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Towards OECD Digital Government Performance Indicators

**Workshop on Digital Government Indicators:
Current Results and Way Forward in Data Collection**

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The purpose of this paper is to support the discussion during the Workshop on Digital Government Indicators taking place on 26 November 2014. It paves the way for solid future analysis and data collection and grounds the discussion on the way forward in relation to the scope of the work and feasibility of data collection under the Programme of Work and Budget 2015-2016.

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INTRODUCTION

1. In over a decade of work in the area of e-government, the OECD has witnessed a significant change in the public sector use of technology in member and partner countries. Governments went from providing ICT to put services online to strengthening internal support functions and government processes, to introducing new technologies to change the interactions with the users of services (citizens and businesses) to increasingly engage them in policy making and service delivery. In particular governments are moving:

- From e-government to digital government¹.
- From using IT to achieve efficiency by mirroring offline services online towards using IT as an opportunity for business process re-engineering and re-thinking of government services, processes and requirements, and as a result increase efficiency.
- From a supply-driven approach towards a more participative, iterative and inclusive (user-driven) approach.

2. Across OECD and partner countries we are observing governments' efforts to implement the shift from using technology to support government processes to using technology to shape public governance outcomes. The result of this extensive and comprehensive analytical work has led to the adoption by the OECD Council of the Recommendation on Digital Government Strategies, on 15 July 2014. The purpose of the Recommendation is to help Governments adopt more strategic approaches for a use of technology that spurs more efficient governments by enabling higher openness, public engagement and innovation.

3. To complement this normative support, the OECD has been working for the past 5 years to improve the evidence available on the use of ICTs within the public sectors. The aim is to be able to provide some solid quantitative data to appraise governments' performance in using ICTs to deliver the expected outputs and policy outcomes.

4. This paper aims to inform the discussions at the OECD Digital Government Indicators Workshop taking place on 26 November 2014 in Paris. The paper outlines the background and the purpose of the work on performance indicators; it illustrates the 12 themes covered by the first round of the data collection run in 2014; explains the objective of the questions and the methodological challenges; and it presents and discusses selected findings within each of the themes

5. The purpose of this paper is therefore to pave the way for solid future analysis and data collection and to ground the discussion on the way forward in relation to the scope of the work and feasibility of the data collection under the Public Governance and territorial Development Directorate Programme of Work and Budget 2015-2016. It does not to provide an exhaustive analysis and reporting on Digital Government Performance across OECD countries.

¹ For a definition please refer to the OECD Recommendation on Digital Government Strategies available at: <http://www.oecd.org/gov/public-innovation/recommendation-on-digital-government-strategies.htm>

Background

6. The use of digital technologies is increasingly considered as a precondition for public sector performance. The use of ICTs is essential for the efficient and effective functioning of processes and services throughout all parts of the administrative back-office, from national security to tax collection and issuance of public permits. Additionally, the use of ICTs is spreading to all parts of the public sector front line service delivery in key social welfare areas, such as for example education and health, among others. In other words, the lack of proper management of ICT deployment and use could potentially cause the risk of a total collapse in large parts of the public sector.

7. Still, the efficiency and effectiveness of delivering, using and managing ICTs within the public sector is only measured sporadically. Measures tend to focus on budget and time management, about executing on deliverables, rather than on creating value as intended. Existing international measures focus particularly on framework conditions (e.g. WEF competitiveness index) or government supply (e.g. the UN's bi-annual E-Government Survey, and the EC's revised e-government benchmark framework although this framework also includes some output and outcome related measures, such as uptake and user orientation). While this greatly adds value to the understanding of relative international development of e-government and digital government, there is a need to complement existing data with more operational insights in governments' performance in Public Sector's digitisation.

8. The 2014 Digital Government Performance Survey draws on the conceptual work laid in a previous issues paper [[GOV/PGC/EGOV\(2012\)8](#)], and constitutes the first step towards the gathering of key data that will be instrumental for the long-term objective of assessing governments' performance in using ICTs as part of OECD indicators and productivity measures for the public sector.

Box 1. Questions to the participants of the OECD Workshop on Digital Government Indicators

The Workshop will address the following questions. The purpose of the questions is to progress in the analysis of the already collected and available digital government performance data, and to spur an aligned approach to the future collection across OECD member and partner countries.

- ***What digital government policy areas should be prioritized for the collection of better evidence?*** Which policy objectives should particularly be supported or further explored?
- Which of the questions asked in the OECD Survey on Digital Government Performance are the most important? Could some questions be skipped? Are some questions missing to strengthen the focus where necessary?
- ***In what areas are concise definitions and terminology particularly needed?***
- A number of questions in the survey have only been answered by few member countries. How should we advance in areas that require (national) co-ordinated data collection which is available only in some countries? ***How do we ensure prioritization of data collection*** (or national coordination) ***for the 2015 survey in all countries?***
- ***How should we balance the need between being relevant and being objective?*** In what areas should we include more external measures/ data sources in the analysis?
- ***How can we jointly leverage the data analytics of digital performance data?*** Across governments, private sector and academia representatives? Should such leverage be institutionalized? If so, how?

METHODOLOGICAL ISSUES RAISED IN THE OECD DIGITAL GOVERNMENT PERFORMANCE SURVEY

9. The first version of the OECD Digital Government Performance Survey focused on 12 key themes, listed below:

- ICT strategy
- Digital rights and obligations
- Governance
- ICT Project management
- ICT Business cases
- Financial benefits for the central government
- Financial benefits outside the public sector
- Central government ICT expenditures
- Sub-national governments ICT expenditures
- ICT Procurement
- Online service delivery and transaction costs
- Using national online portals

10. Survey responses were collected from [27 countries], covering [25] OECD member countries and [2] accession countries. While most countries have provided detailed answers within most themes and questions, the data collection has turned out troublesome for some of the issues. This was not entirely unexpected, and despite the difficulties this was an important part of the process aimed to identify the different stages of sophistication in the various areas pertinent to performance measurements. The sections below provide details on some of the methodological problems encountered.

ICT strategy

11. The existence and scope of national strategies provide an important indication on the level of formalisation of policies as well as their coherence across sectors and levels of government. The funding of the strategies provides an overall indication of the policy framework within which the country leads its strategies, and which is used to create a sense of shared commitment and ownership.

12. The questions cover the existence and the scope of the national digital government strategy, across the government and the levels of government, the sources of funding for the strategy and the existence of performance measurements to follow up on implementation and results. These questions can contribute to the development of the Policy Toolkit aimed to support governments in the implementation of the OECD Recommendation on Digital Government Strategies, particularly for the identification of data and indicators to assess the progress in the implementation of the principles on “leadership and political commitment to the strategy” (#5), and “coherent use of technology across policy areas and levels of government” (#6).

Methodological issues

13. Questions 6 and 7 relate to the scope of digital government strategies. This has been answered according to the countries assessment of the strategy scope. It would support the work if a more precise definition of the “coverage” or “application” of the strategy could be put adopted.

14. Question 8 on the funding of the strategies is an explorative question. It would be desirable to attribute more exact data on the sources of funding for digital government strategies. This would enable a more precise understanding of the relation between investments and operations with regard to funding and benefits realisation.

15. Question 8 on the three most important sources of funding has been answered by [all] countries. However, given the difficulties in providing detailed data on ICT spending at the local levels of government, it is not fully clear how reliable these indications are.

16. Question 10 on the existence of general performance indicators to support the implementation of digital government strategy has been answered by all participants, although the comments in question 11 clearly demonstrate that countries have very different idea on what would be the most useful key performance indicators to support their implementation efforts.

Digital rights and obligations

17. Countries have taken different approaches to the digitisation of the public sector. A number of countries are beginning to adapt legal approaches, granting legal rights and introducing obligations to drive forward the digitisation process.

18. The questions on digital rights and obligations help demonstrating the relation between countries’ performance on other parameters and their introduction of digital rights and obligations as tools to support the digitisation process. They support the development of indicators for the OECD Recommendation’s principles on ensuring transparency, openness and inclusiveness of government (#1), and adapting legal and regulatory frameworks (#12).

Methodological issues

19. Questions 12-22 enquire on the existence of formal rights and obligations. While the outcome of these questions provides an overall indication of the existence and use of such legal instruments, the details of the specific conditions and requirements concerning application of these rights or obligations would require more detailed analysis. This is partly enabled in the references to the specific legislation, but would require detailed specific analysis.

20. Questions 12-22 enquire on the existence of formal rights, not to the extent to which these rights are properly enforced. It could be considered to cover this aspect too in a future data collection.

Governance

21. Governance matters to performance. The digital government mandate and governance frameworks are important to understand the national approaches to coordination, the drive and the incentives for the development and implementation of digital government policies.

22. The questions cover the central government coordination unit, its origin, placement, reference points and responsibilities, and the existence of a formal coordination mechanism and its scope. These questions will support the development of a Policy Toolkit in support of the OECD Recommendations' principles on effective governance and organisational frameworks (#7) and international cooperation (#8).

Methodological issues

23. The questions on leadership and coordination require a high level of clarity and understanding of the definitions applied. This is still work in progress – it will be important to ensure a joint understanding of the term coordination in order to be sure that this government function can be adequately described, and not confused with "centralisation".

ICT Project management

24. The capacity to manage ICT projects is critical for the successful contribution of ICT to public sector modernisation and reform. A number of countries have experienced difficulties delivering on larger ICT projects, so a number of government reviews have sought to address this through professionalization measures.

25. The questions enquire on the different measures taken up in countries to improve ICT project management standards. This includes standardisation and compliance of ICT project management models, as well as compliance measures if any (typically budget thresholds). As research indicates that larger projects hold larger risks of failing, both with regard to budget size and project time span, information on the number of larger ICT projects is also collected. As inclusive digital government strategies lead to better impact, the most important stakeholders of ICT projects are identified, to clarify the practice across countries. The existence of review boards and their mandate is also explored, and finally, the formalisation of project management skills requirements in the government is investigated. These questions will support the development of a Policy Toolkit in support of the OECD Recommendations' principles on "institutional capacities to manage and monitor projects' implementation" (#10), and on "procuring digital technologies based on assessment of existing assets" (#11).

Methodological issues

26. Questions 30 to 32 enquire on the existence of a standardised ICT project management model. The definition and specification of the requirements to qualify an identify an ICT project management model are not fully clear. Extensive frameworks exist, but countries might have put "lighter" and more operational models in place. Thus the concept of a standardised project management model is large, aiming particularly to clarify if the government works systematically with ICT project management.

27. Questions 34 and 35 are on the size of ICT projects. The questions rely on an understanding of when an activity is converted into a project, separate from the permanent line organisation. No very clear definition has been proposed so far; this might create uncertainty about the scope of activities to be included, particularly before and after the project period. Question 36 enquires on the three most important actors involved in the project. Given the complexity of larger ICT project, it might be worth considering if rating the importance of all the actors could provide a more accurate picture of a broader range of actors.

ICT Business cases

28. Investments in digitisation should be held up against the results that they can help (and are expected) to achieve. The use of business cases is a possible method for doing this, by creating a transparent joint basis for decision making and implementation. As countries are maturing in their approaches to digital government and e-government, they also improve their capacity to specify and deliver on the specific value propositions of using ICT. These questions help assess the particular aspect of governments' capacity to deliver value for money. A business case is a strategic tool to assess and present the value proposition of an ICT project, to monitor its implementation and assess the results. This implies assessing the value for money comparing project costs and benefits. The financial cost and benefits typically play a key role, but the business case can also be driven by non-financial gains such as accessibility, service quality and/or inclusiveness, or political and social value.

29. The questions ask if the use of business cases is mandatory in government and at the local levels of government, and if standardised business case models have been developed to support the use. The use of business cases is considered a good practice, and the answer reflects the extent to which such good practice is systematically implemented. These questions will contribute to the development of a toolkit in support of the OECD Recommendations' principle on "business cases to sustain funding and focused implementation" (#9).

Methodological issues

30. The terminology around the concept of a business case is not well established in all countries. This creates some uncertainty around what needs to be included in order for a value proposition framework to be labelled a "business case". This would need to be clearly defined in future surveys, including the key parameters of what in OECD terms can be defined as business case. Typically, countries are better at defining the input to the business case (e.g. the budget or the necessary key resources) than the outcomes (e.g. the actual impact and results, different from delivered activities or output).

31. Questions 44 and 45 focus on business case usage. The option was intended to indicate some level of commitment to the concept of using business cases even though no governance mechanisms to ensure compliance have been established. While this may generally be justified, a central government answer with regard to the broader perception of business cases would most likely not be grounded in empirical verifications of such perceptions. Given the importance of the use of business cases in digital government strategies, future surveys would need to clarify between use, mandatory use, existence of business case models, compliance mechanisms for their use, etc.

Financial benefits for the central government

32. The realisation of financial benefits is an important indicator of the extent to which ICT support public sector productivity and increased efficiency. The approach to the appraisal of realised financial benefits of ICT projects indicates policy orientations and perceived challenges of getting value for money. The use of financial project management and prioritisation tools, provides information on how systematically *financial benefits* are realised. The financial benefits in government can be divided in two categories, the direct financial benefits (where the budgetary consequences happen with more or less immediate and direct link to the ICT project), and the indirect financial benefits (with longer term, indirect effects on public budgets). Here only the direct financial benefits are treated.

Methodological issues

33. Questions 49 and 50 enquire whether the financial benefits are measured and how. The answers point to a lack of clarity in the definition of direct financial benefits. In the initial understanding and

preliminary definition direct financial benefits could for example be the partial reduction of the staff previously devoted to the physical administrative service delivery as a consequence of their previous function being put fully or partly only. This can be measured, for example through the national value of the freed up full time equivalents. This would provide an indication on mechanisms and capacity to realise benefits. Questions 52 and 53 cover central follow-up mechanisms to the realisation of such financial benefits, and hence address the issue of a central governance and ‘harvesting’ of some - or all - of these benefits. The character of the central follow-up mechanisms, when elaborated, provides a clear idea of the variation in the different approaches taken by countries in this regard. This poses an issue in terms of comparability, although the answers still provide first important insights. The question 54 aims to address the extent of this central oversight through an estimated percentage and thus of the central government’s capacity to harvest financial benefits at all. It remains clear that these questions will at best provide subjective indications, based on central government assessments, not real data (furthermore, from recognising an unknown share of benefits to determining its size is a large step).

34. Question 51 aims to identify when in the budget process ICT projects are first included. This is perceived as an additional indicator on to what extent the *financial* benefits are important in the digital government strategies taken on by the countries. It is not a very clear indicator in this regard, and more specifically how the central-local information asymmetry about the specific size and character of these benefits are addressed in the ICT project implementation.

35. Along the lines of the above, question 55 asks how specifically the financial benefits realisation materialises. The question asks how on average benefits are realised across government institutions (e.g. through increases in quality, output, reductions in staff or budgets, or other unknown results). Again the purpose is to obtain an overall subjective indication based on expert assessments, as actual data would be difficult to secure. The data are not directly comparable across the categories, as multiple answers are possible, making some combinations invalid/auto-contradictory. [Preliminary analysis does not regard this as a significant problem in the actual data collection.]

Financial benefits outside the public sector

36. Typically quality improvements and time savings outside the public sector cannot be directly reflected in national budget improvements - contrary to the direct financial benefits in the public sector mentioned above). However, there are often considerable direct and indirect financial effects in both the short and mid-long term. This could include for example direct time savings by national businesses and citizens on specific transactions (e.g. administrative burden reductions), which both can be attributed a monetary value, providing an indicator of added social/economic value of using ICT in the public sector.

Methodological challenges

37. Questions 57 and 59 explore if such financial benefits are measured with regard to citizens and businesses. Questions 58 and 60 ask for specific examples on such measures; generally when used the examples do not reflect a high level of consistency in the measurements.. This decreases the value of the yes-no answers provided. One tentative way to interpret the initial data would be to divide yes-answers in groups of ‘yes, with specific example’ and ‘yes, without specific example’. More specific frameworks in combination with explicit interest from countries might make a more systematic elaboration worthwhile.

Central government ICT expenditures

38. Central government ICT expenditures are an important input variable for the analysis of digital government performance. They can be analysed together with information about outsourcing and procurement, e.g. to identify high dependence on outside suppliers as well as potentially disadvantageous

concentration of suppliers. They can also be used in combination with information about governance mechanisms to understand if and how decision-making and management of ICT projects leads to better results. Ultimately, they should support the analysis of linkages between technology inputs (investments) and policy results (returns). These questions will support the development of a toolkit in support of the OECD Recommendations' principles, particularly with regards to the issue of "procuring digital technologies" (#11).

39. A cross-country view of central government ICT expenditures was first published in *OECD Government at a Glance 2013*. A more exhaustive preliminary analysis was provided in the unpublished 2012 document "Building the basis for new e-government performance indicators: ICT spending by central government" [[GOV/PGC/EGOV\(2011\)3/REV1](#)]. This paper benefits from updates to the existing dataset and therefore a) confirms the range of central government ICT expenditures for OECD countries (mostly oscillating between 1-2% of all central government expenditures); and b) displays over-time developments (no uniform trend between 2011 and 2013 can be identified, rather different developments in individual countries).

Methodological challenges

40. The unpublished 2012 document "Building the basis for new e-government performance indicators: ICT spending by central government" and its methodological Annex [[GOV/PGC/EGOV\(2011\)3/REV1/ANN](#)] remain the reference papers for a cross-country overview on the availability and scope of ICT expenditures data in OECD and partner country governments. The current paper updates some of the existing data, but some of the methodological issues remain valid and require some attention:

- Not all countries consistently collect and report data on all three categories of ICT expenditures – capital, operating and HR. The figure in this paper displays only those countries that provided at least capital and operating expenditures.
- ICT-related human resources expenditures are not uniformly collected and reported by responding countries. Responses to Question 72 of the 2014 survey show that almost all countries that collect such data do so based on national accounting practices that differ from provisions in the System of National Accounts (SNA). Further details are available in the unpublished document cited above.
- Some countries do not report central government spending information to the OECD, which makes harmonised comparisons involving those countries difficult (for Chile for example only general government spending information is available).

Sub-national governments ICT expenditures

41. Expenditures on ICT by sub-national government organisations are an important complement to the analysis of central government expenditures. Sub-national authorities share responsibilities in the delivery of public services, in the collection of revenues and in the fulfilment of general government functions. Hence all the analytical issues and shortcomings described above apply here too.

Methodological challenges

42. Less than half of OECD countries provided an estimated break-down of government ICT expenditures by level of government (Question 77). This illustrates some of the difficulties governments face in establishing the complete picture of state IT spending. But also the importance of developing

further guidance on methodology in this area so that ICT spending data can be used for domestic and cross-country analysis.

ICT Procurement

43. ICT procurement is an important part of the public sector value chain, supplying goods and services integrated in many parts of the public service delivery. A particular attention to ICT procurement enables meeting the special requirements, for example when ICT is provided as a service, developed for particular needs, etc.

44. The questions enquire on the existence and scope of ICT procurement strategies and their more specific priorities. Specific questions to selected functions considered good procurement practices are also asked, together with questions aiming to assess the level of dependency from private supplier in selected institutions. Finally, a specific storage price question is a first attempt to understand the functioning and comparability of national ICT markets. These questions will support the development of a toolkit in support of the OECD Recommendations' principles on "procuring digital technologies based on the assessment of existing assets" (#11).

Methodological challenges

45. Questions 80 and 81 aim to identify, at the same time, the level of specific attention to ICT procurement and the level of government alignment in doing so. The questions suffer from the unclear definition of what it means that a procurement strategy 'covers ICT specifically'. A high level of alignment across levels of government could also exist, even though there were separate strategies for ICT procurement on each level. This creates some margin for interpretation of the answers to the current questions.

46. Questions 82, 84, 86, 88 and 90 enquires on potential dilemmas when balancing the national procurement policy. The questions are asked to force a priority between sometimes opposed concerns. This implies the risk of questions being artificially constructed and less relevant – countries should confirm that this is not the case will need to be confirmed by the– preliminary data analysis does not suggest this is the case.

47. Questions 92 and 94 are based on the assumption that a positive answer to the questions, all other things equal, implies a higher level of professionalism in the ICT procurement. This relevance would need to be confirmed by the countries, also taking into consideration the revised OECD Recommendation for Public Procurement, currently being considered by the PGC. If this is the case, questions elaborating on the compliance would provide even more relevant indicators.

48. Questions 96 and 98 address the private supplier's share of the overall ICT budget. This is considered a proxy for supplier-dependency. While this may be the case, such indicator does not show anything about the critical elements and risk assessments related to this dependency. Considering the high levels of private sector dependency, it might be worth considering pursuing this in future surveys.

49. Question 99 asks to the specific storage prices, average, price spans and purchased storage qualities. The idea is to show the price differences through the comparison of a similar service across the countries. [The answers show that this would require much more specific definitions of what kind of storage service, determine ways to address bundling, etc.] The idea of creating a joint-public data on acquisition prices might be difficult to implement, but could provide countries with a useful indicator for their ICT procurement performance.

Online service delivery and transaction costs

50. The increasing online service delivery has partly been led by an interest in the potentials of using ICT to reduce costs, particularly costs of service transactions. Looking into service transactions and the costs of service transactions across different public service delivery channels can provide important indicators for the added value of using ICT, and help ground the priorities of the national multichannel strategies. As administrative efficiency is one political objective along with others, such as quality and user satisfaction improvements, information is also asked on the time spent for the users in the different service delivery channels, based on the thesis that time spent on administration is an important indicator for the social value added in specific transactions across channels, both with regard to businesses and citizens.

51. The section also asks questions on the overall service delivery, and on the existence of service delivery catalogues, clarifying the number of public services, including the delivery channels through which they are made available. Finally, the more specific channel priorities are identified, including the emphasis put by countries on defining mandatory online services, that is, closing down channels considered obsolete or ineffective.

Methodological challenges

52. Questions 103, 104 and 105 aim to identify the number of mandatory online services. Judging by the answers it is not clear if the definition of ‘mandatory online service’ is sufficiently clear. The questions are asked with the understanding that when a service is mandatory online, it is legally compulsory to use the service online, and not through other channels, such as telephone requests, service centres or physical offices. Hence, having one or several channels as mandatory implies that other channels are not legally valid options. This will need to be agreed jointly with the countries. Unless clarified this point could also affect the reliability of the questions 106, 107 and eventually 109.

53. Question 109 enquires on the main barriers for increasing the number of mandatory online services, as this is considered a way of increasing efficiency in the national service delivery channel strategy. The answer is again a subjective assessment of the general national situation. If such questions are of strategic relevance to the countries, the different answer options could be triangulated with more specific data sources to complement these assessments.

54. Questions 110 and 111 ask for subjective qualified estimates of the current and future cost-effectiveness of a wide range of public service delivery channels. Countries could provide several first priorities, this might add some invalidity to the answers and would need to be verified. An even clearer definition of ‘cost-effectiveness’ might help avoid lack of clarity. The term is here applied somewhat loosely to characterise policy-designs achieving a higher ratio of policy objectives for as few costs as possible. While the questions ask to current and future prioritisations, there is no certainty or cross-referencing in the question ensuring that the answers are grounded in national strategies or policies.

55. Questions 113, 115 and 116 together with the spread sheet on selected service transactions address the measures and data existing on transactions. The definitions in the different answer models are not exhaustively defined: Terms such as ‘time spent by the user’, ‘take-up’, ‘transaction costs’, ‘user satisfaction’ and ‘non-completed’ transactions are not precisely defined, nor are methods for measuring and calculating them commonly established. For example, a clear way of calculating ‘overhead costs’ across the different service and channels is a precondition for providing good transaction data. As is defining exactly what is included in the processes within the survey’s scope. The countries could agree on the need to proceed further in the definition and collection of data along these lines. Furthermore, questions 115 and 116 have a number of defined answer options that are phrased in an easy to understand

pragmatic manner, rather than mutually exclusive and collectively exhaustive. [This could pose a problem to the validity of the answers, although the answers tentatively do not suggest this is the case.]

Using national online portals

56. National portals have been implemented as ways of providing user oriented online services in most OECD countries. While the more precise strategies vary, national portals have become important parts of service delivery channel strategies and hence for the performance in the online public service delivery.

57. The questions enquire on the existence and characteristics of the national portals for citizens and businesses, including also accessibility guidelines and their compliance. Specific user and usage related data is also being collected in order to provide an indication on the relevance of the portals. Finally, the integration of digital ID in the portals is addressed through the last questions.

Methodological challenges

58. Questions 118 and 120 inquire about the characteristics of national citizens and business portals. These questions suffer from the lack of a clear definition of different national portal models, although the answers indicate a clear understanding of the questions. As several answers can be provided the interpretation of what is the most important role will not be clear-cut.

59. Questions 128-133 relate to the use of a legally recognised digital identification mechanism, i.e. a digital signature. The concept is not fully defined in terms of security, authentication and identification requirements. More in-depth analysis is therefore required. Question 130 seeks to identify the scope and reach of the digital signature usage, and although the answers provide a first indication, it would be more desirable to get transaction relative data on the different sectors and levels of government. Question 132 enquires on the share of digital signature by unique users on the national portal. The relevance of this answer depends on the role/purpose of the portal and the national digital service flows.

Common issues on scope, methodology and data collection

60. A number of common issues can be summarised across the above mentioned areas. These issues will need to be addressed in order to pave the way for reliable and solid measures on digital government performance. The OECD Workshop on Digital Government Performance Indicators will provide an opportunity to address this discussion. Among the key methodological issues the following are worth special consideration:

- Questions require *precise and easy-to-grasp definitions of terms and concepts in order to ensure a shared understanding* of the questions and how to answer the questions. This is important for validity and comparability. The clear definition of terms and concepts is particularly important when questions are based on subjective assessments (See also Annex A for a specific basis for the discussion on glossary, including terms and concepts). This first 2014 Survey encouraged countries to build on and specify any existing definitions and terms applied in the survey. It will be important to follow up on this usage to initiate a consolidation process.
- Many of the questions in the Survey are based on subjective assessments, rather than actual raw data sources. The 2014 Survey attempts to *combine objective and subjective data, in order to ensure high relevance and acceptable reliability and validity*. Subjective assessments might, however, in addition to the above, also be subject to political concerns, cultural differences and

other considerations. This is a known problem that often makes developments over time within the countries more reliable than for example comparisons and developments across countries.

- Using data based on *consolidated national statistics*, rather than ad hoc estimates by questionnaire respondents *could provide data of better quality*. This in turn, would improve the reliability and validity of the findings of the Survey. However, this would require considerable international coordination efforts among the countries to ensure such consolidation, based on careful prioritisation efforts across the countries.
- Clearly *defining the most relevant areas for key Digital Government Performance Indicators* and agreeing on their political, economic and social value, now and in the future, to advance Digital Government Strategies in the OECD member and partner countries is first of all important to improve evidence for high performance, but also a precondition for further international alignment of performance indicators. In other words, *it is important that countries agree that the future OECD surveys ask the most relevant questions to their national needs in terms of performance measurement.*

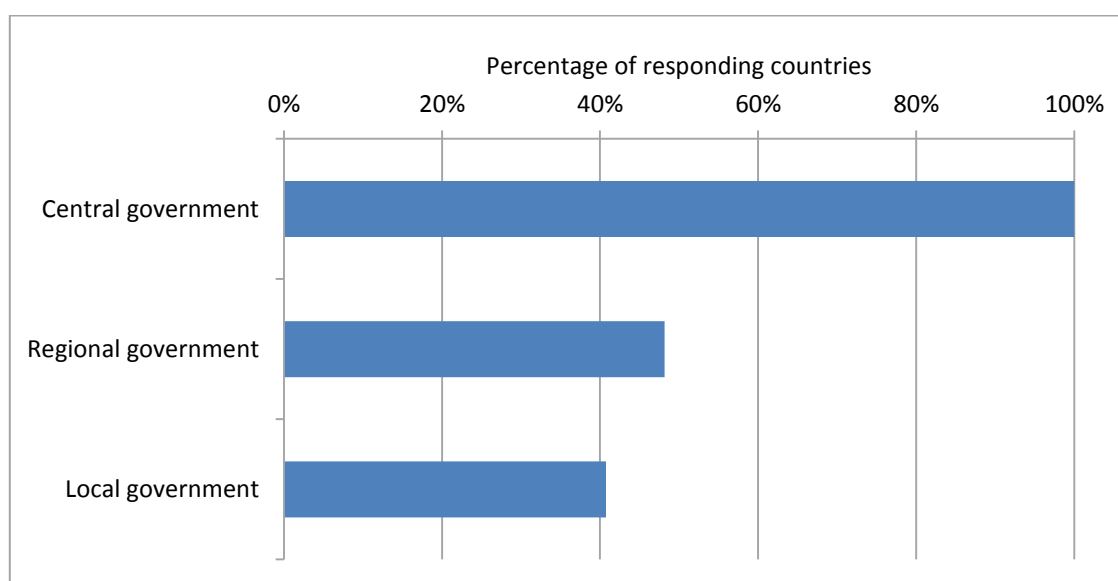
SELECTED FINDINGS FROM THE SURVEY

61. This section of the paper provides selected findings from the OECD Digital Government Performance Survey (2014). Instead of an in-depth analysis, which will follow discussions at the Indicators Workshop in November, the data here are mainly to highlight the potential for developing digital government performance indicators. This overview is meant to support the methodological discussions on how to improve future surveys, including establishing a stronger methodology, a consolidated glossary and a joint understanding of thematic priorities. A full overview of the data collected is available as a separate document (Annex B).

The scope of digital government strategies

62. All OECD and partner countries have digital government strategies in place. Most focus exclusively on the central government level, i.e. they do not include the local levels of government in their national digital government strategy. This is typically a consequence of the national polity structures and tradition, and does not necessarily imply a challenge to policy coordination or alignment across the different levels of government. It can, however, provide a general indication of the level of digital government policy integration across in a country.

Figure 1. Levels of government covered by national digital government strategies

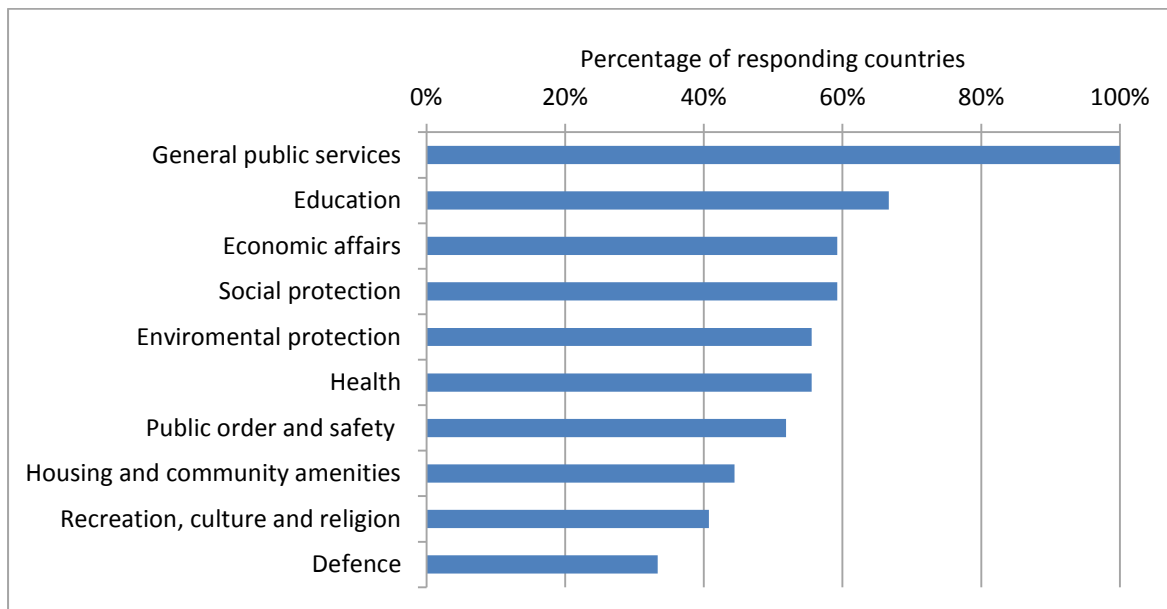


Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia. Q6.

63. The scope of digital government strategies is quite broad. This provides a general indication of the political interest and perspectives on the potentials of digitisation across the countries. The general public services and economic affairs - such as administrative procedures and taxation - have been the core of e-government progress and are still the backbone of digital government strategies. **Large public welfare areas, particularly education, social protection, health and environmental protection, are also included in the majority of strategies.** While few include defence, it should probably not be interpreted as an area irrelevant to digitisation but rather that digital defence strategies are dealt with

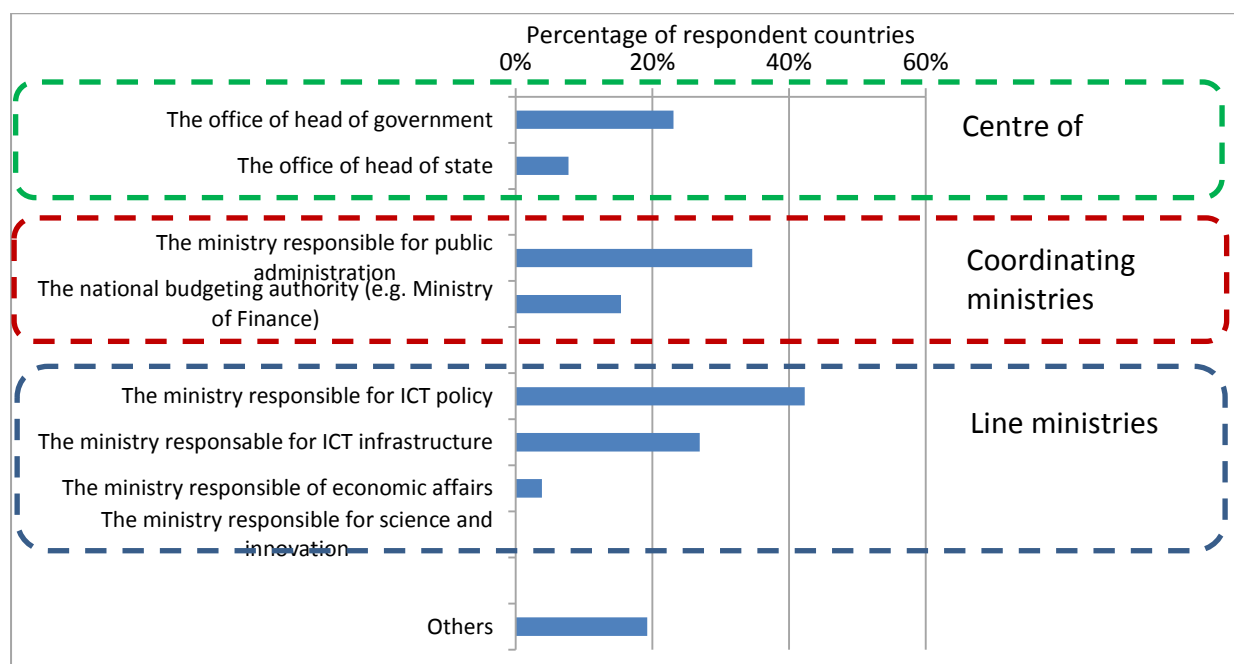
separately. If a country does not include an area in the national digital government strategy, it does not mean it cannot have a dedicated digital strategy for that area instead.

Figure 2. Public policy areas covered by national digital government strategies



Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia. Q7.

64. Coordinating and ensuring alignment across government and levels of government is a challenge. Digital government strategies are cross-government commitments in around half of the countries. Still, responsibilities are often allocated to individual different ministries. Some strategies are anchored in the centre of the government, that is, the in the office of the head of state or government. However, most are located in ministries typically characterised as line ministries or sector ministries, or in coordinating ministries, such as the ministry of finance. This might indicate a challenge for the sector or line ministries to build up a coordinating role and capabilities within the government, and possibly also the challenge of creating joint ownership and commitment.

Figure 3. Coordination ownership of decisions on the use of IT in central government

Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia. Q26. The answers sum up to more than a 100%, as the portfolio of ministries vary across the countries, hence some countries have checked of more than one option.

Questions to discuss to provide guidance for future data collection and analysis:

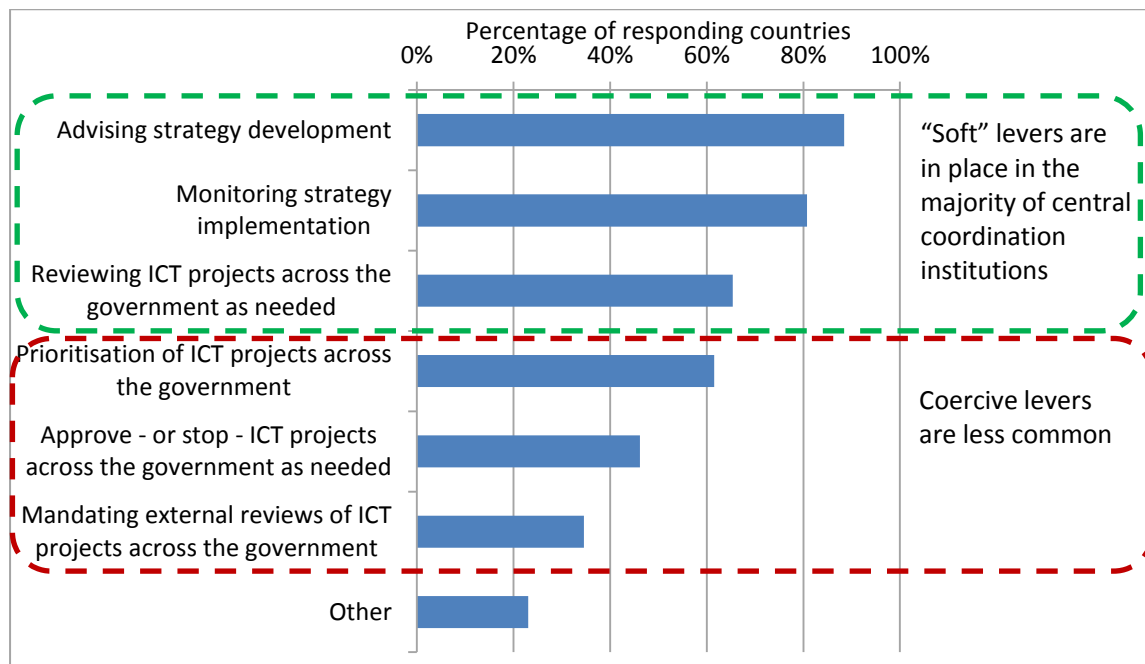
- *What data can help us measure if and how strategies are designed so they lead to better results, efficient/effective implementation?*
- *Are strategies designed in ways that allow implementation to be monitored, results and impacts to be measured?*

Governance to get digital government right

65. Governance mechanisms support the coordination and decision making processes within government and across levels of government. **Advisory and joint monitoring are the most common coordination mechanisms. More coercive measure are less applied, but include joint prioritisation of projects or approval of key decisions in larger government ICT projects.** The predominance of “soft” levers points to continued importance of sector-based priorities and governance mechanisms in determining digital government trends.

Questions to discuss to provide guidance for future data collection and analysis:

- *Which governance mechanisms are being perceived to be most effective and therefore merit further analysis and cross-country comparison?*

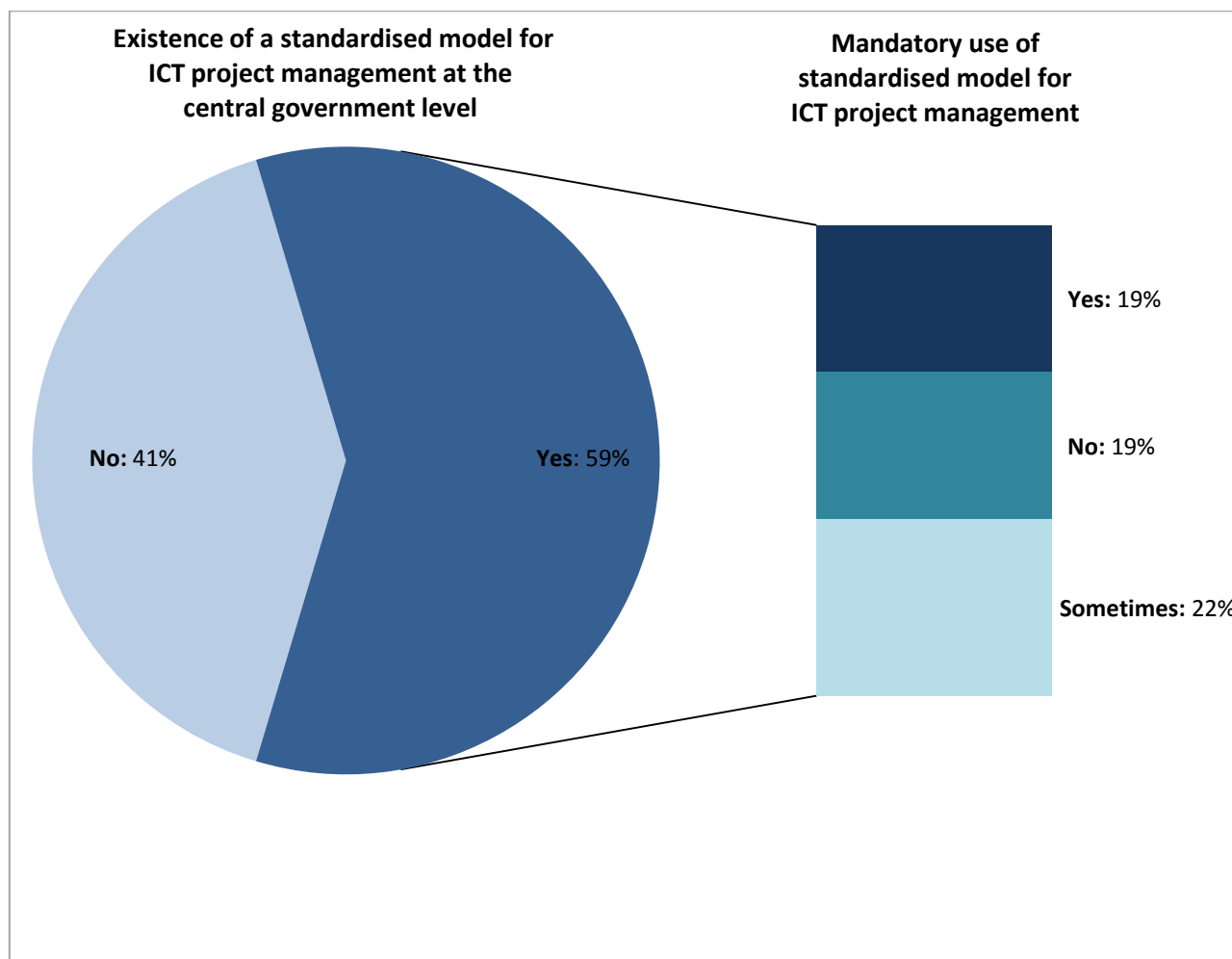
Figure 4. Governance and coordination mechanisms for digital government projects

Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia. Q28.

66. As countries advance and deliver on their digital agendas, individual ICT projects face high political, financial and technical risks. A number of audit and government reviews have sought to address this throughout the last years in order to deal with the challenge in a systematic manner. This has resulted in the introduction of specific models to support the development and implementation of ICT projects, e.g. ICT project management templates and business case requirements.

67. At the central government level, the majority of countries have defined a standardised model for ICT project management – although more than 40% do not. Of the countries having in place a standardised model, around a third has made the use of this model mandatory. Another good third have made it mandatory under certain circumstances. This means **almost two thirds of the countries have either no systematic ICT project management models, or are not consistently ensuring that the existing ICT project management models are being used.**

Figure 5. ICT project management models at the central government level

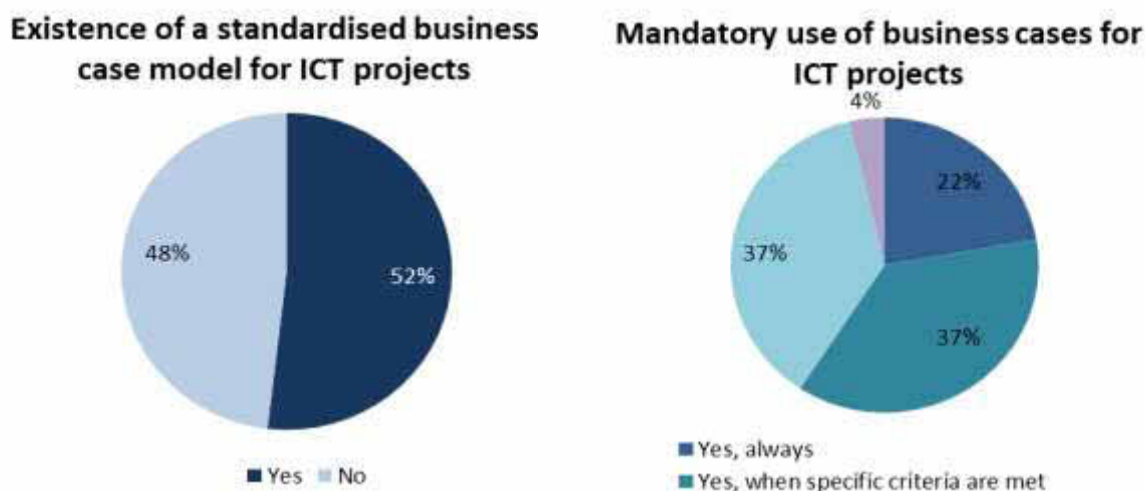


Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia. Q30 and Q32.

68. Business cases are strategic tools to ensure a consistent and transparent presentation of the value proposition of an ICT project or programme, the monitoring of the implementation and the assessment of the expected project's results/outputs. Business cases can support the decision making process as well as the implementation and the follow up to it. Some variation of a business case is typically integrated in an ICT project management model.

69. Around half of the countries have established a standardised business case model to be used at the central level of government. **The use of business cases is mandatory in 22% of the countries; and in another 37% it is mandatory if certain criteria are met.** These criteria are typically related to surpassing a given financial threshold for an IT project. The amount of the threshold varies across countries (e.g. in Finland it is set at EUR 5 million, in Denmark it is EUR 2 million and in Australia it relates to "ICT-enabled" projects that surpass AUD 30 million – around EUR 20 million), across ministries within a single country (e.g. in Canada individual ministries have thresholds for new projects that range from CAN 1 million to CAN 5 million), and across different types of projects (eg. in the United Kingdom where the review threshold for customer-facing digital service developments is deliberately set low at GBP 100 000).

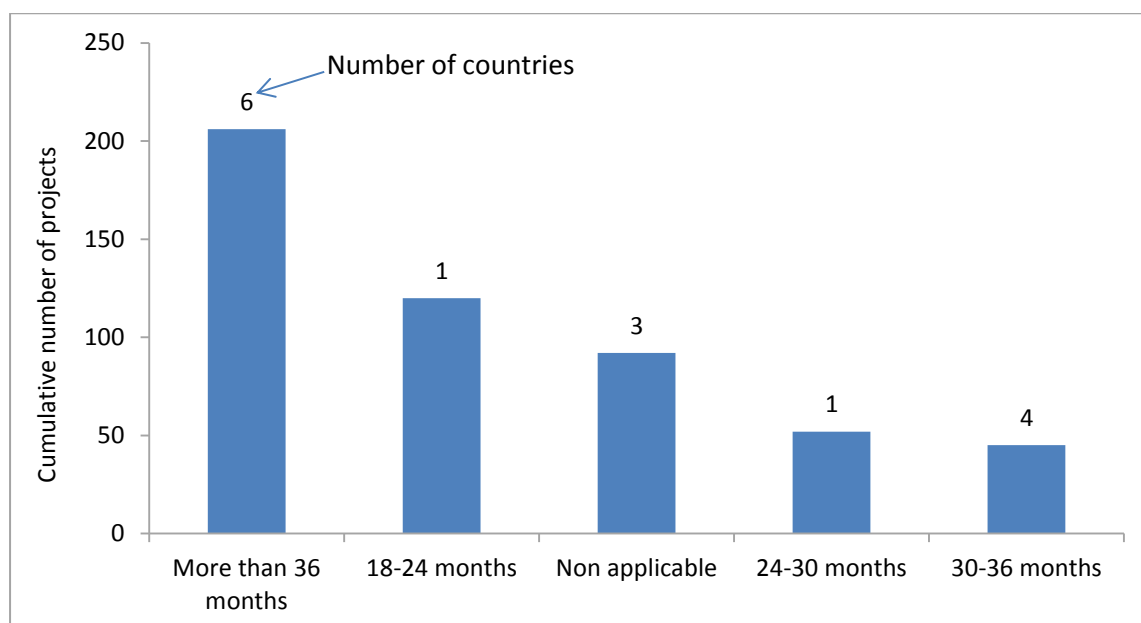
Figure 6. Existence and use of business cases at the central government level



Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia. Q44 and Q46.

70. Risk management of ICT projects is particularly important in larger ICT projects, more susceptible to fail or not fully meet expectations. Research indicates that around 25% of initial project requirements are outdated after only one year of development; there is also the issue of avoiding 'black swans' in digital government.² Looking at the ICT projects with a budget above 10 million USD across the OECD countries, it is clear that longer-lasting projects are a challenge in a great deal of countries. No ICT projects above this budget threshold were observed with duration of less than 18 months. This indicates a need to ensure attention to proper risk management, and particularly to the agility and responsiveness of ICT project management processes.

² See for example the discussion at the OECD E-Leaders 2013 Meeting in Switzerland in this regard. <http://www.oecd.org/governance/eleaders/oecd-leadersmeeting2013.htm>

Figure 7. Cumulative number of large central government ICT projects by average length

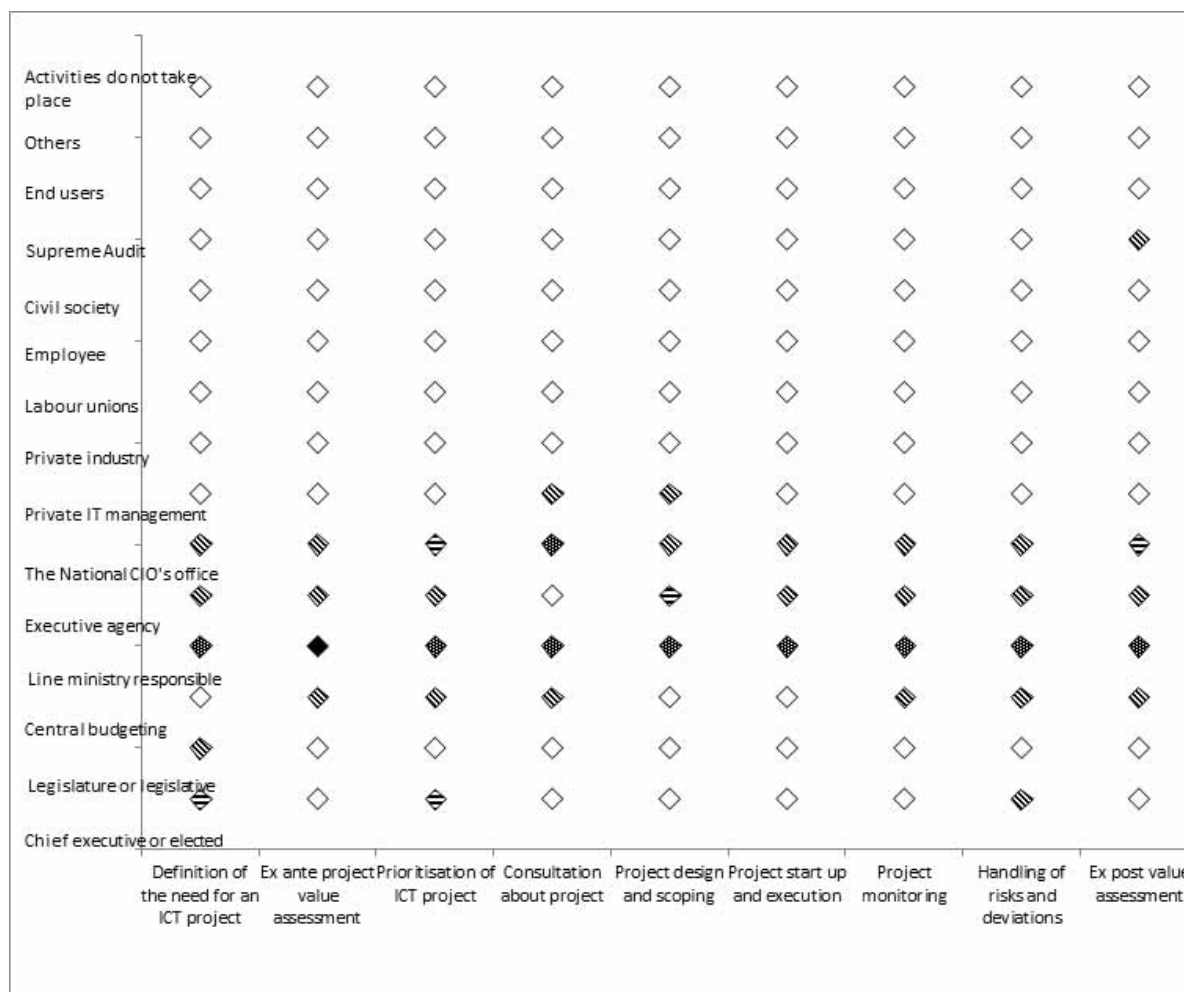
Note: Large projects are here defined as projects with total costs above 10 million USD.

Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia. Q34 and Q35.

71. The figure below outlines the three most important actors during the ICT project management process. **No representatives from end-users, civil society or employee organisations feature among the three most important actors involved in ICT project management.** This appears to indicate a clear need to open up the ICT project management process, engaging key stakeholders to ensure relevance and effective implementation. Furthermore, the national CIO's office is often consulted in the prioritisation of a project, but seems less involved in handling of risks and deviations or monitoring of the projects. It is also noteworthy that the chief executive or the relevant minister plays a key role in the definition of the need of a project in around half the countries.

Questions to discuss to provide guidance for future data collection and analysis:

- *What are general assessments of using business cases to plan, monitor and assess the value creation from government IT projects?*
- *Are there experiences of involving non-government stakeholders in the formulation, validation or monitoring of business cases for government IT projects?*

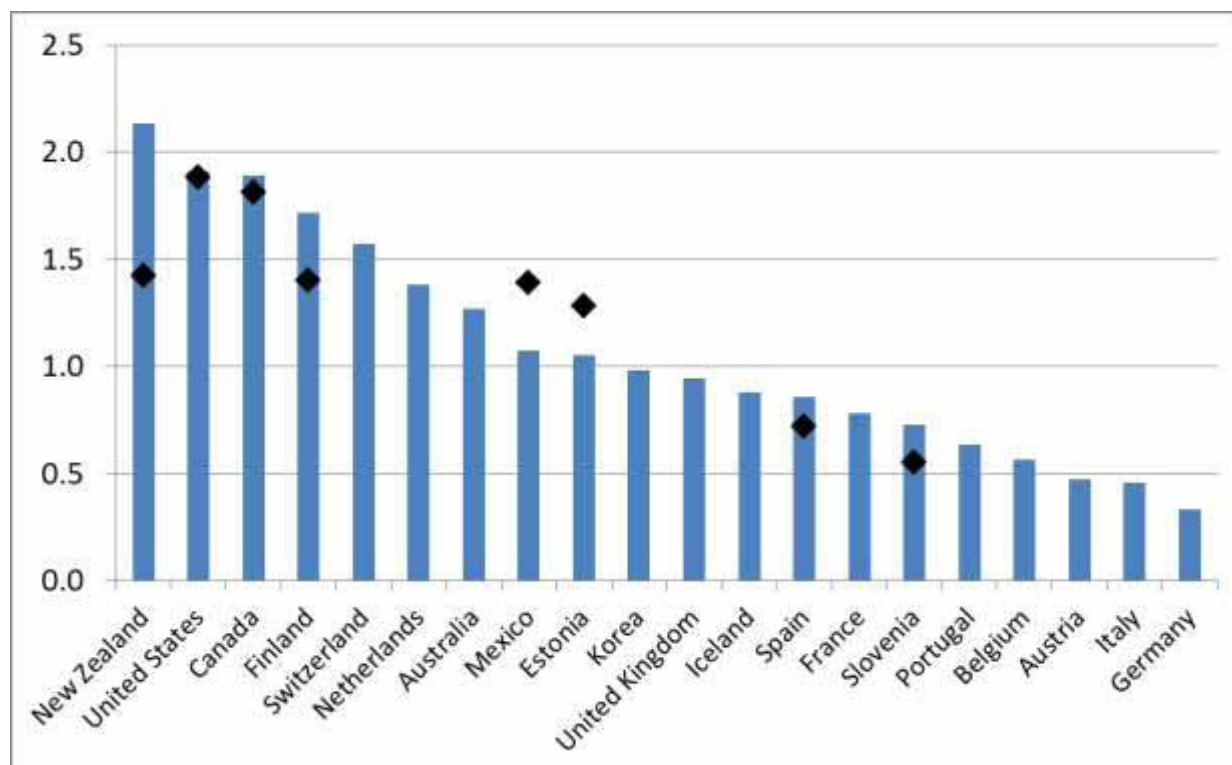
Figure 8. Main actors of central government ICT projects with total project costs above 10 million USD

Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia. Q36.

Spending and procurement

72. Most central governments in OECD countries spend between 1% and 2% of overall expenditures on ICTs. This includes investments in hardware and software (capital expenditures), running costs of IT infrastructures (operating expenditures), salaries for ICT specialists and training (HR expenditures). These shares cannot be used to directly compare and rank countries because high or low spending shares depend on a number of additional context variables, e.g. size of the central public administration and its competencies. At the same time they are an important input variable to determining government performance. They provide a starting point to the analysis of patterns in government ICT spending, e.g. the amounts spent on new capacities versus maintenance or the degree of dependence on outside suppliers.

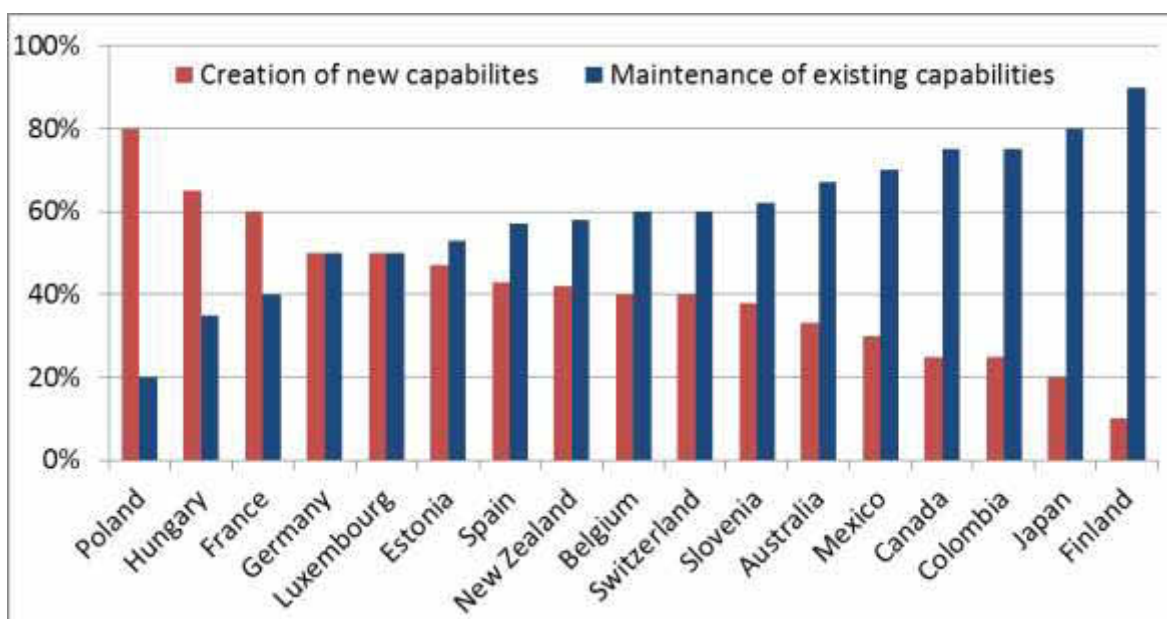
Figure 9. Central government ICT expenditures as share of central government overall expenditures



Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia. Data for United States based on publicly available reports from the White House OMB.

73. The survey asked central governments to estimate the share of ICT spending that goes to the creation of new capabilities and to the maintenance of existing capabilities. Except for a small number of countries to the left of the figure below, **OECD and partner countries spend more than half of their expenditures on the maintenance of existing capabilities**. In Japan and Finland 80% of IT spending and more goes towards maintenance of existing systems, which points to **possible challenges in keeping up with demand for new and better services**.

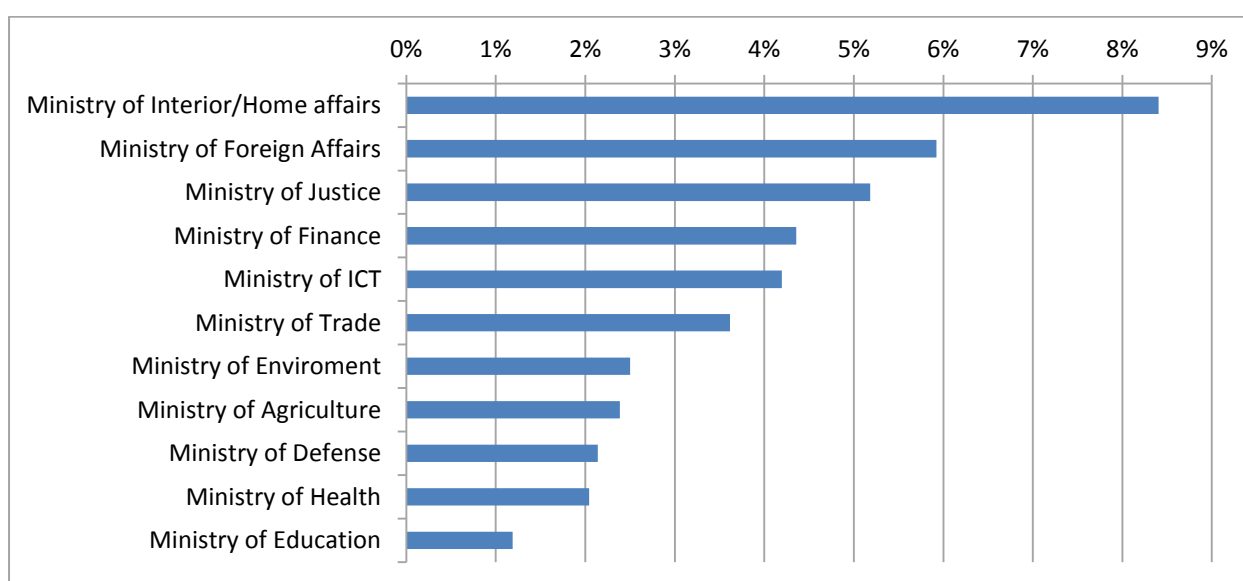
Figure 10. Estimated allocation of central government ICT spending towards new capabilities and towards maintaining existing capabilities



Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia.

74. Individual government departments and sectors can have spending patterns that substantively differ from the government average. The figure below provides an overview of average ICT intensity in typical line ministries, i.e. the average share of ICT spending in an organisation's spending. This is an attempt at mapping different ministries and agencies' spending patterns across countries. **Sector-specific IT spending can be used to identify policy domains that are particularly relevant for in-depth analysis of returns on ICT investments.**

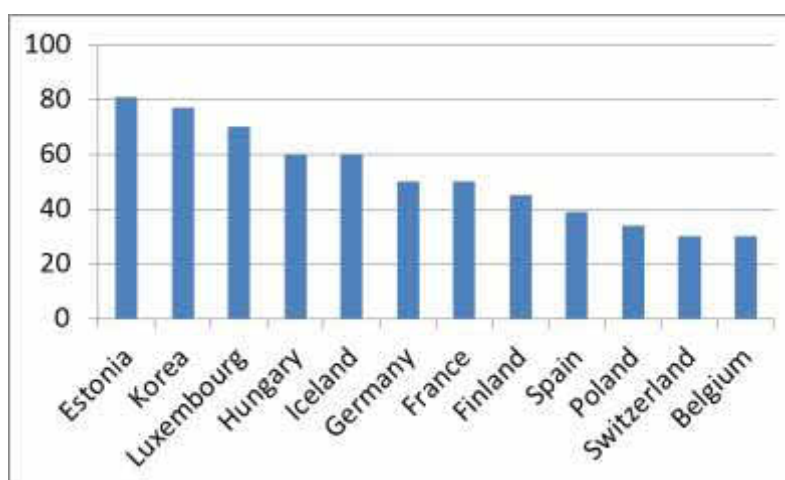
Figure 11. Share of ICT expenditure on overall expenditure across ministries



Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia. Q65. Data are available for Chile, Estonia, Finland, France, Mexico, Netherlands, Slovenia, Spain and Colombia. Availability of information across ministries differ: please refer to Annex B.

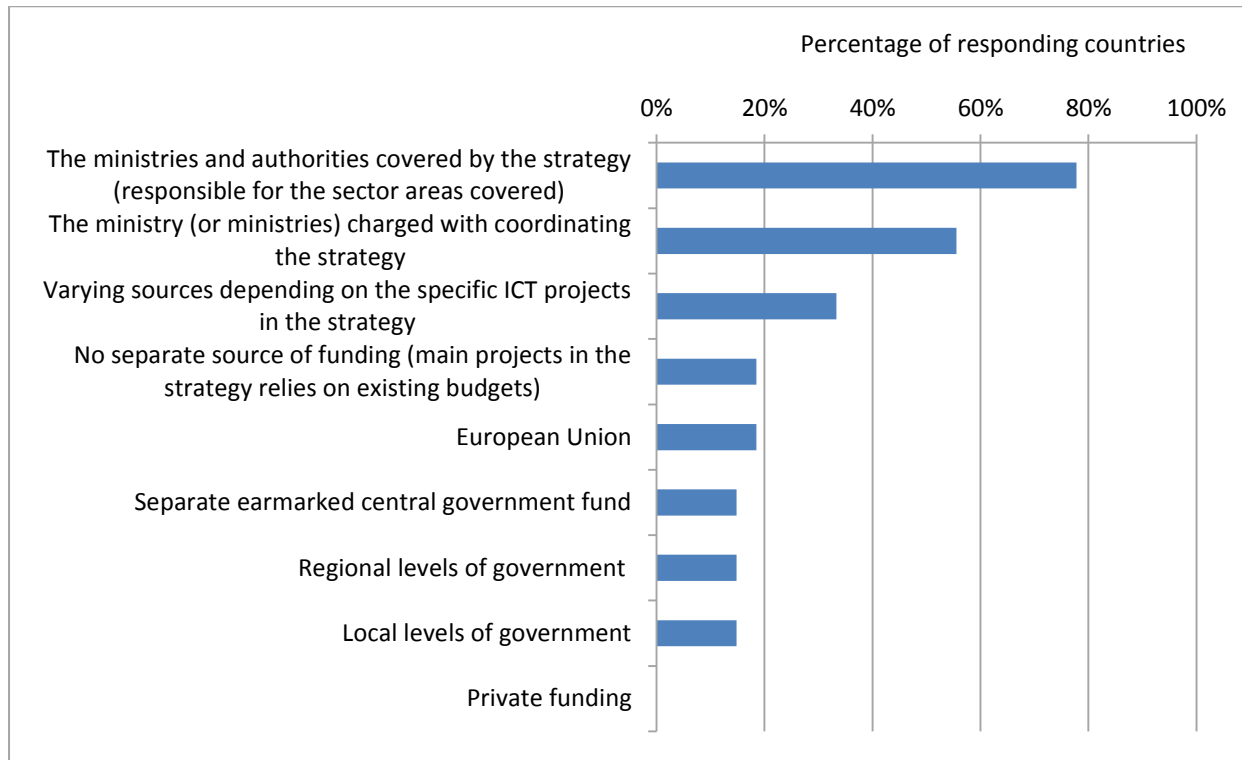
75. The range of central government responsibilities and competencies differs across the OECD. This explains the diversity of central, regional and local governments' shares in total ICT expenditures in individual countries. **Countries that have a relatively decentralised structure of overall government spending tend to also spend more than half of government IT spending at the regional and local levels** – this relates to Germany, France, Finland, Spain, Poland, Switzerland and Belgium in the figure below.

Figure 12. Share of central government in total state ICT expenditures



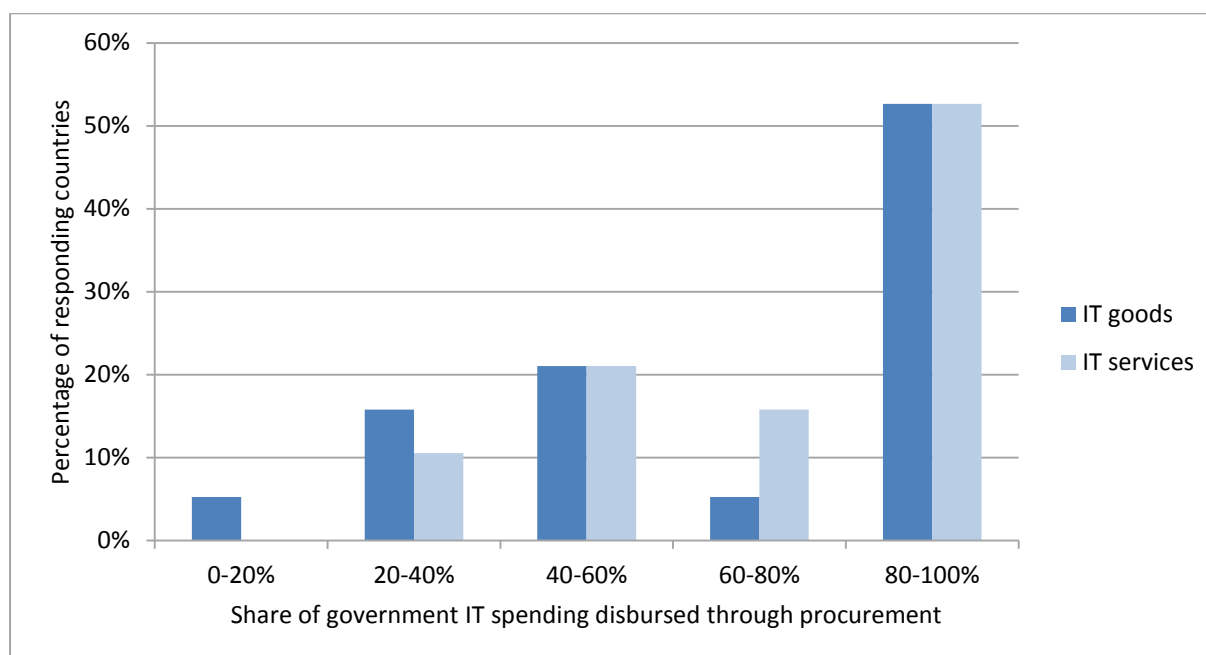
Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia.

76. In most cases, ministries and authorities that are covered by the national digital government strategy are also involved in funding their activities. Ministries' financing is likely to be a lever to ensure commitment. A number of other specific funds are also in play. The EU plays a key role in some countries through inflow of structural funds. It can be noted that the level of countries indicating financing through the regional and local levels of government is lower than the share of countries that include regional and local levels of government in national digital strategies.

Figure 13. Sources of funding for national digital government strategy

Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia. Q8.

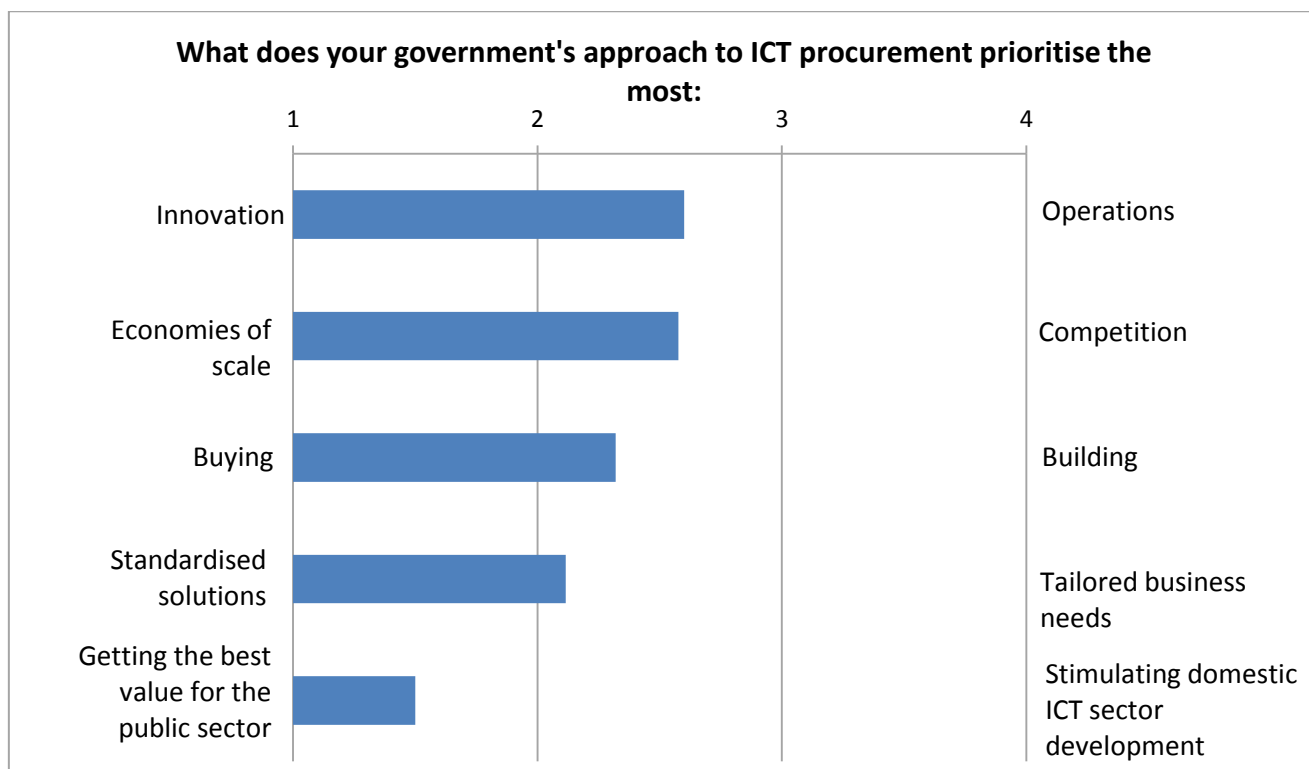
77. There is a high reliance on private suppliers to provide digital government services. More than half of all countries spend somewhere between 80 and 100% of ICT expenditures on services purchased from outside the government. This underlines the importance of ensuring sound procurement frameworks and to ensure continuity and stable, competitive ICT markets, for both goods and services. For this reason a growing number of countries develop guidelines on how to more effectively procure ICT-based services and systems (e.g. the US government's TechFAR handbook for procuring digital services using agile processes, available as open source on GitHub).

Figure 14. Share of overall central government IT expenditures disbursed through public procurement

Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia. Q67.

78. The high share of spending dispersed through public procurement underlines the importance of procurement policies and their priorities. Procurement policies need to balance a number of legitimate, although sometimes opposed, concerns. In the figure below, a selected range of priorities are outlined across the countries. **Trade-offs between innovation vs. operations or economies of scale vs. competition seem to be perceived less problematic. On the other hand there is a clear tendency towards prioritising value for money inside the public sector instead of supporting domestic industries; and choosing standardised solutions rather than tailoring them to specific business needs.**

Figure 15.



Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia. Q82-90.

Questions to discuss to provide guidance for future data collection and analysis:

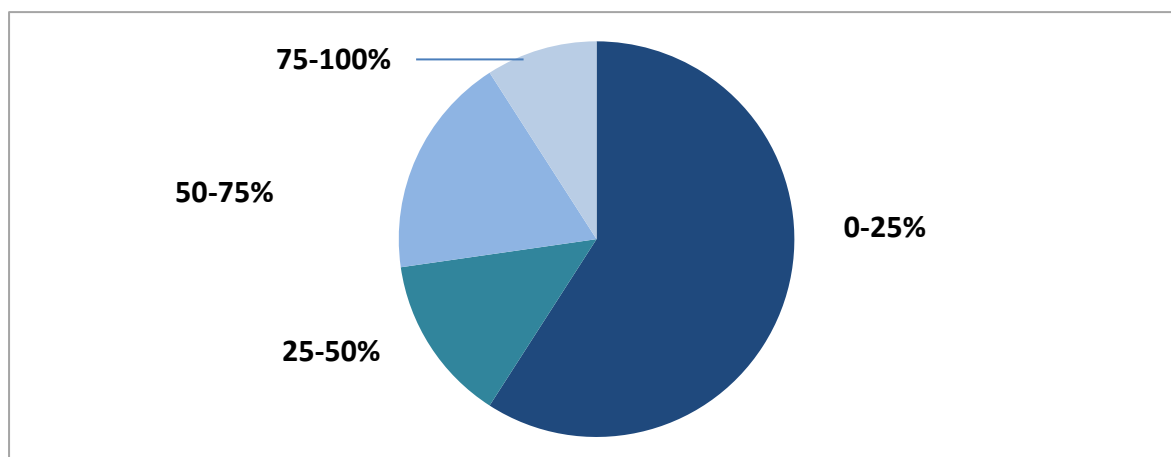
- *Does the spending analysis confirm trends that were already “on the radar” nationally, or does it provide an opportunity to uncover or document previously underestimated challenges to reaping greater returns on ICT investments?*
- *Can data on expenditures be combined with information about governance mechanisms to understand if and how decision-making and management of ICT projects leads to better results?*
- *How are countries adapting procurement frameworks to reflect the changing nature of digital service development processes (more agile, iterative, inclusive, modular)?*
- *Should the existence of comparable data on acquisition prices be explored as basis for measuring ICT procurement performance?*

Benefits realisation and efficiency

79. Most countries agree that increased efficiency is an important priority and a declared aimed for outcome of digital government and ICT projects. But **only few countries have mechanisms to facilitate and ensure efficiency of ICT projects. The large majority of countries estimate being able to measure and report only one quarter of potential direct benefits of government ICT projects.** Only few countries report having a central overview of large part of financial benefits to be realised (e.g. Korea and

Denmark, which indicate measuring over 75% of financial benefits realised through ICTs). It will be important to highlight the practices of such countries to support further progress and knowledge sharing in this area.

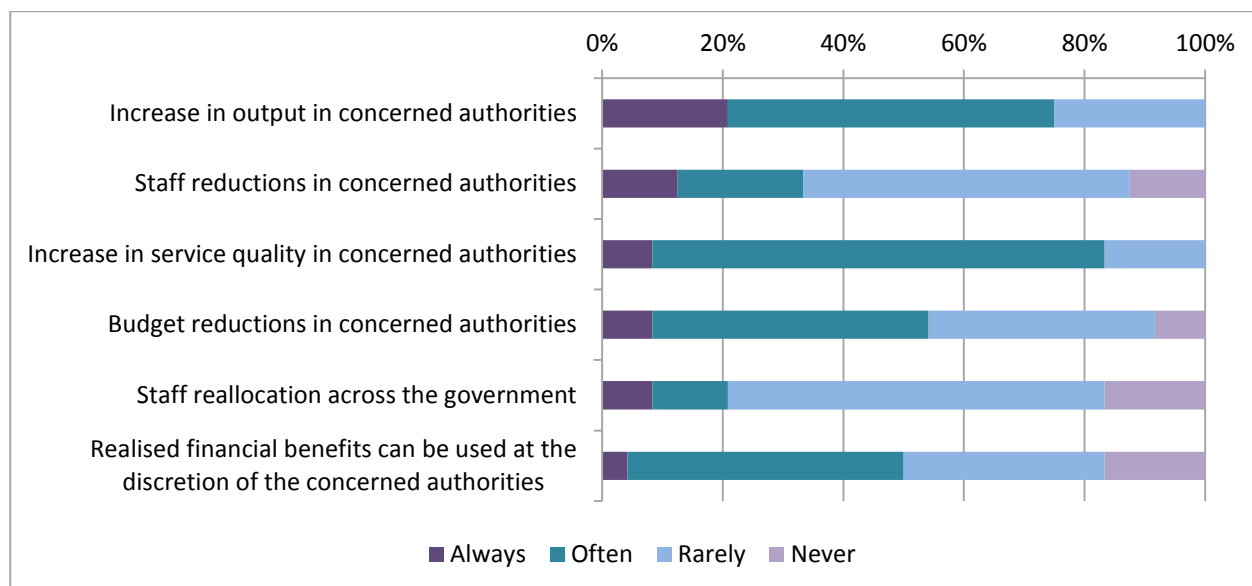
Figure 16. Share of the full potential direct financial benefits of current ICT projects measured and followed up upon centrally



Source: Responses to the OECD Survey on Digital Government Performance (2014) received from 25 OECD member countries, plus Latvia and Colombia. Q54.

80. Use of financial benefits – when realised – is also mixed, subject to different policies. If digital efficiency aims to support fiscal consolidation and budget reductions, it is assumed that the financial benefits should be transformed into staff or budget reductions. However, if the underlying policy is – rather than administrative efficiency as such – to use financial benefits to reinvest or increase spending on public services and service quality, this would be reflected in the use of the financial benefits.

81. Interestingly, around half of the countries indicate that the decision on the usage is always or most often a decision at the discretion of the authority that achieved the saving. In other words, the realisation and usage of financial benefits is not necessarily subject to a national government policy. Financial benefits are always or most often attributed to increases in service quality or increases in output. Staff reductions and reallocations take place always or often in roughly a third and a fifth of the countries, respectively. Direct budget reductions take place in roughly half of the countries.

Figure 17. Estimation of financial benefits realised by the relevant authorities

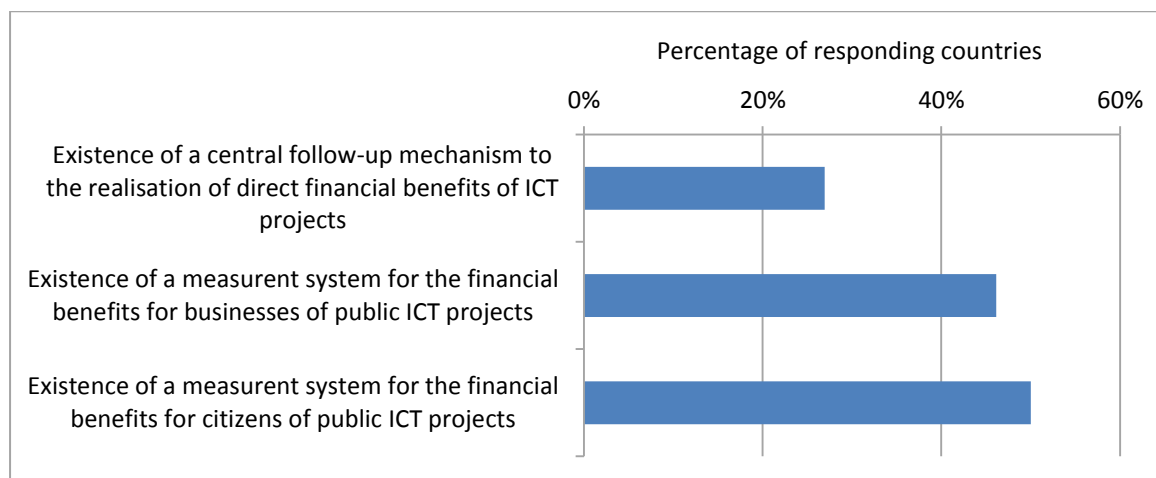
Source: OECD Survey on Digital Government Performance (2014). Sample includes 25 OECD countries plus Colombia and Latvia. Q55

82. In line with the above, less than one third of countries indicate that they have a central follow-up mechanism to ensure the realisation of financial benefits of ICT projects. This roughly corresponds to the share of countries with high levels of central measurement and reporting of financial benefits realisation.

83. Financial benefits of ICT projects are typically identified within the public sector, freeing up public sector resources. However, benefits also occur to other parts of society, citizens and businesses although such financial benefits can be directly reflect in the public budgets. The figure below indicates that **measuring financial benefits happens more often with regard to benefits for citizens and businesses, rather than to benefits within the public sector**. This could be seen as a general policy prioritisation of societal value creation for citizens and businesses. The administrative burden reduction measures targeting businesses provide good data on the businesses side, and standards for measuring the financial benefits in terms of reduced burdens are well-defined, at least in EU countries. Judging by the first round of data on specific administrative service transactions, governments do not often measure the time spent by citizens on the specific services, across channels.

Questions to discuss to provide guidance for future data collection and analysis:

- *What results do countries consider when calculating financial benefits, not only for the public sector, but also for individuals and organisations outside government?*

Figure 18. Measurement of financial benefits of public ICT projects

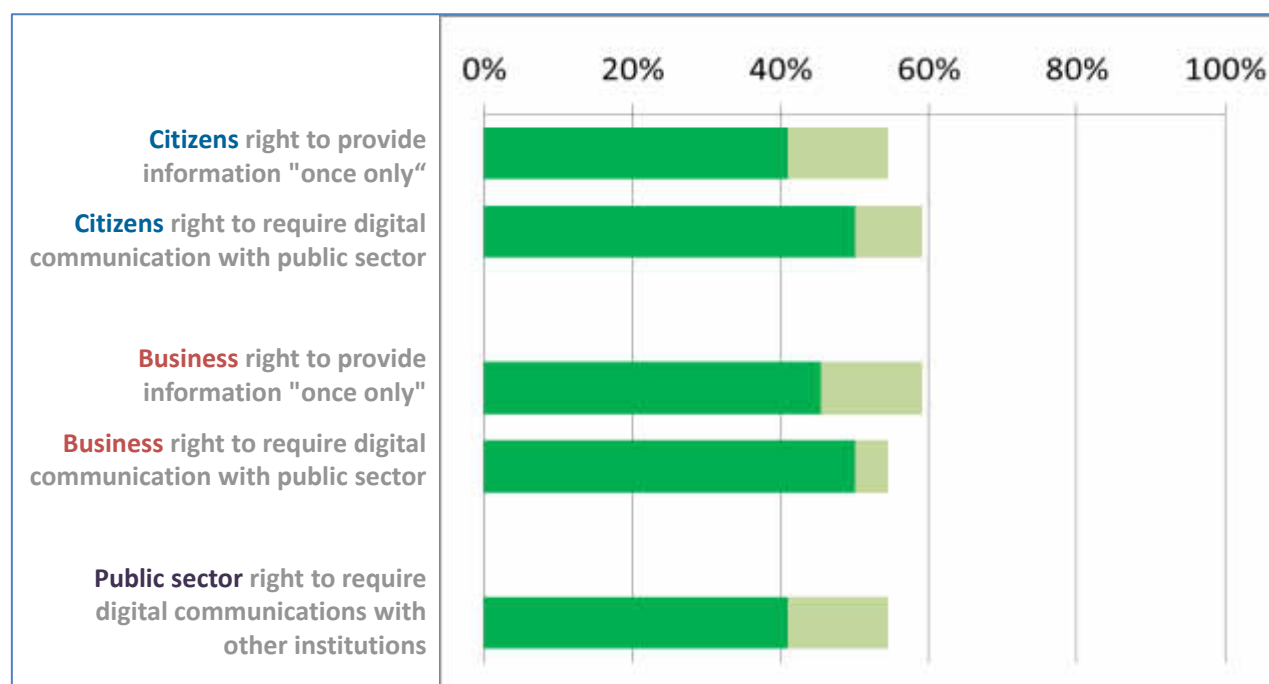
Source: OECD Survey on Digital Government Performance (2014). Sample includes 25 OECD countries plus Colombia and Latvia. Q25,57 and 59.

Digital Service Rights and Service Delivery Strategies

84. The digitisation of public service delivery is a key transformation that public sectors of OECD countries are going through. **With the emergence of digital channels as the new default service delivery mode, digital rights are emerging in some countries.** The right to provide information “once only” has been established as a citizen’s right in more than 40% of countries, and a business right in 50%. This is also the case with the right of citizens and businesses to communicate electronically with the public sector, introduced in around half of the OECD countries responding to the survey. In some countries, public authorities have also been granted the right to require digital communication from other institutions. This points to the interest of defining means to follow-up on the full technical and organisational implementation of such regulation.

Questions to discuss to provide guidance for future data collection and analysis:

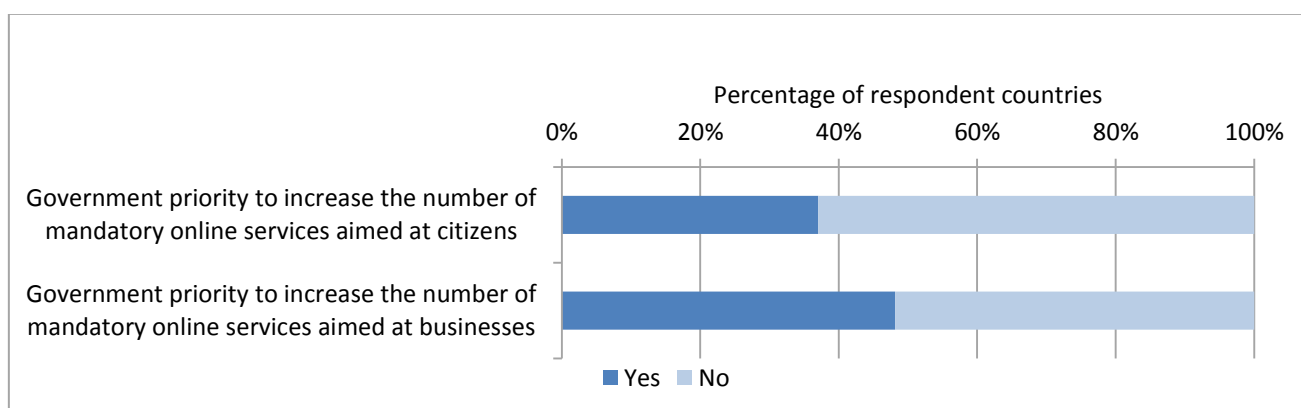
- *Why are countries hesitating to anchor the right to provide information “once only” or the right to require digital communication with the public sector in national legislation?*
- *Is there a way to measure a possible correlation between the recognition of “digital rights” and higher levels of uptake of digital opportunities to interact with the public sector?*
- *Should the level of enforcement or actual implementation of digital government rights be measured?*

Figure 19. Digital communication rights

Note: Dark green indicates yes, light green indicates sometimes/under certain conditions.

Source: OECD Survey on Digital Government Performance (2014). Responses received from 25 OECD member countries, plus Latvia and Colombia. Q12, 14, 16, 18, 20.

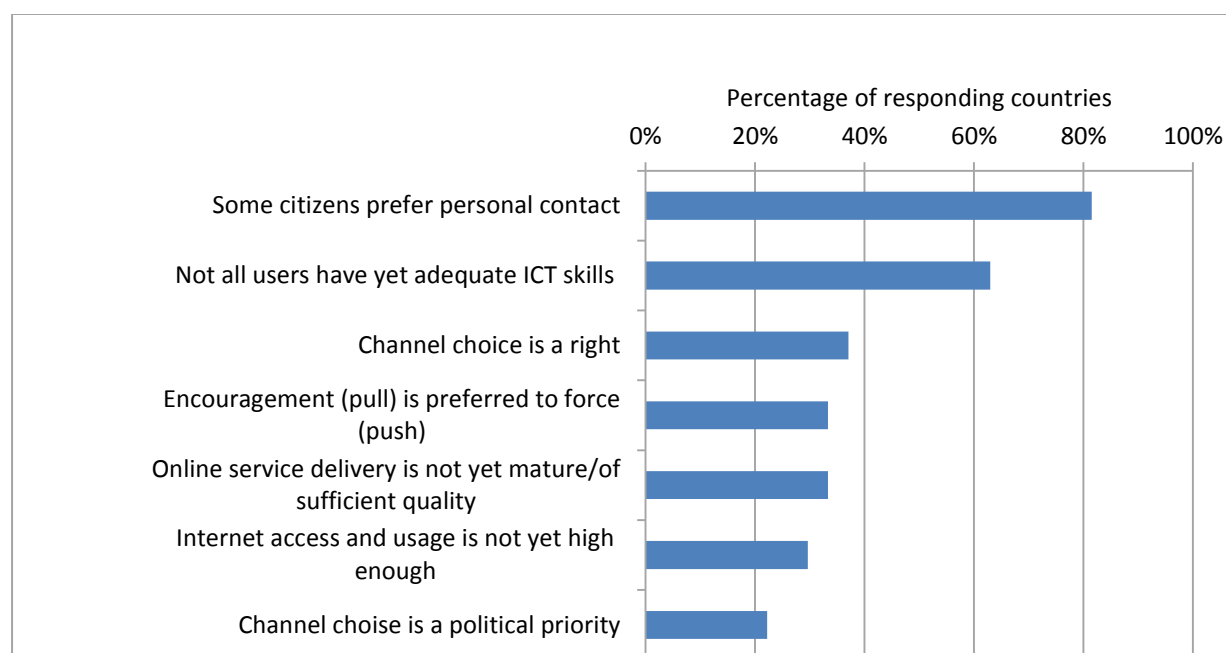
85. While digital rights are being recognised in some countries, it does not necessarily imply that analogue or paper based delivery channels are being closed down. This seems in line with the majority of countries emphasising service quality in digitisation, as discussed above in relation to benefits. While governments generally tend to assess that services aimed at businesses could be made mandatory online, this is less the case with regard to services to citizens. Rather, most countries insist that the right to choose the channel of preference is important.

Figure 20. Government priorities to increase mandatory online services

Source: OECD Survey on Digital Government Performance (2014). Responses received from 25 OECD member countries, plus Latvia and Colombia. Q106 and 107.

86. Examining further why some countries insist on maintaining non-digital service delivery channels, a number of different barriers to mandatory online service delivery are ranked. **The most important barrier is user preference for personal contact.** However, the importance of ICT skills is also highlighted in the majority of countries, where the users of specific services need the adequate skills before mandatory online services can be considered.

Figure 21. Barriers to the increase of mandatory online services



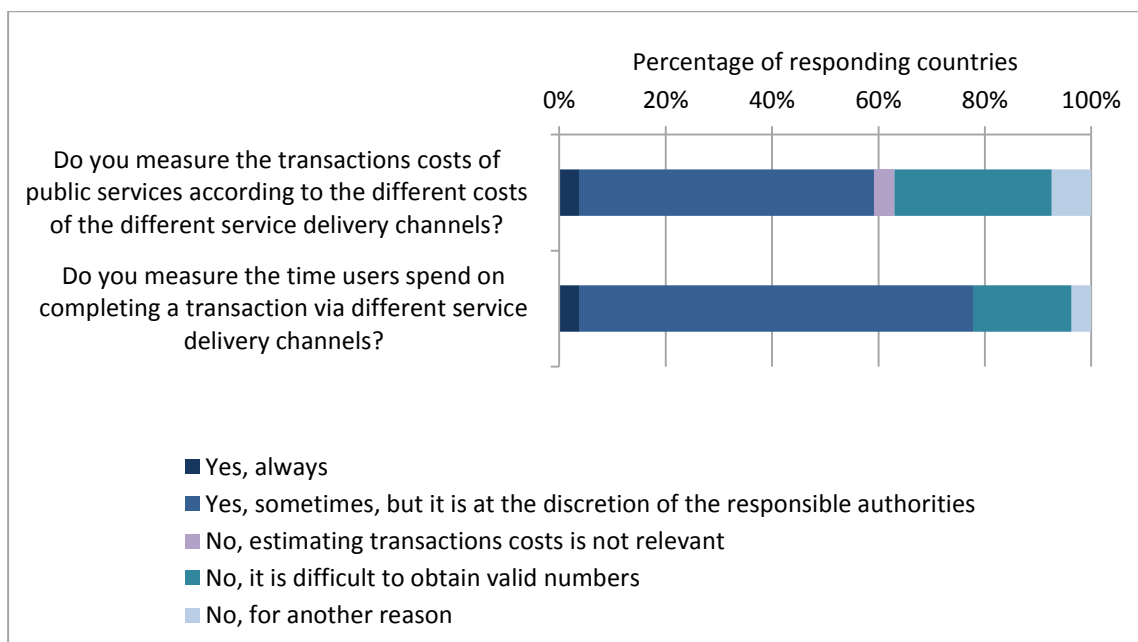
Source: OECD Survey on Digital Government Performance (2014). Responses received from 25 OECD member countries, plus Latvia and Colombia. Q109.

Questions to discuss to provide guidance for future data collection and analysis:

- *How do governments address user preferences for offline services and lack of skills to using digital services?*

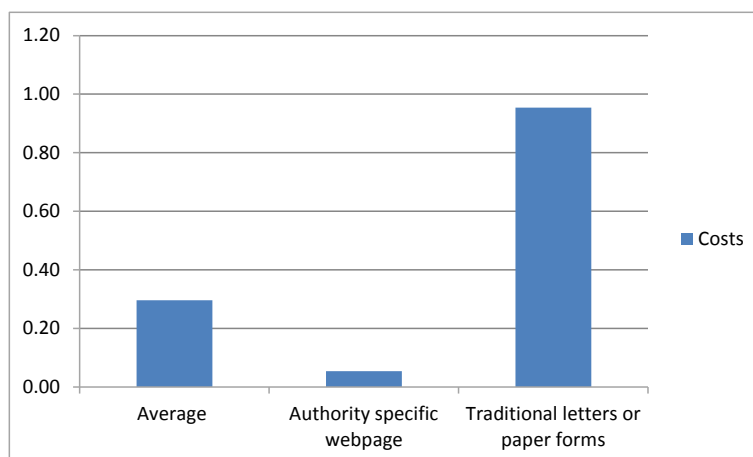
87. Managing multiple channels in parallel requires an integrated strategy for service delivery. Cost-effectiveness is one important parameter in this regard, along with several others. The costs of a specific service transaction will differ according to its cost-structures, particularly depending on the channel chosen for the service delivery. The channel chosen might also influence how long the user needs to complete a service. For example, online or mobile services might decrease the time needed to apply for and receive a permit, compared to a process that involves face-to-face interaction.

88. The figure below illustrates that **very few countries centrally monitor and measure the transaction costs or the user time spent per delivery channel.** The large majority of countries indicate that while this is sometime done, it remains at the discretion of the authorities responsible for the service, and hence, not a nationally coordinated effort. Quite a few countries mention methodological issues as a barrier.

Figure 22. Measuring transaction costs and user time of public services

Source: OECD Survey on Digital Government Performance (2014). Responses received from 25 OECD member countries, plus Latvia and Colombia. Q115 and 116.

89. The difficulties of getting good transaction are clearly reflected in the answers to the questionnaire. Very few countries appear to have solid data on transaction volumes, costs and time spent centrally available. This does not imply that such data do not exist. But it most probably means that **transaction data is not often used to support the national development and implementation of integrated service delivery strategies.**

Figure 23. Costs of income tax transactions across service delivery channels

Note: The costs are measured in USD, PPP adjusted. Data cover 2013.

Source: OECD Survey on Digital Government Performance (2014). Based on data from Chile, Denmark and New Zealand.

90. The available transaction data show a very clear pattern, although they are based on a sample of only three countries: online service delivery transaction costs are considerably lower than the traditional letters or paper forms. Some countries also refer to differences in costs structures of the authority specific webpages as shown here, and the joint national portals that allow for synergies and economies of scale.

Questions to discuss to provide guidance for future data collection and analysis:

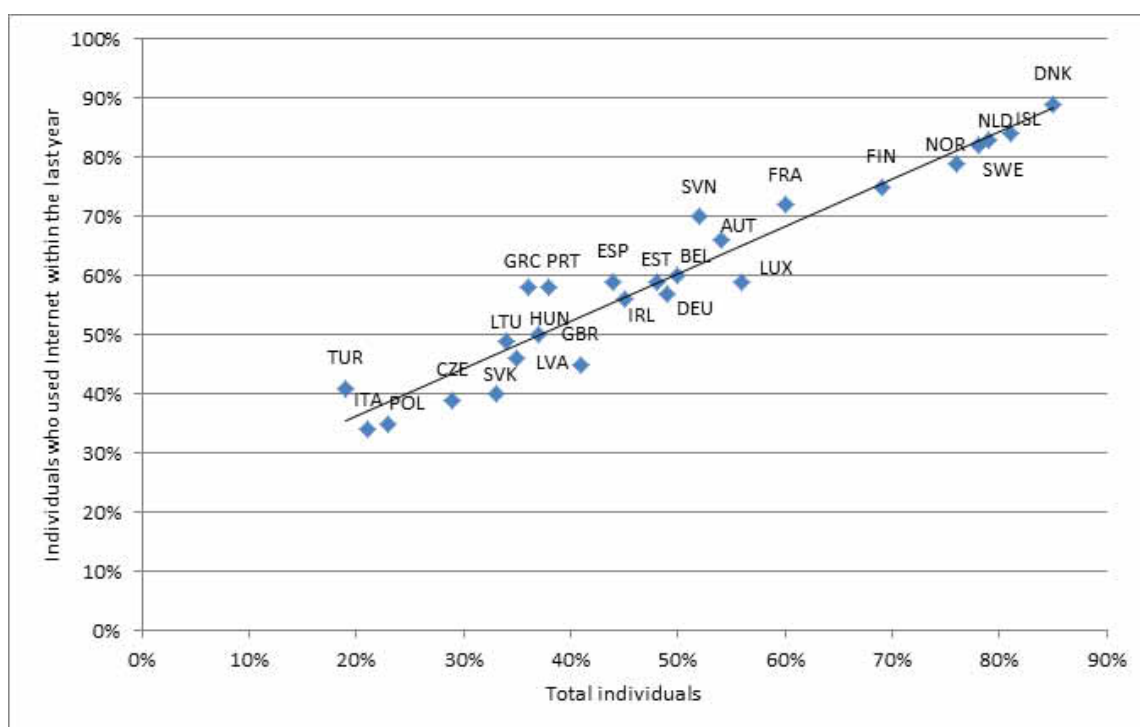
- *Are countries planning to expand their domestic analysis of service transactions – volumes per channel, costs per channel, completion and satisfaction rates per channel?*

INTEGRATING ADDITIONAL DATA SOURCES – ANALYTICAL POTENTIAL

91. A number of institutions are working in parallel to the OECD on creating better evidence for digital government. The European Commission and Eurostat coordinate – also in collaboration with the OECD – a number of interesting benchmarks. This includes for example the data on uptake, collected through household surveys in the member countries by the national statistical offices. While these are interesting in themselves, they also provide an important ground for cross-referencing, improving indicators and proxies for digital performance. While it is not the purpose of this paper to outline options to be further explored for combined work, it will be important to include this aspect in the discussions on how to advance with the work on digital government performance indicators.

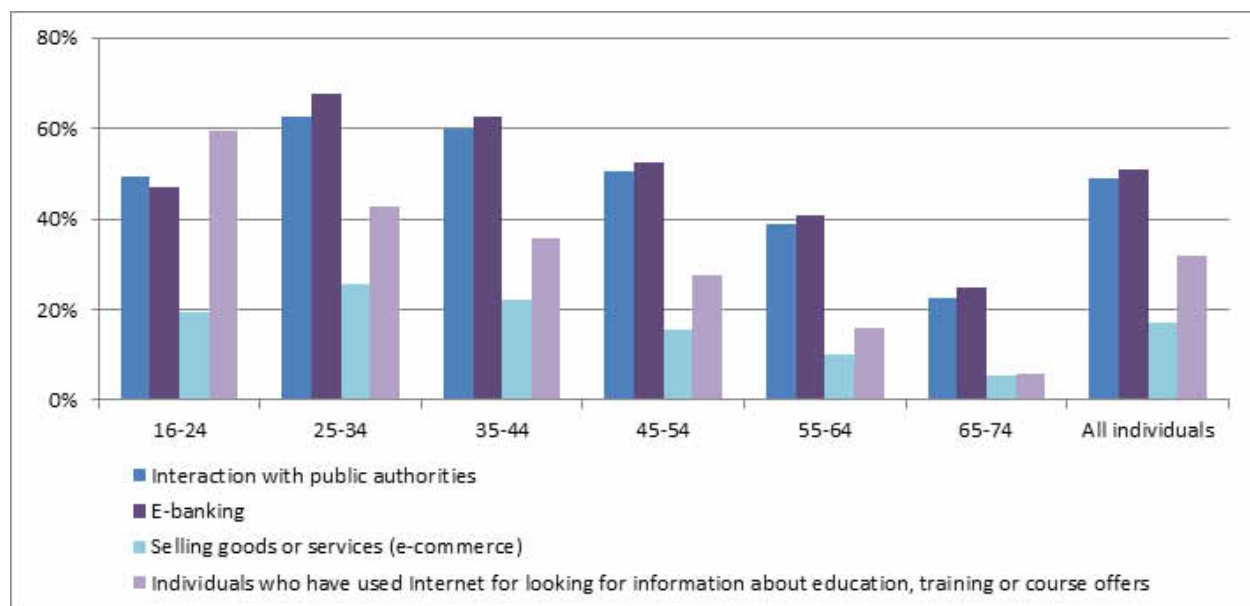
92. The figure below highlights the general online interaction of citizens with public authorities on two different populations. On the one side (x-axis), it shows the interaction of all citizens above 16 years, and on the other side, the part of the population who has used the internet within the last year (y-axis). While the first says something about the information society readiness, the second says something about the governments' capacity to exploit this readiness.

Figure 24. Citizens using internet to interact with public authorities



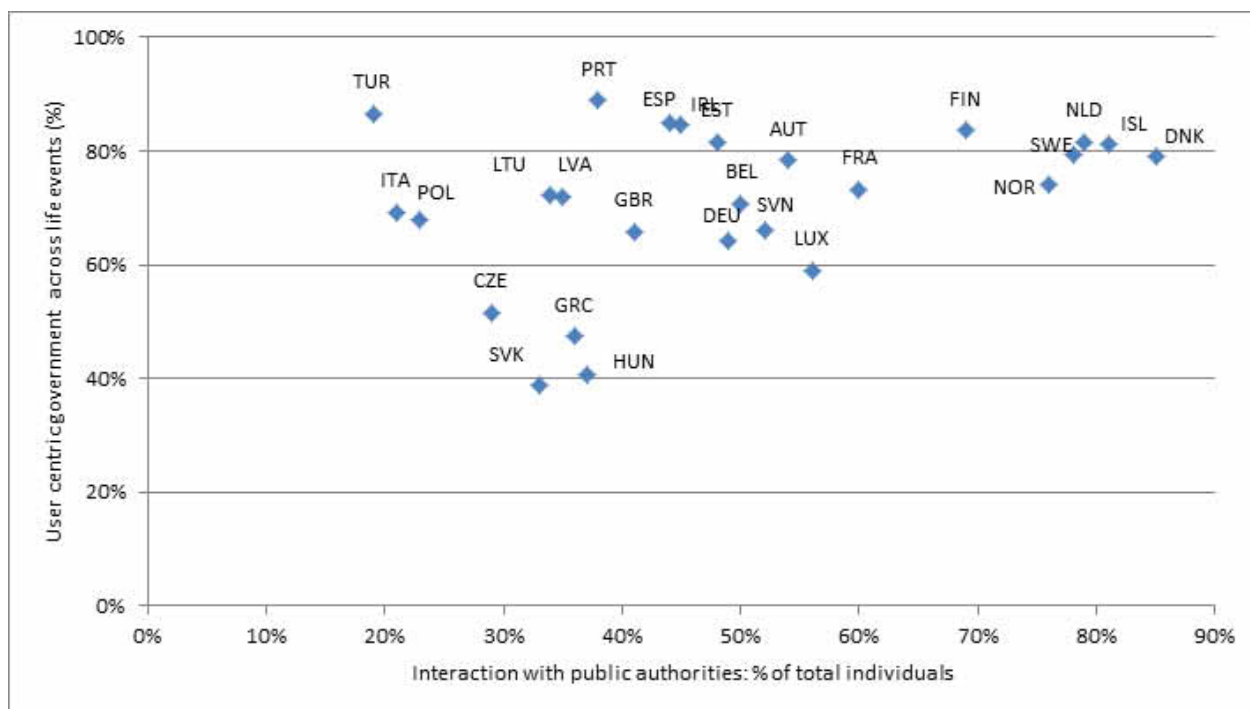
Source: Eurostat, *Information Society Statistics* (database).

93. Examining further the governments' capacities to exploit the digital readiness, another proxy is the national difference between the use of the internet for public authority interaction and for private and commercial purposes, cf. the figure below. There is practically very little difference between uptake of online service for the public sector and for the financial sector (e.g. e-banking), and the public sector outperforms e-commerce considerably.

Figure 25. Public-private uptake gap in internet usage, by age groups

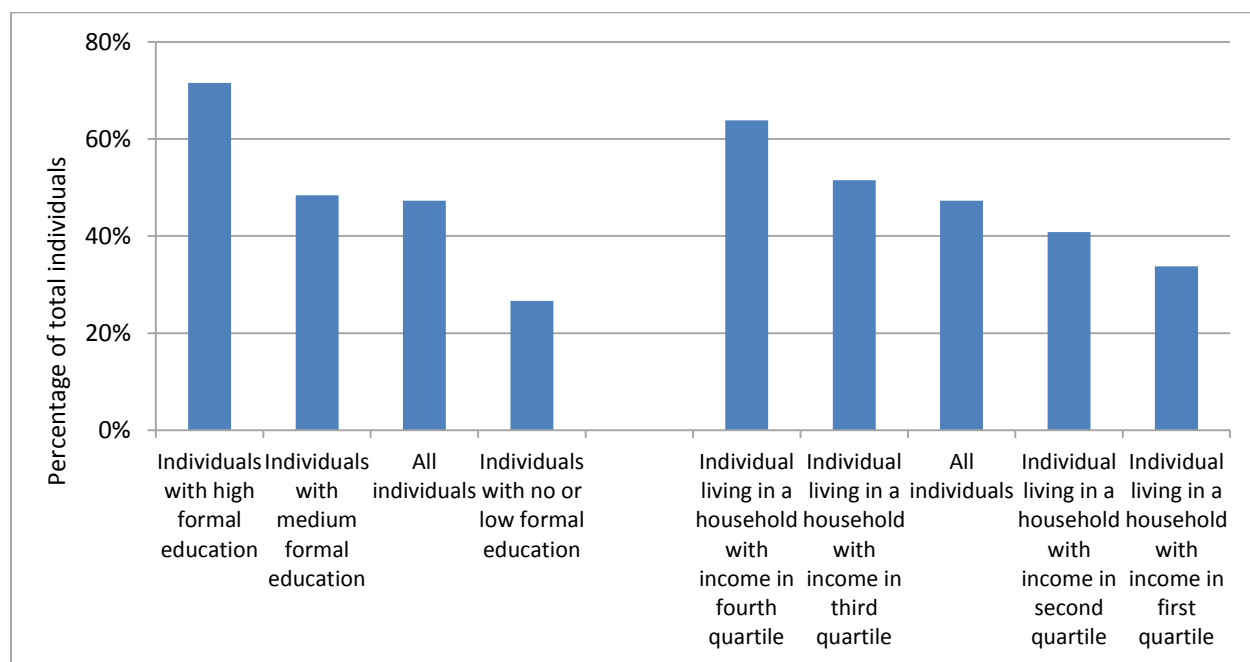
Source: Eurostat, *Information Society Statistics* (database).

94. The latest version of the European Commission's benchmark includes some service specific measures for user centism. The graphs is based on the assumption that countries that have a high level of user-centrism in the selected services covered by the EC benchmark also have a high level of user-centrism in general. Hence it compares general uptake with user-centrism; the data indicate very little relation between the two. While user-centrism is a quality in its own right, this could add to the understanding of what matters in terms of uptake in general.

Figure 26. User-centrism of specific services and general online service uptake

Source: Eurostat (2014), *Information Society Statistics* (database), and the European Commission (2014), 11th e-Government Benchmark Report. Data cover 2013.

95. Other uptake gaps important to consider and include cover education- and income –based gaps, cf. the figure below.

Figure 27. Citizens using internet to interact with public authorities in the last 12 months, by educational attainment and by income quartiles

Source: Eurostat (2014), *Information Society Statistics* (database)

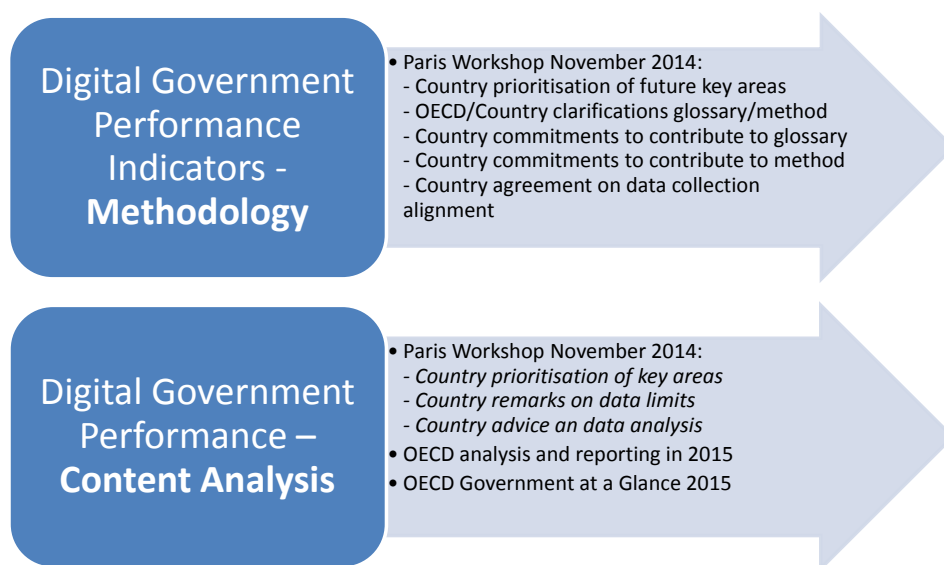
96. Data insights such as the above can provide interesting indications on performance, given that their context, strengths and limitations are well understood. In the analysis to be included in an OECD report on Digital Government Performance to be released in 2015, the secretariat will seek to include and integrate relevant data from trusted sources to complement and strengthen the insights from the 2014 OECD Digital Government Performance Survey. The identification of these sources (national or international) should be the result of a collaborative process, where the OECD member countries also play a key role, ensuring complementarity and a collaborative spirit across the different areas of expertise in national and international organisations.

THE WAY FORWARD – CONSOLIDATING THE DATA AND NURTURING FUTURE ANALYSIS

97. Consolidating the data collected in 2014 will be a key task for the coming PWB 2015-2016. In addition to the consolidation and exploitation of the digital government and ICT specific data collected, the OECD at large is advancing in the development and consolidation of policy outcome indicators, within the sector areas. Linking data on the digitisation process within sector areas and indicators on policy outcomes in these areas will be a challenge. Although difficult, such linkage would enable to support the effective and efficient use of new digital tools to deliver value across all parts of the public sector.

98. The OECD E-leaders and their representatives should be key partners in this effort and take the responsibility to help prioritise these measures, and data collection, in line with their relevance to the national digital government strategies. This would help ensuring that good measures are developed, data collected and insights applied in policy making. The OECD Workshop on Digital Government Indicators provides a good occasion to advance in this direction. Several key areas could be discussed, cf. the figure and the box below.

Figure 28. Proposed way forward for OECD work on digital government performance indicators



Source: OECD

99. Developing sound performance measure will help grounding digital government policies more solidly and facilitate the roll-out of digital services across the society. Having a high number of relevant and reliable open data available will also allow countries to begin, or reinforce, joined-up data analytical work, where all countries can share resources for better evidence. This can in turn increase collective insights around digital government performance data and information, and help governments improve their digital government performance. The OECD will continue to facilitate this process and assist countries - jointly and individually - to use digital technologies to deliver better policy outcomes.

ANNEX A: TENTATIVE GLOSSARY WITH KEY WORKING DEFINITIONS AND TERMS

The OECD Digital Government Performance Survey 2014 explored a number of new areas; hence, the methodology and the working definitions applied remain to be consolidated. The revision of the methodology for this survey should be discussed at the Digital Government Indicators Meeting in 26 November 2014, Paris. While the point of departure for the answers to the OECD Survey on Digital Government Performance initially was any existing international and national definitions, it is a clear ambition and precondition for advancing in the field of digital government performance indicators that a common ground is defined. The tentative glossary outlined below does not

Benefits: The benefits of a project define its outcomes, the desired results of a project. Benefits are not necessarily project deliverables or output, although they can be. Examples on ICT project benefits could be specific budgetary savings reflected in budgets, documented time savings in automated processes, or increases in user satisfaction directly related to digitisation.

Business case: A tool to assess and present the value proposition of an ICT project. This implies assessing the value for money comparing project costs and benefits. The financial cost and benefits typically play a key role, but the business case can also be driven by non-financial gains such as accessibility, service quality or political and social value. The use of business cases is considered essential, for example in IT project management frameworks such as Prince2.

Cost savings: Cost savings could cover reduced procurement costs, reduced operational costs, and time savings from the public administration or users of public services measured by the estimated value of this time.

Central government: The central government sub-sector consists of the institutional units making up the central government plus those NPIs (non-profit institutions) that are controlled and mainly financed by central government. The political authority of central government extends over the entire economy. Central government has therefore the authority to impose taxes on all residents and non-resident units engaged in economic activities within the country.

Digital Government: Digital government refers to the use of digital technologies, as an integrated part of modernisation strategies, to create public value. It relies on a digital government ecosystem comprised of government actors, non-governmental organisations, businesses, citizens' associations and individuals which supports the production and access of data, services and content through interactions with the government.

E-Government: E-Government refers to the use by the governments of information and communication technologies (ICT), and particularly the Internet, as a tool to achieve better government.

Funding: The provision of financial and non-financial resources to a project, including for example through internal or seconded staff. This implies for example that the costs of an ICT project also should include the costs of all the internal staff resources allocated to the project.

General Government: The institutional sector that consists of central, regional, state and local government units together with social security funds imposed and controlled by those units. It includes non-profit institutions engaged in non-market production that are controlled and mainly financed by government units or social security funds.

ICT project: An investment project where the use of ICT is an essential component without which the project would not be implemented. The ICT component can reflect new development or considerable adjustment of existing solutions. The project starts with the definition and scoping of the project and the establishment of a project mandate.

ICT project costs: The total costs cover both *capital costs* and *operating costs* throughout the entire project cycle, including also costs incurred for salaries to internal public servants.

Public service: A public service has a single service outcome, a single service ownership, and a primary end user group. It is characterised by the intent to add value to society.

Public value: Public value refers to different dimensions that may vary according to the perspective or the actors, including the following:

1. goods or services that satisfy the desires of citizens and clients;
2. production choices that meet citizen expectations of justice, fairness, efficiency and effectiveness;
3. properly ordered and productive public institutions that reflect citizens' desires and preferences;
4. fairness and efficiency of distribution;
5. legitimate use of resource to accomplish public purposes;
6. innovation and adaptability to changing preferences and demands.

TB (terra byte): The terabyte is a multiple of the unit byte for digital information. 1 TB equals 1 000 000 000 000 bytes.

Time savings: Time savings can be the result implementing productivity enhancing ICT projects. Time can be saved for example by the elimination, reduction or automation of service delivery or administrative processes. Time savings within the public administration is measured in full time equivalents (FTEs) annually and can be attributed a financial value. Time savings for citizens and businesses are measured in hours annually, and can equally be attributed a financial value.

Transaction costs: The specific costs of delivering a specific service per service transaction. Studies show that transaction costs vary across channels which are why governments seek to prioritise the most cost-effective service delivery channels.

Storage: Storage (or memory) is in this context the capacity to save digital data. A recent trend in storage is the increasing use of virtualisation and cloud computing, allowing for optimisation of usage through remote storage solutions purchased as scalable services.

ANNEX B: QUESTIONNAIRE

100. The OECD Digital Government Performance Survey was composed by three parts: An online survey questionnaire and two excel-sheets with more detailed information. The Survey focused on 12 key themes, listed below:

- ICT strategy
- Digital rights and obligations
- Governance
- ICT Project management
- ICT Business cases
- Financial benefits for the central government
- Financial benefits outside the public sector
- Central government ICT expenditures
- Sub-national governments ICT expenditures
- ICT Procurement
- Online service delivery and transaction costs
- Using national online portals

101. The full pdf-version of the final OECD Digital Government Performance Questionnaire can be found at: <https://dl.dropboxusercontent.com/u/76852/2014%20-%20OECD%20-%20Digital%20government%20performance%20survey%20-%20questionnaire.pdf> (33 pages).

102. Countries were asked about the number of transactions on selected services per service delivery channel.

OECD Digital Government Performance Survey 2014											
Online service delivery transactions: Number of transactions (1/3)											
Please provide the total number of annual transactions (2013, or most recent year available) for each of the following services, on each of the below listed service delivery channels. If services only are provided through some of the listed service delivery channels, or if only numbers for some service delivery channels are available, please provide the relevant numbers and elaborate below.											
	Total number of transactions	Online national portal	Authority specific webpage	Mobile platforms (2G: SMS...)	Mobile platforms (3G: App...)	Telephone - shared call service centre	Telephone - case handling office	Physical meetup - shared service	Physical meetup - case handling	Electronic mail (open ended text)	Traditional letters or paper forms
1. Passport renewal											
2. Registration of a personal vehicle											
3. Applying for secondary level education											
4. Applying for university level education											
5. Scheduling a medical appointment at a hospital											
6. Submission of claims to the judiciary (e.g. a local court)											
7. Paying personal income tax											
8. Paying corporate tax											
9. Paying VAT											
10. Starting up a business (limited liability company)											

103. Countries were also asked to provide the costs per transaction in these selected services per service delivery channel.

OECD Digital Government Performance Survey 2014											
Online service delivery transactions: Transaction costs (2/3)											
Please provide the estimated transaction costs (2013, or most recent year available) for each of the following services, on each of the below listed service delivery channels. If services only are provided through some of the listed service delivery channels, or if only numbers for some service delivery channels are available, please provide the relevant numbers and elaborate below.											
	Average transaction costs	Online national portal	Authority specific webpage	Mobile platforms (2G: SMS...)	Mobile platforms (3G: App...)	Telephone - shared call service centre	Telephone - case handling office	Physical meetup - shared service	Physical meetup - case handling	Electronic mail (open ended text)	Traditional letters or paper forms
1. Passport renewal											
2. Registration of a personal vehicle											
3. Applying for secondary level education											
4. Applying for university level education											
5. Scheduling a medical appointment at a hospital											
6. Submission of claims to the judiciary (e.g. a local court)											
7. Paying personal income tax											
8. Paying corporate tax											
9. Paying VAT											
10. Starting up a business (limited liability company)											

104. Finally, countries were asked to provide the time spent by the user to complete the selected transactions per service delivery channel:

105.

OECD Digital Government Performance Survey 2014											
Online service delivery transactions: <i>Transaction time (3/3)</i>											
Please provide the average transaction time (2013, or most recent year available) for each of the following services, on each of the below listed service delivery channels. By transaction time, we are referring to the time spent by the user of a service in order to complete it. If services only are provided through some of the listed service delivery channels, or if numbers for only some service delivery channels are available, please provide the relevant numbers and elaborate below:											
	Average transaction time	Online national portal	Authority specific webpage	Mobile platforms (2G: SMS...)	Mobile platforms (3G: App...)	Telephone - shared call service centre	Telephone - case handling office	Physical meetup - shared service	Physical meetup - case handling	Electronic mail (open ended text)	Traditional letters or paper forms
1. Passport renewal											
2. Registration of a personal vehicle											
3. Applying for secondary level education											
4. Applying for university level education											
5. Scheduling a medical appointment at a hospital											
6. Submission of claims to the judiciary (e.g. a local court)											
7. Paying personal income tax											
8. Paying corporate tax											
9. Paying VAT											
10. Starting up a business (limited liability company)											

106. In addition to the above, countries were invited to provide information or comments with relevance for additional channels, the definition and scope of services and transactions, within all of the above three questions.

107. Countries were asked to provide an update to the Central Government ICT expenditures according to the categories outlined below.

[illegible]