

**PUBLIC GOVERNANCE AND TERRITORIAL DEVELOPMENT DIRECTORATE
PUBLIC GOVERNANCE COMMITTEE**

OECD E-Government Project

Building the basis for new e-government performance indicators: ICT spending by central government

Methodological Annex

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This document provides the methodological annex to GOV/PGC/EGOV(2011)3/REV1 ("Building the basis for new e-government performance indicators: ICT spending by central government"). It contains an overview table and individual country notes on the scope of ICT spending data collected.

Arthur Mickoleit (Arthur.Mickoleit@oecd.org; +33 1 45 24 91 32),
Barbara Ubaldi (Barbara.Ubaldi@oecd.org; +33 1 45 24 15 26).

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OVERVIEW OF GOVERNMENT ICT EXPENDITURE DATA COLLECTION AND REPORTING IN OECD COUNTRIES

Country	Availability	Public availability	Frequency		Horizontal scope		Vertical scope		ICT spending categories			Stock data on ICT HR	
			Regular	Ad-hoc	Central government	Beyond central	Federal/national	Sub-national	Capital	Operations	HR	Headcount	FTEs
Australia	●	●	●		●	–	●	○	●	●	●	–	●
Austria	●	–	●		●	–	●	–	●	●	○	○	–
Belgium	●	●		●	●	●	●	–	●	●	–	–	●
Canada	●	–		●	●	–	●	–	●	●	●	–	–
Chile	●	○	●		●	●	●	–	●	●	●	●	–
Czech Republic	–												
Denmark	–												
Estonia	●	–	●		●	●	●	–	●	●	–	●	–
Finland	–												
France	●	○	○	●	●	–	●	–	●	●	●	–	●
Germany	●	○	○	●	●	–	●	–	●	●	○	–	–
Greece	○	–	●						●	●	●	–	–
Hungary	○	–	●									–	–
Iceland	●	–		●					●	●	–	–	–
Ireland	–												
Israel	–												
Italy	●	○		●	●	●	●	●	●	●	●	●	●
Japan	○	–		●					●	●	○		
Korea	●	–		●	●	–	●	–	●	●	●	●	–
Luxembourg	–												
Mexico	●	–		●	●	–	●	–	●	●	●	–	–
Netherlands	–												
New Zealand	●	●		●	●	●	●	○	●	●	●	–	●
Norway	–												

● Data is available.
 ○ Data is available, with limitations. Explanations are provided in the individual country note.
 – No data is available.
 A blank space means either “unknown” or “not applicable”.

Country	Availability	Public availability	Frequency		Horizontal scope		Vertical scope		ICT spending categories			Stock data on ICT HR	
			Regular	Ad-hoc	Central government	Beyond central	Federal/national	Sub-national	Capital	Operations	HR	Headcount	FTEs
Poland	○												
Portugal	●	–		●	●	–	●	–	●	●	●	●	–
Slovak Republic	○												
Slovenia	●	–		●	●	●	●	–	●	●	○	●	–
Spain	●	●	●		●	–	●	●	●	●	●	●	–
Sweden	–												
Switzerland	●	●	●		●	–	●	●	●	●	○	–	–
Turkey	○	–		●	●	●	●	–	○	○	●	–	–
United Kingdom	●	●		●	●	●	●	●	●	●	–	–	–
United States	●	●	●		●	–	●	–	●	●	●	●	–

- Data is available.
- Data is available, with limitations. Explanations are provided in the individual country note.
- No data is available.

A blank space means either “unknown” or “not applicable”.

COUNTRY NOTES ON GOVERNMENT ICT SPENDING DATA

AUSTRALIA

Data collection

1. The Australian Government Information Management Office (AGIMO) is the central coordinator for the collection of ICT expenditures across government. The AGIMO works under the authority of the Department of Finance and Deregulation. The current collection of data and benchmarking on ICT government expenditures is undertaken under the mandate of the Financial Management and Accountability Act (FMA Act), 1997.

2. The methodology for collecting and benchmarking ICT expenditures was developed following “Sir Peter Gershon’s Review of Australian Government’s Use of ICT”, 2008. Development was done in an iterative manner involving individual government departments. An “ICT Benchmarking Framework” sets out the objectives of ICT benchmarking: to measure progress in improving the efficiency and effectiveness of ICT services in the delivery of Government programs, and inform other Whole-of-Government ICT policy initiatives. The Framework defines the annual benchmarking process and agreed metrics. A “Financial ICT Taxonomy” provides guidance to agencies to ensure the consistent treatment and categorisation of ICT costs.

3. Previously, the Australian Bureau of Statistics (ABS) conducted surveys of government technology use, expenditures and personnel. The survey was first conducted for the 1992-93 financial year and was discontinued after the 2002-03 financial year. Data collected by the ABS are not directly comparable to those of AGIMO due to significant methodological differences.

Publication

4. ICT benchmarking data by AGIMO are publicly available starting from the fiscal year 2008-09. Data are provided as downloadable booklets (PDF) and Excel sheets.¹ Moreover, the “Gershon Review” and data from the ABS surveys are publicly available.²

Frequency

5. AGIMO has undertaken the ICT benchmarking annually since the 2007-08 financial year.

Horizontal scope

6. Participate in the survey: government departments and agencies covered under the FMA Act (www.finance.gov.au/financial-framework/fma-legislation/fma-agencies.html). In domestic terminology, these cover: departments of state, agencies prescribed by the FMA regulations and parliamentary departments. This means, in other words, government ministries plus government agencies. It includes organizations that are part of the social security system, e.g. the National Labour Office and the National Pension Office. The survey does not cover state-owned operators or companies.

¹ www.finance.gov.au/budget/ict-investment-framework/ict-benchmarking.html

² <http://www.abs.gov.au/ausstats/abs@.nsf/productsbytitle/7D9BD067EFEA3747CA2568A90013940F>

Vertical scope

7. The ICT benchmarking exercise undertaken by AGIMO covers only national government institutions. The surveys conducted previously by the ABS include also spending by institutions at sub-national levels of government: state/territory and local government.

Spending categories

8. ICT expenditures are broken down along three different lines: a) business-as-usual vs. new capability spending; b) by service tower; c) by cost element.

9. The first break-down distinguishes between **business-as-usual (BAU) spending and non-BAU spending**, i.e. spending that would “significantly extend or enhance current agency capability”. This break-down originates from the “Gershon Review”, which estimated that 77% of Australian government spending on ICT was to merely sustain business operations. It recommended lowering that ratio to 70% so that ICT spending was directed more towards developing new capabilities. It was also recommended that half of the savings on BAU achieved through savings measures should be directed to a BAU Reinvestment Fund (BRF) from which agencies could draw to invest in strategic ICT projects.³

10. Business-as-usual spending in the AGIMO ICT benchmarking exercise is defined as:

- monitoring and operating the current ICT environment,
- maintaining, applying patches, installing service packs and providing minor enhancements,
- replacing existing capability that did not significantly enhance the current ICT capability,
- purchasing additional assets to meet business demand such as increasing storage capacity.

11. Non-BAU expenditure is defined as:

- developing substantial new functionality within an existing or new application,
- providing significant new technology capability such as server virtualization,
- significantly transforming the ICT operating model by adopting a different sourcing approach,
- upgrading application software or operating systems in areas such as financial and desktop systems.

12. AGIMO also breaks down ICT expenditures **by service tower**. The individual service towers are: applications; end-user infrastructure; facilities; gateway; helpdesk; ICT management; LAN and RAS; mainframe; midrange; storage; voice services; WAN.

13. Finally, AGIMO also asks departments to break down ICT expenditure data **by cost elements**. The available cost elements to categorize ICT spending are: hardware; software; carriage (i.e. telecommunications); services outsourced to external providers; services outsourced to government agencies (i.e. FMA Act agencies); internal personnel; external personnel (including consultants).

³ Details: www.finance.gov.au/publications/review-implementation-ict-reform-program/3-tighten-management-of-bau-funding.html

Non-monetary data

14. Data collected by AGIMO includes stock data on ICT personnel (FTEs), servers, operating systems, devices, storage capacity.

Further methodological notes

15. Data collected and publicized by AGIMO covers the expenditure categories proposed by the OECD (“ICT capital expenditures”, “ICT operating expenditures” and “ICT HR expenditures”). However, the break-down is not fully compatible with either of the break-downs practiced by AGIMO. For example, cost elements such as hardware or software represent aggregated capital and operating expenditures. Unless a break-down of expenditures by their capital and operating components can be done (like was the case in the ABS surveys), OECD comparisons using Australian data are restricted to analyzing aggregate ICT expenditures.

AUSTRIA***Data collection***

16. The Austrian Federal Chancellery (BKA) provided data to the OECD upon request. The data was computed by the Ministry of Finance, based on federal budget information.

Publication

17. Data is not publicly available.

Frequency

18. Data is available for the period 2005 to 2010.

Horizontal scope

19. Data covers all central government institutions covered by the federal budget.

Vertical scope

20. Data is provided for federal government institutions only.

Spending categories

21. ICT expenditures cover hardware, software, spending on shared ICT services and others (e.g. training expenditures). Break-downs are available by these four categories.

22. The data takes into account programming costs, i.e. the HR component of developing software. It does not, however, detach this individual item from the overall category “software”.

23. There is no provision for capital spending on hardware, i.e. depreciation of investments is not being done at the federal budget level, which means that all spending is based on current expenditures.

24. Limited data on outsourced ICT services is available, notably services payments made to the government-wide shared ICT services centre (*Bundesrechenzentrum*).

Non-monetary data

25. Some data is available on ICT employment in government. This covers the headcount of employees that have a dedicated ICT contract and those that receive extra payments due to ICT-related tasks. It does not

cover employees with ICT-related functions that do not have this specific type of contract, the number of which could be just as high as those with the contract.

26. No stock data on ICTs in government are available.

Further methodological notes

27. This report uses ICT expenditures in the Austrian government in aggregate form. The disaggregation provided by Austria is helpful for internal reporting; however it cannot directly be compared to the spending categories proposed by the OECD.

BELGIUM

Data collection

28. The *Service Public Fédéral ICT* (FEDICT) collects data on back-office ICT information across the Belgian federal administration. The “Fed-e-View/A” project uses over 100 administration-specific indicators and over 20 indicators for the overall federal government to guide federal e-government strategies. Data collected covers ICT expenditure and personnel data. The data is collected through questionnaires sent to ICT managers of federal organizations.

Publication

29. Aggregate results from the “Fed-e-View/A” project are publicly available in brochure form (PDF).⁴

Frequency

30. Data was collected twice: in 2004 and in 2009. Data for 2009 are provided both “as is” and in a harmonized form to allow comparisons with the 2004 cohort of institutions.

Horizontal scope

31. FEDICT collects data for the general government, i.e. including core ministries of the central government (termed “Federal public services”) plus public social security institutions (PSSIs) and federal scientific institutions (FSIs). Separate datasets are available for each of the three categories of government institutions. The reports contain detailed lists of the institutions included in each of the three categories.

Vertical scope

32. FEDICT collects data for federal government institutions only.

Spending categories

33. A detailed break-down of spending categories is not available. However, the FEDICT survey asks federal administrations to indicate their global ICT budget, **excluding expenditures on internal ICT personnel (salaries) and voice communications.**

Non-monetary data

34. FEDICT collects data on the number of ICT personnel (FTEs), servers, workstations, devices, remote access possibilities, open source uptake.

⁴ www.fedict.belgium.be/fr/binaries/09085_fedict_fediview_FR_tcm461-127424.pdf

35. The following is FEDICT's definition of ICT personnel: "*the number of FTEs reporting to the ICT Manager including the department's secretaries and supervisory staff. The ICT employees not reporting to the ICT Manager were not taken into account (e.g. employees having an "ICT bonus" but working in another department were not included here). Distinction was made between: a) Internal staff: statutory and contractual civil servants; b) Seconded employees: people with a SMALS or Fedict Select contract; c) External commercial employees: people under contract with a privately held company, as (semi)-permanent body shopping in the department (people working via project contracts with payment on results were not included).*"

Further methodological notes

36. For the purpose of this report, only expenditures of the central government ("FPS" in FEDICT terminology) and of the PSSIs are considered.

37. Data on overall FTEs used to calculate ratios by FEDICT differ from those reported to the OECD by Belgium in the context of the "OECD Survey on Public Employment, 2011". Shares calculated in this report use the numbers supplied to the OECD as a basis for "per employee" calculations.

CANADA

Data collection

38. The Treasury Board Secretariat, Chief Information Branch is developing a common ICT costing model to be applied across the federal government. The first and only survey so far was conducted in 2011 and covered 44 departments, representing an estimated 80 to 90% of the total ICT expenditures across the federal government of Canada. Revisions are underway to harmonize the methodology.

Publication

39. Data is not publicly available.

Frequency

40. The survey was conducted once, providing 2009-10 data on ICT expenditures.

Horizontal scope

41. The survey covers 44 central government departments and agencies, representing an estimated 80 to 90% of the total ICT expenditures across the federal government of Canada.

Vertical scope

42. The survey covers only federal government agencies.

Spending categories

43. The Treasury Board applies an IT costing model that breaks ICT expenditures down by a) cost elements, and b) government-internal IT services groups.

44. Cost elements are: hardware, software, human resources, facilities, external services, supplies and office equipment, transfer.

45. IT services groups are: distributed computing, application/database development and maintenance, production and operations computing, telecommunications, IT security, IT programme management.

Non-monetary data

46. No employment or stock data is collected through the survey.

CHILE

Data collection

47. The Budget Office of Chile's Ministry of Finance has access to administrative spending data on ICTs. Data provided to the OECD span the years 2004 to 2008. The first data collection exercise was initiated in 2003.

Publication

48. Data for 2004 to 2008 is not publicly available. The report on 2003 ICT expenditures on e-government is available for download.⁵

Frequency

49. Data is provided on a yearly basis.

Horizontal scope

50. Data is available for a total of 23 state entities, of which 20 can be classified as central government (i.e. Ministries and related agencies). The remaining three entities for which data is available are the Congress (legislative body), Judiciary, and General Comptroller (i.e. the supreme auditing institution).

51. The available dataset is very detailed and breaks down ICT expenditures by individual entities and then by organizational units within those entities.

Vertical scope

52. Data covers only institutions at the national level.

Spending categories

53. ICT spending is disaggregated using the following categories:

- Computer expenses
- Computer investment projects
- Current transfers
- Development and training
- Expenditures on HR for IT
- IT investment
- Telephone service
- Capital transfers to other public entities

⁵ www.dipres.gob.cl/572/articles-21677_doc_pdf.pdf

Non-monetary data

54. Further to ICT expenditures, data for Chile is available on the number of ICT-related employees. Three categories of employees are used: a) civil servants (“public servant contract” and “limited term public servant contract”, b) contractors and consultants (“honoraria-based employees).

Further methodological notes

55. The Chilean dataset covers institutions that go beyond the definition of “central government”. ICT expenditures by these institutions are not considered in this report.

ESTONIA***Data collection***

56. The Estonian Ministry of Economic Affairs and Communications provided data to the OECD upon request. The data was computed by the Ministry of Finance, based on budget information collected in line with the State Budget Act.

Publication

57. Data is not publicly available.

Frequency

58. Data was provided for 2008 and 2009 in a first instance; and later for 2010 and 2011.

Horizontal scope

59. Data covers the central government, i.e. a total of eleven ministries. A further set of institutions is summarized under “constitutional institutions”. This most likely covers legislative and judiciary institutions, which are not within the scope of the current report.

Vertical scope

60. Data is for the national government only.

Spending categories

61. Data for 2010 and 2011 distinguish between ICT investments and ICT operating expenditures. Any expenditure items whose original cost expands beyond EUR 2.000 is automatically accounted for as investment. These two categories can be broadly compared to the ones proposed in the report (ICT capital expenditures, ICT operating expenditures), although it needs to be confirmed whether HR expenditures are capitalized, e.g. for software development.

62. Operating expenditures for 2010 and 2011 are further divided into:

- Expenses for IT hardware and accessories
- Expenses on communication technology hardware and accessories
- ICT software
- ICT hardware maintenance and repair

- ICT rent and hosting expenses
- ICT development
- Other (which accounts for close to 10% of all operating expenditures in each year).

63. ICT spending categories in 2009 included: ICT equipment, software licenses and software development. In 2008, a fourth category – communications – was included, but was later integrated in “ICT equipment” because it refers to investments in communications infrastructures.

Non-monetary data

64. ICT employee data is available for 2010. It includes headcounts for categories of institutions (e.g. ministries and state chancellery) and [average] monthly salaries.

65. No data on ICT stocks is available.

Further methodological notes

66. The two datasets provided to the OECD (2008 and 2009; 2010 and 2011) use different categories of expenditures. Moreover, there seems to be some inconsistency in methodologies used; spending levels for the central government increase by a factor of 1.5 between 2008/2009 and 2010/2011.

67. Therefore only the most recent dataset (2010 and 2011) is taken into account for this report.

FRANCE

Data collection

68. The *Direction Générale de la Modernisation de l'État* (DGME) conducted a one-off exercise to capture ICT expenditures contained in the general budget of 2008. Besides that, ICT expenditures are also contained within the regular government budget. However, they are listed per government policy area (“mission”) and are not available as cross-government tabulation.

Publication

69. The 2008 dataset is available in form of a downloadable presentation.⁶

Frequency

70. Data is available for 2008 only.

Horizontal scope

71. The data covers the central government, i.e. all ministries. Teachers and education personnel are included as employees of the Ministry of Education.

Vertical scope

72. The data includes only national institutions.

⁶ See presentations at the OECD E-Leaders meeting 2010, Brussels: www.oecd.org/governance/eleaders/46189105.pdf and www.oecd.org/governance/eleaders/oecde-leadersmeeting2010.htm.

Spending categories

73. The data provided by France can be attributed to the categories established by the OECD: ICT investments, ICT operating expenditures and ICT human resources expenditures.

74. ICT investments contain:

- ICT equipment
- Networking equipment
- Software.

75. ICT operating expenditures contain:

- Services
- Hardware maintenance
- Accessories
- ICT consultants
- Other expenses.

76. ICT HR expenditures contain:

- Personnel expenses for civil servants
- Training.

Non-monetary data

77. ICT employees data is provided as FTEs. This data covers only civil servants, not ICT consultants.

Further methodological notes**GERMANY*****Data collection***

78. The Federal Ministry of the Interior provided data on government ICT expenditures upon request. The data was calculated from a specific budget item in the Federal Budget (“*Titelgruppe*” 55, which covers ICT expenditures).

Publication

79. Data is publicly available in the form of the Federal Budget. However, the Federal Budget is structured by individual ministries; no specific cross-tabulation exists for ICT expenditures across the entire government.

80. A public account of ICT expenditures by the entire government exists as a result of a request by a group of Members of Parliament. The request and its reply are available from the German Parliament's website.⁷

Frequency

81. Data provided to the OECD are for 2010 only.

Horizontal scope

82. Data covers all federal ministries and related agencies.

Vertical scope

83. Data is for the federal level only.

Spending categories

84. Data on ICT expenditures in the Federal Budget covers, although no individual break-downs are available:

- Expenses for telephone, stationary etc. and data transmission including equipment, hard- and software, maintenance
- Rent and leasing fees for data processing systems, equipment, hard- and software
- Training
- Expenses for contracts and services
- Purchase of data processing systems, equipment and software.

Non-monetary data

85. Further data on employment or stocks are not available.

Further methodological notes

GREECE

Data collection

86. The Greek Ministry of Interior provided government ICT expenditures upon request by the OECD. It is not clear from the reply, however, whether the data provided refers to ICT expenditures of the public administration or to expenses made under information society programmes of the government (e.g. loans to increase domestic ICT diffusion).

Publication

87. Data is not publicly available.

⁷ Request by group of MPs ("*Kleine Anfrage*") and the reply by the government ("*Antwort*") can be found here: <http://dipbt.bundestag.de/extrakt/ba/WP17/328/32829.html>.

Frequency

88. Data is provided for the years 2006 to 2009.

Horizontal scope

89. No information is provided as to the entities included in the data collection.

Vertical scope

90. No information is provided as to whether data collected covers only the national level or sub-national levels too.

Spending categories

91. The data broadly follows the categories proposed by the OECD.

Non-monetary data

92. No data provided on numbers of employees or stocks.

Further methodological notes

93. Data for Greece is currently not used in the report, until it is clarified whether ICT expenditures provided to the OECD refer to administrative spending or information society programme spending.

HUNGARY***Data collection***

94. The Hungarian Prime Minister's office regularly collects data on ICT expenditures from government ministries and agencies. The procedure follows a government decree (44/2005, III.11). Data for 2008 was made available to the OECD upon request.

Publication

95. Data is not publicly available.

Frequency

96. Data is collected yearly.

Horizontal scope

97. No information is available as to the entities covered by the data collection.

Vertical scope

98. No information is available as to whether data collection is at the national level only or also includes sub-national levels of government.

Spending categories

99. ICT expenditures data is provided as an aggregate of total expenditures.

Non-monetary data

100. No further data is provided.

Further methodological notes

101. Data for Hungary cannot be used at the moment, further methodological information is necessary to clarify what the data contains.

ICELAND

Data collection

102. The Icelandic Prime Minister's office provided data calculated by the Ministry of Finance upon request by the OECD.

Publication

103. Data is not publicly available.

Frequency

104. Data is available for 2008 only.

Horizontal scope

105. No detailed information is available as to the institutions covered.

Vertical scope

106. No detailed information is available as to whether only the national government is covered, or also sub-national levels of government.

Spending categories

107. The data covers expenditures across four categories: hardware, operational services, software licenses and development, infrastructure. No details are available as to whether human resources expenditures are included or not.

Non-monetary data

108. No data on employees or stock are available.

Further methodological notes

109. Until further clarification is provided, ICT expenditures by Iceland will be used only in aggregate form and under the assumption that HR expenditures are not included.

ITALY

Data collection

110. Data for the national government level was provided to the OECD by the Prime Minister's office (*Presidenza del Consiglio dei Ministri*). Data was collected from executives in charge of managing information systems (i.e. CIOs) from a total of 39 administrative bodies.

111. In addition to expenditure data for the national government, Italy also provided data at the sub-national level. This data comes from a survey conducted by the Italian National Statistical Office (ISTAT).

Publication

112. National government ICT expenditures are not publicly available.

113. Local government ICT expenditures are published by ISTAT.⁸

Frequency

114. National government ICT expenditures are available for 2009 and 2010. Data for 2010 are provided both “as is” and in a harmonized form to allow comparisons with the identical 2009 cohort of institutions.

115. Local government ICT expenditures are available for 2008 only (2009 for HR expenditures).

Horizontal scope

116. The Italian dataset covers two sets of institutions: a) 24 ministries and agencies within the central government (termed “central administrations” in the data submission); b) 15 other agencies and “non-economic public bodies” (termed “central government agencies” in the data submission), e.g. a number of publicly-funded research institutes or also the Italian Red Cross. It should be noted that the first group includes administrations of the national social security.

117. Aggregate data is available by individual ministry or agency; social security administrations can therefore be detached from the analysis in order to make expenditure data for Italy compatible with the chosen definition of “central government”.

Vertical scope

118. Two separate datasets are available, one for the level of national government and one for the sub-national level (aggregating regions, provinces, municipalities and “mountain local government authorities”).

Spending categories

119. At the national government level, Italy provides a very detailed break-down of ICT expenditures as financial commitments. The first disaggregation is done by the following broad categories:

- Basic hardware and software
- Application software
- Networks
- Services
- Other
- HR expenditures (“internal costs”).

120. Each of these broad categories is further disaggregated to allow distinctions between IT purchases, licensing and outsourcing, etc.

⁸ http://e_n.istat.it/salastampa/comunicati/non_calendario/20101117_00/.

121. Data for the local government level are disaggregated by the expenditure categories proposed in this report.

Non-monetary data

122. Further to ICT-related HR expenditures, the Italian dataset for the national level contains headcounts and FTEs for ICT-related personnel.

Further methodological notes

123. The current report will make primarily use of national government expenditures, in order to maintain comparability with data from other OECD countries.

JAPAN

Data collection

124. The Ministry of Internal Affairs and Communications provided the OECD with selected data on ICT expenditures in the government. Two separate datasets were provided: a) data on the national government's ICT expenditures; and b) data on the budget of the national programme for the "Formation of an Advanced Information and Telecommunications Network Society".

Publication

125. Data is not publicly available.

Frequency

126. Data on a) is available for 2009 and 2010.

127. Data on b) is available for 2005 to 2010.

Horizontal scope

128. No information on the institutions covered by dataset a) is available.

129. Dataset b) covers the central government ministries and agencies.

Vertical scope

It is supposed that both datasets covers only national government institutions, i.e. do not contain data on the expenditures at the level of local government.

Spending categories

130. Dataset a) covers the following categories of ICT expenditures:

- Development costs for information systems (e.g. design and programming)
- Operational costs for information systems
- General e-government costs, e.g. remuneration of ICT advisory personnel
- Subsidies and other costs.

Non-monetary data

131. No data on employees or stock is available.

Further methodological notes

132. Data on the national government's ICT expenditures can probably be used to compare with other OECD countries, provided further information is obtained on the scope of the data.

133. Data on information society spending is not part of the definition of government ICT expenditures proposed by the OECD and is therefore not considered in this report.

KOREA***Data collection***

134. The Korean Ministry of Public Administration and Security (MOPAS) conducted an ad-hoc survey at the end of 2011.

Publication

135. Data is not publicly available.

Frequency

136. Data is available for 2009 and 2010.

Horizontal scope

137. Data is provided for central government institutions, i.e. ministries and their agencies.

Vertical scope

138. Data is for the national government level.

Spending categories

139. The Korean government provided data following the OECD's categorization of ICT expenditures. However, it pointed out that some sub-categories needed to be estimated because no identical counterparts existed within the budget of the Korean government.

Non-monetary data

140. Data is provided on the headcount of ICT personnel.

Further methodological notes**MEXICO*****Data collection***

141. The Ministry for Public Administration (*Secretaría de la Función Pública*, SFP) conducted an ad-hoc collection of ICT expenditures upon request by the OECD.

Publication

142. Data is not publicly available.

Frequency

143. Data is available for 2010 and 2011. Only 2011 data covers human capital because this data was not maintained within the IT accounting system before 2011.

Horizontal scope

144. Central government institutions, i.e. ministries and their agencies.

Vertical scope

145. Data covers only the federal government.

Spending categories

146. The Mexican government internally uses ICT expenditures categories that can be matched with those proposed by the OECD.

- ICT capital expenditures: informatics assets, administration equipment, telecommunications equipment, other equipment, software, software property rights, software licensing.
- ICT operating expenditures: telecommunications services, rented equipment, other IT-related services, outsourced services, maintenance, consultancy, certification costs.
- ICT HR expenditures: personnel costs, personnel training.

Non-monetary data

147. Data on numbers of employees or stock is not available.

Further methodological notes

NEW ZEALAND

Data collection

148. The New Zealand State Services Commission (SSC) conducted a survey of 2008 ICT expenditures as part of the “Government Use of ICT” survey. Moreover, Statistics New Zealand published a one-off analysis of government ICT expenditures for 2006. Methodologies for the two surveys are different, which does not allow for comparisons side by side.

Publication

149. The results of both surveys are publicly available, as PDF downloads.⁹

⁹ 2008 survey: <http://archive.ict.govt.nz/plone/archive/resources/news/2009/20090408.html>; 2006 survey: www.stats.govt.nz/browse_for_stats/industry_sectors/information_technology_and_communications/govt-use-of-ict.aspx.

Frequency

150. Data is available for 2006 and 2008, albeit with different methodologies.

Horizontal scope

151. The 2008 data covers a total of 144 central government institutions and “Crown Research Institutes”.

152. The 2006 data expands beyond central government institutions to include also education institution, research and other institutes.

Vertical scope

153. The 2008 survey only covers national government expenditures.

154. The 2006 survey includes local government expenditures.

Spending categories

155. Data is broken down by capital and operating expenditures. The categories are defined by Statistics New Zealand as follows:

- Capital expenditure refers to all investment in new ICT, including new or improved ICT hardware or software, new infrastructure, and capitalised salaries.
- Operating expenditures covers all on-going ICT costs, including maintenance and servicing of ICT, upgrades and repairs of software or hardware, and salaries of ICT staff.

Non-monetary data

156. New Zealand provides data on the FTEs of ICT-related personnel and outside contractors.

Further methodological notes**POLAND*****Data collection***

157. The Polish Ministry for Public Administration and Digitisation (MAC) collects data on a limited sub-set of ICT expenditures in the public administration. The sub-set refers to expenditures on e-government services under the national “Operational Programme Innovative Economy”, which is unlikely to be a good approximation of overall government ICT expenditures in the sense developed in this report. Pending further clarification, data for Poland is not included in this report’s analysis.

PORTUGAL***Data collection***

158. The Portuguese Agency for the Public Services Reform (AMA) provided the OECD with an ad-hoc extraction of ICT expenditures. Data was compiled by the Ministry of Finance (MoF) and the Directorate-General for Public Administration and Public Employment (DGAEP).

Publication

159. Data is not publicly available.

Frequency

160. MoF data is available for the year 2010.
161. DGAEP data is available for 2007 to 2010.

Horizontal scope

162. Both datasets cover central government institutions, i.e. ministries and their agencies.

Vertical scope

163. Both datasets refer to the national government, i.e. do not include local government institutions.

Spending categories

164. The MoF and DGAEP datasets apply the categories of ICT expenditures proposed by the OECD. Break-downs are available for individual categories:

- ICT capital expenditure: ICT equipment, ICT materials, software.
- ICT operating expenditure: Communications, ICT consultants, ICT rental.
- ICT HR expenditures: Wages and salaries (without social contributions), training.

Non-monetary data

165. The DGAEP dataset includes headcounts for ICT employees.

Further methodological notes

166. For the purpose of the report, data from the MoF will be considered for ICT capital and operating expenditures. DGAEP appears to be the authoritative and more exhaustive source for ICT HR expenditures, given that MoF employment data seems to be limited to personnel costs for civil servants working on Information Society policies. This seems to be a narrower view on ICT HR expenditures than that taken by DGAEP. And indeed, DGAEP figures for ICT HR expenditures are about 6 to 7 times higher than those reported by MoF.

167. It must be noted that OECD data on public sector employment in Portugal is only available for the “general government”. This means the number of civil servants available to the OECD is potentially inclusive of local government employees and public sector healthcare and education staff. Data on ICT expenditures per civil servant will therefore not be compared to those of other countries.

SLOVAK REPUBLIC

Data collection

168. The Ministry of Finance reported that ICT expenditures are currently not collected across the government. The only approximation was published in 2008 as part of the National e-Government Strategy. There are no details available as to content of the data, so pending further clarification data is not included in the current version of the report.

Publication

169. The National e-Government Strategy is publicly available.¹⁰

SLOVENIA***Data collection***

170. The Slovenian Ministry of Public Administration collected government ICT expenditures upon request by the OECD.

Publication

171. Data is not publicly available.

Frequency

172. Data is provided for 2009.

Horizontal scope

173. The data covers a total of 177 budget users at the central level, including ministries and their agencies, but also institutions of the judiciary, the legislature and others.

Vertical scope

174. Data is for institutions at the national/state level.

Spending categories

175. The Slovenian dataset broadly applies the categories proposed by the OECD. No detailed breakdowns are provided, which means that the content of aggregate spending categories cannot be confirmed.

Non-monetary data

176. Data is provided on ICT employee headcounts.

Further methodological notes

177. The Slovenian dataset covers more institutions than foreseen by the definition of “central government”. Notably this includes the judiciary and legislature. These institutions have been detached and their ICT expenditures are not included in the report under Slovenia.

178. The Slovenian dataset appears to merge software investments and operational expenditures in one category. Pending further clarification, only the aggregate amount of ICT expenditures will be used in this report under Slovenia.

¹⁰ www.informatizacia.sk/the-egovernment-strategy-of-the-slovak-republic/4666s

SPAIN

Data collection

179. The Spanish Ministry for Territorial Policy and Public Administration collected ICT expenditures for the central, regional and local levels of government upon request by the OECD.

180. Data at the central level originate from a regular (yearly) reporting exercise in the “*REINA*” government information system. Data for the local government level are based on a regular (biennial) reporting exercise in the “*IRIA*” government information system. The methodology applied across the two systems is identical, which makes it possible to draw comparisons and conclusions across levels of government in Spain.

181. Regional government ICT expenditures are based on an ad-hoc survey conducted by the Ministry. A total of 10 regional governments provided data.¹¹ Based on this data, the Ministry extrapolated ICT expenditures for the remaining regional government authorities. 182.

Publication

183. The “*REINA*” reports provide a very detailed account of annual ICT expenditures across the state public administration; reports and Excel files are publicly available.¹² The “*IRIA*” reports provide a very detailed account of annual ICT expenditures across Spain’s local government (municipality) authorities; reports are publicly available.¹³ Both reports contain a rich set of information, e.g. on individual ministries’ expenditures, on suppliers, on stocks.

184. Regional government ICT expenditures are not publicly available.

Frequency

185. Data provided to the OECD, based on the proposed categories, covers the years 2005 to 2010. Reports of the “*REINA*” and “*IRIA*” series, however, go back to 1998.

Horizontal scope

186. Data collected at the central government level covers ministries and their agencies. Break-downs by individual agencies are available in the “*REINA*” series of reports.

187. Local government data from the “*IRIA*” reports covers the entire municipality administration. No break-downs are available.

188. Regional government data extend to the executive arm, i.e. ministries and their agencies.

¹¹ According to information received by Spain, sub-national ICT spending data covers nine *Comunidades Autónomas*: Asturias, Valencia, Cantabria, Castilla-La Mancha, Cataluña, Navarra, Islas Baleares, La Rioja, Islas Canarias (information for Galicia was received at a later stage); and the *Ciudad Autónoma* of Melilla.

¹² http://administracionelectronica.gob.es/?_nfpb=true&_pageLabel=P3401115701310558814745&langPae=gl&detalleLista=PAE_13107130334079513.

¹³ http://administracionelectronica.gob.es/?_nfpb=true&_pageLabel=P3401215701310559216838&langPae=es&detalleLista=PAE_13107141567539394

Vertical scope

189. As per above description, separate datasets are available for the central, regional and local levels of government.

Spending categories

190. The Ministry provided ICT expenditures data for all levels of government in line with the categories proposed by the OECD. Detailed break-downs can be done using information from the “REINA” and “IRIA” reports. The main categories in these reports are:

- Hardware (with sub-categories), software (with sub-categories), services (with sub-categories), personnel, telecommunications (with sub-categories), other.
- HR expenditures: salaries for ICT personnel (distinguished by different types of contracts), ICT training expenditures.

Non-monetary data

191. ICT employment data is available as headcounts. Moreover, the “REINA” and “IRIA” reports contain a wealth of information about ICT stocks in the public administration, about ICT training hours of civil servants, about the use of tele-work, digital signatures, etc.

Further methodological notes**SWITZERLAND*****Data collection***

192. Swiss Federal government ICT expenditures are highlighted in the yearly budget of the Swiss Federation.

193. ICT expenditures in 22 Swiss regional (cantonal) administrations were collected ad-hoc in 2010. The data collection was conducted by the Swiss Informatics Conference (“*Conférence suisse sur l’informatique*”), a standing organisation that coordinates ICT matters of the different regional public administrations.

Publication

194. Federal government ICT expenditures are publicly available as part of the Federal Government’s budget reports (Part 3, “*Explications complémentaires et tableaux statistiques*”).

195. Regional (cantonal) government ICT expenditures are not publicly available.

Frequency

196. Federal government expenditures on ICT are available for the years 2002 to 2010.

197. Regional (cantonal) government ICT expenditures are available for 2010 only.

Horizontal scope

198. Data for the federal government cover central government institutions, i.e. ministries and their agencies.

199. Data at the regional government level cover the public administration in the narrow sense of the term, i.e. excluding schools, hospitals, social security institutions, etc.

Vertical scope

200. Two separate datasets are provided: one for the federal government level and a separate one for regional (cantonal) administrations. No data is available for ICT expenditures at the level of municipalities.

Spending categories

201. Swiss federal budget categories for ICT expenditures can be directly applied to the proposed OECD categories. This is because the federal budget uses accounting methodologies to distinguish capital investments (“*dépenses d’investissement*”) from other expenditures in ICTs (“*charges avec incidences financières*”). Data is available on both appropriations and accrual expenditures.

202. ICT capital expenditures break down into hardware, software and other.

203. ICT operating expenditures break down into low-value ICT equipment, low-value software, maintenance costs, external services, telecommunications services and other.

204. HR expenditures are only available for government-internal shared services providers. This is too little to be taken as an approximation for overall government ICT HR expenditures.

Non-monetary data

205. No data on employees or stocks is available.

Further methodological notes

206. The Federal Budget outlines ICT spending by and to government-internal shared services providers, notably the Federal Office of IT, Systems and Telecommunication (“*Office fédéral de l’informatique et de la télécommunication*”) and the Armed Forces Command Support Organisation (“*Base d’aide au commandement*”).

TURKEY

Data collection

207. The Turkish State Planning Organization (SPO) provided the OECD with a combination of two datasets: a) public investments in ICTs as administered by the SPO; b) ICT operational and HR expenditures as overseen by the Ministry of Finance. Regarding a), it is important to highlight that data refers to allocations that have not necessarily been spent in a given year.

Publication

208. Data on ICT expenditures are not publicly available.

Frequency

209. Data is available for the year 2009.

Horizontal scope

210. Both datasets cover central government institutions, i.e. ministries and their agencies. Additional data on ICT investments is available for parts of the judiciary and the education system (universities).

Vertical scope

211. Data cover national/state institutions.

Spending categories

212. The category termed “ICT investments” by the SPO does not identically match with the definition proposed by the OECD for ICT capital investments. This is because besides spending on hardware and software, it also includes cost items for consultancy (operating expenditures) and training (HR expenditures). The investments cannot be disaggregated.

213. Data on operational ICT expenditures seems to include R&D spending, which can include items that are by definition capital or HR expenditures. Moreover, it includes expenditures on operation and maintenance of ICT systems, communications services.

214. Data on ICT HR expenditures includes compensation for ICT personnel.

Non-monetary data

215. No data is available on employee numbers or ICT stocks.

Further methodological notes

216. Due to the methodological issues with the spending categories, data for Turkey will be considered as an aggregate, without a break-down by capital and operating expenditures.

217. Given that data on ICT spending at the central government are provided from two distinct sources, it seems necessary to verify the detailed contents of each source to avoid systematic double-counting.

UNITED KINGDOM***Data collection***

218. Data on UK government ICT expenditures originate from an ad-hoc publication of data on public sector procurement. The data was collected and published by the Office of Government Commerce (OGC), an independent office of the Treasury.

Publication

219. The dataset is publicly available as a report and a set of (interactive) Excel files.¹⁴

Frequency

220. Data is available for 2009 only.

Horizontal scope

221. Data covers the central government, i.e. ministries and their agencies. Additional data is available on a wider range of government institutions as well as for “communities and local government”.

Vertical scope

222. The dataset covers institutions. It also lists the ICT expenditures of local government authorities.

¹⁴ <http://data.gov.uk/dataset/public-sector-procurement-spend>.

Spending categories

223. The dataset establishes ICT spending categories without further explanations as to what exactly they contain. A matching was done with the spending categories developed in this report:

- ICT capital expenditures: hardware, software, networking, other.
- ICT operation expenditures: maintenance and support, systems delivery, outsourced ICT services, telecommunications services, other.

224. No data on human resources expenditures is available.

Non-monetary data

225. No data on personnel or stock is available.

Further methodological notes

UNITED STATES

Data collection

226. In the yearly “Analytical Perspectives” to the U.S. government budget, the Office of Management and Budget (OMB) provides a dedicated section on IT portfolios. The OMB bases its analyses on two lines of reporting on ICT spending by federal agencies: a) the so-called “Exhibit 53”, which is an annual investment portfolio mandatorily reported on an annual basis by each federal department and agency; b) the so-called “Exhibit 300”, which is a necessary budget justification and report for major IT investments as defined by federal legislation.

227. The OMB uses the “Analytical Perspectives” to report to Congress on federal ICT spending and its impacts.

Publication

228. The OMB’s “Analytical Perspectives” are publicly available in the form of PDF reports and Excel files.¹⁵ Moreover, the “Federal IT Dashboard” is an interactive web application that allows every Internet users to access a wealth of aggregate and detailed data about the federal government’s ICT expenditures.¹⁶

Frequency

229. Annual expenditures data are readily available starting 2002.

Horizontal scope

230. Data cover all federal departments and agencies. Data can be disaggregated by individual departments and agencies. Moreover, micro-data is disclosed, i.e. the complete list of individual ICT projects at the federal government.

Vertical scope

231. Data are limited to the federal government level.

¹⁵ www.whitehouse.gov/omb/e-gov/docs/.

¹⁶ www.itdashboard.gov/.

Spending categories

232. The U.S. federal government budget applies a first categorization along the dimension of mission area vs. infrastructure spending. The definitions are as follows:

- Mission area spending is spending reported as IT investments directly supporting an agency-designated mission area or National Security System (i.e. the sum of investments identified as Parts 1 and 5 in “Exhibit 53”, starting with the 2009 budget).
- Infrastructure spending is spending reported as IT investments supporting infrastructure, strategic management of IT operations, or a grants management system (i.e. the sum of investments identified as Parts 2, 3 and 4 in “Exhibit 53”, starting with the 2009 budget).

233. Similar to the Australian case, the United States federal government then applies a second categorization of ICT spending along the dimension of modernization vs. operations costs. Although in its purpose similar to the distinction developed in this report between ICT capital and operating expenditures, the two methodologies do not perfectly match. Human resources expenditures in the US reporting, for example, are contained in both modernization and operations costs, depending on their characteristics. They cannot be singled out.

234. The definitions of the two categories are:

- Development, Modernisation, Enhancement expenditures (DME expenditures) are the costs for projects leading to new IT assets and projects that change or modify existing IT assets to: improve capability or performance; implement legislative or regulatory requirements; or to meet agency leadership requests. These expenses include: hardware; software; Federal and contracted labor for planning, development, acquisition, system integration; and direct overhead and project management. If the replacement of non-repairable or non-working IT hardware or software to continue the operation of an asset improves the capability or performance of an asset, the expense should be categorized as operations.
- Operations & Maintenance expenditures (O&M, or Steady-State costs) describes the expenses associated with an IT asset that is in the operations and maintenance life cycle phase. Operations expenses including maintenance projects and operation costs needed to sustain the IT asset at the current capability and performance levels including: Federal and contracted labor costs; corrective hardware and software maintenance; voice and data communications maintenance and service; replacement of broken or obsolete IT equipment; and overhead costs.

235. Finally, spending on “major” ICT investments is included in the above budget, as well as singled out for specific reporting purposes.

Non-monetary data

236. The OMB “Analytical Perspectives” on the 2011 budget include a headcount of federal government ICT employees.

Further methodological notes

237. For the purpose of this report, the U.S. federal government expenditures will be considered in their aggregate. It needs to be carefully considered if and how DME/SS expenditures can be matched to ICT capital and ICT operating expenditures as used in this report.