

# «The Strategic Use of Innovation Procurement in the Digital Economy»

A general overview of the study

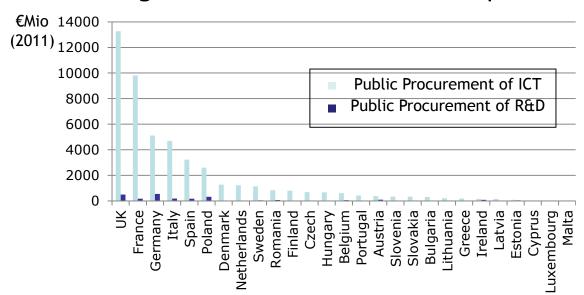
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# Data from a previous EU study in 2014



 Public procurement is 'the tool' that enables potential buyers to steer industry R&I to its needs. However, it is under-used in EU.

Also large differences within Europe



Frontrunner Member States invest 5 times higher % of total public procurement budget than followers on ICT and R&D proc:

ICT procurement
13,5% in UK <-> 2,5% in GR
R&D procurement
0,5% in UK <-> 0,1% in GR



## The purpose of the study

- To develop an approach that enables **systematic measuring** and **monitoring** of the progress across different countries in Europe on implementing a policy mix of measures to mainstream **innovation procurement.**
- To gather for the first time based on the above approach qualitative and quantitative evidence per country about the implementation progress, good practice cases and remaining barriers.
- To identify **key disparities, commonalities and trends across Europe** arising from the data gathered from different countries and to report on the key findings of this analysis
- To propose **methodology and guidelines** to collect in the future the above type of data per country in a systematic way and to integrate the results into statistics, scoreboards and benchmarking exercises across Europe



## The subject of the study

- The study analyses both the national **policy frameworks for innovation procurement** and the **expenditure** on PPI in the Member States, Norway and Switzerland.
- In the benchmarking of the **policy frameworks for innovation procurement**, there will be reference to public procurements that (I) procure R&D (including but not limited to **PCPs**), (II) public procurements that procure innovative solutions (**PPIs**) and (III) public procurements that procure a combination of R&D and innovative solutions
- In the **expenditure dimension** the aim is to measure only the expenditure in **PPI**.



## Preliminary Measurement Framework

#### **PURPOSE**

Monitoring the progress of 30 EU countries on the implementation of a mix of policy measures to mainstream innovation procurement across sectors of public interest and on increasing the expenditure on public procurement of innovative solutions

## Benchmarking of **policy frameworks**

- Official definition
- Horizontal enabling policies
- Sectorial policies
- Dedicated action plan
- Spending target
- Monitoring system
- Incentives
- Capacity building/training and assistance
- Legal framework

## Measuring of **expenditure**

- The total amount of yearly spending in PPI;
- The total amount of yearly PPI spending in percentage of total PPI expenditure;
- The amount of yearly PPI spending that is related to ICT based solutions;
- The amount of yearly ICT related PPI spending in percentage of total ICT related public procurement spending;

## Countries Performance

## **EXAMPLE**



#### *Indicator*

#### Assessment

#### 6) Monitoring System

(1) No

(2)Yes, but only for a subset of innovation procurements (e.g. only for PPI or only for R&D procurement but not for both), not widely across the whole country (e.g. only for certain sectors or certain levels of government, only for some regions, only for specific PCP or PPI programmes etc.) and not in line with EU definitions.

(3)Yes, but only for a subset of innovation procurements (e.g. only for PPI or only for R&D procurement but not for both), widely all public procurements across the whole country, but not in line with EU definitions.

(4)Yes, for all types of innovation procurements (both R&D procurement, incl. PCP and PPI), but not widely across the whole country (e.g. only for certain sectors or certain levels of government, only for some regions, only for specific PCP or PPI programmes etc.) and not in line with EU definitions.

(5)Yes, for all types of innovation procurements (both R&D procurement, incl. PCP and PPI) and widely across all public procurements across the whole country, but not in line with EU definitions.

(6) Yes, for all types of innovation procurements (both R&D procurement, incl. PCP and PPI) and widely across all public procurements across the whole country and in line with EU definitions.

Overview possible scores for 'monitoring system'	(1)	(2)	(3)	(4)	(5)	(6)
I. Is there a system for measuring innovation procurement expenditure?	0%	20%	40%	60%	80%	100%
II. Is there a system for evaluating the impacts of innovation procurements?	0%	20%	40%	60%	80%	100%



# Benchmarking innovation procurement policy frameworks, the aggregation strategy

The total score of each indicator is calculated as the average of the scores on each of the subindicators:

Example: the indicator monitoring system has two subindicators:

- I. Is there a system for measuring innovation procurement expenditure?
- II. Is there a system for evaluating the impacts of innovation procurements?

The **final total score** is calculated as the average of the scores of these 2 subindicators.

The total score of the indicator would be = (I+II) / 2



## **DATA GATHERING APPROACH**

Data related to policy framework benchmark will be collected through:

-Online survey aimed at national representatives in charge of innovation procurement/national experts on innovation procurement

- Face to face/phone interviews as follow up of the survey

07/09/2017



## The expenditure dimension of PPI

- The total amount of yearly spending in PPI;
- The total amount of yearly PPI spending in percentage of total PP expenditure;
- The amount of yearly PPI spending that is related to ICT based solutions;
- The amount of yearly ICT related PPI spending in percentage of total ICT related public procurement

The gathered quantitative data on the above indicators will be broken down:

- by area of public sector activity and sub sectors
- by type / level of contracting authority / entity (e.g. international, national, regional, local etc.)
- by type of contract (services, supplies, works)
- by type/ radius of publication (e.g. above threshold reported in TED, below threshold reported in national database, not reported in TED or national database)
- by ICT categories: Core ICT, ICT+ (ICT embedded in other products) and Media.



## The methodological approach

A four-step approach, fully automatized:

Step 1 Data Grabbing on daily tender publications from various sources TED; National database; Private companies



#### Step 2 Survey design and mailing

The goal of the survey is to identify potentially innovative tenders, which will be published in 2018 and it is aimed to directly asking to the procurer about the innovativeness of the tender



### Step 3 Survey response collection

Information extracted from the answers provided by the procurers are stored in the storage system together with information of the related tender already inside the platform.



#### Step 4 Survey response validation.

Both the artificial intelligence of IDOL and human analysis will be used to check the innovative content of the tenders



#### How you can contribute to the Study

Tell us about national existing methodology

- Share data on innovation procurement with us
- Inform public procurers at national and regional level about our study
- Need for support by national contact points in charge of promoting the setup of national initiatives in Member States



## **Study Contacts**

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# Thank you very much for your attention

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2) Innovation Procurement embedded as a priority in strategic horizontal enabling policies that define the surrounding ecosystem that enables innovation procurement to flourish

#### Assessment

- 1) The policy is present and compliant: Yes or No
- 2) The policy is applicable country wide: Yes (i.e. applicable to all public procurers in the country) or no ((e.g. only applicable to procurers in part of the country such as a region)

Overview possible scores for 'horizontal enabling policies' subindicators	0 yes	1 yes	2 yes
I. R&D policy	0%	50%	100%
II. Innovation policy	0%	50%	100%
III. Public procurement policy	0%	50%	100%
IV. Competition policy	0%	50%	100%
V. ICT policy	0%	50%	100%
VI. Economic policy	0%	50%	100%
VII. Entrepreneurship policy	0%	50%	100%
VIII. Education policy	0%	50%	100%
IX. Financial policy	0%	50%	100%
X. Regional / Urban policy	0%	50%	100%

07/09/2017 \_\_\_\_\_ 14



3) Innovation Procurement embedded as a strategic priority in policy frameworks and action plans across the different sectors of public sector activity defined in the EU public procurement directives

#### **Assessment**

- 1) Recognized in the policy framework: yes or no
- 2) Recognized in the action plan: yes or no
- 3) Full coverage of the scope (R&D, PPI...): yes or no

Overview possible scores for 'sectorial policies/action plans'	0 yes	1 yes	2 yes	3 yes
I. Score on healthcare and social services sector	0%	33%	66%	100%
II. Score on public transport sector	0%	25%	50%	100%
III. Score on general public services, public administration, economic and financial	0%	25%	50%	100%
affairs sector				
IV. Score on construction sector	0%	25%	50%	100%
V. Score on energy sector	0%	25%	50%	100%
VI. Score on environment sector	0%	25%	50%	100%
VII. Score on water sector	0%	25%	50%	100%
VIII. Score on postal sector	0%	25%	50%	100%
IX. Score on public order, safety, security and defence sector	0%	25%	50%	100%
X. Score on education, recreation, culture and religion sector	0%	25%	50%	100%



#### Indicator Assessment

4) Dedicated action plan for innovation procurement

- I. 0%: No
- II. 25%: Yes, but only for a subset of innovation procurement (e.g. only for PPI or only for R&D procurement but not for both), not widely across the whole country (e.g. only applicable to some public procurers in certain sectors or at certain levels of government, only for some/not all regions/cities) and not yet for mainstreaming innovation procurement at large scale (e.g. only for 'pilot' actions),
- III. 50%: Yes, for all types of innovation procurement (...), but not widely across the whole country (...) and not yet for mainstreaming innovation procurement at large scale (e.g. only for some 'pilot' actions).
- IV. 75%: Yes, for all types of innovation procurement (...) and widely across the whole country (...) but not yet for mainstreaming innovation procurement at large scale (e.g. only for some 'pilot' actions).
- V. 100%: Yes, for all types of innovation procurement (...), and widely across the whole country (...) and for mainstreaming innovation procurement at large scale



Overview possible scores for 'dedicated innovation proc action plan'	(1)	(2)	(3)	(4)	(5)
I. Is there a specific action plan for innovation procurement?	0%	25%	50%	75%	100%
II. Does the action plan commit to concrete actions to be implemented?	0%	25%	50%	75%	100%
III. Does the action plan define which specific resources (material and budgets) will be used to implement each action?	0%	25%	50%	75%	100%
IV. Does the action plan clearly define expected results (possibly broken down in final results and intermediate milestones) for each action?	0%	25%	50%	75%	100%
V. Does the action plan define a clear timeline for implementation of the different actions?	0%	25%	50%	75%	100%
VI. Does the action plan define concrete actors to implement each action?	0%	25%	50%	75%	100%
VII. Have the relevant key procurement organisations in the country committed and been mobilised to implement the action plan?	0%	25%	50%	75%	100%
VIII. Does the action plan define clear, lightweight decision-making structures for innovation procurements that need approval from procurers / policy makers from different levels of government / sectors?	0%	25%	50%	75%	100%
IX. Does the action plan define concrete measures to pool demand among procurers in the country?	0%	25%	50%	75%	100%
X. Does the action plan define concrete measures to pool demand with procurers from other countries?	0%	25%	50%	75%	100%

The total score on the indicator = (I + II + III + IV + V + VI + VIII + IX + X) / 10



#### Assessment

5) Spending target for innovation procurement

1.Presence of target: yes or no

2.Full coverage of the scope (R&D, PPI...): yes or no

3. Broken down by scope: yes or no

4. Ambitious (above (below 2,5%/15% respectively): yes or no

5. Applicable country wide and across sectors: yes or no

6.Articulated in targets for specific sectors and bodies

7. Consultation and agreement with key procurers: yes or no

8. Operational commitment agreed by key procurers: yes or no

Overview possible scores for 'spending	1 No	1 yes	2 Yes	3 yes	4 yes	5 yes	6 yes	7 yes	8 yes
target									
I. Is there a system for measuring innovation procurement expenditure?	0%	12,5%	25%	37,5%	50%	62,5%	75%	87,5%	100%



#### Assessment

#### 6) Monitoring System

(1) No

(2)Yes, but only for a subset of innovation procurements (e.g. only for PPI or only for R&D procurement but not for both), not widely across the whole country (e.g. only for certain sectors or certain levels of government, only for some regions, only for specific PCP or PPI programmes etc.) and not in line with EU definitions.

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Overview possible scores for 'monitoring system'	(1)	(2)	(3)	(4)	(5)	(6)
I. Is there a system for measuring innovation procurement expenditure?	0%	20%	40%	60%	80%	100%
II. Is there a system for evaluating the impacts of innovation procurements?	0%	20%	40%	60%	80%	100%



- 7) Financial and other Incentives for innovation procurement
- I. Are there incentives to reduce the financial risk for public procurers to undertake innovation procurements?
- II. Are there personal incentives for public procurers to undertake innovation procurements?

#### Assessment

- 1)Existence of financial incentives: yes or no
- 2)Full coverage of the scope (R&D, PPI...): yes or no
- 3)They are applicable country wide: Yes (i.e. applicable to all public procurers in the country) or no (e.g. only applicable to procurers in part of the country such as a region or only to some sectors or type of public body)
- 4)They are designed for large scale deployment, not just for pilots: yes or no. Pilot actions are actions with limited scope, duration and/or budget to trial out innovation procurement in a limited number of cases.
- 5)The incentives are additional to existing EU funding (e.g. ESIF co-financing of procurements, EIB loans to procurers): yes or no
- 6)The incentives are designed to be synergetic with ESIF
- 7)The incentives are designed to be synergetic with H2020

- 1)Presence of personal incentives: yes or no
- 2)Ambitious: more than one incentive: yes or no
- 3)Implemented country wide: yes or no

Overview possible scores for 'incentives'	(1)	(2)	(3)	(4)	(5)
I. Are there incentives to reduce the financial risk for public procurers to undertake	0%	25%	50%	75%	100%
innovation procurements?					
II. Are there personal incentives for public procurers to undertake innovation	0%		50%	100%	
procurements?					

I he total score on the indicator = (I + II) / 2



#### Assessment

- 8) Competence center capacity building and assistance measures
- I. Have a central website that explains why the policy framework encourages public procurers to undertake innovation procurement and that gives an overview of existing and upcoming policy initiatives to mainstream innovation procurement?
- II. Have a central website with good practices example cases on innovation procurement?
- III. Have an official implementation handbook or guidelines on innovation procurement?
- IV. Offer trainings/workshops for public procurers on innovation procurement?
- V. Offer case specific (practical and legal) implementation assistance to public procurers to prepare and implement innovation procurements?
- VI. Offer template tender documents for public procurers to undertake innovation procurements?
- VII. Offer case specific assistance to public procurers to obtain hierarchical approval and financial support for implementing innovation procurements?
- VIII. Pre-approve or coordinate the implementation of innovation procurements nationally/regionally?
- IX. Facilitate experience sharing and networking between procurers in other cities/regions, sectors, countries (e.g. online via a forum, or via physical meetings)
- X. Offer a one-stop-shop for public procurers to the above type capacity building and/or assistance measures through an officially appointed competence center on innovation procurement?



#### Assessment

8) Competence center - capacity building and assistance measures

For each of the above 10 questions (I to X), an additional 5 questions are asked:

- 1. Synergies: Does it connect in addition to the relevant national also the relevant EU references/initiatives? Yes or no
- 2. Incentives: Is it offered free of charge to procurers or at payment? Yes or no
- 3. Scope: Is it covering all aspects of innovation procurement (R&D procurement, including PCP, and PPI)? Yes or no
- 4. Country wide: Is it available/applicable to all public procurers in the country or only partially (e.g. only to certain (region(s)))? Yes or no
- 5. Mainstream: Is it offered at small scale (e.g. piloting) or at large scale (with enough resources for mainstreaming innovation procurement widely)? Yes or no

Overview possible scores	1 No	1 yes	2 Yes	3 yes	4 yes	5 yes
Question I to X + 5 additional questions	0%	20%	40%	60%	80%	100%

The total score on the indicator = (I + II + II + IV + V + VI + VIII + VIII + IX + X) / 10



- 9) An innovation friendly legal framework
- I)The use of specific techniques to foster innovation in public procurement

#### Assessment

- (a) Is the default regime in the country that IPR ownership is normally left to the contractors in public procurements (note: not all IPR related rights, but IPR ownership)?
- (b) How frequent is the use of an 'open' preliminary market consultation before procuring?
- (c) How frequent is the use of functional/performance is prescriptive solution specifications?
- (d) How frequent are variant offers allowed?
- (e) How frequent are value for money (with innovation requirements) versus lowest price award criteria used? (e.g. does not national legislation still foresee a large list of exceptions from the EU public procurement directives where lowest price has to be used)
- (f) How frequent are solutions evaluated based on the quality and/or cost benefits that innovations can bring over the long term (e.g. the entire life cycle of the solution) instead of only evaluating immediate quality/cost benefits?

Possible answer for a):

- 1) the default regime in the country is to leave IPR ownership with the public procurer
- 2) there is no default regime defined in the country and the choice is up to the procurer to leave IPR ownership with the contractors or not
- 3) the default regime in the country is to leave IPR ownership with the contractors (and procurers can only deviate from that in duly justified cases)

The two possible answers for (b) to (f) are "below average", if the country is below the European average, and "above average" in the opposite case.



## 9) An innovation friendly legal framework

II The overall openness of the national public procurement market (openness to new suppliers and thus new solutions), based on existing data from the Single Market Scoreboard

#### Assessment

The overall openness of the national public procurement market (openness to new suppliers and thus new solutions), based on existing data from the Single Market Scoreboard:

- (a) Level of competition
- (b) Level of transparency

The two possible answers are "below average", if the country is below the European average, and "above average" in the opposite case.

Overview possible scores for 'innovation friendly legal framework'			
a) IPR ownership left by default with contractors?			
	0%	50%	100%
	0%		100%
b) Use of 'open' preliminary market consultations	0%		100%
c) Use of functional / performance based specifications	0%		100%
	0%		100%
d) Allowance of variance offers	0%		100%
e) Use of value for money versus lowest price award criteria			
f) Evaluation of offers based on long term instead of only immediate quality/cost benefits			
a) Competition	0%		100%
b) Tranparency	0%		100%