Study on best practices for ICT procurement based on standards in order to promote efficiency and reduce lock-in

Survey results' analysis

Monitoring the use of standards and the take-up of "open" procurement

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pwc

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1 Introduction

Task 4 of the project "*Study on best Practices for ICT procurement based on standards in order to promote efficiency and reduce lock-in*" is focused on building an effective monitoring system for the take-up of open procurement in EU; this is an overarching activity of the project, as well as a fundamental aim of the European Commission which envisions spreading awareness about ICT lock-in and its negative consequences, to free the public sector and to foster competition among ICT providers. In fact monitoring gives some hints on the level of achievement of all goals which are covered by the other tasks of the project (i.e. awareness creation, dissemination of "The Guide", community building, sharing of best practices).

Therefore the primary objective of this sub-task is to gain a sense of European public sector ICT procurement trends and how to measure them, with particular reference to the extent of "openness" and "lock-in" in primary contracting authorities. In particular, the monitoring system is aimed at assessing:

- Effectiveness of the project in terms of level of involvement of Member States in accessing the various provisions, as well as developing more specialized versions of "The Guide" tailored to their own ICT strategies and their use of specific standards;
- Statistical data on references to brand names in tenders, the number of suppliers participating in public procurement bids, and assessments of value for money of ICT procurement;
- Information about ICT procurement processes of public authorities, the assessment of their use of standards in ICT procurement, the development of practical advice, long-term business appraisals, and budgetary planning.

As far as this document is concerned, it aims at shedding some light on the aforementioned points, by presenting the analysis a survey conducted by PwC (http://bit.ly/1D9HyHi)

As a matter of facts the next section will be devoted to the presentation and analysis of results of PwC's survey, grouped around main topics.

Each section will have a summarising paragrah at the beginning and will continue with some deep dives on the different questions of the survey, grouped around some main topic.

In Annex the list of questions for the survey

2 Survey results' analysis

2.1 Methodology

A survey was designed and implemented to help gathering some insights towards aspects related to the procurement of ICT products and services in Europe such as perceptions, knowledge and stakeholders' past experiences about ICT lock-in. These topics are also important in the construction of a light and effective monitoring system to be maintained in order to evaluate the achievements of the project and of the general aims and take actions to correct distortions or noncompliance.

The survey was realized using an advanced version of Qualtrics (http://www.qualtrics.com/), developed for PwC. This tool allows to design and distribute online surveys, as well as to collect and analyse the results easily and effectively.

The survey was produced in English and Italian, completed by 117 respondents coming from 25 different Member States, working for 109 different public & private entities, ensuring a good level of representativity[1]. This survey was implemented between February and March 2015; a quality assessment of the answers was also done to exclude inconsistent answers[2], prior to the analysis.

2.2 Results

2.2.1 Characteristics of respondents

> **Summary box**
> *This analysis surveyed 117 professionals from 25 European contries, holding different roles in the procurement area within 109 public and private organisations, whose expenditure for ICT goods and services covers a wide range (while being polarised). More operative roles showed a higher participation at the survey, showing how this topic is relevant for them, despite the confirmation that the new European Directive is still little known.*

Wide coverage of countries and organisations

As anticipated in section 2.1, the survey was completed by 117 respondents, coming from 25 different Member States (i.e. all but Luxembourg, Estonia and Hungary), with a high representation of Latvia, followed by Italy and the Netherlands (see Figure 1); respondents work for 109 different public and private entities, whose relative distribution is shown in Figure 2. Almost a third of the sample worked for Central Government, reflecting the importance of the procurement topic for them; only 3% came instead from any national Central Purchasing Body.

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[1] Requirements asked to reach stakeholders from at least 25 EU countries, working for at least 7 different types of organisations and covering the 6 professional roles specified in "The Guide: Using standards for ICT procurement".

[2] As an example, the same respondent declared "my yearly expenditure is below 50.000€", while saying at the same time that "a good part of my expenditure is above EU threshold" which is more than 50.000€. Others chose affirmative answers to close-ended questions, while explaining that they did exactly the opposite compared to what they affirmed in the previous question.

Figure 1 Respondents distribution by country
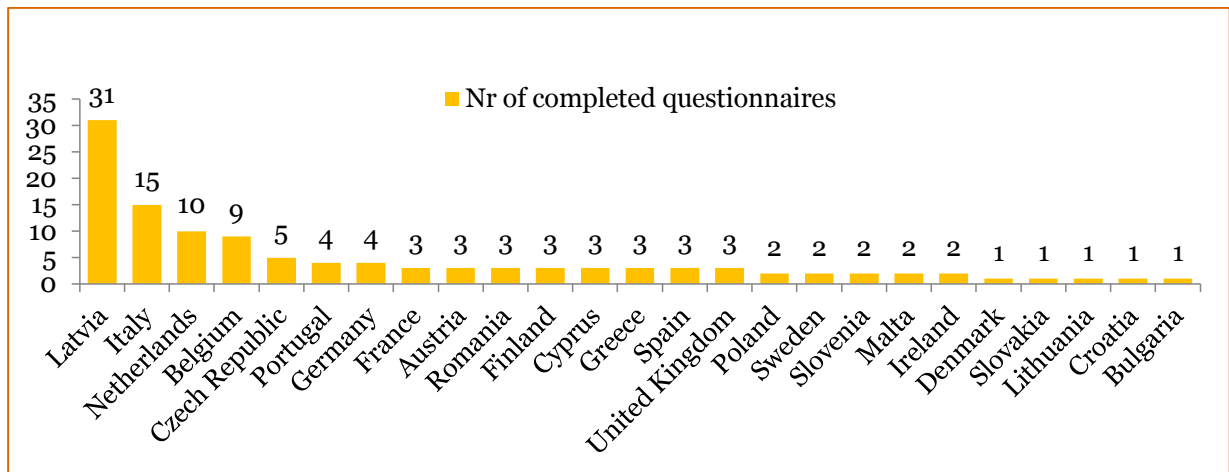
Source: survey, question 2 (based on 117 respondents)

Figure 2 Respondents by organisation type
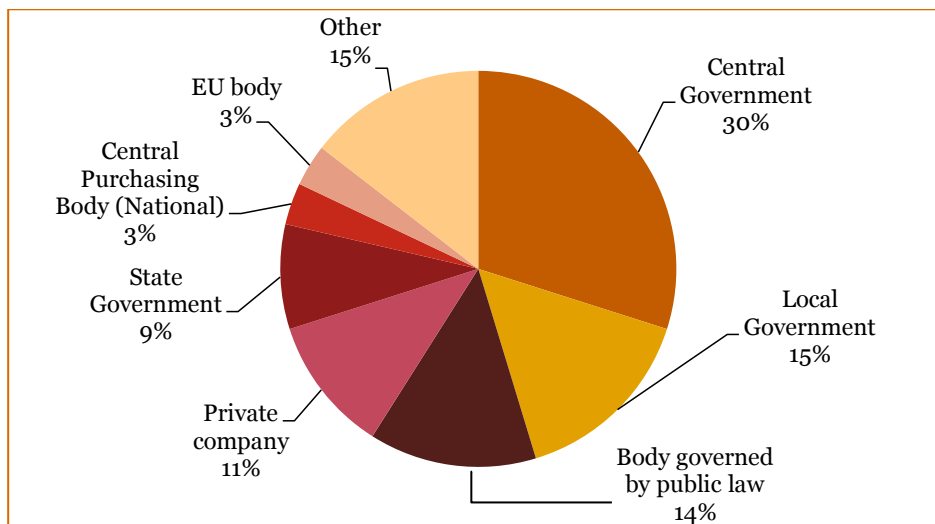
Source: survey, question 3 (based on 117 respondents)

Skewed distribution of respondents towards operative roles

Survey respondents work for a wide variety of **organisations** covering a **number of professional roles**, both those defined in "*Guide for the procurement of standards-based ICT*"[3] , and other positions involved in the procurement area (see Figure 3).

The highest level of response rate was obtained by Procurement Practitioners (i.e. who purchase goods and services for public authorities and write specifications, engage the market and manage the procurement process leading to a contract; their response rate was 38%) , followed by Senior Managers (i.e. who are accountable for expenditure, strategy and delivering organisation's objectives, therefore the main influencers on how effectively open standards will be used; they represent 19% of the sampled responses) and Technical Architects (i.e. who design technical solutions to business problems, determining the IT architecture and solving interoperable issues; they are 9% in the sample).

Standard setters (i.e. who define what standards are to be used in a country, region or authority) and Strategists (i.e who determine the technology and digital strategies in line with an overarching

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[3] www.openictprocurement.eu

business strategy) represented 6% of the sample each; finally only 1% of the sample is represented by business case authors (i.e. who assess the costs, benefits, advantages and disadvantages of certain initiatives, such as an IT project, and act as consultants to the management team to decide on investments within an organisation), but a certain percentage in the "other" group could be added here since there are some consultants who may ultimately be considered business authors. Especially these stakeholders in higher level positions should be involved as much as possible since they can contribute hugely to the outcomes and the realisation of European objectives.

Among "Others" (21%), there are some professionals from the IT sector, such as a CIO and some IT administrators, as well as some stakeholders in relevant positions, such as Project Managers, Principals and administrators working in the public procurement area (or advising public authorities).

Figure 3 Respondents by professional role
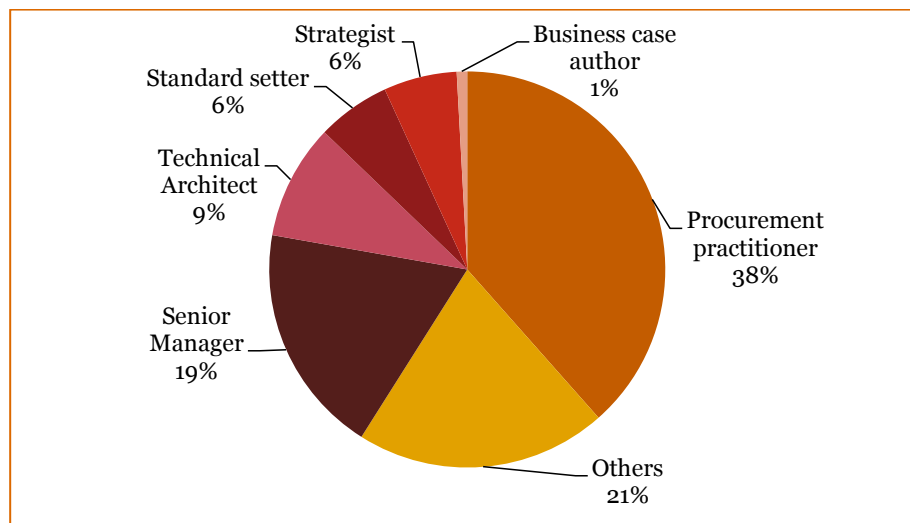
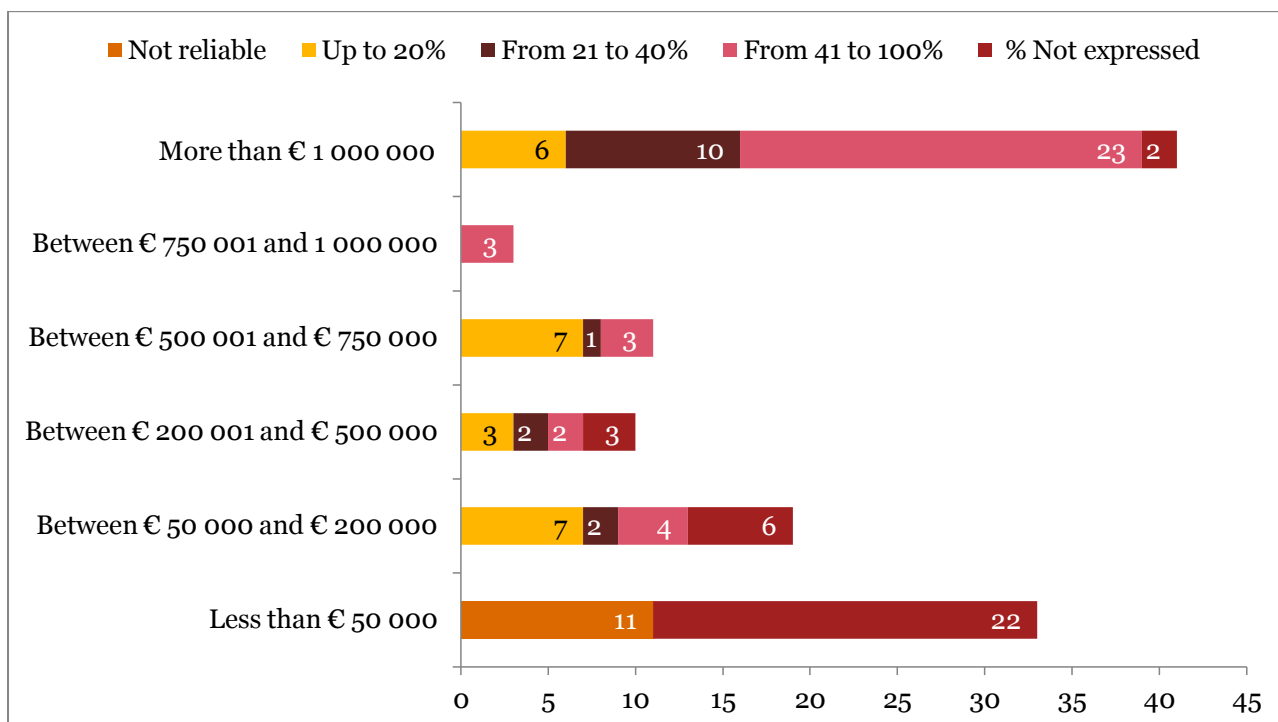*Source: survey, question 4 (based on 117 respondents)*

ICT expenditure among organisations is polarised

In the respondents' answers, it seems that the expenditure for procurement for ICT goods and services is polarised: indeed 42% of organisations spend more than one million €, while 33% only spend less than 50.000€. This information can be matched with the percentage amount exceeding the European thresholds[4]; among those who replied "less than 50.000€", 12% of answers were not reliable since they claimed to have spent more than the thresholds, while saying that they spent less than 50.000€ (which is, in turn, far less than these thresholds). Among the other spend bands, Figure 4 shows that, for instance, among those who spent between 500.001€ and 750.000 €, seven organisations claimed that 20% of their spend is higher than the European thresholds, while for one organisation, up to 40% of its spend for ICT exceeded the thresholds; finally there were three organisations for which more than half of their expenditure was higher than the thresholds.

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[4] According to Directive 2014/24/EU (Art 4) threshold values, net of value-added tax (VAT), are as follows:
(a) EUR 5.186.000 for public works contracts;
(b) EUR 134.000 for public supply and service contracts awarded by central government authorities;
(c) EUR 207.000 for public supply and service contracts awarded by sub-central contracting authorities;
(d) EUR 750.000 for public service contracts for social and other specific services.

Source: survey, questions 5 & 6 (based on 117 respondents)

The new Directive on procurement is still little known

As a general comment, the level of awareness about the new procurement Directive (i.e. Dir. 2014/24/EU, replacing Dir. 2004/18/EC) could be more satisfactory: when asked if respondents are aware of the upcoming changes (namely that "electronic communication/e-procurement will become mandatory and all contracting authorities shall use electronic means of communication generally available and fully interoperable"), only 56%[5] of the sample declared to know something about it, even though its provisions will strongly impact the way these administrations will have to perform their procurement activities from 2018 onwards. There is a strong need for dissemination activities, as well as some incentives to take actions on time, in order to be fully compliant by 2018.

2.2.2 ICT lock-in awareness

Summary box
ICT lock-in is a widely known concept, whose negative implications have been experienced by almost half ot the sampled respondents. Its alleged causes are the lack of interoperability, the lack of compatibility as well as high switching costs. Some countermeasures have been implemented, first and foremost the adoption of open source and open standards and the creation of some guidelines.

ICT lock-in is a known problem

A satisfactory level of knowledge about ICT lock-in has been registered (65 % of the sample declared to have heard about it[6]), even if there is no clear consensus on its definition. In fact ICT lock-in is a situation of dependency on a specific vendor, due to the fact that it is the only one providing a certain product/ service, or its IT solutions are not interoperable with other products,

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[5] Source: survey, question 24 (based on 117 respondents).
[6] Source: survey, question 7 (based on 117 respondents).

in turn leading to high transition costs (from the existing technology to another one, not only in monetary terms, but also in cognitive terms).

Respondents' answers about ICT lock-in showed that the alleged causes can be categorized in three main clusters, making migration of data and dialogue with other entities too complex or lengthy to bring other providers in:

- **Lack of interoperability**;

- **Lack of compatibility with existing tailored-made solutions**;

- **High switching costs** (either in the form of non amortised investments previously done, or in the form of actual transition costs for the design and implementation of new solutions, not to mention the psychological costs of learning new tools and win the resistence to change).

The lock-in status is described by respondents as a "de facto monopoly", bringing about "technical or commercial challenges" which impose "legacy systems"; this situation makes respondents "almost feel powerless to question any alternative" also pointing at the possible lack of motivation of business users, who tend to oppose changes to avoid initial inconvenience of learning new tools and processes. A respondent also pointed out that there is "no objective measure" to define ICT lock-in and there were also some wrong definitions: in fact the European Commission should probably insists more on the concept, as well as on its bad implications on the market and its agents.

42% of the sample experienced ICT "lock-in"[7] (these percentage raises at 52%, if you only consider those who know what ICT lock-in means).

Many examples are mentioned in the questionnaires: first of all, there is a high occurrence of the most reknowned vendors' names (e.g Microsoft, Oracle, SAP, IBM, BlackBerry), followed by some quotations about more specific tools such as Visual FoxPro, AIX products, MSLync or some Content Management System for web applications. Other examples of negative experiences were explained: all of these turn around lack of needed documentation, lack of control over the code or over the access authorisation rights, also due to the IP rights that contractually hampered any change or further customisation.

A **high variety of countermeasures**[8] to tackle ICT lock-in has emerged, as it can be seen from Figure 5. The most used method is "to define ICT strategies and architectures on open source and open standards": many examples are mentioned by respondents, such as the Italian Digital Administration Code (DAC), according to whom Consip can acquire computer programs, or parts, in accordance with the principles of economy and efficiency, investment protection, reuse and technological neutrality. Other respondents specified that there exist internal legal guidelines ensuring the handle of IT modular solutions and the guarantee of interoperability and cooperation among systems, portability of the solution on other platforms, reusability of the solution, as well as information security. There is also evidence of some studies on best of breed Public eProcurement Solutions in different implementation scenarios. Another measure used very often is the definition of a list of standards and technical specifications and guidelines: for example, in Sweden, new framework agreements for the public sector were created which make it cumbersome to procure non-open standards and non-open source software; other respondents claimed that they get informed about standards by attending conferences or by reading papers; someone else felt that there are only two or three international standards really describing goods and services sufficiently well. Training initiatives and the adoption of external consultants were also chosen by a number of respondents as possible countermeasures to the risk (or the occurrence) of ICT lock-in. Finally it is

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[7] Source: survey, question 8 (based on 117 respondents).
[8] Source: survey, question 9 (based on 117 respondents).

important to remark that defining needs clearly, as well as long term strategies can help organisations to find the most adequate measures to fight ICT lock-in.

In this respect it is useful to mention that a virtuous circle of good practices should be made real to help organisations to free themselves from ICT lock-in, by leveraging on other organisations' experiences: however so far the vast majority of respondents are not aware of any successful initiative (see also section 2.2.4).

Figure 5 Countermeasures adoption against ICT lock-in
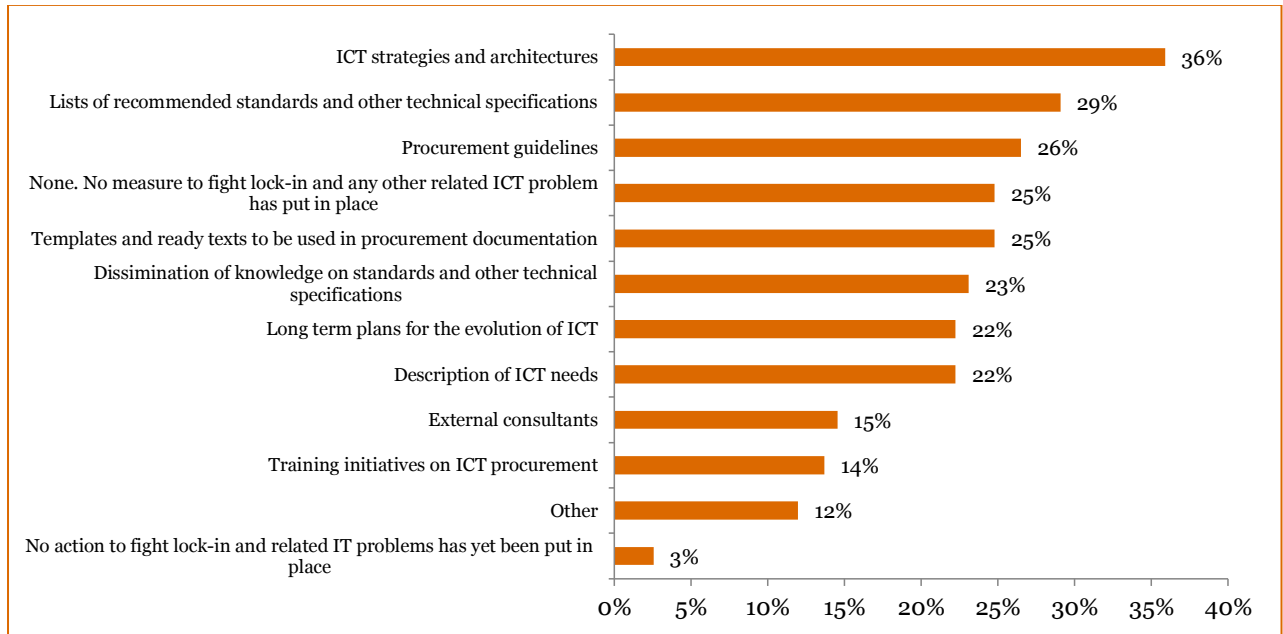
Source: survey, question 9 (based on 117 respondents, expressing 294 preferences)
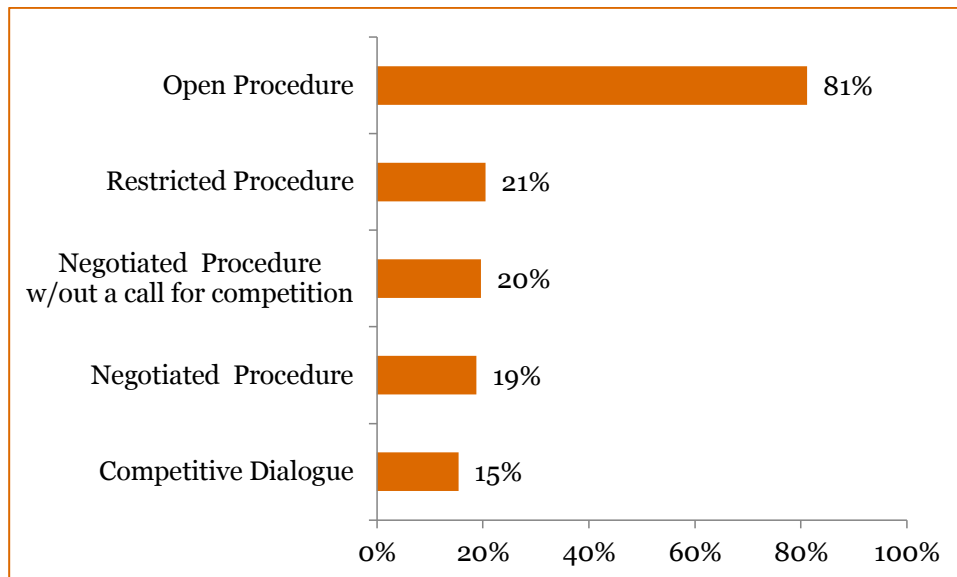
2.2.3 ICT procurement current practices

Summary box
80% of the sample prefers open procedures when procuring ICT goods and services. Cost considerations, quality control concerns, supplier's expertise and the need of direct control are driving factors behind "make-or-buy" decisions, and a relevant need for procurement experts is shown by the respondents. The "use of templates and standards clauses" is limited, while the habit of dealing with "licence agreements before contract award" is common. The avoidance of lock-in is not perceived as an important goal and there is no intention to "ensure provider turnover", calling for an urgent corrective action from the European authorities.

Open procedures dominate the ICT procurement

Open procedures are the most used method when procuring ICT products and services, chosen by 80% of the sample while the other types of procedures are equally preferred, as shown in Figure 6.

Figure 6 Preferred procedures for ICT procurement

Chart data:
- Open Procedure: 81%
- Restricted Procedure: 21%
- Negotiated Procedure w/out a call for competition: 20%
- Negotiated Procedure: 19%
- Competitive Dialogue: 15%

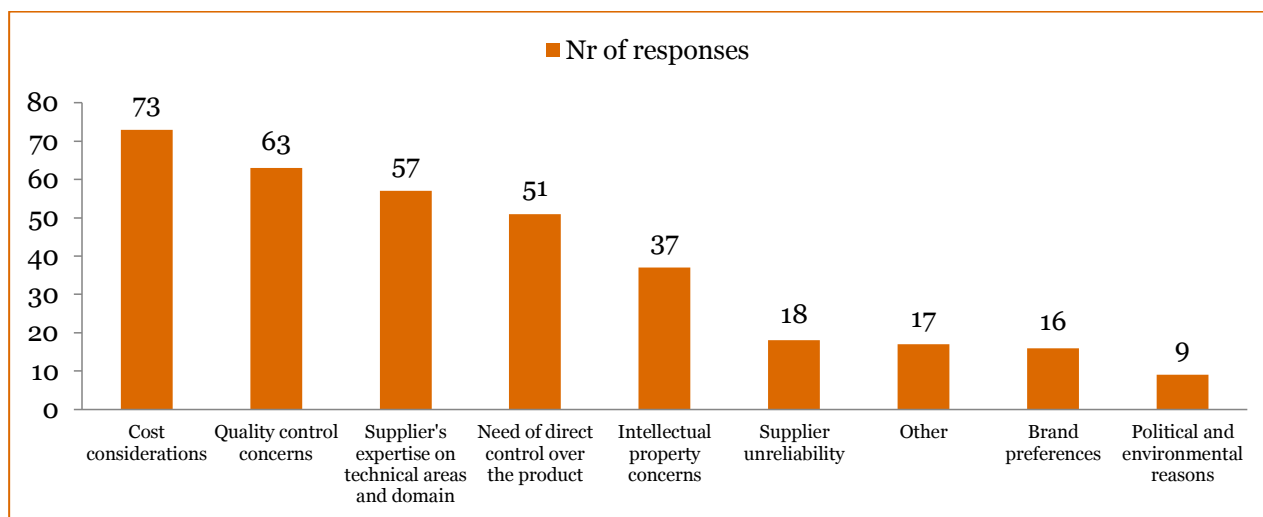*Source: survey, question 10 (based on 117 respondents, expressing 182 preferences)*

Indeed it can be seen[9] that different procedures are chosen for different reasons: for instance, restricted procedures are preferred when procuring services requiring special features provided by one operator only (military purposes, personal data protection, public connectivity services, specific activities in strategic sites ...), as well as when too many vendors could be involved. On the contrary, negotiated procedures can be better when there exist some time boundaries, or a supplier's services uniqueness; finally there were some opposite comments on competitive dialogue: in fact someone claimed that they engaged in it for cost effectiveness reasons, while other stakeholders explicitly said that they did not choose it because it was perceived as non cost-effective. Analysing all comments, it appears that participants to the survey did not have a unanimous understanding about the peculiarities of each procedure, so it is advisable to stress more on the different meaning.

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[9] Source: survey, question 10 (based on 117 respondents).

Cost and quality as main drivers

Cost considerations, quality control concerns, supplier's expertise and the need of direct control are driving factors behind "make-or-buy" decisions[10] (see Figure 7). Similarly these factors should be used as "motivational drivers" to promote the adoption of ICT standards that indeed support the cost reduction and ensure a good level of quality.

Figure 7 Main drivers for the "make-or-buy" decision

Source: survey, question 11 (based on 117 respondents, expressing 341 preferences)

Respondents choosing "other" drivers mentioned first and foremost the lack of internal ICT capacity ex ante preventing any make-or-buy choice; such a decision is not an option also for those organisations which committed to long term framework agreement with a specific vendor.

## *Procurement expertise is felt as necessary*

Over 60% of the sample relies on internal experts to secure high technical quality of their procurement[11], as shown in Figure 8. When these are not available, external consultants together with employee trainings are felt as the solution; a worrisome 20% of the sample openly admitted that they did not take any action, also for budgeting reasons: this suggests that the European Commission should take more actions in order to ensure compliance with rules and possibly guarantee some incentives. Training sessions should also be organised.

Interestingly a respondent claimed that "properly executed procurement should not require IT expertise but a clear statement of desired outcome", moving the attention on functional requirements, instead of on technical requirements. Those who selected "other" measures mostly relied on self-education, market research and benchmarking. Another respondent denounced the lack of an adequate training for civil servants involved in public procurement in Finland.

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[10] Source: survey, question 11 (based on 117 respondents).
[11] Source: survey, question 12 (based on 117 respondents).

Figure 8 Control measures on IT and legal capabilities of procurement teams
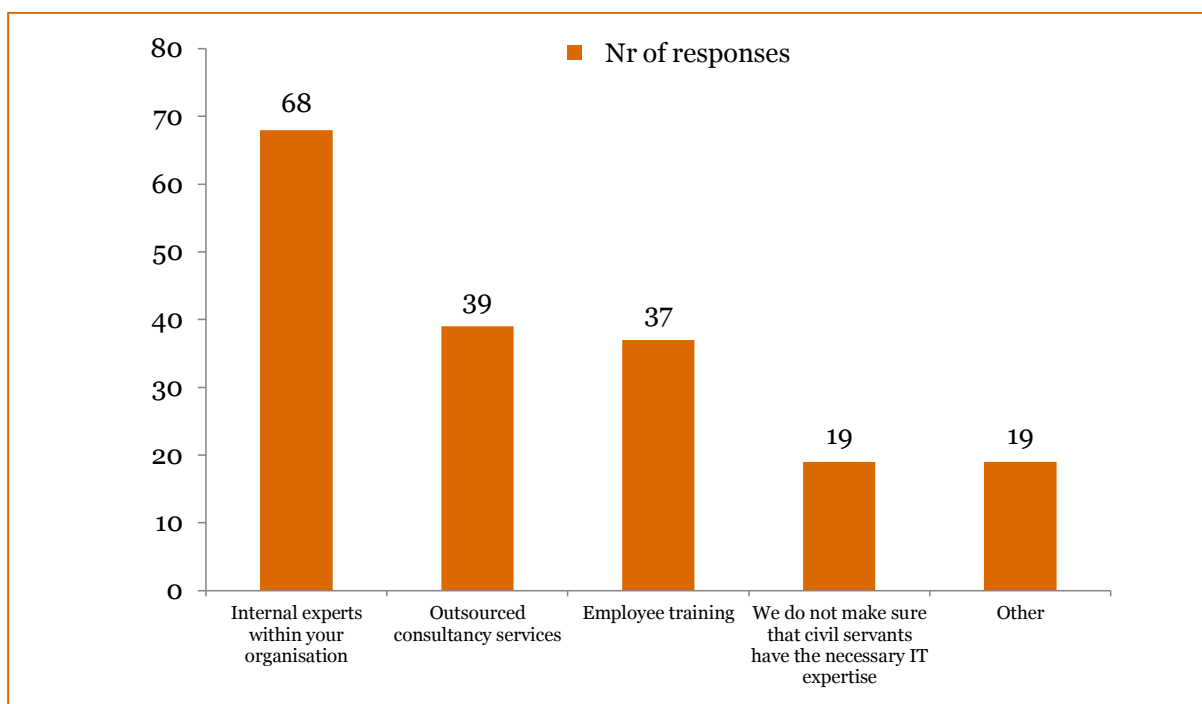
Source: survey, question 12 (based on 117 respondents, expressing 182 preferences)

Templates & standards clauses are rarely used

A limited number of respondents used "templates and standard clauses" in their tendering documentation (only 17%)[12]. Nevertheless, those who used them, considered them very effective: indeed they claimed that they are "efficient and motivating for informal learning", "helpful", "effective", "but tough to monitor and enforce".

Good practices and its benefits should be stressed in order to push others to adopt it; more templates should also be provided by the European Commission in an attempt of simplification.

In general organisations pertaining to our sample largely agreed on the importance of dealing with licence agreements since the beginning of the procurement procedure (86%)[13]. As a note, the small number of respondents who did not take them into account spend less than € 50.000 each year.

Forward-looking but individual rationales are in place when procuring ICT

Half of the sample considered migration & exit costs before awarding ICT tenders[14], according to the "product life-cycle costing" methodology introduced by the new Public procurement Directive.

This percentage is expected to increase over the upcoming years with the full adotion of the Directive 24/2014 in all Member States. Among those who did not take exit and migration costs into account, the worst performers are "Procurement Practitioners" and, more interestingly, "Standard Setters" and "Senior Managers". Training and education is thus needed.

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[12] Source: survey, question 13 (based on 117 respondents).

[13] Source: survey, question 14 (based on 117 respondents).

[14] Source: survey, question 15 (based on 117 respondents).

Figure 9 Importance of different aims when planning an ICT purchase
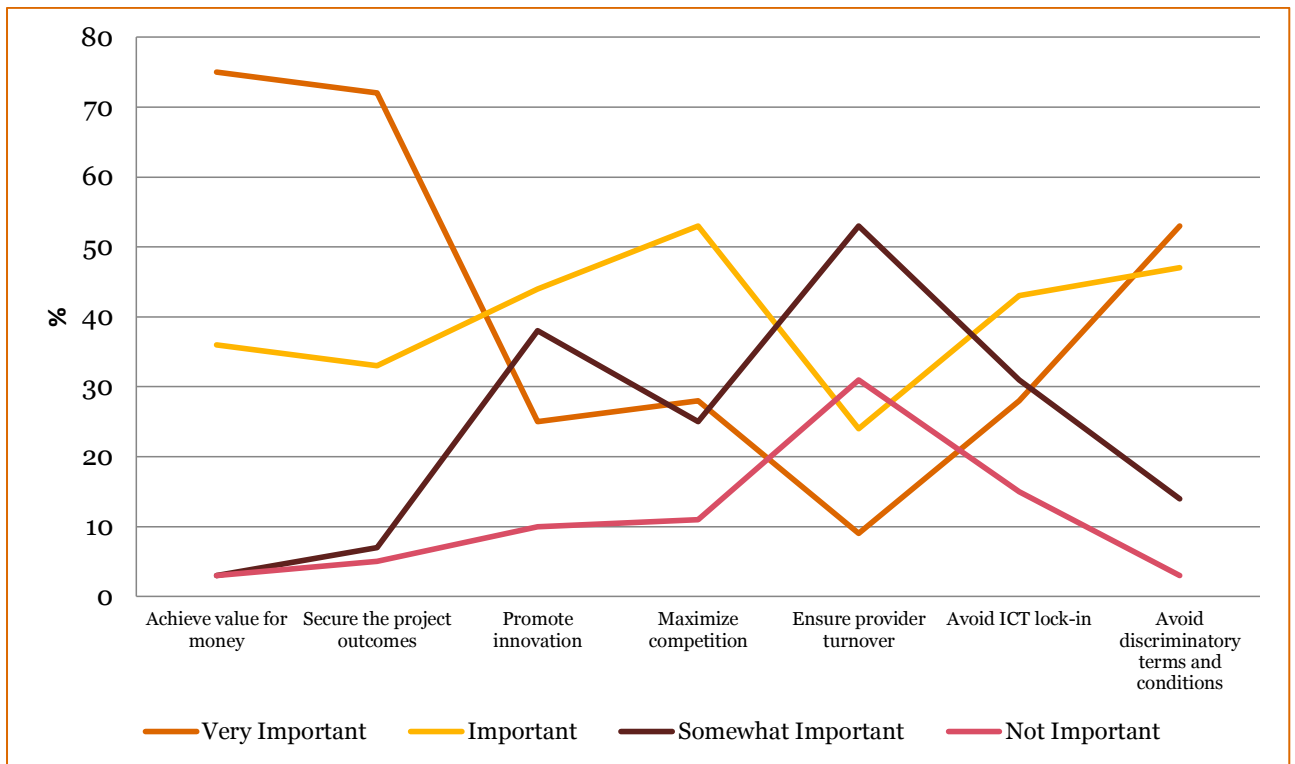
Source: survey, question 16 (based on 117 respondents)

Moreover it is interesting to understand respondents' perceptions on the relative importance of different objectives, when they procure ICT goods and services: unsurprisingly, on top of the most important goals, there is the achievement of value for money, that is gaining an adequate level of quality while keeping an eye on the budget. Secure the project outcomes was also considered very important by most of the respondents; less than one third of the sample considered maximisation of competition, innovation promotion, providers' turnover as very important aims: this can be explained by a general self-concentrated approach by individuals, who tend to focus less on wider societal benefits; moreover provider turnover, coupled with the avoidance of ICT lock-in may remind of the possible inconvenience due to switching costs and implications, therefore they appear not to be primary objectives. The avoidance of discriminatory terms and conditions was also considered very important by more than half of the sample, reinforcing again the wish to secure outcomes effectively and with the least disadvantages as possible.

## 2.2.4 ICT standards awareness and use

Summary box
Standards are still little used, even among those who experienced lock-in. The majority of respondents is not aware of any successful initiative to reduce ICT lock-in and there is a urgent need for dissemination activities at the EU level, as well as training.

Still limited use of ICT standards

35% of the sample never mentioned "ICT standards" in their tendering documentation, 15% rarely used them and 10% used them sometimes[15]. However, 41% of the sample used them often, also because of previous experiences with lock-in; among the used standards those of ISO, Open Software, ITU, CEN-CENELEC, W3C, IETF.

The skewed composition of the respondent base towards the most operative roles may partially explain these low results in terms of awareness and adoption of best practices, more likely to be known by higher level professionals.

Figure 10 Reference to ICT procurement standards in tender notices (%)
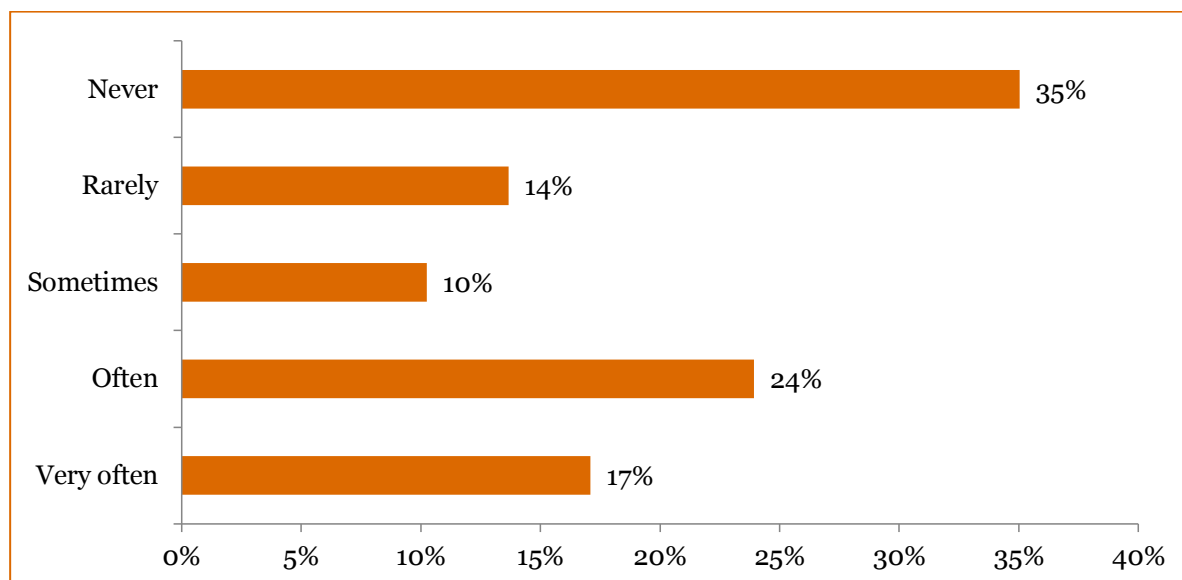
Source: survey, question 17 (based on 117 respondents)

A priority: investing in dissemination activities

The analysis of the questionnaires revealed that over 80% of the respondents is not informed about successful initiatives carried out at the European level to avoid ICT lock-in[16].Those who instead are informed mentioned, among others, the Netherlands (i.e. forumstandaardisatie), the Academic and Research Network of Slovenia, the Alingsås municipality (in Sweden), the Austrian Public Procurement Authority, the Tor Vergata University (in Rome, Italy), the NATO, the Munich municipality (in Germany), the Cabinet Office (in the UK), the Germany's SAGA Committee, the MITA approach to Open Standards (Malta) and the Latvian Information and Communications Technology Association (LIKTA).

The dissemination of the best practices should become an explicit goal at the European level.

40 % of the sample suggested important initiatives to be further investigated: these are summarised in TABLE 1. This to assess whether or not they can contribute to the European Commission fight against lock-in.

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[15] Source: survey, question 17 (based on 117 respondents).

[16] Source: survey, question 18 (based on 117 respondents).

Table 1 Successful initiatives against ICT lock-in in respondents' words

	Awareness level of the respondents on useful initiatives	Mentioned initiatives
1	I know someone who has prepared lists of recommended standards and other technical specifications	* Academic and Research Network of Slovenia - ARNES * Bitkom * Consip * eCl@aa * forumstandaardisatie.nl * Kammarkollegiet in combination with the University of Skövde * The Latvian Information and Communications Technology Association * NATO * UK Cabinet Office * Germany's SAGA Committee
2	I know someone who has realized templates and ready texts to be used in procurement documentation	* Treasury of the Republic of Cyprus * DG INFORMATICS * Consip (i.e. the DPS Institutive call notice, defining the product category "DPS ICT", the hardware, software and ICT services. In DPS Consip provides support to the single CA by setting up: product and services characteristics, negotiation model based on the lowest price and the most economic advantageous tender award criteria, standard documentation on procurement in order to facilitate CA to publish and manage the specific procedure, to provide useful indications or support to facilitate the use of ICT procurement standards) * eCl@aa * forumstandaardisatie.nl * Ventspils City Municipality * Joinup
3	I know someone who has disseminated knowledge on standards and other technical specification	* BFS * eCl@ss * CEN * forumstandaardisatie.nl * LIKTA * Latvian Open Technology Association (LATA) * OSOR website
4	I know someone who has defined ICT strategies and architectures	* eCl@ss * forumstandaardisatie.nl * Maritime National Single window (to support implementation of Directive 2010/65/EU) * The Ministry of Finance in Finland * OSOR website * Ventspils City Municipality, Riga City Municipality
5	I know someone who has written procurement guidelines	* LIKTA * Joinup * Latvian ICT associations * Rishab Ghosh * Patrice-Emmanuel Schmitz * Italian Digital Agency (AGID) * Latvian Information and Communications Technology Association * Ventspils City Municipality * Projessor Luis Valadares Tavares
6	I know someone who has organized training initiatives on ICT procurement	* eCl@ss * VIP d.o.o. Hrvatska * OSOR website
7	I know someone who has evaluated an ICT product or service	* eCl@ss * Ventspils City Municipality
8	I know someone who has organized training initiatives on ICT procurement	* eCl@ss * PJR d.o.o. Hrvatska * Latvian Information and Communications Technology Association
9	I know someone who has made long term plans for the evolution of ICT	* eCl@ss * Ventspils City Municipality * Siemens * Audi
10	I know someone who has exactly described our ICT needs	* eCl@ss * Ventspils City Municipality * Siemens * Audi * Experts working at Vortal

2.2.5 The Guide – an appraisal

Summary box

A bigger effort to disseminate the Guide should be planned at the EU level, since very few participants read it and find it interesting. The Guide should be made simpler, shorter and with more practical cases, as well as useful material to be used (such as templates, list of standards and legal requirements).

The Guide must be disseminated and simplified

Only 28% of the sample read the Guide[17], found it somewhat interesting[18] and provided some suggestions to improve it[19]. Among those who expressed their feedback, it emerged that "The Guide" could improve by:

–   Including more case studies (best practises, lessons learned, suggestions on "how to deal with non trivial situations" etc..)

–   Making "The Guide" simpler and shorter

–   Including more templates, standards clauses and lists of standards

Central administrations were, as expected, the actors who care the most about ICT lock-in. Indeed, they scored the highest percentage in guidelines and recommendations development.

Moreover it was suggested to send this Guide to all IT managers in Europe, as well as to translate it into all official European languages. There was also a case of strong criticism from a Strategist, pointing out at the lack of value, accuracy of information and reliance on too many assumptions. Despite being an isolated comment, it can further motivate to improve the quality at the Guide.

Little commitment to define guidelines on ICT procurement

Most of the organisations (65%) did not develop any recommendation guidelines to define how procurement for ICT should be managed[20], confirming that a true adoption of standards and of the new Directive is lagging behind. The best players have instead defined a "framework that identifies the difference activities involved in the Vendor Management cycle and the responsibilities across the departments" or internal documentations (such as general "guidelines on how documentation is shared, who owns it", "guidelines on quality indicators, product life cycles and on the drafting of tender documentation on application services"..). Some respondents limit themselves to apply the national authorities' guidelines.

2.2.6 Use of the CAMSS

Summary box

The CAMSS is scarcely known and a high effort of information and dissemination is needed to make it useful and effective.

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[17] Source: survey, question 20 (based on 117 respondents).
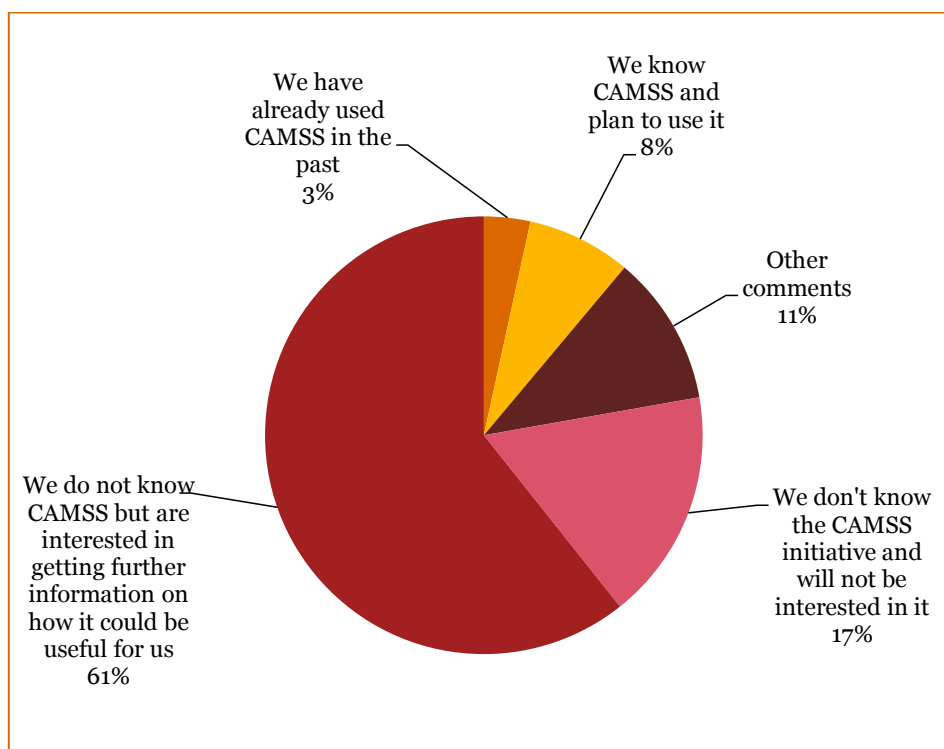[18] Source: survey, question 21 (based on 117 respondents).
[19] Source: survey, question 22 (based on 117 respondents).
[20] Source: survey, question 23 (based on 117 respondents).

CAMSS is not known yet

The CAMSS (i.e. "Common Assessment Method for Standards and Specifications") is an initiative part of the European Commission's IDABC programme (i.e. Interoperable Delivery of European eGovernment Services to public Administrations, Business and Citizens), aiming to «initiate, support and coordinate the collaboration between volunteer Member States in defining a "Common Assessment Method for Standards and Specifications" and to share the assessment study results for the development of eGovernment services»[21]. This initiative is very little known by the respondents and only 3% of them have used it in the past; 61% claimed to be interested in such an initiative, whereas 17% admitted that they are not. Among the possible reasons why, someone quoted the too little level of procurement to be worth the investment, someone else mentioned time limitations. A general lack of awareness drove these answers, thus it is important to promote the CAMSS and make it as more known as possible.

Figure 11 Awareness of CAMSS

Source: survey, question 24 (based on 117 respondents)

2.3   Policy recommendations

The analysis of the survey's results has shown that the ICT lock-in is a widespread and known problem among European countries, even though still too few organisations take explicit effort to counteract it.

Knowledge and best practices dissemination need to become a primary goal of the European Commission: indeed there is still a too little awareness about the new Directive 2014/24/EU, with its implications calling for many lengthy and sometimes complex adjustments in terms of ICT systems (respecting the deadline of 2018 will become harder and harder if no action is taken as soon as possible). Similarly, successful initiatives, as well as the benefits from using open standards and open source products, and the negative implications coming from the ICT lock-in

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[21] http://ec.europa.eu/idabc/en/document/7407.html

should become well known by each economic operator, working in the public procurement area. It is recommended to promote more the CAMMS initiative among Member States: this is why regular workshops, events and training session should be organised at the European, as well as at the national level. All this will create a virtuous circle of good practices where everyone will be motivated to take corrective actions, by leveraging on other organisations' positive experiences.

A simplification of "The Guide - Using standards for ICT procurement" is advisable to make it more ready-to-use by adding more practical examples, business cases, templates, lists of standards and legal requirements; adding some ad-hoc sections describing in details how to face and overcome ICT lock-in in situations such as data migration, software incompatibility, presence of tailored IT solutions is also needed since these are the most mentioned problems by the any Public Administration. The Guide should be published in all European official languages and updated frequently and sent to any relevant stakeholder.

As an overarching topic, the adoption of open standards and open source products must be promoted by stressing on the main motivating drivers, namely cost reduction, quality and direct control on the code. Moreover some dissemination and training activities on the different procedures for ICT procurement are required since they are not perceived as so distinctive.

Finally economic incentives may be needed (even in the form of some subsidies) in order to help those organisations which did not take any action against the ICT lock-in for budgetary reasons.

Annex 4: Survey Questionnaire

1. Contact Information

- First Name
- Last name
- E-mail
- Phone

2. Member State in which your organization is located

3. Please select the type of organization you work for

- Central Government
- State Government
- Local Government
- Body governed by public law (e.g. hospitals, schools, etc.)
- Central Purchasing Body (National)
- Central Purchasing Body (Regional)
- EU body
- Other (please specify)

4. What is your role within your organization?

- Technical Architect: If you design technical solutions to business problems. You generally think about the whole technical estate, how it interoperates and how to replace components cheaply and easily
- Strategist: If you determine the technology or digital strategies in the context of an overarching business strategy
- Standard setter: If you define what standards are to be used in a country, region or authority
- Procurement practitioner: If you purchase goods and services for public authorities. You write specifications, engage the market and manage the procurement process leading to a contract
- Other: Please specify
- Senior Manager: If you are accountable for expenditure, strategy and delivering organisation's objectives
- Business case author: If you assess the cost and benefit of certain initiatives (such as an IT project). Business cases are used as a management tool to agree investments within an organisation

5. In your organization, what is the average yearly expenditure for the purchase of ICT goods and services?(Please express the amount in € Euro. For example € 150 000)

- Less than € 50 000
- Between € 50 000 and € 200 000
- Between € 200 001 and € 500 000
- Between € 500 001 and 750 000
- Between € 750 001 and 1 000 000
- More than €1 000 000

6. What percentage of your ICT procurement is above EU threshold? (Please, express the amount in % points. For example: 22 %) P.N. According to EC Directive 24/2014 (Art 4) threshold values, net of value-added tax (VAT), are as follows: (a) EUR 5 186 000 for public works contracts; (b) EUR 134 000 for public supply and service contracts awarded by central government authorities; (c) EUR 207 000 for public supply and service contracts awarded by sub-central contracting authorities; (d) EUR 750.000 for public service contracts for social and other specific services.

- (% from 1 to 100%)

7. Have you ever heard of "ICT lock-in"? If yes, can you please describe it in a few words?

- Yes
- No, I have never heard of "ICT lock-in"

8. Have you ever found yourself in a "lock-in" situation? If yes, can you please describe it in a few words?

- Yes
- No, we have never found ourselves in a lock-in situation
- No, and I am not even aware of what "lock-in" means

9. What measures have you put in place or plan to put in place to fight lock-in and other related IT problems? If any, could you briefly describe them?

- We have defined ICT strategies and architectures (please specify)
- We have disseminated knowledge on standards and other technical specification (please specify)
- We have prepared lists of recommended standards and other technical specifications (please specify)
- We have realized templates and ready texts to be used in procurement documentation (please specify)
- We have organized training initiatives on ICT procurement (please specify)
- We have exactly described our ICT needs (please specify)
- We have made long term plans for the evolution of ICT (please specify)
- We have written procurement guidelines (please specify)
- We have hired external consultants (please specify)
- Other (please specify)
- We have not yet put in place any action to fight lock-in and other related IT problems (please specify)
- None. We have not put in place any measure to fight lock-in and any other related ICT problem

10. What procedures do you usually use when procuring for ICT products or services?

- Open Procedure (please specify for what type of IT purchases you choose this procedure and what would be the reason behind your choice)
- Restricted Procedure (please specify for what type of IT purchases you choose this procedure and what would be the reason behind your choice)
- Negotiated Procedure w/out a call for competition (please specify for what type of IT purchases you choose this procedure and what would be the reason behind your choice)
- Negotiated Procedure (please specify for what type of IT purchases you choose this procedure and what would be the reason behind your choice)
- Competitive Dialogue (please specify for what type of IT purchases you choose this procedure and what would be the reason behind your choice)

11. When you need to acquire IT systems, what influences your decision on whether to reach to the open market for a specific product/system or whether to use your own resources/in-house capacity?

- Need of direct control over the product
- Intellectual property concerns
- Quality control concerns
- Supplier unreliability
- Supplier's expertise on the technical areas and the domain
- Cost considerations
- Brand preferences
- Political and environmental reasons
- Other (please specifiy)

12. How do you ensure that civil servants executing the procurement procedure have the necessary IT technical and legal expertise? (E.g. do you have employee training schemes/ internal experts within your organisation/outsourced consultancy services?)

- Employee training schemes
- Internal experts within your organisation
- Outsourced consultancy services
- Other (please specify)
- We do not make sure that civil servants executing the procurement procedure have the necessary IT technical and legal expertise

13. Has your organisation ever inserted IT-related templates/standards clauses (such as the ones available at JoinUp eLibrary; http://bit.ly/1qEzwVg) in tendering documents? If yes, how do you assess their efficiency?

- Yes
- No

14. Does your organisation take into consideration from the beginning of the IT procurement process the impact of licence agreements (in terms of transfer of intellectual property rights to you as a buyer)?

- Yes
- No

15. When conducting procurement of IT, do you integrate the future migration/exit costs, according the "product life-cycle costing" methodology introduced by the new Public procurement directives before the decision on the award of the contract?

- Yes
- No

16. Please select the appropriate level of importance

	Very Important	Important	Somewhat Important	Not Important

- Achieve value for money
- Secure the project outcomes
- Promote innovation
- Maximize competition
- Ensure provider turnover
- Avoid ICT lock-in
- Avoid discriminatory terms and conditions

17. How often do you refer to "ICT procurement standards" when writing down a tender notice for the purchase of ICT goods and services? If yes, to which standards do you usually refer to?

- Very often
- Often
- Sometimes
- Rarely
- Never

18. Are you aware of any public body (throughout the EU) which successfully avoided "ICT lock-in" situations by using standards? If yes, can you briefly describe it?

- Yes
- No, I am not aware

19. Do you know any interesting initiative meant to provide useful indications or support to facilitate the use of ICT procurement standards?

- I know someone who has defined ICT strategies and architectures (please specify)
- I know someone who has disseminated knowledge on standards and other technical specification (please specify)
- Other (please specify)
- I know someone who has organized training initiatives on ICT procurement (please specify)
- No, I don't know
- I know someone who has prepared lists of recommended standards and other technical specifications (please specify)
- I know someone who has realized templates and ready texts to be used in procurement documentation (please specify)
- I know someone who has organized training initiatives on ICT procurement (please specify)
- I know someone who has exactly described our ICT needs (please specify)
- I know someone who has made long term plans for the evolution of ICT (please specify)
- I know someone who has written procurement guidelines (please specify)
- I know someone who has evaluated an ICT product or service (please specify)

20. Have you ever heard of the "Guide for the procurement of standards-based ICT" issued by the European Commission?(http://bit.ly/1CdaRa1).

- Yes
- No

21. If you read the Guide (Q 20), can you please indicate your level of interest about it?(1 is "not interested" and 5 is "very interested")

22. If you had a chance to read the "Guide" (see Q. 20), would you suggest any way to improve it?

- No, I have never read the Guide
- Yes, I read it and I would like the Guide to...

23. Has your organization developed any guideline or recommendation for the procurement of ICT goods and services? If yes, could you briefly describe what they are all about? Are they currently available? Implemented?

- Yes
- No, we have not developed any guideline or recommendation for the procurement of ICT goods and service

24. How are you aware of the new procurement provisions within Directive 24/2014 repealing Directive 18/2004? In particular, are you aware that starting from 2018: i) electronic communication/e-procurement will become mandatory ii) all contracting authorities shall use electronic means of communication generally available and fully interoperable

- Yes
- No

25. CAMSS, an action of the European Commission's Interoperability Solutions for European Public Administrations - ISA programme, aims to support and coordinate the collaboration between Member States in defining a "Common Assessment Method for Standards and Specifications" (https://joinup.ec.europa.eu/community/camss/description). How aware are you of this initiative?

- We have already used CAMSS in the past
- We know CAMSS and plan to use it
- We do not know CAMSS but are interested in getting further information on how it could be useful for us
- We don't know the CAMSS initiative and will not be interested in it
- Other comments (please specify)