (including PCP and PPI procurements) with both references to national and EU funded cases.
- In the **UK** the Department for Business, Innovation and Skills (BIS) has published a series of good practices examples of Forward Commitment Procurements that clearly illustrate the benefits to procurers. Despite that, there is a lack of PCP good practice examples and references to examples from other countries including EU funded case examples.

3.9.3 *Trainings and workshops*

15 countries (AT, BE, DE, EE, FI, FR, HU, LT, NL, NO, PL, SE, SI, SK, UK) are currently implementing dedicated training and workshop activities to increase the know-how of public procurers on innovation procurement practices in a systematic, regular way. Out of these, however, only Austria and Sweden obtained a full 100% score. The European average for the "trainings and workshops" sub-indicator is 34,5%, which is mainly due to the fact that in 15 countries there are no such trainings/workshops yet. However, some of these countries (e.g. BG, CY, HR, LV, PT) address innovation procurement in the context of wider trainings on public procurement, although not in a systematic way.

	AT	BE	DE	EE	FI	FR	HU	LT	NL	NO	PL	SE	SI	SK	UK
Trainings/workshops are offered by the government	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Trainings/workshops offered cover not only national aspects but also the EU and international framework	√	√				√		√	√		√	√	√		√
Trainings/workshops are offered free of charge	√	√	√	√	√	√		√	√	√	√	√	√	√	√
Trainings/workshops cover all types and aspects of innovation procurement	√	√	√		√	√		√		√		√		√	
Trainings/workshops are available/applicable to all public procurers in the country	√		√	√	√	√		√	√	√	√	√			√
Training/workshops address how to implement innovation procurement at large scale	√											√			√
Total score	100 %	67 %	67 %	50 %	67 %	83 %	17%	83 %	67 %	67 %	67 %	100 %	50 %	50 %	83 %

The notable examples of Austria and Sweden, the only countries to reach a full score under this sub-indicator, are described in the following paragraphs:

- In **Austria**, the national competence centre on innovation procurement (PPPI ServiceStelle), in cooperation with the Federal Academy of Public Administration, carries out training activities that deliver a **certification of achieved innovation procurement competence** at basic and advanced levels.
- In **Sweden**, the national agency for public procurement organises a wide range of regular in-depth **trainings and workshops** on different aspects related to innovation procurement.

Networks and associations of other Swedish procurers with similar needs are also invited to participate in the trainings and workshops.

3.9.4 *Handbook and guidelines*

Handbooks and guidelines on innovation procurement have been published in 19 countries (AT, DE, DK, EE, ES, FI, FR, HU, IE, IT, LU, LT, NL, NO, PL, SE, SI, SK, UK). In 3 countries (FI, FR, SE), these guidelines are covering all types and aspects of innovation procurement, highlighting also the EU and international framework for innovation procurement, are offered free of charge, are addressed and applicable to all public procurers in the country and conceived to mainstream innovation procurement at large scale, thus reporting a full score. The European average value for this sub-indicator is 46,6%.

	AT	DE	DK	EE	ES	FI	FR	HU	IE	IT	LU	LT	NL	NO	PL	SE	SI	SK	UK
Official handbook or guideline is available	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Handbook/guidelines gives also guidance about relevant EU/international framework for innovation procurement		√		√	√	√	√			√	√	√			√	√	√		√
Handbook/guidelines is offered free of charge	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
Handbook/guidelines covers all aspects and types of innovation procurement	√	√		√		√	√				√	√	√	√	√	√			
Handbook/guidelines is available and applicable to all public procurers in the country	√	√	√	√	√	√	√		√	√	√	√	√	√	√	√	√	√	√
Handbook/guidelines addresses how to implement innovation procurement at large scale					√	√	√						√			√			
Total score	67%	83 %	50 %	83%	83%	100%	100%	33%	50%	67%	83%	83%	83%	67%	83%	100%	67%	50 %	67%

Examples of guidelines are:

- In **Sweden**, the National Authority for Public Procurement published guidelines on innovation procurement. The guidelines refer to the Swedish strategy for innovation procurement, the legal framework, the definitions, provide examples and implementation advice on creating purchasing groups to achieve critical mass levels. Vinnova published a similar guide specifically for PCPs.
- There are also countries that published guidelines that address specific areas. For instance, **Italy** published a guide only for PCP. In **Slovenia**, the Ministry of Public Administration, in cooperation with relevant public and private stakeholders, prepared guidelines on innovative public procurement in the field of construction, engineering services and ICT.

3.9.5 *Assistance to public procurers*

11 countries (AT, BE, DE, FI, FR, LT, NL, NO, SE, SI, UK) provide dedicated technical and legal assistance to public procurers in a regular, structured manner to prepare and implement innovation procurement. The strongest performers in terms of assistance for procurers are Austria, Germany and Finland, each scoring 83%, considerably above the European average (23,3%). This result is influenced by the fact that 19 countries do not currently envisage any form of assistance aimed at public procurers.

	AT	BE	DE	FI	FR	LT	NL	NO	SE	SI	UK
Government offers case specific assistance	√	√	√	√	√	√	√	√	√	√	√
Assistance is also provided to obtain EU financing		√	√		√		√				
Assistance is offered free of charge	√	√	√	√	√	√	√	√	√	√	√
Assistance is available for all types and aspects of innovation procurement	√	√	√	√				√		√	
Assistance is available/applicable to all public procurers in the country	√		√	√		√	√	√	√	√	
Assistance is available to mainstream innovation procurements at large scale across the country	√								√		
Total score	83%	67%	83%	67%	50%	50%	67%	67%	67%	67%	33%

An example of assistance is:

- In **Austria**, the PPPI Service Centre provides assistance to public procurers both on a general basis (e.g. clarifications on the legal framework, or suggestions and advice on the tools that can be used) and on a case-by-case basis (tailor-made workshops, individual support in setting up specific innovation procurement projects/project development, providing support via the PPPI online). There is no limitation in terms of days of assistance provided.

3.9.6 *Template tender documents*

Only 3 countries (DK, NO, UK) provide template tender documents for innovation procurement to public procurers. However, all 3 countries obtained only a 50% score on the "template tender documents" sub-indicator, as outlined in the following table. Unsurprisingly, the European average was particularly low, at only 5%.

	DK	NO	UK
Government offers template tender document to undertake innovation procurement	√	√	√
Tender template documents also refer to the relevant EU and international frameworks			√
Templates are offered free of charge	√	√	√
Templates are available for all types of innovation procurement			
Templates are applicable to all public procurers in the country	√	√	
Templates address how to implement public procurement at large scale			
Total score	50%	50%	50%

Evidence regarding template tender documents includes:

- In **Denmark**, the Market Development Fund of the Danish Business Authority has published templates for PCPs.
- In **Norway**, the Difi provides within the "National Programme for Supplier Development" detailed instructions and templates to perform innovation procurement (including PCPs). Instructions include the use of practical examples from the over 150 innovation procurements procedures implemented in the country.
- In **the UK**, the Crown commercial services provides template tender documents that encourage innovation in public procurement. In the framework of the SBRI, Innovate UK provides also templates of standard contracts for these type of R&D procurements to contacting authorities.

3.9.7 *Coordination of innovation procurements*

This sub-indicator reflects on whether the government or another public institution (e.g. innovation procurement competence centre, Public Procurement Office) pre-approves innovation procurement procedures and/or coordinates the implementation of innovation procurements in the country. Only 3 countries (LT, NO, SE) offer either pre-approval, or coordination or both types of support to public procurers. As a consequence, the European average value for the sub-indicator "innovation procurements" is a mere 6,7%.

	LT	NO	SE
Government (itself or through an officially appointed entity e.g. competence centre) pre-approves and/or coordinates the implementation of innovation procurements nationally/ regionally	√	√	√
Government pre-approves and/or coordinates the implementation of innovation procurements implemented with EU financing	√		√
Pre-approval and/or coordination is offered free of charge to procurers	√	√	√
Pre-approval and/or coordination is applicable to all types of innovation procurement			√
Pre-approval and/or coordination is applicable to all public procurers in the country	√	√	√
Pre-approval and/or coordination for innovation procurements is implemented at large scale			
Total score	67%	50%	83%

For instance:

- In **Lithuania**, the national competence centre for innovation procurement MITA pre-approves the procurement (approval of the compliance of the tender documents with the national Lithuanian regulation on PCP) and coordinates the implementation of innovation procurements under the national programme. So far, this is happening only at small scale and not for all types of innovation procurements (only PCPs).
- In **Norway**, the national supplier development programme, supported by Difi, coordinates the creation of buyers' groups of small procurers (typically local authorities) and the preparation of joint procurements to create enough market pull for suppliers to bring innovative solutions to the market. The national suppliers development programme coordinates the identification and specification of joint needs and helps those buyers groups organise open market consultations, promotes the calls for tenders based on template tender documents for PCPs and other types of innovation procurements provided by Difi. However, so far this is happening only on a small scale.
- In **Sweden,** the national procurement agency coordinates the creation of buyers' groups of small local authorities, helps them implement open market consultations and implement joint procurements. The national energy agency also coordinates joint procurements between groups of small local public procurers to create market pull. The agency collects needs of the local authorities, defines tender specifications, helps those procurers to organise preliminary market consultations, tests and certifies resulting solutions against achieved energy efficiency levels/labels and issues framework contracts from which local authorities can buy. However this type of coordination is not done yet in other sectors.

3.9.8 *Networking between procurers*

13 countries (AT, BE, DE, ES, FI, FR, HU, LU, NL, NO, SE, SI, UK) have put in place networking activities for public procurers – such as events, platforms or meetings – to facilitate experience sharing on innovation procurement between procurers. Only 5 countries (BE, FI, NL, NO, SE) organise networking activities with the involvement not only of national but also foreign procurers, thus giving a European or international dimension to the networking. The European average value for the sub-indicator "networking between procurers" is 30%.

	AT	BE	DE	ES	FI	FR	HU	LU	NL	NO	SE	SI	UK
Government facilitates experience sharing and networking between procurers in other cities/regions, sectors, countries	√	√	√	√	√	√	√	√	√	√	√	√	√
Connection with relevant EU / international networking initiatives		√			√				√	√	√		
Networking is offered free of charge to procurers	√	√	√	√	√	√	√	√	√	√	√	√	√
Networking covers all types of innovation procurement	√	√	√	√	√	√	√	√	√	√	√	√	
Networking is available to all public procurers in the country	√		√		√			√	√		√	√	
Networking is addressing how to implement innovation procurements at large scale	√			√	√						√		
Total score	83%	67%	67%	67%	100%	50%	50%	67%	83%	67%	100%	67%	33%

Networking activities are usually organised by the competence centres on innovation procurement, as in Austria, Belgium, Finland, Germany, the Netherlands, Spain and Sweden, usually in the form of events, conferences and seminars.

There are also countries and regions that established more structured ways of networking procurers across borders. For example:

- At national level, Austria, Finland, Sweden network individual procurers with national purchasing bodies to explore opportunities to achieve large scale multiplier effects with innovation procurements.
- In 2011 the Nordic Ministers of Industry launched together a so-called "Nordic lighthouse initiative" in the healthcare domain to strengthen collaboration between Denmark, Finland, Iceland, Norway and Sweden on innovation procurement. Nordic innovation and the national competence centres on innovation procurement in those countries organise from time to time meetings with procurers from different Nordic countries to discuss potential coordinated procurement possibilities.
- In Germany, KOINNO organises networking between national procurers. Under the impulse of ZENIT (the part of the Germany competence centre that works on the international dimension) the region North Rhine-Westphalia signed a cooperation agreement with the Netherlands and the Flemish region in Belgium to network public procurers of their different countries to stimulate cross-border innovation procurements. As this does not concern all procurers in Germany, the score does not exceed 67%.

3.9.9 *One-stop-shop and competence centres*

9 countries (AT, BE, DE, ES, FI, LT, NL, NO, SE) have a one-stop-shop where public procurers can access all capacity building and assistance measures for innovation procurement. Typically this one-stop-shop is provided by the national competence centre on innovation procurement (AT, DE, ES, FI, NL, SE, LT). In Belgium, the one-stop-shop exists for the moment only in the Flanders (however the national competence centre on innovation procurement is under construction). Based on the various criteria

presented below for this sub-indicator, Sweden achieves a full 100% score, while the European average accounts for 23,3%.

	AT	BE	DE	ES	FI	LT	NL	NO	SE
Government offers a one-stop-shop for public procurers to the above type capacity building and/or assistance measures	√	√	√	√	√	√	√	√	√
The one-stop-shop is connected not only to the relevant national but also the relevant EU / international initiatives	√		√	√		√	√		√
The one-stop-shop is offered free of charge to public procurers	√	√	√	√	√	√	√	√	√
The one-stop-shop covers all types and aspects of innovation procurement	√	√	√	√	√	√	√	√	√
The one-stop-shop is available/applicable to all public procurers in the country	√		√		√	√	√	√	√
The one-stop-shop offers support to mainstream innovation procurement at large scale across the whole country					√				√
Total score	83%	50%	83%	67%	83%	83%	83%	67%	100%

Examples of one-stop-shops are:

- The PPPI Service Centre in **Austria** has created a working group on innovation procurement with a national network of competence centres and entities which have different thematic or sectoral focuses (the Austrian Research Promotion Agency – FFG – as general competence centre for PCPs; the Austria Wirtschaftsservice – AWS – as general competence centre for PPIs; the Austrian Association for Transport & Infrastructure – GVS – as sectoral competence centre for Mobility; the Federal Real Estate – Bundesimmobilierngesellschaft – BIG – as sectoral competence centre in Building Construction, and the Austrian Energy Agency, as sectoral competence centre for Energy).
- **Finland** has recently set up a national Competence Centre for Sustainable and Innovative Public Procurement (KEINO), which has started its operations in April 2018. KEINO is a network-based consortium, whose founding members responsible for the operation and co-development are Motiva Ltd, the Association of Finnish Local and Regional Authorities, VTT Technical Research Centre of Finland Ltd, The Finnish Funding Agency for Innovation – Business Finland, the Finnish Environment Institute SYKE, Hansel Ltd, KL-Kuntahankinnat Ltd and the Finnish Innovation Fund Sitra. The Ministry of Economic Affairs and Employment will grant funding for the centre's founding and operations for three years, for an estimated total of €6 mn.
- In **Spain**, a structure of inter-connected centres is acting as a competence centre for innovation procurement: the structure is led by MINECO, with a specialised Deputy Directorate General for fostering innovation and supported by two national specialised nodes, namely: (i) Node for health: the Ministry for Health, Social Security and Equality; (ii) Node for dual technologies: the INTA – National Institute for Aerospace Technologies, depending from the Ministry of Defence. The network provides assistance to all public procurers at national level. At local level, MEIC also supports capacity building for municipalities through the network INNPULSO. In addition, Health Ministry has a specialised network for attending IP proposals from the 18 regional health services.

Some of the above competence centres participate also in the EU-funded project "*Procure2Innovate - European network of competence centres for innovation procurement*" that started in January 2018 to set a collaboration and interchange of best practices. The project is carried out between a group of 5 countries that are reinforcing existing national competence centres (AT, DE, ES, NL, SE) and 5 countries that are creating a national competence centre (EE, EL, IE, IT, PT). In July 2018, MITA was appointed by Lithuania as the national competence centre for innovation procurement and MITA has in the meantime also joined Procure2Innovate. KEINO did as well.

3.10 Indicator 10 – Innovation friendly public procurement market

This indicator reflects to what extent the public procurement market of each country encourages the implementation of innovation procurement on a wide scale and results from the combination of two sub-indicators: (i) the use of specific techniques to foster innovation in public procurement and (ii) the openness of the national procurement market to innovations from across the EU single market.

The score for each sub-indicator was calculated based on the EU Single Market Scoreboard indicators.[50] The most recent 2017 data was used whenever available, otherwise data from 2016 or earlier was used.

The following table presents the scores for the two sub-indicators and the aggregate scores for the indicator "Innovation friendly public procurement market". Based on the evidence collected so far. Belgium, Ireland and France – all 3 with scores above 70% - are the strongest overall performers, while the European average for the indicator does not exceed 52%.

Country	Total Sub-Indicator I (Use of specific techniques to foster innovation in public procurement)	Total Sub- Indicator II (Openness of the national procurement market to innovations from across the EU single market)	Aggregate Indicator 10
Austria	46%	60%	**53%**
Belgium	86%	60%	**73%**
Bulgaria	23%	68%	**46%**
Croatia	23%	72%	**47%**
Cyprus	16%	46%	**31%**
Czech Republic	24%	63%	**44%**
Denmark	36%	73%	**55%**
Estonia	37%	78%	**58%**
Finland	61%	73%	**67%**
France	80%	64%	**72%**
Germany	29%	58%	**44%**
Greece	20%	57%	**38%**
Hungary	50%	71%	**60%**
Ireland	67%	78%	**72%**
Italy	43%	56%	**50%**
Latvia	26%	71%	**49%**
Lithuania	18%	78%	**48%**
Luxembourg	41%	62%	**51%**
Malta	16%	48%	**32%**
Netherlands	42%	74%	**58%**
Norway	52%	81%	**66%**
Poland	40%	56%	**48%**
Portugal	30%	51%	**41%**
Romania	16%	52%	**34%**
Slovakia	17%	77%	**47%**
Slovenia	44%	61%	**53%**
Spain	60%	65%	**63%**

[50] http://ec.europa.eu/internal_market/scoreboard/performance_per_policy_area/public_procurement/index_en.htm

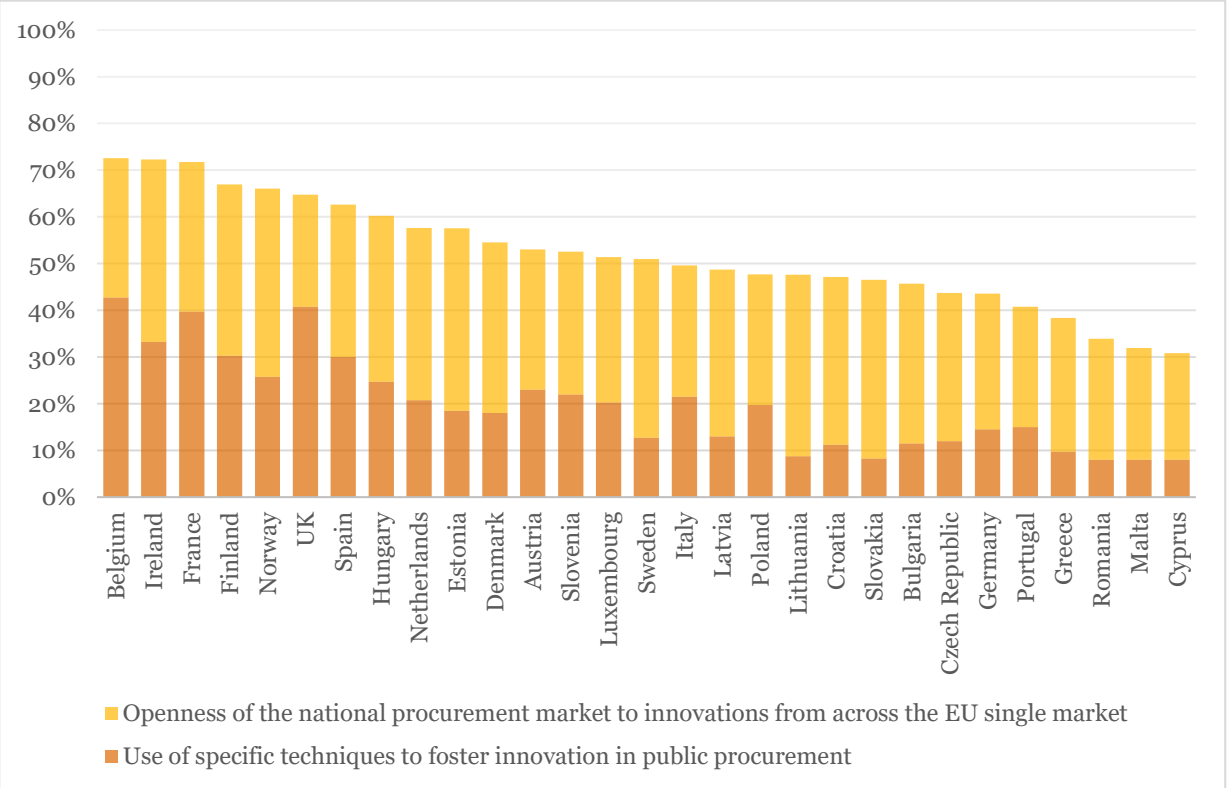
Sweden	26%	76%	**51%**
*Switzerland**	n/a	n/a	**n/a**
UK	82%	48%	**65%**
European average	**38%**	**65%**	**52%**

* EU Single Market Scoreboard data not available for Switzerland.

At the present stage, the analysis for sub-indicator I does not include information on "frequency of open preliminary market consultations" and the "frequency of allowing the submission of variant offers". This information will be added upon completion of the parallel quantitative analysis of the study, expected in 2019.

The ranking is presented in the graph below.

Figure 11 –Indicator "Innovation friendly public procurement market" overall ranking



3.10.1 *Sub-indicator I - Use of specific techniques to foster innovation in public procurement*

The European average for sub-indicator I is 38%. This relatively low average is due to the limited use of the value for money award criterion, and of the low use of an IPR default regime that fosters innovation by leaving IPR ownership to the suppliers and assigning usage rights to the public procurers.

The top performing countries on sub-indicator I are Belgium, France and the UK, which score around 80%, which is approximately two times higher than the European average (41%).

Country	IPR default regime	Value for money award criteria	Total sub-indicator I
Austria	25%	67%	46%
Belgium	100%	71%	86%
Bulgaria	25%	21%	23%
Croatia	25%	20%	23%
Cyprus	25%	7%	16%
Czech Republic	25%	23%	24%
Denmark	25%	47%	36%
Estonia	50%	24%	37%
Finland	75%	46%	61%
France	75%	84%	80%
Germany	25%	33%	29%
Greece	25%	14%	20%
Hungary	50%	49%	50%
Ireland	50%	83%	67%
Italy	25%	61%	43%
Latvia	25%	27%	26%
Lithuania	25%	10%	18%
Luxembourg	50%	31%	41%
Malta	25%	7%	16%
Netherlands	0%	83%	42%
Norway	25%	78%	52%
Poland	25%	54%	40%
Portugal	25%	35%	30%
Romania	25%	7%	16%
Slovakia	25%	8%	17%
Slovenia	50%	38%	44%
Spain	50%	70%	60%
Sweden	25%	26%	26%
Switzerland	75%	n/a	n/a
UK	75%	88%	82%
European average	**38%**	**42%**	**41%**

* EU Single Market Scoreboard data not available for Switzerland.

IPR default regime

11 countries (BE, CH, EE, ES, FI, FR, HU, IE, LU, SI, UK) are promoting a default IPR allocation regime that aims to balance the need to obtain the best value for money for the public procurer, while promoting innovation. This is achieved by leaving IPR ownership rights to suppliers and at the same time granting usage rights to public procurers.

The European average for sub-indicator "IPR default regime" is 38%. This score is mainly due to the fact that 19 countries have not adopted such a default IPR allocation regime yet: they typically have not defined any IPR default allocation regime in public procurement and are silent about the issue of IPR allocation in general. As a result, European countries are still quite far from the situation in Europe's

other major trading partners (US, Canada, Australia, Japan, Russia etc.), which already have such a default IPR regime in their public procurement legislation (which would correspond to a score of 100%).

Regarding the allocation of IPRs in the public procurement framework, the different countries can be clustered in a number of groups.

Features of the IPR regime	Country allocation and score
IPR default regime that leaves IPR ownership with suppliers and usage rights with public procurers in public procurement law	BE (100% score), ES (50% score)
IPR default regime that leaves IPR ownership with suppliers and usage rights with public procurers in general terms and conditions for government contracts	CH, FI, FR, UK (75%)
IPR default regime that leaves IPR ownership with suppliers and usage rights with public procurers in official guidelines	EE, HU, IE, LU, SI (50%)
No IPR default regime in public procurement law, guidelines of general terms and conditions for government contracts	AT, CY, CZ, DE, DK, EL, HR, IT, LT, LV, MT, NO, PL, PT, RO, SE, SK (25%)
IPR default regime that keeps all IPR rights with the public procurer	NL (0%)

In total, 11 countries define in their national public procurement system a default IPR regime that allocates ownership rights to the contractors and usage rights to the public procurer:

- 2 countries (BE, ES) define it **in their national public procurement law**. The default IPR allocation regime applies automatically unless otherwise specified in the tender documents / contract. In Belgium, the law assigns both the default rights for the procurer (usage rights) and for the suppliers (ownership rights). In Spain, there is only a default regime for the rights for the procurer (usage rights), thus scoring only half the score (50%) on this sub-indicator. As large procurers have announced to switch to an approach that leaves IPR ownership with suppliers, a discussion has started about updating also the general terms and conditions.
- 4 countries (CH, FI, FR, UK) define it **in general terms and conditions for government contracts**. This default IPR allocation regime applies automatically when the general terms and conditions for government contracts are referred to in the tender documents / contract.
- 5 countries (EE, HU, IE, LU, SI) define this **in national guidelines for public procurement or innovation procurement specifically**. The guidelines recommend public procurers in those countries to apply this type of IPR allocation regime in their tender documents / contract.

In the Netherlands, the public procurement law does not define a default IPR allocation regime, but the general terms and conditions for central government contracts define that all IPR rights remain with the public procurer unless otherwise specified in the tender documents.

In the remaining 18 countries, the national public procurement system (the public procurement law, guidelines and general terms and conditions for government contracts) does not define a default IPR allocation regime. In most of those countries, the public procurement system is silent about the issue of IPR allocation in public procurement. The responsibility to allocate IPRs in public procurements in a way that stimulates innovation and is compliant with applicable IPR/copyright law is left with the public procurer himself. As many public procurers are not well-informed and skilled in IPR issues, this approach is however prone to errors and disputes between public procurers and suppliers.

An interesting good practice example is:

- In **Belgium**, national legislation on public procurement defines that by default IPR ownership remains with the suppliers in public procurements and the public procurer obtains usage rights, except in exceptional duly justified cases where the public procurer may deviate from this default regime. The exceptional cases are defined in the law as those cases where the supplier should not be allowed to commercialise the results of the public procurement (e.g. because of confidentiality reasons, for instance if the public procurement concerned an internal HR evaluation) or the

supplier would not be able to commercialise the results of the public procurement in any case (e.g. because the public procurement concerned the development of a logo/emblem that is characteristic/unique for the public procurer). To promote the default IPR allocation regime, the Belgian government has also issued guidelines that explain how to implement it in practice.

Use of value for money criteria

As reported in the table above, the European average for the use of value for money as award criterion in public procurements published on TED is 42%. This is below the "sufficient" level of 80% as defined in the EU Single Market Scoreboard. The best performing countries are UK (88%), France (84%), Ireland (83%) and Netherlands (83%). These are also the only countries that perform above the sufficient level. All other countries still have to make efforts to increase the use of value for money award criteria instead of awarding public procurement contracts based on lowest price considerations only.

Interesting good practice example are:

- In the UK, the Crown Commercial Service published in May 2016 a "Model Service Contract Guide".[51] A chapter of this guide is dedicated to ensure value for money during the public procurement process, providing a "pricing mechanism toolkit" aimed at guaranteeing that maximum value is extracted from public procurements under the contractual arrangements. Similarly, in France, the Practical Guide to Innovative Public Procurement,[52] drafted by the Ministry of Economics and Finance and the Ministry of Economic Regeneration in 2014, recommends the tender award criteria that allow enhancing the innovative solutions.

3.10.2 *Sub-indicator II - Openness of the national public procurement market to innovations from across the EU single market*

The European average for sub-indicator II is 65%. This is below the 79,4% "sufficient" level calculated based on the sufficient levels of all the relative sub-indicators as defined in the EU Single Market Scoreboard. The top performing country, which is also the only one exceeding the sufficient level, is Norway (81%), closely followed by Estonia, Ireland and Lithuania (78%).

Country	Level of transparency	Level of competition	Total Sub-Indicator II
Austria	30%	91%	**60%**
Belgium	30%	90%	**60%**
Bulgaria	66%	71%	**68%**
Croatia	69%	75%	**72%**
Cyprus	27%	64%	**46%**
Czech Republic	55%	72%	**63%**
Denmark	56%	91%	**73%**
Estonia	69%	87%	**78%**
Finland	53%	94%	**73%**
France	37%	91%	**64%**
Germany	27%	89%	**58%**
Greece	32%	83%	**57%**
Hungary	63%	79%	**71%**
Ireland	62%	95%	**78%**

[51] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/677891/MSC_Guidance_V1.0.pdf
[52] https://www.economie.gouv.fr/files/files/directions_services/daj/marches_publics/conseil_acheteurs/guides/guide-pratique-achat-public-innovant.pdf

Country	Level of transparency	Level of competition	Total Sub-Indicator II
Italy	31%	82%	**56%**
Latvia	61%	82%	**71%**
Lithuania	68%	88%	**78%**
Luxembourg	32%	93%	**62%**
Malta	3%	93%	**48%**
Netherlands	58%	89%	**74%**
Norway	66%	95%	**81%**
Poland	39%	73%	**56%**
Portugal	14%	89%	**51%**
Romania	34%	70%	**52%**
Slovakia	65%	88%	**77%**
Slovenia	53%	70%	**61%**
Spain	46%	85%	**65%**
Sweden	58%	95%	**76%**
Switzerland	n/a	n/a	**n/a**
UK	14%	83%	**48%**
European average	**45%**	**84%**	**65%**

* EU Single Market Scoreboard data not available for Switzerland.

Level of competition

The European average in terms of level of competition is 84%. For each country, the criterion was calculated as an average of two different sub-criteria: (i) the percentage of EU tendered procurements with more than one bidder, and (ii) the percentage of EU tendered procurements in which a call for bids was used.

The best performing countries for the sub-indicator "percentage of EU tendered procurements with more than one bidder" are Norway (90%), Sweden (89%) and Finland (89%). However, none of these countries reaches the 90% "satisfactory" level set in the EU Single Market Scoreboard. Regarding the second sub-indicator (i.e. percentage of EU tendered procurements in which a call for bids was used), the best performing countries are Sweden (100%), Luxembourg (100%), Malta (100%) and Ireland (100%). For this sub-indicator, 16 countries (SE, LU, MT, IE, AT, BE, DK, FI, FR, DE, GR, LT, PL, PT, SK, UK) reach the 95% "satisfactory" level.

The best performing countries on the total sub-indicator "level of competition" are Norway, Ireland, Finland, Sweden, Luxembourg and Malta, which are also the only ones above the "satisfactory level" of the EU Single Market Scoreboard.

Country	More than one bidder made an offer	Call for bids was used	Total sub-indicator Competition
Austria	83%	98%	**91%**
Belgium	81%	98%	**90%**
Bulgaria	68%	74%	**71%**
Croatia	56%	94%	**75%**
Cyprus	58%	70%	**64%**
Czech Republic	53%	90%	**72%**
Denmark	86%	95%	**91%**

Country	More than one bidder made an offer	Call for bids was used	Total sub-indicator Competition
Estonia	80%	94%	**87%**
Finland	89%	98%	**94%**
France	85%	97%	**91%**
Germany	81%	97%	**89%**
Greece	66%	99%	**83%**
Hungary	65%	92%	**79%**
Ireland	89%	100%	**95%**
Italy	70%	93%	**82%**
Latvia	73%	91%	**82%**
Lithuania	79%	97%	**88%**
Luxembourg	86%	100%	**93%**
Malta	85%	100%	**93%**
Netherlands	84%	94%	**89%**
Norway	90%	100%	**95%**
Poland	51%	95%	**73%**
Portugal	78%	99%	**89%**
Romania	57%	83%	**70%**
Slovakia	81%	95%	**88%**
Slovenia	63%	76%	**70%**
Spain	77%	92%	**85%**
Sweden	89%	100%	**95%**
Switzerland	n/a	n/a	**n/a**
UK	68%	97%	**83%**
European average	**75%**	**93%**	**84%**

* EU Single Market Scoreboard data not available for Switzerland.

Level of transparency

The European average for the sub-indicator "level of transparency" is 45%. For each country, the score was determined by taking into consideration 3 different sub-criteria: (i) the publication rate, namely the value of procurement advertised on TED as a proportion of the national GDP, (ii) the “no missing calls for bids”, namely the share of contract awards that have no missing information, and (iii) the “no missing buyer registration numbers”, meaning the proportion of procedures where the registration number of the buyer was included.

The low European average score is mainly due to the fact that the “publication rate” in many countries is low. In this respect, the best performing countries are Latvia (9,8%) and Estonia (8,7%). Also Denmark, Poland, Slovakia, Romania and Bulgaria score above the 5% "satisfactory" level set for this indicator in the EU Single Market Scoreboard.

The best performing countries on sub-criterion "no missing call for bids information" are Estonia (99%), Lithuania (98%), Croatia (99%) and Ireland (98%). These countries are the only ones achieving the "satisfactory" 97% level set in the EU Single Market Scoreboard.

Finally, concerning the sub-indicator "no missing buyer registration numbers", the strongest performers are Estonia (100%), Croatia (100%) and Lithuania (100%). Also Norway, Bulgaria, Greece, Hungary and Slovakia are above the 97% "satisfactory" level.

As a result, the best performers on the overall sub-indicator "level of transparency on the EU single market" are Estonia (69%), Croatia (69%), Lithuania (68%), Norway (66%) and Bulgaria (66%), which are the only countries reaching on average the "satisfactory" level calculated by combining all 3 criteria.

Country	Publication rate	No missing call for bids information	No missing registration numbers buyer	Total sub-indicator Transparency
Austria	2,2%	84%	3%	**30%**
Belgium	3,4%	74%	12%	**30%**
Bulgaria	6,4%	92%	99%	**66%**
Croatia	6,8%	99%	100%	**69%**
Cyprus	1,7%	80%	0%	**27%**
Czech Republic	3,8%	66%	96%	**55%**
Denmark	6,7%	91%	69%	**56%**
Estonia	8,7%	99%	100%	**69%**
Finland	4,2%	96%	60%	**53%**
France	3%	83%	25%	**37%**
Germany	1,2%	78%	3%	**27%**
Greece	1,8%	85%	99%	**32%**
Hungary	4,4%	87%	99%	**63%**
Ireland	2%	98%	85%	**62%**
Italy	2,5%	87%	3%	**31%**
Latvia	9,8%	95%	78%	**61%**
Lithuania	4,5%	98%	100%	**68%**
Luxembourg	1,5%	93%	0%	**32%**
Malta	4,8%	5%	0%	**3%**
Netherlands	2,4%	81%	92%	**58%**
Norway	4%*	94%	99%	**66%**
Poland	6,4%	92%	18%	**39%**
Portugal	1,4%	33%	9%	**14%**
Romania	5,7%	5%	0%	**34%**
Slovakia	5,6%	91%	99%	**65%**
Slovenia	4,3%	81%	73%	**53%**
Spain	1,6%	81%	55%	**46%**
Sweden	4,9%	93%	77%	**58%**
Switzerland	n/a	n/a	n/a	**n/a**
UK	4,9%	34%	2%	**14%**
European average	**4%**	**84%**	**48%**	**45%**

* Due to lack of data from the EU single market scoreboard, for Norway the average value for the publication rate sub-indicator is used.

An interesting example of maximising transparency in public procurement is Greece, where the National System of e-Public Procurement-ESHDHS was updated in 2017. In addition to the tenders already available in the past, today the new portal also integrates all the tenders published in the Central e-Registry of Public Procurement (KHDMHS). On this national portal (ESHDHS) it is compulsory to publish all public procurements above €60.000. This includes not only the publication of prior information notices, contract notices and contract award notices but also the publication of all

procurement stages (including contracts and payment orders). This measure has significantly helped companies identify interesting public procurement opportunities and enhanced the level of transparency.