



EUROPEAN COMMISSION

Directorate-General for Communications Networks, Content and Technology

Digital Single market

Start ups and Innovation Unit

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## **Public Consultation on the interest of public procurers for innovation procurements of ICT based solutions for Horizon 2020 WP2018-20 Summary of Findings**

### **1. Background**

Public sector modernization is one of the five priorities of the European Economic Semester. Innovation procurement is a key enabler to improve the quality and efficiency of public services as it drives innovation from the demand side to meet concrete public customer needs. In addition, innovation procurement can create new growth opportunities for industry. This is also important because according to ECB and FP7 studies the biggest challenge for innovative companies in Europe is not to find funding for research and innovation, but to find a first customer.

In response to European Council and Parliament requests, the European Commission already started encouraging [Pre-Commercial Procurement \(PCP\) and Public Procurement of Innovative solutions \(PPI\)](#) through its FP7 and CIP programs by supporting a number of [on-going PCP and PPI projects](#) that enable procurers from different countries across Europe to tackle challenges of public interest together.

Horizon 2020 reinforced this support for innovation procurement by making funding for PCP and PPI standard available across the three pillars of Horizon 2020: Societal Challenges, Leadership in Enabling and Industrial Technologies, Research Infrastructures. By doing so, Horizon 2020 encourages wider use of public procurement to drive the development and deployment of innovative solutions through PCP and PPI, two complementary components to build a comprehensive innovation procurement strategy.

Ongoing EU funded PCPs and PPIs have shown significant impact on the quality and efficiency of public services and the competitiveness of companies involved: see [PCP impact study, first results of PCPs](#). Ongoing EU funded PCPs for example, have proven to increase the access of SMEs to the procurement market (73% versus 29% of contracts awarded to SMEs, which are mostly startups and scaleups) and open up cross-border growth opportunities for SMEs (33% versus 1,26% of contracts awarded cross-border). Companies that participated in PPIs are more successful compared to those that didn't in winning other public contracts later. The [Scale Up Europe manifesto](#) therefore also specifically requests Member States and the EC to boost the efforts and set specific spending targets for PCPs and PPIs in Europe.

Feedback from public procurers involved in ongoing EU funded innovation procurements, evaluators in calls and the FP7 impact study have indicated that there is a need for larger size, more frequent and more open innovation procurement calls in Horizon 2020. This consultation provides information on the opinion of public procurers across all Europe on this issue and sheds light on what are the concrete interests and priorities for new innovation procurements in the coming years of public procurers across all Europe.

In preparation of the next Horizon 2020 work programme, directorate F of DG CNECT, Unit F3 launched a 8-month open public consultation between mid February and mid October 2016 to obtain views and contributions from a broad constituency on the potential priorities for innovation procurement support in 2018-2020. The contributions obtained are meant to support the services of the European Commission in the drafting of the new 2018-2020 work programme complementing the opinions provided by other stakeholders and impact studies.

The public consultation was published on 12 February 2016 on the Horizon 2020 public consultations webpage<sup>1</sup> and the responses were collected via an online questionnaire on the European Assistance for Innovation Procurement (eafip) website<sup>2</sup>.

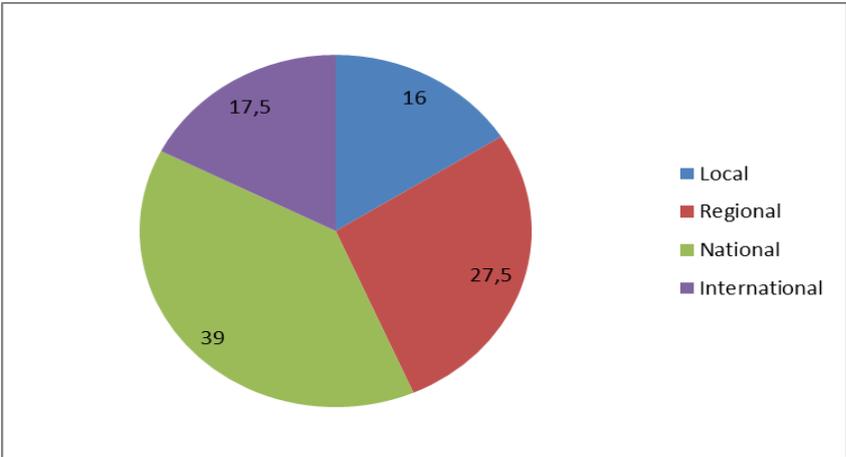
The targets of the public consultation were public procurers, so potential customers for innovative solutions in the public sector. This spans different fields of public sector activity such as healthcare, transport, energy, environment, water, education, culture, security/defense, public administration etc. Public procurers include both contracting authorities (public bodies such as public authorities at local, regional, national and international level) and contracting entities (e.g. public utilities and other companies that are financed or controlled by public bodies).

The survey was conducted with the premise not to publish the individual answers of each respondent as the replies contain confidential information about the purchasing power and procurement strategy of public procurers. Only aggregated conclusions are therefore provided in this summary of findings.

**1. Information about respondents**

A total of 186 entries were submitted out of which 174 were submitted by public procurers. Some procurers submitted more than one response (for different procurement needs). Out of those 94,25% are organisations, while 5,75% are individuals.

Individuals that replied are typically consultants that are working for public procurers in the definition and/or implementation of their public procurement strategy. Among the procuring organisations that replied the distribution between the different public sector working levels: 16% of responses came from local level, 27,5 from regional level, 39% from national level and 17,5% from international level organisations. 84% of replies came from networks or associations of public bodies, central purchasing bodies, groupings of procurers or large strategic procurers at regional, national or international level that represent thousands of smaller public administrations or publicly owned or controlled utilities or companies.

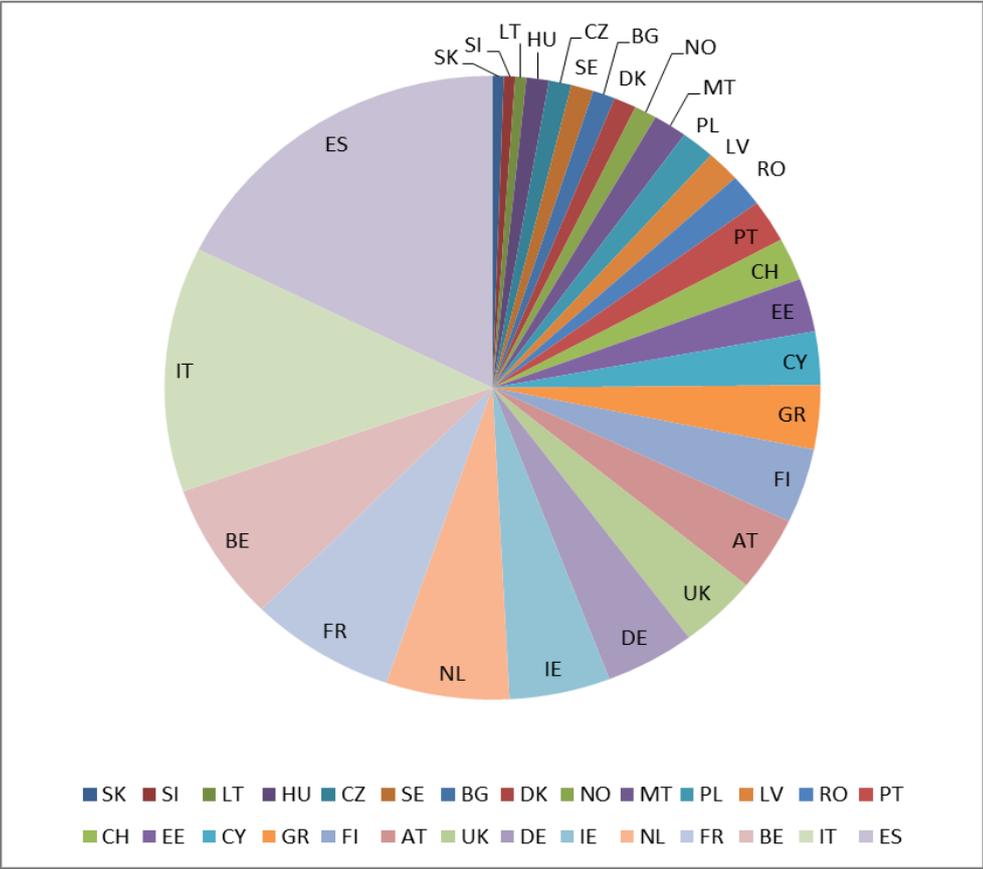


**Distribution of the respondents over different public sector working levels**

<sup>1</sup> <https://ec.europa.eu/programmes/horizon2020/en/information-and-communication-technologies-work-programme-2018-20-preparation>

<sup>2</sup> [http://eafip.eu/procurer\\_survey/](http://eafip.eu/procurer_survey/)

In terms of geographic distribution, replies were received from respondents across 27 EU Member States (all except Luxembourg) and 2 other countries (Norway, Switzerland). 17,5% of replies came from Spain, 12,6% from Italy, 7,1% from Belgium, 7,1% from France, 6% from Netherlands, 5% from Ireland, 4,4% from Germany, 3,8% from UK, 3,8% from Austria, 3,3% from Greece, 2,7% from Cyprus, 2,7% from Estonia, 2,2% from Switzerland, 2,2% from Finland, 2,2% from Portugal, 1,6% from Latvia, 1,6% from Romania, 1,6% from Poland, 1,6% from Malta, 1,1% from Norway, 1,1% from Denmark, 1,1% from Bulgaria, 1,1% from Sweden, 1,1% from Czech Republic, 1,1% from Hungary, 0,5% from Lithuania, 0,5% from Slovenia, 0,5% from Slovakia and 0,5% from Russia.

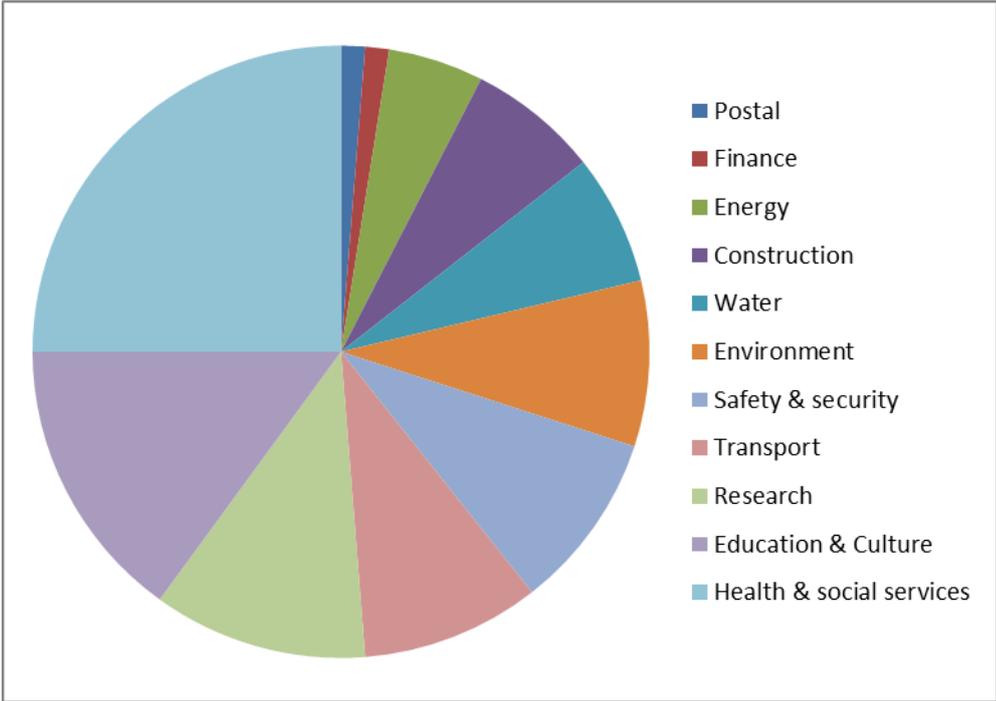


**Geographic distribution of the respondents over different countries**

The replies came from public procurers in various areas of public interest. 1,2% of the replies came from public procurers that are active in postal services, 1,2% in finance (e.g. central banks, ministries of finance), 5 in % energy (e.g. energy utilities), 6,9% in construction (e.g. land services), 6,9% water (e.g. water utilities), 8,9% environment (e.g. environmental protection bodies), 9,5% in public order, safety or defense (e.g. policy forces, ministries of justice or defense), 9% in research (e.g. public research centers that procure equipment to conduct their research), 11% in transport (such as railway, urban railway, tramway, trolley bus, bus services, airport and port related activities), 15% in education and culture (e.g. museums, universities, libraries) and 25% in health and social services (e.g. hospitals, elderly care services).

76% of the responses came from public procurers that are specialised in procuring for one domain of public interest (e.g. hospitals for healthcare, universities for education). 24% of the responses came from public procurers that are procuring for several domains of public interest: 3% came from national central purchasing bodies, 6% from procurers that buy IT for procurers across several public sector domains (e.g. local or national governments' central IT purchasing departments), 6,7% from cities/local governments and 8% from regional governments.

The larger response from the health and social sector is due to the fact that in this sector there is significantly larger awareness about and engagement in EU funding for innovation procurement because in this sector there have been calls since 2011-12 WP in the FP7 and CIP programs.

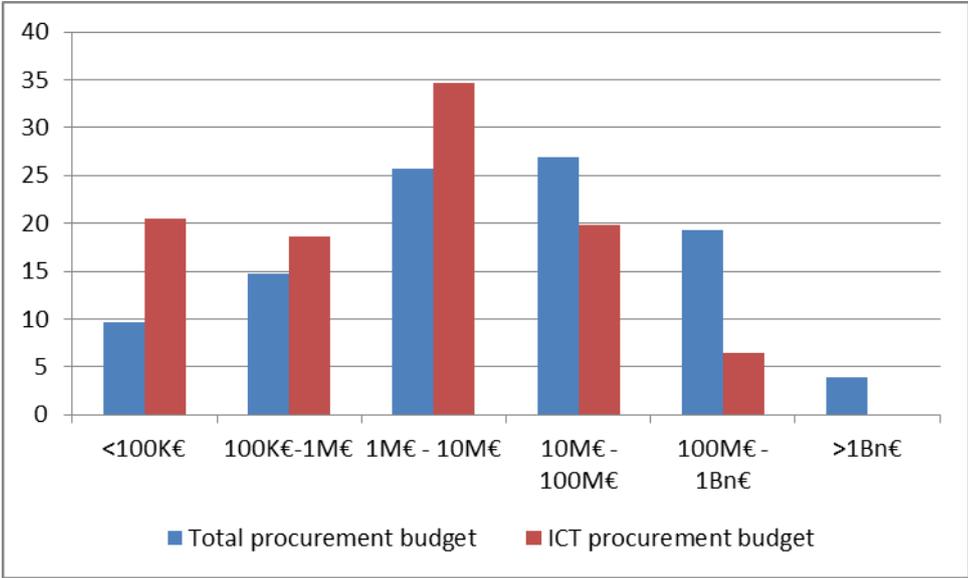


**Distribution of the respondents over the different sectors of public interest**

The survey attracted responses from very small to very large public procurers.

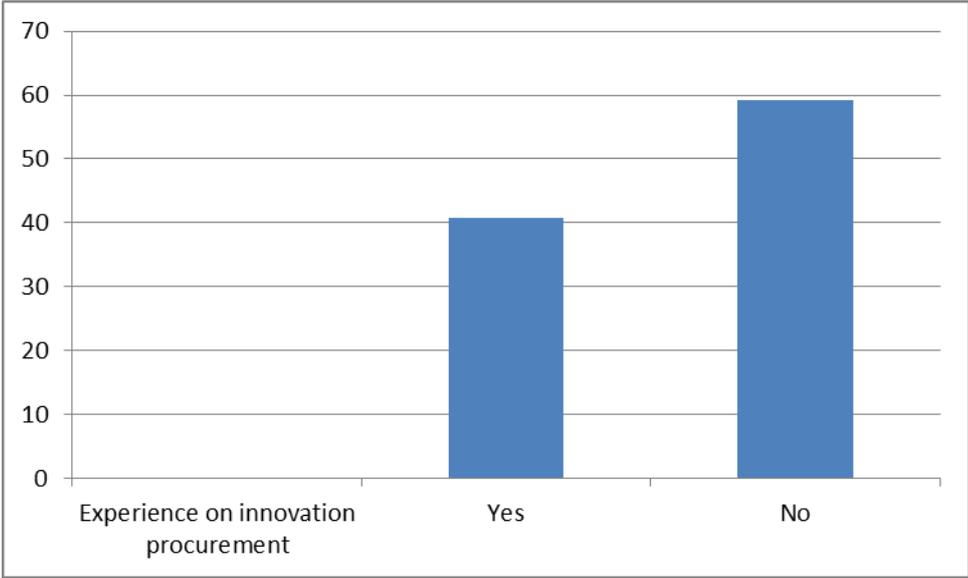
9.6% of responses came from public procurers with a total procurement budget of below 100K€, 14,7% from 100K€-1M€ procurers, 25,6% from 1M€-10M€ procurers, 26,9% from 10M€-100M€ procurers, 29,2% from 100M€-1Bn€ procurers and 3,8% from procurers with a total purchasing power of over 1Bn€.

The replies indicate that their procurement budget for ICT goods and services ranges typically between 10% to 60% of their total procurement budget. 20,5% of public procurers indicated to have an ICT procurement budget of below 100K€, 18,6% between 100K€-1M€, 34,6% between 1M€-10M€, 19,8% between 10M€-100M€, 6,4% between 100M€-1Bn€.



**Distribution of the respondents in terms of procurement budget**

The survey collected responses both from procurers with and without innovation procurement experience. 41% of respondents indicated to have experience on innovation procurement, 59% indicated not to be experienced in this.



**Distribution of respondents in terms of experience on innovation procurement**

Given the wide geographic, government level and sectorial, budgetary and experience coverage of the responses, the consultation collected data from a significant cross-section of public procurers across Europe.

**3. Findings of the consultation**

The objective of the survey was to collect information about (see Annex I for the full questions):

- The type of procurement needs/challenges faced by public procurers that potentially require innovative ICT based solutions (question 9)
- The interest of public procurers in innovative ICT based solutions to address the above challenges (question 9)
- The type of ICT solutions of most interest to the procurers (question 10)
- The interest of public procurers in collaborating with other procurers in implementing innovation procurements (question 11)

Reponses collected on the type of procurement needs/challenges faced by public procurers that potentially require innovative ICT based solutions (Q9)

The respondents listed the following procurement needs / challenges that they face that require innovative ICT based solutions.

*Transport – Mobility*

- Deployment of C-ITS solutions	PPI
- Preparing the infrastructure for connected and automated vehicles	PCP
- Developing solutions for new mobility concepts (Mobility as a Service)	PCP
- Smart bikes, smart bus stop	PPI
- Smart sensors for road network e.g. for smart tunnels, smart parking solutions	PCP
- Automatic switch control systems for trams and trolleybuses	PCP

- Smart city transport solutions for citizens	PCP/PPI
- Intermodal transport	PPI
- Digital elevation models in coastal areas around ports/harbours	PCP
- Improve the safety of navigation, the capacity of the waterway transport, and the environmental protection for inland ports. Combined use of radar, TV and thermal cameras to detect non-AIS targets, accurate modelling of the waterway advanced environmental monitoring, especially the height of the waves and their impact on the waterway margins.	PCP
- digitization of port communication systems into a smart "Port Community System", a single window system for all the stakeholders in the port	PPI
- New automatic switch control systems for trams and trolleybuses	PPI
- Information management systems for air traffic and aviation safety	PPI
- Big data, business intelligence and decision making for management and occupation of berthing docks surfaces	PCP
- Intelligent detection and geolocation of incidents in ports	PCP
- Intelligent Transport Systems (ITS) components and applications conformity assessment - ICTs and their applications in transport by ITS and global navigation satellite systems ( GNSS)	PPI
- standardised solutions for e-ticketing for railways	PPI
- safer, environmentally cleaner, more ergonomically, fully ICT equipped ambulance vehicles	PPI
- Road safety for emergency vehicles (Vehicle2Vehicle; Vehicle2Infrastructure)	PPI

### *Construction*

- Development of new ICT solutions that can reduce construction times and costs	PPI
- Smart solutions that improve the quality of housing services provided by cities to citizens	PCP
- Solutions to better monitor the allocation of work of building redevelopment, the status of work in progress, the buildings' situation and their current usage	PCP/PPI
- Intelligent ways to create buildings using recycled materials	PCP
- Design and analysis of real estate monitoring system based on remote sensing and image recognition technologies. R&D for advanced methods for cartographic generalization of state map series	PCP
- Development of archival management software	PCP
- Common tool for management of an entire building process	PCP/PPI
- New materials and new integrated construction techniques for complex constructions	PCP

### *Health and social care*

- Robotic distribution system	PCP
- RFID, networking systems	PPI
- e-documentation and pay per use systems	PPI
- Securitization and data protection of healthcare systems	PCP
- Patient Empowerment	PCP
- Solutions that make optimal use of IoT	PCP
- Big data system to manage hospital data	PCP
- Iaas, Saas	PPI
- Integrated care records	PPI
- Technology enabled care and living	PCP/PPI
- Smart city solutions to improve the quality of health and social services provided by cities to citizens	PCP/PPI

- All elements of ICT in health and social care, infrastructure, hardware & software, security	PPI
- Smarter clinical data storage solutions and clinical trials metadata repositories	PCP
- Telemedicine service in the field of intensive care medicine	PPI
- Creating the most intelligent university hospital in the world by 2030 (e.g. providing truly integrating health and social care provisioning)	PCP/PPI
- Smart processing of bioinformatics related data (DNA, Genomics, Metabolomics, Health, Pharmacy)	PCP
- Smarter patient care including ICT for patient records, patient management and treatment	PCP/PPI
- Smart solutions to catch data from different systems and devices (diagnostic laboratory, clinics etc) with the objective to create and share patient records according to a strict privacy strategy	PCP
- Solutions for enhancing pre-graduate, graduate and continuous medical education	PPI
- Smart solutions for registries for chronic diseases and molecular epidemiology: management of large databases with a wide range of data: demographic, life habits, clinical, pharmacological, socio-economic, labor, quality of life, imaging, genetic and laboratorial	PCP
- New technologies / clinical devices for rehabilitation (also at home)	PCP
- New technologies for the diagnosis of antibiotic-resistant bacteria	PCP
- New technologies for the rehabilitation of vision	PCP
- Aids and devices for mobility in both outdoor and indoor (partially sighted)	PCP
- Aids and equipment for independent living (elderly and visually impaired people)	PCP/PPI
- Telehealth / Remote Healthcare	PPI
- Advanced Clinical Decision Support Systems for hospitals	PCP
- ICT methodology and software tool for liability and risk management in healthcare: analyzing data of activities related to healthcare organization including specific risk for each activity, correlating this with risk management actions/policies and insurance coverage.	PCP
- Intelligent system to optimise hospital logistics (Internet of Things)	PCP
- Patient empowerment solutions	PCP/PPI
- Electronic diabetes management solution	PPI
- Secure transfer of medical data, e-privacy solutions for distributed healthcare networks	PCP
- Hospital IT system that enables co-creation of health and social care services by patients	PCP
- Intelligent logistics system for handling and tracking of blood bags	PCP

### *Energy*

- Smart city solutions improving the quality of services provided by cities to citizens	PCP/PPI
- More energy efficient high performance computing systems	PCP/PPI
- IoT, big data solutions optimising energy efficiency	PCP
- Introduction of energy saving schemes in the procurement process for hospitals, police, educational premises and other public buildings	PPI
- Deploying more energy efficiency public buildings in particular for social housing	PPI
- Electric buses with battery or super capacitors technology	PCP

### *Environment*

- Smart city solutions to reduce the environmental impact of city services	PCP/PPI
- IoT, big data, reusable components	PCP
- Waste management solutions for cultural heritage sites	PCP

- Use of drones-rtp devices and remote sensing for wildfire prevention	PCP/PPI
- Knowledge infrastructure and management of biodiversity and water resources	PCP/PPI
-Intelligent models for learning from environmental infrastructure management contents	PCP
- Development of new technologies for the improvement of air quality	PCP
- Facility management for collecting and recycling materials from demolition	PCP/PPI
- Greening healthcare provisioning	PCP/PPI
- Development of multi-parametric monitoring protocols for the instability of slopes in high seismic risk areas.	PCP
- Development of a platform for supporting all phases of environmental emergency interventions	PCP
- Lower CO2 emission frontline vehicles for fire brigades	PCP
- ICT solutions to model the possibility to build complex requirements (weight, space utilisation, reliability etc) into early stage development low emission vehicles	PCP

### *Water*

- Centralize and standardize the management of water, sewage, rainwater, beaches and streams operations into a single remote monitoring and control center	PCP/PPI
- Intelligent wastewater treatment, upgrading / repair of pipelines and other facilities	PCP
- Artificial intelligence, client centered software methodologies	PCP
- Development of technologies for the improvement of water quality	PCP
- Development of technologies for more intelligent treatment of waste water	PCP
- Deployment of technologies for the decontamination of polluted soils	PCP/PPI
- Development of innovative adaptive water management platform for urban water managers for automatic urban water balance execution, integrated management of networks hydraulics and analysis of failures and interventions (using the ever increasing amounts of data available by smart measuring devices and sensors, integrating and validate physical and administrative data, complemented by real-time and historical information in a single technological platforms)	PCP
- Intelligent ICT solutions to tackle flooding and extreme weather conditions-development of innovative technologies for protection, management and quality control of water resources	PCP
- Open interoperable solutions for water meters - remote control for water purification plant and waste water treatment plants	PCP/PPI

### *Education and Culture*

- Smart solutions to improve the educational and cultural offering in	PCP/PPI
- Pooling demand so education procurers can gather enough purchasing power to challenge providers to deliver better price/quality truly innovative products, not their regular off shelf products and services	PPI
- IoT, big data solutions for education/culture	
- Language learning accelerating software	PCP/PPI
- Hardware and Software development for higher education and investigation	PPI
- Apps for tour guiding and thematic paths, interactive serious games for interpretation of a European Heritage Label site, collaboration platforms, comprehensive wireless LAN in historic buildings, semantic-based virtual visitor information centre solutions	PPI
- Deploying technologies for personalized learning of science subjects (STEM)	PPI
- Developing new technologies for teaching and learning for the case of autism, dyslexia	PCP
- Human-oriented ICT solutions (e.g. Social media ICT, ICT for learning / training	PCP/PPI

and games, multimodal natural computer communication, translation) - The fully ICT equipped school of the future - Data driven digital learning platform - Augmented reality solutions for cultural heritage sites - Mobile tourism solutions	PPI PCP PPI PPI
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*Safety and security*

- Innovative ICT solutions for police- and border guard, emergency and rescue services, justice, defence	PCP/PPI
- Building lower emission vehicles for the frontline fleet of fire brigades. Due to the complexity and specialist nature of these vehicles, considerable design, development, modelling and testing using ICT based solutions will be required before a prototype vehicle could be built	PCP
- Smart ICT solutions to tackle new hybrid threats of safety of European citizens	PCP
- Intelligent systems for emergency refugees and asylum seekers	PCP/PPI
- Cybersecurity solutions for critical infrastructures	PCP/PPI
- Intelligent information systems for prisons interconnected with policy IT systems and equipped with self-learning pattern analysis (using big data analysis)	PCP/PPI
- New and smart sensors, back end systems, data correlation, robotics, IoT issues in the field of law enforcement / police forces	PCP/PPI

*Public administration - e-government*

- Innovative solutions for tax and customs offices, ministries of foreign affairs	PPI
- Cloud computing solutions for public administrations	PPI
- Smart ICT based policy making decision tool based on parameterization and vizualization of big data input from the economic sectors of the city (employment, turnover, relativeweight in the GDP, etc) to improve the traceability of indicators that measure the efficiency of different operational plans and detect areas to improve to produce more wealth and employment.	PCP
- Public lightning solutions for cultural heritage sites	PPI
- Smart novel Internet architectures for public administrations	PCP/PPI
- Large volume data management	PCP/PPI
- Deployment of e-justice portal solution for the European e-Justice Strategy and developing new advanced modules for that	PCP/PPI
- Smart learning platform that offers personalised e-gov services to entrepreneurs in the region (based on big data processing, machine-learning algorithms etc)	PCP
- IoT/IoE services for smart city e-government services	PCP/PPI

*Research*

- Beyond the state-of-the-art solutions for providing best in class (internationally competitive) high performance computer services to national and European users.	PCP/PPI
- Overcoming technical issues related to the next generation of multi-petascale and exascale systems based on hybrid and/or manicure architectures, such as programmability, security, convergence between HPC and big data, precise monitoring, smart scheduling, I/O and resilience (factor 10 improvement on all points needed every 3 years to remain at cutting edge globally)	PCP/PPI
- Cloud computing solutions for scientific community that move further up the cloud stack and use PCP/PPI actions for innovative PaaS/SaaS services	PPI

- Next generation optical-network based solution to satisfy NREN user-base needs in term of large amount of data transfers regarding cloud services, 8k+ video or any bioinformatics data.	PPI
- Information systems for universities for faster and cheaper data collection, bridging the gap between data collection agents and data assessors and development new ways of more dynamic, more mobile, more accurate, faster data collection	PCP/PPI

A recurrent challenge mentioned across all areas above was to improve the interoperability and reduce supplier lock-in of ICT solutions. Big data, IoT, smart modelling and analysis and automatic learning tools and smart city solutions were also recurrent themes.

### Responses collected on the type of ICT solutions of most interest to the procurers (Q10)

Respondents were asked to indicate which types of ICTs (of the below 8 categories), covered typically by the ICT LEIT work programme, are of most interest to them. Respondents were allowed to tick multiple categories.

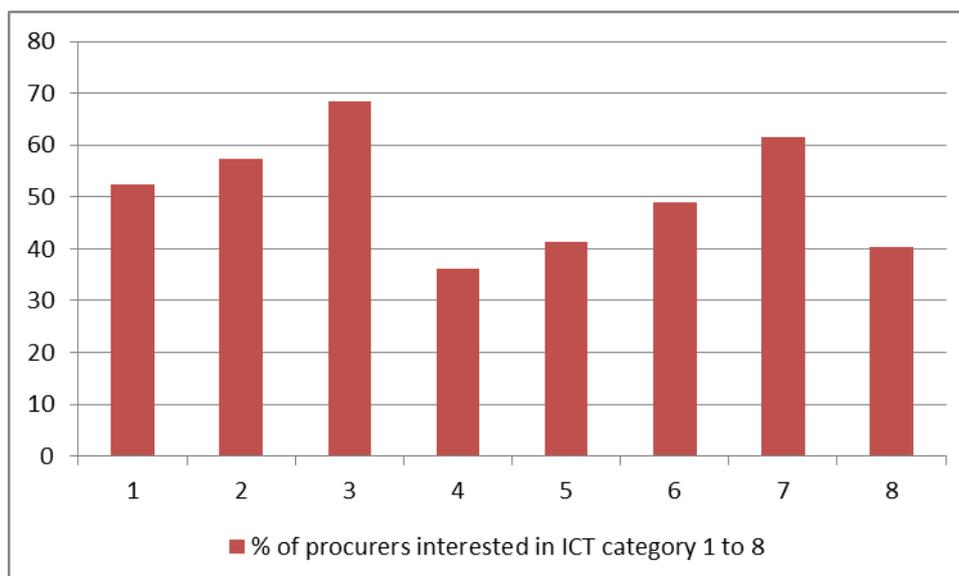
1. Novel networking and hardware (e.g. fixed and wireless communication networks, smart novel Internet architectures, experimentation platforms, computers, data centres)
2. Novel software (e.g. cloud computing solutions and services, software development)
3. Content technologies and information management (e.g. big data handling, content handling and modelling, automatic learning)
4. Advanced computing (e.g. customized and low power computing, high performance computing)
5. Components and systems (e.g. embedded ICT systems, miniaturisation / system integration, thin large organic and large area electronics, micro/nano-electronics, key enabling ICT technologies, photonics, robotics, sensors)
6. Human-centric ICT solutions (e.g. social media ICTs, ICTs for learning / teaching and gaming, multimodal natural computer interaction, language translation)
7. Software services or applications
8. Trustworthy ICT / cyber security

Category 1 received specific interest from 52% of respondents, category 2 of 57% of them, category 3 of 68% of them, category 4 of 36%, category 5 of 38%, category 6 of 48%, category 7 of 61% and category 8 of 40% of respondents.

More than 80% of public procurers indicate that to address their procurement needs they need end-to-end solutions that combine ICTs from on average 4 different ICT categories.

Other areas of interest for innovation procurements listed by procurers (including non-ICT):

- Cyclotrons (for transmutation of radioactive waste, energy productions and medical applications). Magnets, Power supplies and RF cavities for cyclotron accelerators
- All types of smart city solutions and technologies



### Interest of public procurers in different categories of ICT goods and services

#### Responses collected on the interest to collaborate with other procurers in implementing innovation procurements (Q11)

Procurers turn out to be overall very willing to collaborate with other procurers (only very few procurers say 'no' to that) but the level willingness varies for different types of cooperation.

When the procurers are asked whether they are interested to share information on their procurement needs with other procurers, the vast majority (84,9%) says immediately 'yes'. When asked whether they would be interested to implement an innovation procurement with other procurers, an equally large majority says immediately 'yes'.

Are you interested to...	Yes	No	Don't know
share info on your procurement need with other procurers	84,95	2,15	12,90
implement an innovation procurement with other procurers in your country	74,73	5,38	19,89
implement an innovation procurement with other procurers in other countries	91,63	4,59	3,53

However, it is remarkable that 17% more procurers are willing to implement an innovation procurement together with procurers from another country (91,6%) than with procurers from their own country (74,7%). Normally one would expect the opposite as joint procurement at international level is more complex than at national level. The reason quoted for this preference to procure together at international level versus at national level is most often that there is competition between public procurers at national level. Such competition exists on political level (e.g. the best equipped hospital in the country not wanting to lose this status and so not wanting to cooperate with other hospitals in the country as this would deliver all the them equally advanced solutions) and/or on market level (e.g. different energy utilities or public transport procurers in one country competing for the same customers and not wanting to cooperate with each other in procurements as then they would then all end up with solutions with the same level of quality and lose their differentiation factor towards customers).

#### 4. Conclusions and recommendations

From the data, the following main messages can be concluded for the 2018-2020 work program:

- Public procurers across all sectors of public interest are interested to start innovation procurements. More regional and national level, both also local and international level, public procurers show a genuine interest in innovation procurements.
- Public procurers identified quite a list of procurement needs for innovative solutions that cover a wide range of topics across the different societal challenges domains in Horizon 2020. Also in other domains like finance, education and culture or research infrastructures, procurers have concrete innovation procurement needs. In domains where the EU has already invested more in innovation procurement in the past (health/ageing), procurers are more active to start new innovation procurements in the future. Public procurers identified not only short term procurement needs that could be addressed with PPIs. The majority of topics identified still require some R&D and refer to PCP type procurement needs. There is a clear need for increased Horizon 2020 support to both PCP and PPI procurements to address the list of procurement needs identified by the procurers.
- Public procurers across all areas of public interest have 'large' needs for new innovative ICTs (between 10% to 60% of their annual purchasing budget). Public procurers have a keen interest to procure innovative ICTs in all areas in the ICT LEIT work programme. Big data, IoT, IT platforms with smart data modelling, analysis and automatic learning tools and smart city solutions were the most recurrent themes for procurers in all sectors of public interest.
- More than 80% of public procurers indicate that - to address their procurement needs - they need end-to-end solutions that require combinations of different ICT technologies from on average 3 to 4 different ICT categories. For PCPs in particular also 'comparisons between' different ICT technologies from several ICT categories are needed. These findings confirm the recommendations of evaluators in past PCP calls and the recommendations of the FP7 PCP impact study, which requested to increase the budget and the frequency of the open PCP call in LEIT. This open PCP call that is run since 2012 (currently bi-annually) is open to public procurers in all areas of public interest to address any challenge that requires combinations or comparison of different ICT solutions and has indeed been 4 times oversubscribed in the 2016-17 work programme.
- Procurers are very willing to share information about their procurement needs with other procurers and to collaborate in the implementation of an innovation procurement with other procurers. Remarkably, 17% more procurers are willing to implement an innovation procurement together with procurers from other countries than with procurers from their own country. Reinforcing Horizon 2020 support for cross-border innovation procurements at EU level thus remains important to create enough demand for innovative solutions and EU wide growth opportunities for companies.
- There is clearly more response from procurers in advanced countries that have a national innovation procurement policy/action plan than from other lagging countries (e.g. Eastern Europe). Cooperation at EU level can also help address the need for learning and experience sharing on innovation procurement between advanced and lagging countries.

## Annex I: Questions posed in the consultation

The consultation consisted of 9 questions, mostly closed-end questions:

### 1. General Information

**Name of your organisation \***

**Website \***

**Country \***

In which country is your organisation headquartered?

**Sector \***

Indicate in which sector of public procurement your organisation mainly operates.

**Name \***

**First**

**Last**

**Email \***

**Enter Email**

**Confirm Email**

**Your function in your organisation \***

### 2. Your organisation's procurement responsibilities

**Indicate for which tasks linked to public procurement (also with regard to innovation procurement) your organisation is responsible. You can choose more than one option. \***

- Definition of the acquisition strategy
- Delivery/deployment/operation of services of public interest
- Regulation of services of public interest
- Use of the innovative solutions resulting from any potential public procurement
- Other (please specify)

### 3. Contact Details

**If applicable, please indicate who is responsible in your organisation for the following issues.**

Person Responsible for Purchasing Department

**Name**

**Email**

**Phone**

Person Responsible for Long term procurement strategy planning

**Name**

**Email**

**Phone**

Person Responsible for EU relations/EU projects and for innovation strategy

**Name**

**Email**

**Phone**

### 4. Your organisation's procurement budget

**What is the approximate total annual procurement budget of your organisation? \***

- €0 – 100.000
- €1 million – 10 million
- €100 million–1 billion
- Don't know
- €100.000 – 1.000.000
- €10 million–100 million
- €1 billion or more

## 5. Your organisation's budget for procurement of ICT solutions <sup>1</sup>

<sup>1</sup> See the list of types of ICT solutions in question 8

**What is the approximate annual budget for procurement of ICT solutions in your organisation? \***

- €0 - 100.000
- €1 million - 10 million
- €100 million - 1 billion
- Click here to specify your ICT budget as a portion of the total procurement budget
- €100.000 - 1.000.000
- €10 million - 100 million
- €1 billion or more

## 6. Your organisation's experience in innovation procurement

**Does your organisation already have experience with implementing innovation procurement? \***

- No
- Yes

If 'yes', please indicate whether this concerns [PCP](#) and / or [PPI](#) type procurements.

## 7. Your organisation's potential interest in innovative ICT based solutions

**Does your organisation have a potential or concrete interest in procuring ICT based solutions in the coming years? \***

- No
- Yes

If 'yes', describe briefly the procurement needs and/or challenges faced by your organisation that potentially require new innovative ICT solutions.

## 8. The type of innovative ICT solutions of most interest to your organisation

**Please indicate the types of innovative ICT solutions that would be of most interest to your organisation in the coming years. You can choose more than one option. \***

- Novel networking and hardware (e.g. fixed and wireless communication network technologies, smart novel Internet architectures, experimentation platforms, computers, data centres)
- Novel software (e.g. cloud computing solutions and services, software development)
- Content technologies and information management (e.g. big data handling, content handling and modelling, automatic learning)
- Advanced computing (e.g. customized and low power computing, high performance computing)
- Components and systems (e.g. embedded ICT systems, miniaturisation / system integration, thin large organic and large area electronics, micro/nano-electronics, key enabling ICT technologies, photonics, robotics)
- Human-centric ICT solutions (e.g. social media ICTs, ICTs for learning / teaching and gaming, multimodal natural computer interaction, language translation)
- Software services or applications
- Trustworthy ICT / cyber security
- Other (please specify)

## 9. Your organisation's potential interest in collaborating with other procurers

Is your organisation potentially interested in collaborating with other procurers who face similar procurement needs?

Interested in sharing information about innovation needs with other procurers \*

Yes  No  I don't know

Potentially interested in sharing the costs and experience of undertaking an innovation procurement together with other procurers from your own country who face similar procurement needs \*

Yes  No  I don't know

Potentially interested in sharing the costs and experience of undertaking an innovation procurement together with other procurers from other EU countries that face similar procurement needs \*

Yes  No  I don't know

Are you interested in receiving more information about EU funding for innovation procurement / being included in the EC Innovation Procurement mailing list? \*

Yes

No

## Annex II: List of respondents

Rijkswaterstaat	NL
Montan University Leoben	AT
Bundesanstalt für Post und Telekommunikation Deutsche Bundespost	DE
Departement Isère	FR
CPSU	MT
RTE	IE
Occupational Diseases Fund	BE
Parc Tauli Hospital	ES
Eastern Cheshire Clinical Commissioning Group	UK
Forum Virium Helsinki	FI
JSC, Forschungszentrum Jülich	DE
BSO, Health & Social Care Services in Northern Ireland	UK
ECRIN (European Clinical research Infrastructure network)	FR
GENCI	FR
Area science park	IT
Cineca	IT
City of Dortmund, Fire Department	DE
Green IT Amsterdam Region	NL
University Hospital Aachen	DE
Sucha Beskidzka Hospital	PL
City of Lublin	PL
ASLTo3	IT
Finnish Transport Safety Agency	FI
ESTAR	IT
Semmelweis University	DE
Regione lombardia - DG Housing	IT
Digipolis	BE
Ministry of Finance	SK
SMIT	EE
Northern Ostrobothnia Hospital District	FI
CERN: European Organization for Nuclear Research	CH
Stockport Council	UK
CESNET, a.l.e.	CZ
Latvian Environmental Investment Fund	LV
TRUSTECH/Central Manchester NHS Foundation Hospital Trust	UK

Information System Authority	EE
Department of Mobility and Public Works	BE
Galicia Innovation Agency	ES
Azienda Ospedaliero Universitaria Ospedali Riuniti Ancona	IT
Trafikverket	SE
London Fire Brigade	UK
Ministry of Education and Research	EE
Enterprise Estonia	EE
Western Norway Regional Health Authority	NO
Auditoría de contratos	ES
Konstantin Preslavski Shumen University	BG
Centro Hospitalar e Universitário de Coimbra	PT
EpiDoC Unit	PT
NEW Medical School   Faculty of Medical Sciences, New University of Lisbon	PT
Government of Catalonia. Departament of Business and Knowledge. General Directorate of Research	ES
Generalitat de Catalunya	ES
Gijón City Council	ES
Authority Port of Seville	ES
Santiago de Compostela City Council	ES
Regional Government of Valencia	ES
Dirección General de Modernización y Calidad de los Servicios. Consejería de Presidencia, Justicia e Igualdad. Gobierno de Canarias	ES
University of Cyprus	CY
Agency for Public Management and eGovernment	NO
Municipality of Neapolis-Sykies	GR
Águas do Porto	PT
Malta Information Technology Agency (MITA)	MT
CYPRUS PORTS AUTHORITY	CY
Swedish Post and Telecom Authority (PTS)	SE
Stolichen Electrotransport	BG
Latvian Prison Administration	LV
DIMOS ARTAS	GR
Burghauptmannschaft Österreich	AT
IRISH AVIATION AUTHORITY (IAA)	IE
FRANCE télévisions	FR
Rigshospitalet	DK
SAK vzw – caritas west	BE
Ihobe	ES
ICO	ES
Autoridad Portuaria de Huelva	ES
Consortio para el Centro de Láseres Pulsados	ES
CONSEJERÍA DE MEDIO AMBIENTE Y ORDENACIÓN DEL TERRITORIO. JUNTA DE ANDALUCÍA	ES
South Karelia Social and Health Care District	FI
University of Oulu, Centre for Health and Technology	FI
Centre Nationale de la Recherche Scientifique – CNRS	FR
Ministry of environment and energy	GR
Ministry of defence	GR
Sewerage Board of Limassol Amathus	GR
Technological University of Cyprus	CY
Azienda Ospedaliero Universitaria Ospedali Riuniti Ancona	IT
Ministry of environment	IT
ARCA S.p.A. Lombardia	IT

Kaunas Builders Training Centre	FI
University of Hasselt	BE
UMCG Ambulancezorg	NL
FEDICT	BE
Agency for Payments and Intervention in Agriculture	RO
Regional Agency for Housing, Sardegna	IT
North Karelia Central Hospital District	FI
University Research Institute for Applied Economic and Social Sciences of the University of Macedonia	GR
Local Government Operational Procurement Centre (LGOPC), Kerry County Council	UK
Waterschapshuis	NL
Klinikum Westfalen	DE
MAIRIE DE LENS	FR
Office of the Upper Austrian Provincial Government	AT
Rittmeyer regional institute of the blind	IT
European network of law enforcement technology services	NL
FundeSalud. Government of Extremadura	ES
Ancona university hospital association	IT
InnovaPuglia	IT
Dublin City Council	IE
Romanian National Union for Experts in Public Procurement	RO
Agency for Digital Italy	IT
Mairie de Paris	FR
Legal aid board	NL
Regional council Rhône Alpes	FR
Innovation, Financing and internationalization agency Castilla y León	ES
Digipolis Gent	BE
EIT Digital	BE
Office International de l'Eau	FR
Innoviris	BE
The State Land Service	LV
Technology Agency of the Czech Republic	CZ
Marupes utilities	LV
Viveracqua Scarl	IT
Eurail Group	NL
City of Vantaa	FI
lazio Innova spa	IT
National University of Ireland, Galway	IE
The Health Knowledge Agency- The Galician Health Ministry	ES
Aragon Institute of Health Sciences	ES
Ministry of Social Affairs	EE
Centrum Usług Wspólnych	PL
Universidad Politécnica de Madrid	ES
London Fire Brigade	UK
The Central Bank of Hungary	HU
Bradford College	UK
Hospital La Paz Institute for Health Research (IdiPAZ)	ES
IDIBELL - Bellvitge Biomedical Research Institute	ES
European Blood Alliance	NL
UNIVERSITY OF IOANNINA	GR