How and Why Should Government Activity Be Measured in "Government at a Glance"?
OECD GOV Technical Paper 1

OECD project on Management in Government: Comparative Country Data
by Nick Manning, Dirk-Jan Kraan and Jana Malinska (OECD GOV)

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How and Why should Government Activity be Measured in "Government at a Glance"?
OECD GOV Technical Paper 1

Nick Manning, Dirk-Jan Kraan and Jana Malinska (OECD GOV)¹

¹ This paper is being prepared under the guidance of the project Informal Overall Editorial Group (see Annex 4: Membership of the Informal Editorial Groups for details). Useful comments have been provided by David Cieslikowski and Steve Knack (World Bank), Zsuzsanna Lonti (Victoria University of Wellington), Koos Roest (Ministry of the Interior and Kingdom Relations, Netherlands), Morten Stromgren (Ministry of Government Administration and Reform, Norway), Richard Murray (Statskontoret, Sweden), Bernard Blanc and colleagues (Ministry of Finance, Economy and Industry, France), Douglas Sutherland (OECD Economics Department) and Daniel Bergvall, Martin Forst, Jonathan Kings and Elsa Pilichowski (OECD GOV Directorate). Parts of the draft have also benefitted from informal discussions with Paul Conway and Joaquim Oliveira Martins (OECD Economics Department), Stéphane Jacobzone (OECD GOV Directorate) and Enrico Giovannini (Director of the OECD Statistics Directorate). In discussing efficiency and productivity measures, it draws on parallel work within the OECD Economics Department led by Robert Price, Isabelle Jounard and Douglas Sutherland.
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### ACRONYMS

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<th>Description</th>
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<tr>
<td>CAF</td>
<td>The Common Assessment Framework is a result of the cooperation between the EU Ministers responsible for Public Administration. It is both a free-standing self-assessment tool, and a structured method for sharing information between agencies about functional areas.</td>
</tr>
<tr>
<td>COFOG</td>
<td>The classification of the functions of government (a classification used to identify the socio-economic objectives of current transactions, capital outlays and acquisition of financial assets by general government and its sub-sectors) (OECD Glossary of Statistical Terms: 2004)</td>
</tr>
<tr>
<td>COFOG2</td>
<td>The OECD Statistics Directorate, in close co-operation with Eurostat, is in the process of gathering data on public spending disaggregated into more narrowly defined functions than is currently the case in COFOG1. As an example, spending on Housing and community amenities of the COFOG1 classification is broken down in the COFOG2 into: Housing development; Community development; Water supply; Street lighting; R&amp;D housing and community amenities.</td>
</tr>
<tr>
<td>CoMET</td>
<td>The Community of Metros Benchmarking group</td>
</tr>
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<td>DAC</td>
<td>OECD Development Co-operation Directorate</td>
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<tr>
<td>DEA</td>
<td>Data Envelopment Analysis</td>
</tr>
<tr>
<td>ECO</td>
<td>OECD Economics Department</td>
</tr>
<tr>
<td>EIPA</td>
<td>The European Institute of Public Administration</td>
</tr>
<tr>
<td>Eurostat</td>
<td>Statistical Office of the European Commission</td>
</tr>
<tr>
<td>GOV</td>
<td>OECD Directorate for Public Governance and Territorial Development</td>
</tr>
<tr>
<td>Modified COFOG</td>
<td>This is an OECD approach, developed within the GOV Directorate, for interpreting COFOG1 and COFOG2 classifications to provide a break-down of expenditures into primarily individual and primarily collective goods, as well as goods in kind and cash transfers.</td>
</tr>
<tr>
<td>PISA</td>
<td>OECD Programme for International Student Assessment</td>
</tr>
<tr>
<td>PUMA</td>
<td>OECD Public Management Advisory Service (predecessor to OECD GOV)</td>
</tr>
<tr>
<td>SNA</td>
<td>United Nations System of National Accounts</td>
</tr>
<tr>
<td>STD</td>
<td>OECD Statistics Directorate</td>
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# GLOSSARY

<table>
<thead>
<tr>
<th>Terms</th>
<th>Use in this note</th>
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<tr>
<td>Aggregate indicator</td>
<td>See composite indicator</td>
<td>&quot;Aggregation denotes the compounding of primary data into an aggregate, usually for the purpose of expressing them in a summary form.&quot; (OECD Glossary of Statistical Terms: 2004)</td>
</tr>
<tr>
<td>Composite indicator</td>
<td>An indicator formed by compiling individual indicators into a single index on the basis of an underlying model (Nardo, Saisana et al.: 2005, p.8 – emphasis added)</td>
<td>Strictly speaking, if the individual indicators are combining different measures of a similar concept within the single measure, the result is an aggregate measure (see <a href="http://www.undp.org/oslocentre/cross_faq.htm">http://www.undp.org/oslocentre/cross_faq.htm</a>). However, for simplicity, all such compiled measures are referred to in this note as composite indicators.</td>
</tr>
<tr>
<td>Contingent liabilities</td>
<td>&quot;Significant&quot; liabilities which may be explicit (where the government is legally mandated to settle the obligation when it becomes due) or implicit (the obligation is based on public expectations and political pressures).</td>
<td>&quot;Obligations that have been entered into, but the timing and amount of which are contingent on the occurrence of some uncertain future event. They are therefore not yet liabilities, and may never be if the specific contingency does not materialize.&quot; (See <a href="http://www.imf.org/external/np/fad/trans/manual/gloss.htm">http://www.imf.org/external/np/fad/trans/manual/gloss.htm</a>). See also (Polackova: 1999)</td>
</tr>
<tr>
<td>Dataset</td>
<td>A set of indicators or variables concerning a single topic (e.g. regulatory quality)</td>
<td>A permanently stored collection of information relating to a single subject (OECD Glossary of Statistical Terms: 2004)</td>
</tr>
<tr>
<td>Derived indicator</td>
<td>A indicator produced on the basis of other indicators by a procedure other than through simple compilation or aggregation</td>
<td>&quot;A derived statistic is obtained by an arithmetical observation from the primary observations. In this sense, almost every statistic is &quot;derived&quot;. The term is mainly used to denote descriptive statistical quantities obtained from data which are primary in the sense of being mere summaries of observations, e.g. population figures are primary and so are geographical areas, but population-per-square-mile is a derived quantity.&quot; (OECD Glossary of Statistical Terms: 2004)</td>
</tr>
<tr>
<td>Efficiency</td>
<td>Costs per unit of output</td>
<td>In economics efficiency is used in two ways: operational or technical efficiency and allocative efficiency. Operational efficiency is costs per unit of output, given the existing input combination. Allocative (input) efficiency is costs per unit of output, given the input prices. The efficient input combination may change according to a change in input prices. Cost efficiency comprises both operational and allocative (input) efficiency. (Coelli, Rao et al.: 1999)</td>
</tr>
<tr>
<td>Final (end) outcome</td>
<td>The impacts on, or the consequences for, the community of the outputs or activities of government</td>
<td>The final result desired from delivering outputs. An output may have more than one end outcome; or several outputs may contribute to a single end outcome. (<a href="http://www.ssc.govt.nz/Glossary/">http://www.ssc.govt.nz/Glossary/</a>)</td>
</tr>
<tr>
<td>Financial input</td>
<td>Costs of inputs financed by expenditures or tax expenditures</td>
<td>Costs at current prices of the inputs sacrificed to produce outputs. (Atkinson, Grice et al.: 2005, p.19)</td>
</tr>
</tbody>
</table>
### Terms | Use in this note | Formal meaning
--- | --- | ---
Financial proxy output | Value of outputs or groups of outputs, measured by input costs | The value of non-market output can be estimated directly or indirectly. The conventional method for the government is indirect, namely by the "input method ", which consists of measuring output value by the sum of input costs sacrificed for its production. (SNA 1993 pp. 129)

Gaming | A conscious response to manipulate outputs or the data as a reaction to measurement | "(R)eactive subversion such as 'hitting the target and missing the point' or reducing performance where targets do not apply" (Bevan and Hood: 2005, p. 8)

Indicator | A variable that contributes to analysis | "...quantitative or a qualitative measure derived from a series of observed facts that can reveal relative positions (e.g., of a country) in a given area. When evaluated at regular intervals, an indicator can point out the direction of change across different units and through time. " (Nardo et al: 2005, p.8)

Input (non-financial) | Units of labour, capital, goods and services sacrificed for the production of services | "Taking the health service as an example, input is defined as the time of medical and non medical staff, the drugs, the electricity and other inputs purchased, and the capital services from the equipment and buildings used." (Lequiller: 2005, p.4)

Intermediate outcome | A consequence of the outputs or activities of government which contributes towards the final outcome | An intermediate outcome is expected to lead to an end outcome, but, in itself, is not the desired result (http://www.ssc.govt.nz/Glossary/).

Mode of production classification | The key classifications used for "Government at a Glance" are: intermediate consumption (contracting out and procurement); compensation of employees; gross capital expenditure; social benefits in kind; and subsidies. (These are the main inputs in the economic classification.) | Disaggregation of expenditures into categories reflecting how the public sector uses these expenditures to produce goods and services.

Output (non-financial) | Output derived from the direct measurement of output volume and associated quality characteristics. | Measures which arise from "the calculation of a volume indicator of output using appropriately weighted measures of output of the various categories of non-market goods and services produced." (Lequiller: 2005, p.4)

Performance | Used non-analytically to convey that achievements matter as well as probity and parsimony in resource use | The term "performance" is used to indicate that there is a standard to which managers, agencies will be held to account - beyond complying with constraints on the consumption of inputs. 2 The difficulty in the term is that the standard that is to be achieved can refer to anything at all beyond inputs – whether it is in fact classifiable as processes, outputs, or outcomes.

Productivity | Output per unit of input or weighted inputs | Economists distinguish between total productivity, namely total output divided by total (weighted) input(s) and marginal productivity, namely change in output divided by change in (weighted) input(s) (Coelli et al: 1999).

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2 For example, "Performance-based management is a systematic approach to performance improvement through an ongoing process of establishing strategic performance objectives; measuring performance; collecting, analyzing, reviewing, and reporting performance data; and using that data to drive performance improvement." (Artley, Ellison et al.: 2001, p.3).
<table>
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</tr>
</thead>
<tbody>
<tr>
<td>Value</td>
<td>The numerical measure or a category assigned to a particular variable (can mean worth but only when this is clear from the context)</td>
<td>A data element value is a value out of a set of permissible values pertaining to a data element. Alternatively, value at the level of a single, homogeneous good or service is equal to the price per unit of quantity multiplied by the number of quantity units of that good or service; in contrast to price, value is independent of the choice of quantity unit. (OECD Glossary of Statistical Terms: 2004)</td>
</tr>
<tr>
<td>Variable</td>
<td>A characteristic of a unit (often it is equivalent to an answer to a single question in an OECD survey)</td>
<td>A variable is a characteristic of a unit being observed that may assume more than one of a set of values to which a numerical measure or a category from a classification can be assigned (e.g. income, age, weight, etc., and &quot;occupation&quot;, &quot;industry&quot;, &quot;disease&quot;, etc. (OECD Glossary of Statistical Terms: 2004)</td>
</tr>
</tbody>
</table>
1. Introduction

1. How government activities are measured, matters. Given the size of government and its role in the economy, the contribution of government to national economic growth is of great significance, especially when looking at change rates over time. Recent work in the UK highlights that changing the basis of measurement of government activity can increase or decrease the measure of GDP significantly (Atkinson et al: 2005, p.16). Beyond economics, measuring government activity is important because of the size of its activities and the consequent need to understand what it is achieving with the very significant expenditures (across the OECD, between 36 and 57 per cent of GDP in 2004). Its achievements, or otherwise, emerge in the quality and nature of the goods and services it provides, its redistributive activities, and in the nature of its regulation of market and individual behaviour.

2. This Technical Paper has been prepared as a contribution to an active debate concerning measurement of government activities, as the OECD GOV Directorate builds up to the first publication of a major biennial OECD publication, "Government at a Glance", in late 2009.3

3. In preparing for the 2009 launch of "Government at a Glance", three annual Working Papers will be published, commencing in November 2006, each setting out the best available data at that point, and summarising its uses and limitations.

4. The overall project is ambitious in several dimensions:

   *It is ambitious in its scope* – recognising that describing the activities of the usual government actors – ministries, departments and subnational governments – is important but increasingly leaves blank spots. Many public sector activities are undertaken by private sector entities, but with significant public funding.4 In the case of concessions and legal monopolies, there may be little direct funding, but there may be an implicit contingent liability for government. It concludes that while "Government at a Glance" will primarily focus on activities that are financed from public funds or carried out by government owned enterprises, the bottom-line test for the inclusion of data or analyses in "Government at a Glance" will be that they describe events that contribute to or can be significantly attributed to activities that are undertaken with public funds, whether within or outside of core government, and whether those funds represent a direct transfer or are provided in the form of an implicit guarantee.

   *It is ambitious in its classification* – proposing to encompass six categories of variables: revenues; inputs; public sector processes; outputs; outcomes; and antecedents or constraints that contextualise government efficiency and effectiveness. It has further ambitions even within these classifications. For example, in considering outputs it harnesses a "modified COFOG"5 sub-classification that offers a break-down of expenditures into primarily individual and primarily collective goods as well as goods in kind and cash transfers – and yet a further "mode of production" sub-classification which provides insights into the nature of the inputs used: labour,

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3 The other Technical Papers are:
   Technical Paper 2: Issues in Output Measurement for "Government at a Glance"

4 The term private sector is used here and in the rest of this paper for all production sectors that do not belong to the public sector in the sense of the national accounts. This includes the financial and non-financial corporate sector, the non-profit sector serving households and the productive activities of the household sector. These distinctions are further explained in Table 1.

5 Classification of Functions of Government
procurement of goods and services, gross capital investment, social benefits in kind and subsidies. These refinements allow some interesting benchmarking and expose implicit government policy.

Above all, it is ambitious in the questions that it suggests that the data could assist in answering. It sets itself the challenge of providing data that will help governments and other analysts in two main ways:

- For individual countries, it will enable robust benchmarking between countries, using common units of analysis, facilitating a structured practitioner dialogue and moving away from simplistic best practice, uncritically promoting new developments.

- Longer term, it will contribute to OECD-wide lesson-learning concerning:
  
  - Sector efficiency and broader measures of institutional effectiveness, providing insights into the results of providing services via different institutional and managerial arrangements.
  
  - Observed relationships (which changes in public sector processes are associated with which changes in outputs?)
  
  - Absorptive capacity (public sector production constraints following significant increases in sector expenditures, and the converse).

5. Despite these ambitions, it proposes a path that is distinctively policy-neutral. "Government at a Glance" will take government sector policies as a given, and will provide information that may assist in illuminating whether these could be implemented more efficiently and how the arrangements for implementation differ between similar arrangements in other countries or over time. It will very specifically not seek to explore questions concerning the sector outcomes that governments are seeking to implement.

6. Having set out its ambitious proposals, this paper examines why this agenda is pressing. It reviews the persistent problem of public management reform recommendations which are based on few (or in fact no) facts and owe more to policy fashion than to evidence and with significant over-claiming about "best practice". Its review of current data availability presents a sobering picture, well-recognised in all recent analyses of public management reforms.

7. The paper summarises the available OECD data on inputs and public sector processes, and reviews the particularly limited internationally comparable data on outputs and outcomes. It describes the gradual increase in the data coverage as the annual Working Papers build up to the 2009 launch of "Government of a Glance", and summarises how the range of analyses possible should increase in step.

8. In reviewing the project strategy, the paper notes that there is a fundamental choice of strategy in building a set of public management indicators. The principal choice is between:

- Starting with a broad-brush approach, gathering aggregate statistics for the key stages in the public sector production process, and working towards some specific analyses; or

- Starting with specific, in-depth studies – such as developing unit costs for various public services outputs.

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Sector is used to mean any of the COFOG functions except for "General public services".
9. The most frequent request to the OECD is for basic benchmarking data, with senior officials seeking insights into how the structures and processes in their country compare to those in other countries. Starting from specific, in-depth studies would detract from the ability of the "Government at a Glance" to offer benchmarking in the short term. Thus the proposal is to start from the collection of a wide array of data, building up to more specific studies – rather than the reverse. Within this approach, the intention is to build out from areas in which the OECD Governance Directorate has some recognised competence. In observing that there are many other bodies and institutions that develop useful public management datasets, it proposes to establish the reputation of "Government at a Glance" so that inclusion of a dataset is a badge of honour. This requires establishing a clear data quality threshold for inclusion, ensuring consistency in the units of analysis, maximising opportunities for others to propose data, and encouraging particular collection efforts to cover key data gaps.

10. Overall, this paper speculates that OECD GOV might continue to undertake some data collection in core areas - as it has a distinct comparative advantage in its access to governments – but it might be necessary to combine this data collection role with an increased emphasis on networking. Combining its unique convening power with a clearer specification of technical standards and identification of data gaps will encourage other data suppliers to work on priority areas and conform to OECD standards. This may have the additional advantage of minimising overlapping survey demands on OECD member government time.

11. On some technical points, this paper proposes a very cautious approach to the use of composite indicators on the grounds that these suggest a spurious degree of precision in inter-country ranking. It suggests some experimentation in narrowly defined areas following some evaluation of the risks involved. It also notes that there is a different type of indicator that could attract interest in the project. "Derived indicators" could show the degree to which countries have made data available to facilitate benchmarking, or could identify public sector processes for which there are time series and where there has been a significant variation between two dates.

12. The paper concludes by noting that since "Government at a Glance" will collate as well as generate new data, it will be important to signal clearly to researchers and practitioners the areas in which new datasets could contribute to useful analyses. With this in mind, it offers an approach for identifying the data needed to deepen benchmarking, and extend efficiency studies and measures of institutional effectiveness.

2. Why measure government?

13. The government is a major economic actor in modern society. In the OECD area, general government expenditure comprised between 36.2 per cent (Korea) and 57.3 percent (Sweden) of GDP in 2004. The variation between countries is mainly explained by the size of the central government. Some additional variation is explained by the existence of a state level in federal countries, which is typically somewhat more costly than the highest subnational level in unitary countries.

2.1. The government delivers key services

14. The economic role of government in society is twofold: it provides goods and services in kind and it redistributes income through taxation (including social security levies) and transfers. Goods and services are partly sold to the citizens for significant prices, in which case government operates as a market producer, but mostly provided for free or at insignificant prices. Whereas the goods and services sold in markets are always individual goods, those provided for free can be either individual or collective goods.7

7 Individual good is taken here in the sense of the national accounts: a good that is acquired by a household and used to satisfy the needs and wants of members of that household). A collective good is a good
Collective goods in kind mostly concern the classical tasks of the state: general public services (costs of major state organs), defence, law and order, infrastructure. Individual goods mostly concern the tasks of the modern welfare state: health, social services, public housing, public transport, research and development subsidies, and environmental subsidies.

15. The divergence of the size of central government in OECD countries is mainly due to the provision of social security transfers in the sphere of unemployment, old age and disability and to the provision of individual goods in kind, mainly in the sphere of health and social services. However, even in countries where the government sector is relatively small, such as the United States, the expenditures of central government on private goods in kind and social transfers nowadays exceed those on public goods.

2.2. The government also provides non-economic and regulatory services

16. The government is not only a provider of goods and services in kind and a guardian of social coherence through the redistribution of income, but also provides less tangible outcomes through the regulation of behaviour. This concerns general behaviour in the market sector regulated through civil law, and the many markets where special legislation and market supervision is necessary because of inherent market imperfections (most particularly financial markets, telecommunication markets and energy markets). Furthermore the government regulates its own behaviour, firstly in constitutional law which regards the functioning of the main state organs and constraints on what government may do, and secondly in the large corpus of administrative law which regulates the competence of state organs and the rights of citizens in all areas of government activity. The most relevant aspect of all this regulation is not so much its characteristic as a public service or output (although it can also be seen and measured as such), but its behavioural effect on citizens and society at large.

2.3. How government is measured, matters

17. The output of government which is not sold in markets is traditionally valued in the national accounts as the sum of the inputs used in the production process: mainly compensation of employees, intermediate consumption (good and services purchased) and consumption of capital. Given the size of government, the contribution of government to national economic growth is of great significance, especially when looking at change rates over time. For instance, in the UK "in broad terms, a 1 per cent per year faster growth rate of government output raises the overall GDP growth rate by some 0.2 per cent" (Atkinson et al: 2005, p.2). Accordingly, the way of measuring the output of government strongly affects the growth performance of the national economy. Again taking the UK as an example, "between 1995 and 2003, GDP at constant prices grew at a rate of 2.75 per cent per year, using the direct output indicators for government output currently employed. If the output had continued to be measured wholly by the inputs, the recorded growth rate would have been 3 per cent per annum. In relation to international comparisons this difference is significant. GDP growth in the United States was 3.25 per annum over this period. The difference, for the United Kingdom, between the input method (used by the United States) and the direct output method used to date by the United Kingdom, accounts for nearly half of the difference in the countries’ published growth rates" (Atkinson et al: 2005, p.16).
3. What data will "Government at a Glance" encompass?

3.1. The scope of "Government"

18. Broadly, "Government at a Glance" will comprise measures of both the market and non-market activities of government and government owned enterprises. This is known as the public sector and includes what the System of National Accounts recognises as general government and the government owned part of the (quasi-) corporate sector. However, and somewhat experimentally, it also pays attention to other activities which are undertaken outside of core governmental structures and that are only partly funded through taxation or other public sector revenues (comprising a new classification of "private sector in the public domain"\(^8\)). The significance of this domain is its size and the potentially significant contingent fiscal liability that it represents to government.\(^9\)

19. The set of public sector activities summarised in Table 1 will be at the core of the classification system proposed for "Government at a Glance".\(^10\)

20. The logic for extending beyond the obvious lists of ministries, departments and subnational governments is simple, as many government activities are undertaken in state owned trading operations of one form or another. Extending further, many of the operations in the newly delineated "private sector in the public domain" are undertaken by private sector entities, but with significant public funding. In the case of concessions and legal monopolies, there may be little direct funding, but there is often an assumption that government will meet any implicit contingent liability that arises, with the probability that government would, in the event of major operational failure, underwrite the debts of these entities. Any work in this latter category must be somewhat tentative and experimental however, as little is known about the exact scope of this domain and there are many definitional problems.

21. The effect is that while "Government at a Glance" will primarily focus on activities that are undertaken by government with public funds or by publicly owned enterprises the bottom-line test for the inclusion of data or analyses in "Government at a Glance" will be that they describe events that contribute to or can be significantly attributed to activities that are undertaken with public funds, whether within or outside of core government, and whether those funds represent a direct transfer or are provided in the form of an implicit guarantee. The sequence in which this comprehensive coverage will be developed is set out in Expanding data coverage: project strategy below.

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\(^8\) This description has been devised specifically for this purpose and is not a recognised SNA term.

\(^9\) The term "significant" is important here. There is no assumption that government will automatically assume all financial responsibilities for all activities encompassed by "Government at a Glance" in the event of some service failure. The scope of "Government at a Glance" is intended to cover those activities which are politically important and therefore are most likely to represent such a liability, but there is no certainty.

\(^10\) This is consistent with the approach proposed in (Gallais: 2006).
Table 1: Activities encompassed by "Government at a Glance"¹¹

<table>
<thead>
<tr>
<th>Institutional domain</th>
<th>How transactions are recorded in the national accounts</th>
<th>Examples</th>
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</table>
| **General government** | The operations of budget-funded units:  
• The units of central, state and local governments  
• All social security funds at each level of government  
• All non-market non profit-institutions that are controlled and more than 50% financed by government units  
As defined by section S.13 in the System of National Accounts (SNA). | Central government, states, provinces, counties, municipalities  
Health fund, unemployment fund, pension fund  
Schools, hospitals, etc. that are largely funded and controlled by government but not owned by government |
| **Public sector** | The operations of market producers, controlled by government, selling goods or services at an economically significant price ("public enterprises"):  
• Public financial (quasi-) corporations  
• Public non-financial (quasi-) corporations  
As defined by S. 11 and S12 in the SNA. | Publicly owned banks  
Publicly owned harbours, airports |
| **Private sector in the public domain**²² | The operations of market producers, whose indirect public funding comprises more than 50% of total revenue:  
• Non-profit institutions  
• Profit institutions  
As defined by S.11, S.12 in the SNA | Profit or non-profit private hospitals accessible to publicly insured clients |
| **Private sector in the public domain**²² | The operations of non-profit institutions serving households, financed more than 50% by government, but not controlled by government:  
• Non-profit institutions serving households  
As defined by S.15 in the SNA | Schools, hospitals, etc. that are largely funded by government but not owned nor controlled by government |
| **Private sector in the public domain**²² | The operations of private enterprises with a distinctive and statutorily privileged market position:  
• Private sector utilities licensed to operate in very limited markets (water, energy, sewage, waste disposal, post, but not telecommunication)  
• Legal monopolies  
As defined by S.11 in the SNA | Energy companies, local public transport companies  
National train company |

¹¹ This characterisation builds on a framework that has been developed by Dirk-Jan Kraan, Elsa Pilichowski and Edouard Turkisch within the context of OECD work on the questionnaire for the Comparison of Employment in the Public Domain.

²² See footnote 8.
3.2. What "Government at a Glance" will not cover

22. The contribution of "Government at a Glance" is to provide an empirical basis for understanding the significance and impact of institutional and managerial reforms within the public sector. It will take government sector policies as a given, and will provide information that may assist in illuminating whether these could be implemented more efficiently and how the arrangements for implementation differ between similar arrangements in other countries or over time. It will very specifically not seek to explore questions concerning the sector objectives (outcomes) that governments are seeking to achieve.

3.3. A basic classification of the variables

23. The principal content of "Government at a Glance" will be a simple presentation of available key data on the public sector production process. At a sufficiently high level of generality, there is little disagreement on the logical steps involved\(^\text{13}\), but the devil is of course in the detail of the seemingly straightforward categories within this process.

\textbf{Figure 1: The basic public sector production process}

![Figure 1: The basic public sector production process](image)

\textit{Source: Based on (Hatry: 1999), (Pollitt and Bouckaert: 2004) and (Logic Model Development Guide: 2004)}

24. At root, this route from input to outcome draws from business management theories developed in the early 1980s to increase manufacturing production. The non-profit community adopted this model in the late 1980s and early 1990s. Since then, it has been adopted by both private and public funders as a means of determining programme results. Although it provides the basic road map for any exposition of data concerning the public sector, this approach requires some nuancing for the public sector.

25. \textit{Mapping the production process should reflect the diversity of inputs.} Inputs are public expenditures (including tax expenditures) that materialise in, of course, different types of physical input (labour, goods and services, and capital investment). As will be discussed, many public sector outputs present significant measurement difficulties and, in some circumstances, distinguishing between changes in the quality and volume of different types of inputs can represent a pragmatic proxy for changes in output.

26. \textit{Activities must be seen in the context of overarching structures and institutional arrangements.} Activity can refer to specific, routine and technical tasks undertaken within the public sector, such as surgical operations in hospitals or police patrols. Clearly, these routine, technical activities are a key component in converting resources into public value but for the public sector such a reductionist approach omits some fundamental questions. The architecture of the public sector, most particularly the mode of production (distinguishing for example between services that are procured or contracted out and those that are produced in-house) and the major cross-cutting institutional arrangements (such as the type of public service or the nature of the budgeting and accounting arrangements) are likely to represent significant constraints or enablers to these activities.

\(^\text{13}\) Noting that there is far less consensus on the socio-economic objectives that lead to the selection of desired outcomes, as this is a matter of normative economics and political preferences.
27. **There is some overlap between activities, outputs and outcomes.** For collective goods, outputs can be particularly difficult to measure and measuring activities might be a suboptimal but inevitable compromise. This is likely to be the case in relation to the security sector, and in relation to the production and management of economic regulations, for example. Where outputs can be captured, the quality characteristic of the output can best be measured by examining the degree to which the outputs have contributed to outcomes.

28. **Outcomes cannot be solely attributed to public sector outputs.** Contextual factors such as broader social conditions, cultural traditions, and natural disasters are often largely outside of the control of government. These have a significant bearing on the likelihood that outcomes will be achieved. Some authors refer to intermediate outcomes which they define as a result of the public sector activities that are expected to lead to a desired end, but are not ends in themselves (Hatry: 1999).

29. **Revenues and expenditures.** The input – process – output – outcome sequence looks at public policy from an operational or non-financial point of view. However, this operational sequence has a financial counterpart. Analysis of expenditures can throw light on any stage in the production process. In particular, the expenditure on different types of input can be examined, and the expenditures allocated to types of outputs can also be distinguished. In sum, "Government at a Glance" will distinguish between financial and non-financial measures of input and output.

30. In considering the public sector, it is also important also to look at the revenue arrangements. Examining how government raises its revenues (taxation, fees, property income, transfers, and the incurrence of public debt) will provide insights into the incentives and constraints that governments face in determining how to provide goods and services.

### 3.4. A disaggregated classification of the public sector production process

31. Figure 1 indicates five categories of variables that "Government at a Glance" will encompass: inputs; public sector processes; outputs; outcomes; antecedents or constraints that contextualise government efficiency and effectiveness and revenues. Input and output data will encompass both expenditure data (volume and prices) and non-financial data (units of inputs, units of outputs). Revenue data will also be provided.

32. Structuring the variables included in "Government at a Glance" within a production process classification does not imply that this idealised flow from inputs to outcomes can always be recognised in practice. As will be discussed below, there are many situations where the attribution problems between the stages in Figure 1 are so significant that no simple relationship can be identified. The classification has the purpose of providing similar units of analysis. When the attributions are clear and, for example,
measurable outputs within a given country/sector can be reasonably linked to specific inputs and measurable processes then the production process is a reasonable way of viewing the data. When this is not the case, these are simply measurement categories which can be compared across countries and over time.

Figure 2: Disaggregated public sector production process

Source: Based on (Van Dooren, Sterck et al.: 2006), (Hatry: 1999), (Boyne and Law: 2004), (Pollitt and Bouckaert: 2004) and (Algemene Rekenkamer: 2006)

Inputs16

33. For "Government at a Glance", input data will comprise both financial data (public expenditures including tax expenditures) and non-financial data (such as staff numbers and workforce composition).

34. Financial input data will be disaggregated into a "mode of production" classification using five input categories used in the National Accounts: labour, procurement of goods and services, gross capital investment, social benefits in kind and subsidies.17 The first three inputs apply to government production, the latter two to privatized production wholly or partly funded by government. Full details of the approach for disaggregating inputs by mode of production are set out in


35. Taking education for example, the labour input consists of the wages and salaries paid to teachers, school secretaries, caretakers, and other employees, together with the costs of employing them, such as employer taxes and pension contributions. Goods and services would include expenditure on exercise books, pens, lighting, heating, supply teachers, transport services, and items such as data processing services. Subsidies are the public contributions to, for instance, catering companies that provide school

16 This section draws significantly on (Atkinson et al: 2005)

17 The first data collection effort is in constant prices in national currencies. However, when the data are available, they will be transformed, e.g. deflated or in PPP.
meals and to various types of support institutes, such as educational consultancy firms, that are less than 50% publicly funded.

36. Labour is usually assumed to be the most important input for public services, and this is undoubtedly the case for areas such as education, child and elderly care, and the justice system. In countries where public services are increasingly outsourced to private producers, the direct wage proportion for the government decreases although the indirect proportion of wages, comprising employees funded by government money, might remain the same.

37. This mode of production analysis provides a benchmarking opportunity as it further reveals the preferences of governments concerning the way in which expenditures are utilised to deliver in kind goods and services. If the premise is accepted that in kind collective goods and services often have complex and hard to measure outputs and are more reliably delivered directly by the public sector, while individual goods and services are more efficiently delivered through outsourcing and contracting with private and not-for-profit providers, then benchmarking these distinctions between countries can lead to a productive debate.

Processes

38. The public sector, as defined in Table 1 is shaped by many cross-cutting managerial and institutional arrangements. In 'General Government', many human resource management arrangements are in common at each level of government, for example those that determine the degree to which staff move readily in and out of central government employment, often broadly captured in the distinction between career and position-based systems. Arrangements for pay determination and the way in which the very senior staff are managed, including their obligations to avoid conflicts of interest, are often covered by a common set of rules. The rules concerning budget preparation, execution and audit are also generally similar across this sector, and all operations are shaped by the central arrangements for preparing the medium-term macroeconomic and fiscal framework.

39. Sub-national governments operate within a common set of managerial, legal (and often constitutional) constraints, and intergovernmental arrangements, including transfers and fiscal rules, generally apply similarly to all entities.

40. Arrangements that impact on entities in the 'Other Public Sector' and 'Private Sector in the Public Domain' are likely more diverse, but the key will be to identify the significance of the arrangement, with a preference for data that illuminate processes with the widest possible application.

41. Overall, for "Government at a Glance", process variables will be classified according to the sphere of influence (general government by level of government, other public sector, private sector in the public domain), with preference for variables that highlight the existence and application of cross-cutting rules and institutional arrangements. To the extent feasible, variables that describe significant activities that are likely associated with the quality of hard to measure outputs should be identified separately.

Outputs

42. Non-financial output variables will not be included in the November 2006 Working Paper. It is anticipated that some key variables will be included in the November 2007 Working Paper 2. The reason
for this delay is to provide some opportunity for discussion on the appropriate framework for selecting and classifying them.\footnote{18}

43. However, financial proxy output data will be included: expenditures in real terms (indicating volume of services) classified according to functional sector (area of output) as set out in Box 1. For this purpose "Government at a Glance" will make use of a modified COFOG\footnote{19} classification. This classification goes a step further than COFOG1 and COFOG2 (see \textit{Glossary}) in that it offers a break-down of expenditures into primarily individual and primarily collective goods as well as goods in kind and cash transfers.\footnote{20} These distinctions are important as they determine the structure of resource allocation in the public sector. The distinction between in kind and cash transfers indicates the degree to which government considers that beneficiaries should retain a spending choice. The significance of the distinction between individual and collective goods and services points to different options for service provision. For instance with individual goods it is usually technically possible to provide the services as an entitlement (a claim of the individual on the state). Also, with individual goods it can be possible (and not inefficient in principle) to make consumption dependent on the payment of a private contribution.

\begin{table}[h]
\centering
\begin{tabular}{|c|c|c|}
\hline
\multicolumn{1}{|c|}{\textbf{In kind}} & \textbf{Primarily individual goods and services} & \textbf{Primarily collective goods and services} \\
\hline
Education & General public services & \\
Health & Defence & \\
Social services\footnote{21} & Public order and safety & \\
Non-market recreation, culture and religion & Basic research & \\
Market subsidies\footnote{22} & Infrastructure & \\
\hline
\textbf{Cash} & Social transfers & Foreign aid transfers & \\
\hline
& & General purpose and block grants & \\
& & Interest & \\
\hline
\end{tabular}
\caption{Initial functional classification for "Government at a Glance"}
\end{table}

The functional breakdown will follow the modified COFOG classification as summarised here. Full details are given in \textit{Annex 6: Technical Issues}.  

\footnote{18} A parallel technical paper has been prepared (Technical Paper 2: \textit{Current issues in Output Measurement for "Government at a Glance"}) under the guidance of the project Output Editorial Group (see \textit{Annex 4: Membership of the Informal Editorial Groups} for details).

\footnote{19} Classification of Functions of Government

\footnote{20} For a discussion of the methodology, see \textit{Annex 6: Technical Issues}.

\footnote{21} Social services is a group constructed within the modified COFOG classification, and is distinct from social benefits which is a group in the economic classification. Social services is mostly intramural and ambulant care for the elderly, the handicapped, children and social housing. It excludes health and education. Social benefits is broader group, encompassing all individual goods funded by government for social reasons, including education and health.
44. Technical Paper 2 contains a discussion of current issues in the measurement of non-financial outputs within the public sector. The discussion notes that the use of non-financial output measures for decision-making needs careful consideration. Planning decisions are more naturally loosely associated with ("informed by") output measures. By contrast, decisions for action concerning accountability and control can be more mechanically and automatically linked to ("driven by") output measures. It also notes, somewhat speculatively, that the transaction (consumption) approach to the measurement of outputs is problematic for accountability purposes and more suited for planning.\(^{23}\) The converse is seemingly true for the provision approach to the measurement of outputs.

45. The discussion on the mitigation of gaming problems in the use of non-financial output measures suggests that some attention must be paid to the development of independent measures of output quality – through either qualitative interpretation or quantitative measurement of the quality dimensions. It also highlights the significance of quality management and assurance systems for output data, and of the frequency and regularity with which the measures are repeated.

46. Subject to further discussion and comments, it is proposed that non-financial outputs are classified according to the basis of measurement (transaction/consumption vs. provision) and to the extent feasible, further classified by the uses of the output measures (planning vs. accountability and control) and, where appropriate, the way in which they are used (tight vs. loose connection to decision-making). Over time, variables capturing outputs should also be associated with data concerning the degree to which they are accompanied by independent measures of output quality, of quality management and assurance arrangements, and of the frequency with which the measures are changed.

47. As noted earlier, government also provides regulatory services. Regulatory output is intangible and unmeasurable other than via very crude proxies (number of new regulations, number of pages of regulatory materials etc.). Thus regulatory activity can best be measured by examining, on the one hand, the processes for generating and managing the regulations and, on the other, the outcomes (the effect of regulations on the key economic and social sectors).

**Outcomes**

48. As with the non-financial output variables, outcomes will not be included in the November 2006 Working Paper. It is anticipated that some key variables will be included in the November 2007 Working Paper. The reason for this delay is to provide some opportunity for discussion on the appropriate framework for selecting and classifying them.\(^{24}\) Technical Paper 3 suggests that consideration is given to identifying a set of "executive governance outcomes" which are primarily related to the activities of the executive branch of government. "Government at a Glance" will not contain sector outcomes (educational attainment, life expectancy, air quality) as it excludes discussion of sector policy objectives.

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\(^{22}\) Market subsidies in the modified COFOG classification is distinct from subsidies as group in the economic classification. It mainly includes transfers in the COFOG sectors of Economic Affairs, Environment, Public Housing and Community Services and Recreation, Culture and Religion (but not in the areas of Education and Health).

\(^{23}\) Output can be counted when the transaction is complete, i.e. when the output is consumed. This transaction approach is used in many existing direct output measures of public services, e.g. number of pupils, prisoners, crimes, number of fires attended, etc. The provision approach sees output as products or services that come out of the production process, regardless of whether they are consumed or not. Instead of the number of pupils or prisoners, the number of teaching hours or the number of cells are defined as the outputs. This approach is more common in public administration because the potential use of the data in holding people or entities to account is more evident.

\(^{24}\) See Technical Paper 3: Current issues in Outcome Measurement for "Government at a Glance".
49. "Executive governance outcomes" might be broadly of three types: public confidence, equity and fiscal/economic stability. Public confidence might encompass issues around trust in government, and associated concerns relating to the predictability and acceptability of government policy. Equity might encompass the measured distribution of services and benefits across diverse populations. Fiscal and economic stability might relate to the track record of government in these spheres.

50. In relation to trust, there are some survey data currently available offering some international comparability. However, there are many conceptual uncertainties in relation to the question that is being addressed in these surveys. In developing relevant measures, an effort on the scale of the OECD PISA survey would ideally be useful. A consistent data set would allow some movement towards assessing institutional effectiveness – addressing the question of which reforms of structures and processes really are associated with concrete changes in particular aspects of trust.

Antecedents or constraints

51. This category needs considerable further clarification. It is probable that it will be interpreted somewhat narrowly to refer just to the key co-factors that must be taken into account in reviewing the relationship between processes, outputs and "executive governance outcomes".

Revenues

52. Public revenues are commonly distinguished in tax and non-tax revenues. Non-tax revenues can further be distinguished in fees (charges for the use of public services), property income (proceeds from the sale or rent of property), concessions (payment for the right to exploit a natural resource or public monopoly), transfers and taxation. The latter encompasses both earmarked and general fund taxation. The revenue data will also include the incurrence of public debt and the stock of public debt, the latter being a measure of future taxation required for debt redemption.

53. In the November 2006 issue of the paper a beginning will be made with the presentation of revenue data for sub-central government. Particularly data will be presented concerning the split of sub-national revenues sources. Transfers from central government (grants) will further be classified according to type (discretionary – non-discretionary; earmarked-non earmarked; matching-non matching). Revenue data for central government will not be provided in the November 2006 issue.

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This section draws significantly on (Atkinson et al: 2005)
4. How can international comparable data assist governments?

54. As Figure 3 shows, the basic structure of the data proposed for "Government at a Glance" is that of a cube – with the three key dimensions of countries, years and data classifications.

55. Drawing on different comparisons within this cube, "Government at a Glance" will help governments and other analysts in two main ways:

• For individual countries, it will enable robust benchmarking between countries, using common units of analysis, facilitating a structured practitioner dialogue and moving away from simplistic best practice, uncritically promoting new developments.
  
  – It will contribute to OECD-wide lesson-learning concerning:
  
  – Sector efficiency and broader measures of institutional effectiveness, providing insights into the results of providing services via different institutional and managerial arrangements.
  
  – Observed relationships (which changes in public sector processes are associated with which changes in outputs?)
  
  – Absorptive capacity (can public sector production be scaled up quickly following significant increases in sector expenditures, and the converse).

4.1. For individual countries

Benchmarking and structured practitioner dialogue

56. As noted earlier, managing within the public sector is, and likely will remain, an art as much as a science, and practitioner experiences will continue to be a core source of guidance concerning future developments. Those practitioner experiences are best shared within a structured dialogue however, and there has been some concern about reform excesses that have resulted from inappropriately enthusiastic borrowing of others’ experiences (see 5. Consequences of weak data below)."Government at a Glance" is intended to assist in framing that dialogue through benchmarking – a structured debate between practitioners, agencies or governments concerning how and why things are different between them.
57. Proponents often link benchmarking with an assumption that if "best practices" have been developed in one setting, then it offers a vehicle for identifying how key elements might be exported and usefully adapted. Whether or not one subscribes to the concept that there are best practices independent of time and place, making comparisons within carefully selected parameters can sustain a productive debate about how and why things differ between settings and options for reform (Cowper and Samuels: 1997).

58. The key assumption of benchmarking is that the comparisons are not, per se, evaluative - although in practice, output or outcome benchmarking will inevitably come close to that. The purpose of benchmarking is to open up issues for subsequent investigation – to provoke interest in deeper examinations. The OECD public sector peer review exercises (Budget Reviews, Human Resource Management reviews, Regulatory Reviews, E-government Reviews, etc.) are ultimately based on benchmarking, and as "Government at a Glance" develops, these reviews will be strengthened with a broader array of comparative data around which to initiate discussions.

**Box 2: Dialogue matters in comparative learning**

In the context of comparative learning about health reforms, (Marmor, Freeman et al.: 2005) note that "...The last decades have seen a growing body of comparative study in health policy, but this growth was not matched by a growing understanding of the processes of policy learning from the experience of other countries. There is, in fact, little attention to methodological questions about this learning process."

They identify how dialogue can be structured to avoid glib and misleading interpretations of others' experiences, suggesting that the purpose of comparative analysis is:

- To provide insight into the local situation through simple explanations of what is happening elsewhere, providing some perspective.
- To illuminate the options, understand why reforms were undertaken in a specific context – and what made them work, or fail, there.
- To regard cross-national experience as "quasi-experimental", drawing lessons about why some reforms seem either promising or doable, both, or neither.

**Benchmarking approaches to common challenges**

59. Benchmarking can be used to compare inputs, processes, outputs or outcomes. Much of the practitioner literature emphasises its use to compare intermediate outcomes – very particularly customer satisfaction and perceived service quality.

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26 "Benchmarking comprises: (t)wo or more participants making systematic comparisons of processes and/or results in their respective organisations in order to learn about best practices and implement them in ways suited to their own organisation." (The Common Assessment Framework (CAF): Improving an Organisation through Self Assessment: 2002, p.53)

"Benchmarking is a method for improving performance by identifying, understanding, comparing, and adapting one’s own organization with the outstanding practices and processes of others." ("Best Practices and Benchmarking: Making Worthwhile Comparisons": undated, p.4). See also (Auluck: 2002).

27 "(A)t its simplest, benchmarking means: ‘Improving ourselves by learning from others’. ‘Benchmarking is simply about making comparisons with other organisations and then learning the lessons that those comparisons throw up’. Source: The European Benchmarking Code of Conduct." (The UK Public Sector Benchmarking Service: http://www.benchmarking.gov.uk/about_bench/whatisit.asp)

60. The key is to define a series of variables, and then whether though self-assessment as with the Common Assessment Framework (see Box 3) or through objective measures, to compare the results as a component of a structured dialogue concerning their significance and their likely impact on agency performance.

**Box 3: The Common Assessment Framework (CAF) and benchmarking**

The Common Assessment Framework (CAF) is a result of the cooperation between the EU Ministers responsible for Public Administration. A new version of the framework was prepared in 2002 by the Innovative Public Services Group, an informal working group of national experts set up by the EU Directors General in order to promote exchanges and cooperation in modernising government and public service delivery in EU Member States.

The CAF is both a free-standing self-assessment tool, and a structured method for sharing information between agencies about 9 functional areas, as shown in Figure 4.

**Figure 4: The CAF Model**

The European Institute of Public Administration points out that using the CAF allows an organisation to fill in the evaluation form on-line after the self-assessment has been conducted. The achieved results will remain anonymous, but the organisation will get feedback on its scoring against the average of other organisations that have used the CAF in the same country or the same sector of activity. The self-assessment results will be part of the European CAF database, which contains information with regard to the organisations that have used the CAF, their sector of activity, the size of the organisations in terms of personnel and contact persons. By offering key information the database can help public sector organisations identify suitable benchmarking partners.
4.2. OECD-wide lesson-learning

Developing measures of sector efficiency

Defining productivity in the public sector

61. The OECD Productivity Manual notes that "activities where non-market producers dominate... pose specific problems of productivity measurement, due to the difficulty or impossibility of observing and/or defining market prices or output." (OECD: 2001, para. 1.2).

62. Productivity is generally interpreted as a ratio of a volume measure of output to a volume measure of input use (see (OECD: 2001) and Glossary). Efficiency has two dimensions. Technical or operational efficiency is the degree to which the production process has achieved the minimal costs per unit of output given the existing mix of inputs. Allocative (input) efficiency is the degree to which the input mix has achieved the minimal costs per unit of output, given the prices of inputs. In general allocative (input) efficiency will require a change in the input mix if the prices of inputs change. Thus the two key objectives of productivity measurement in the public sector are:

- **To trace technical inefficiencies**: identifying opportunities for improvements in the ways that resources are converted into outputs.
- **To identify inefficiencies in the mix of production factors**.

63. Productivity measurements are of immense practical and policy significance within the public sector as they represents a counterweight to the implicit assumption that if a country spends a smaller share of GDP on, for example, health care or education than other comparable countries, then expenditure on such programs should be increased. However (Social and Cultural Planning Office: 2004) "demonstrates convincingly that there is no one-to-one relationship between resources made available to sectors like health care and education and the (overall) performance of the public sector. Put simply, in many cases more money does not guarantee more effective policy outcomes."  

64. Delivering the same services at lower costs could allow tax reductions and thus improve incentives to work and invest, while reaching better public sector outcomes (such as education) with the same amount of public money can be growth-enhancing.

65. In all cases, however, productivity and efficiency measures are valid only to the extent that there is a clear causal relationship between the factors involved.

Work in hand on public sector productivity and efficiency

66. Various empirical studies on public spending efficiency have been carried out since the mid-90s, mostly at a national level and often focussing on specific sectors (in particular education and to a lesser extent on health care and other sectors such as police) (Pollitt and Bouckaert: 2003, p.13).

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29 It is of course important to note that, as (Social and Cultural Planning Office: 2004) point out, differences in productivity are not the only explanations for the weak link between public money and public performance. The shape of the demand is unlikely to be the same between different countries, and demographic considerations require that additional funding is directed at different outputs in different settings – for example, requiring that additional funding for education is directed towards secondary rather than primary education with different unit costs. Second, the production of public services is, generally, labour intensive and thus different relative wage levels in the private and public sectors can make a significant difference in the cost of additional services.
67. At the sector level, output measures have been developed (such as success of individual schools in the national matriculation examinations) and the role of process variables such as school size or contextual variables such as parents' educational level has been explored in explaining differences in efficiency. These efficiency measures and institutional determinants often remain highly country-specific.

68. Output data are required in order to undertake any measurement of efficiency or productivity at the national level. For cross-country studies, there must of course be agreement that the variables are accurate and are measuring outputs to which all countries subscribe. This need for agreement on the outputs and, implicitly, on the policy objectives of such services explains why most empirical work has focused on the education sector. In education, PISA achievement scores have been used as the output/outcome variable and inputs measured as total public expenditure on education or as the volume of resources mobilised in the education system (such as the number of teachers).

69. Other examples of comparative efficiency or productivity studies include (Social and Cultural Planning Office: 2004) and current OECD work to measure efficiency in the education sector (OECD Economics Department). However, studies in this area have been bedevilled by the weak data. (Social and Cultural Planning Office: 2004) identified this as a major cause of concern. Other studies have resorted to rather weak measures of output with perception-based quality indicators (Afonso, Schuknecht et al.: 2006) which are likely to correlate with a general attitude towards government (Van de Walle: 2005).

**Reasons for caution**

70. Defining the relevant input and output variables for any efficiency or productivity analysis is far from straightforward as public services are complex activities, with multiple inputs and multiple policy objectives and output targets. Efficiency scores are sensitive to the choice of indicators.

71. Key choices that have to be confronted include the large variety of physical inputs involved in the production of public services (teachers, non-teaching staff, classrooms, software equipment, etc.). Taking public spending as the input would also be conducive to assessing the fundamental issue of whether governments are getting good value for money, though information on indirect public support (particularly via tax expenditures) is not available in most cases. In addition, relating the amount spent to outputs would not allow conclusions to be drawn as to whether inefficiencies reflect a sub-optimal use of inputs or high relative prices.

72. In any attempt to consider efficiency in achieving desired outcomes, the attribution problems emerge as very challenging. Outcomes reflect many factors which are outside the control of policymakers, at least in the short run. Life expectancy, for example, depends to a large extent on lifestyle and diet. Similarly, where public services are partly financed or offered by the government itself and partly provided within a regulatory framework by the private sector, the final outcome reflects the contributions of various outputs, many of which might be attributable to government but where the appropriate mix and contribution of each to the final outcome is not clear. Even the relevant government contributing outputs can be produced by a number of different institutions.

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30 This section draws significantly from the current work on efficiency in the education sector being undertaken by the Economics Division of the OECD, led by Robert Price, Isabelle Joumard and Douglas Sutherland.

31 (Joumard, Kongsrud et al.: 2004, p.116) provides a particularly good summary of the difficulties here.
Box 4: Developments in measuring public spending efficiency

Developments in measuring public spending efficiency look promising. Non-parametrical approaches have been increasingly used based on Data Envelopment Analysis (DEA). The basic idea of this approach is to view schools (for example) as productive units which use inputs (e.g. teaching time or public spending on education) and produce education services (outputs) whose quality characteristics can be measured through level of proficiency of pupils (e.g. PISA tests). The method produces measures of relative efficiency by deriving an "efficiency frontier", i.e. the production frontier which envelops the set of observations on inputs consumed and outputs produced by individual units or countries. The distance of observations from the frontier is then measured to obtain efficiency scores. Once the "efficient frontier" has been defined, the relative efficiency of public service providers can be measured as the distance of observations to the frontier, either in an international or national context (sub-national governments or groups of providers).

This approach allows benchmarking and the detection of sources of inefficiency (e.g. the mix or volume of inputs used and/or their costs). An attractive feature is that it does not require an a priori judgment on the desirable output/outcome level for each public spending programme which may reflect differences in societal tastes and choices. Rather, it allows an assessment of whether inputs are efficiently used to deliver given outputs.

One key concern is whether the output measure captures the value of the service. For example, in considering the use of PISA scores as the quality characteristic of an output, there is a risk that the PISA tests do not indicate the effectiveness of education – whether a 15 year old with a high PISA score is on the way to a successful career in something useful is not clear. The consequence could be that some amount of the resources which the analysis registers as 'inefficiency' is in fact used to teach the students something useful which is not captured by PISA scores.

Stochastic frontier analysis is a parametric method which starts from the estimation of a production function and then distinguishes the distance from separate observations into estimation error (noise) on the one hand and inefficiency on the other.

Typically DEA analysis and stochastic frontier analysis use a very limited number of output variables which might not fully capture the value of the services.

Another concern is the way in which the institutional drivers of efficiency are conceived. These can conceal prior assumptions concerning preferred institutional arrangements within the public sector (implying that decentralisation is always efficiency enhancing for example) particularly when composite indicators are constructed, and the construction of any measures of the institutional drivers of efficiency should be based on solid theoretical grounds.

73. Outputs may thus be a more relevant concept for assessing public spending efficiency to the extent that they first and foremost reflect the results of the public service concerned. Even then, measuring public sector output is not straightforward, as underlined by (Atkinson et al: 2005). The most significant challenges lie in the measurement of outputs for collective services such as defence and public order and safety. Eurostat note that "(f)or collective services, however, there is no transaction between producer and consumer since these are provided simultaneously to the society as a whole. It becomes therefore very difficult to define the output. It is very difficult to say for example what the unit of output is of defence or police services" (Eurostat: 2001, paragraph 3.1.2.1).

32 In fact, the distinction between individual and collective is related to, but not identical with, measurability - examples of collective public goods can be found with both low and high measurability. For example, job counselling has individual benefits but the hidden quality aspects make it undoubtedly hard to measure. Similarly, few would argue that quantity is a particularly relevant metric in policy advice.
74. There are two main approaches for assessing productivity of collective services which allow some movement away from pure "inputs". As Eurostat note, in the case of collective services a modified input method can be used in which the volume of each type of input is estimated separately, taking quality changes of each input into account.

75. Alternatively, activity can be measured. Activity is, 'for example, the number of operations in hospitals or number of patrols carried out by the police. As Atkinson notes, "activity indicators reflect what the non-market units are actually doing with their inputs and are therefore closer to the output" (Atkinson et al: 2005, p.31). This is undoubtedly an imperfect measure as, if for example improved medical treatments reduce the number of operations necessary, then the number of operations is no longer a useful indicator as a higher number would imply a decrease of output and productivity. However, for some collective services, activity indicators may be the only indicators that can be found' (Eurostat: 2001, paragraph 3.1.2.1).

**Box 5: The importance of corroboration in productivity measures**

"...no single number, however carefully constructed, can fully capture the performance of complex public services with multiple objectives. Productivity change should be interpreted in the light of a range of other information – the triangulation principle" (Atkinson et al: 2005, p.153).

There are three levels at which corroboration should be sought:

1. **The output data** should be examined for coherence with other evidence.
2. **At the level of the department or agency**, the input and output indicators should be related to other departmental or agency performance measures.
3. **A government-wide productivity measurement programme** (such as the US experience with the Federal Productivity Measurement Program conducted by the Bureau of Labor Statistics until its closure in 1994) should encourage robust approaches and national peer review in the collection of data and of analyses.

(Atkinson et al: 2005, pp.52-54)

**Developing measures of institutional effectiveness**

76. While efficiency or productivity builds on the relationship between inputs and outputs, institutional effectiveness examines the relationships between, on the one hand, public sector structures and processes and, on the other, executive governance outcomes. Thus, for example, the inclusive scope of "government" proposed for the publication series could, over time, provide insights into the results of different oversight arrangements in relation to changed measures of public trust.

Output measures for collective services could, in principle, be established by looking at the additional public value created. Assuming that collective goods provided by governments, where benefits are consumed jointly and non-excludably by the whole population, are also public goods then there is a marginal value to each consumer (Samuelson: 1954), and in theory it would be possible to add these marginal valuations to arrive at the total value.
Monitoring change through comparisons over time

Trajectories

77. (Pollitt and Bouckaert: 2004) identify, tentatively, some reform trajectories, noting that these are not neat and tidy, or indeed predestined, but that they seem to represent paths which OECD countries seemed to be attempting to follow in their modernisation efforts.

Table 2: Reform trajectories

<table>
<thead>
<tr>
<th>Budget reforms</th>
<th>Accounting reforms</th>
<th>Audit reforms</th>
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</thead>
<tbody>
<tr>
<td>1. Input-oriented line item budget</td>
<td>1. Cash-based</td>
<td>1. Traditional financial and compliance audit</td>
</tr>
<tr>
<td>2. + some performance information</td>
<td>2. Double-entry bookkeeping</td>
<td>2. + elements of performance and evaluation</td>
</tr>
<tr>
<td>3. + revised format and content</td>
<td>3. Accruals accounting with extended cost calculation supported by performance measurement system</td>
<td>3. Institutionalised financial, compliance and performance auditing</td>
</tr>
<tr>
<td>4. + revised procedures and timing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. + revised method of charging (accrual basis)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: (Pollitt and Bouckaert: 2004)

78. Monitoring of public sector processes over time will allow for a more robust assessment of the degree to which such trajectories are found in practice and whether significant departure from the mainstream is associated with any distinctive differences in context or in outputs/outcomes.\textsuperscript{33}

79. In the current public management climate, with a strong focus on "performance orientation" (Schick: 2005), one particularly interesting trajectory to track concerns changes in the way in which performance is measured – the nature of the output and outcome measures and how they are used. This would assist in responding to key questions in managerial and institutional reform concerning whether measures must be changed regularly as they inevitably lose their impact (Thiel and Leeuw: 2002), or whether changing them is a somewhat cynical attempt to maximise the apparent performance improvement (Talbot: 1996).

\textsuperscript{33} Public sector reform trajectories are also identified as significant to understanding the likelihood of reform success in developing countries ("Global Monitoring Report 2006: Strengthening Mutual Accountability - Aid, Trade and Governance": 2006, p.18).

It is possible that, over time, analysis of such paths might throw some light on a key evaluation question – what is the counter-factual? What would have happened if the reform had not been implemented? (Boston: 2000)
Contribution analysis

80. (Mayne: 1999) points out that one key value of monitoring change over time is to assist in unpacking complex attribution problems in examining public sector outputs and outcomes. Since agency or programme designs generally cannot be adjusted experimentally to assess impact, the challenge is how to determine whether and in what proportion programme activities and public sector processes contribute to outputs, and similarly which outputs contribute significantly to which outcomes. He notes that "where the programme activities have varied over time, showing that outcomes have varied in a consistent manner with the variation in activities can strengthen the argument that the activities have indeed made a difference. In the simplest example, if an expected outcome has been observed after (and not before) the program activity has started up, this suggests the program is having an effect. In a more complicated case, if the outcome improves at sites (or at times) where the program has been implemented but not at others (such as a national programme operating at many locations), the case for making a difference is even stronger." (Mayne: 1999, p.12).

Absorptive capacity

81. Large bureaucracies, public or private, can find challenges in ensuring that outputs increase appropriately with increases in inputs. When resources are scaled up rapidly, it is widely held that a significant part of those additional resources will be used to improve working conditions and incomes, or simply be wasted (Social and Cultural Planning Office: 2004, p.25). There are also more technical reasons why, at least in the short term, increased inputs might be associated with negative productivity growth rates. It is probable that the impact of information technology on productivity in the public sector mirrors that in the private sector, with the associated organisational changes reducing the short term benefits from new technology due to disruption of production processes (Dawson, Gravelle et al.: , p.59). The evidence seemingly suggests that in the UK output growth lagged behind the increase in inputs used during the period 1995 to 2001, implying, on some measures, a fall in public sector productivity. However, other explanations for this development might include the need for spending on long term investments, and weak output measures (Pritchard: 2003, p.27)

82. Time series data will allow some analysis of the absorptive capacity of government organisations, allowing cross-country comparative analysis of the impact of softer budget constraints following significant increases in sector expenditures.

5. Consequences of weak data

5.1. Public management recommendations based on few (or no) facts

83. The paucity of reliable data has, to date, deterred significant progress in all the analyses described above:

1. Benchmarking and practitioner dialogue have tended to resort to assertions concerning "best practice", with frequent comments that policy fashion has dictated many recent changes.

2. There are few well-developed measures of sector productivity or of institutional effectiveness. Recommendations concerning institutional arrangements remain based more on conviction than on proof.

3. Monitoring change over time has been equally limited, with many reforms launched and relaunched with little review of past experience.
Over-claiming on "best practice"

84. Many commentators point out that, in the absence of data, belief counts as much as evaluations. "...what we are dealing with here is best described as a kind of religion... a system of belief founded on faith and (which) therefore should not be analysed as though it were some kind of body of scientific knowledge subject to objective tests" (Pollitt and Bouckaert: 2003, pp.12-35). The same commentators point out that, remarkably, this lack of robust data has not diminished the certainty of the reformers: "There is something of a paradox at the heart of the international movement in favour of performance-oriented management reform. The reformers insist that public sector organizations must reorient and reorganize themselves in order to focus more vigorously on their results. They must count costs, measure outputs, assess outcomes, and use all this information in a systematic process of feedback and continuous improvement. Yet this philosophy has clearly not been applied to many of the reforms themselves, which have thus far been evaluated relatively seldom, and usually in ways that have some serious methodological limitations..." (Pollitt and Bouckaert: 2004, p.140).

85. These concerns about inappropriately enthusiastic and uncritical acceptance of managerial and policy reforms are echoed within more specialist areas such as the health sector, where (Marmor et al: 2005) find that: "There is... a considerable gap between promise and performance in the field of comparative policy studies. Misdescription and superficiality are all too common. Unwarranted inferences, rhetorical distortion, and caricatures – all show up too regularly in comparative health policy scholarship and debates." They conclude that "(p)erhaps the most important lesson we can draw from the overview in the current literature is that the development of a serious body of comparative work takes more time and effort than health policy makers are willing to spend. They feel pressures to take action and feel they cannot wait. At the same time, policy errors based on misconceptions of the experience abroad can be costly." (Marmor et al: 2005, p.343)

86. It is however worth noting that reforms are undertaken for many more reasons than just efficiency and effectiveness. The need to shake up a seemingly moribund administration, and political interest in being seen to take charge of a sector or an issue play their parts (Pollitt and Bouckaert: 2003, p.15).

Short institutional memories

87. A review of developments in executive agencies in the UK (Talbot and Johnson: 2006) points out that in 1988, the UK central government embarked on what has become one of the most quoted emblematic cases of disaggregation – the break-up of the previously monolithic civil service into 'executive agencies' as a result of the 'Next Steps' report. As a result of the reforms, the UK central government moved from having around 17 Ministries to, by the mid-1990s, having roughly the same number of ministries plus at one point nearly 130 executive agencies or organisations "working on Next Steps lines". This was seemingly impressive change and was widely cited and emulated in something of an "agency fever". The review suggests that in 2006 the picture is very different. From the large scale disaggregation of the early 1990s policy seems to have been significantly reversed itself, with the number of civil servants working in agencies having dropped from its high of 75% to just over 53% at most, and most likely to only 38%.

88. Similarly, a recent review of US government reforms suggests that "the deluge of recent reform may have done little to actually improve performance. On the contrary, it may have created confusion within government about what Congress and the president really want, distraction from needed debates about organizational missions and resources, and the illusion that more reform will somehow lead to better government" (Light: 2006).

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34 Similar points are made by (Hood: 2005; Pollitt: 1995).
89. Others might strongly challenge these propositions. However, with such limited time series data, it is all but impossible to determine the degree to which such alleged reversals or reform overloads have occurred.

**Limited understanding of possibilities for improving efficiency or effectiveness**

90. In the search for efficiency measures, the work by (Porta, Lopez-de-Silane et al.; 1998) illustrates the dilemma that researchers find themselves in, given the weak state of data. The authors assessed government performance using measures of government intervention, public sector efficiency, public good provision, size of government, and political freedom. Many of these data were at a very aggregate level and included composite indicators constructed from primarily perception-based data. The finding that, inter alia, countries that use French laws exhibit inferior government performance is, to say the least, contestable.

91. More recently, a much publicised European Central Bank publication concluded that "countries with lean public sectors and public expenditure ratios not far from 30% of GDP tend to be most efficient" and that "countries could use around 45 per cent less resources to attain the same outcomes if they were fully efficient. Average output scores suggest that countries are only delivering around 2/3 of the output they could deliver if they were on the efficiency frontier." (Afonso et al: 2006). Again, given the data and the reliance on composite indicators drawing on perception-based data, the results can be challenged.

92. On institutional effectiveness, then to the degree that there is a common goal amongst OECD countries of economic stability combined with low poverty, then the analysis by (Social and Cultural Planning Office: 2004) highlights that the current data can support few conclusions beyond the obvious points that history and culture matter. Certainly, no conclusions can be drawn concerning the relationship between these outcomes and institutional design within the public sector.

**5.2. Challenges in maximising benefits from reforms**

93. It is well-recognised in private sector change management, that temporary drops in efficiency follow structural reform – caused by actual costs and also by the displacement/distraction of time and energy. Private sector restructuring experts recognise this and actively work to reduce this temporary dip (and, separately, to maximise any impact from the "Hawthorne Effect"). However, the problem of temporary drops in efficiency is likely to be exacerbated if reforms are cumulative and follow in rapid succession, and if subsequent reforms are introduced before recovery from the productivity dip, then it is possible to envisage a series of cumulative dips that are unpromising for overall productivity improvements.

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35 For example, an indicator of government efficiency was constructed with perception-based data from the International Country Risk Guide (ICRG), Business Environmental Risk Intelligence's (BERI) Operation Risk Index and the The Global Competitiveness Report 1996. It also included public sector employment data which are fraught with definitional problems.

36 (Social and Cultural Planning Office: 2004) constructed composite indicators for economic stability from growth rate in GDP, unemployment rate, inflation and budget deficits/surplus as a percentage of GDP. Using that indicator, they showed that the Central European countries show moderate economic stability (particularly in terms of inflation, unemployment and the budget deficit), but also a low poverty rate. The Western and Northern European countries are generally characterised by a fairly positive score for both criteria. The Southern European countries as a rule score fairly negatively on both criteria. The Anglo-Saxon countries, including the United Kingdom, have moderate economic stability and a high poverty rate.

37 See, for example, (Dervitisios: 1998)

38 Improvements in productivity or quality resulting from the fact that staff are being studied or observed.
94. If this is a real phenomenon, then it is possible that it is getting worse – if a combination of the spread of term contracts for senior officials, and higher rates of turnover of staff have shortened institutional memories, so that the challenges of previous reform efforts are more rapidly forgotten. Hood points to an interesting example of this in the suggestion that policy-making capacity within the UK Department of Trade and Industry might have been weakened by the "constant re-organisation of departmental boundaries and structures... [which] weakened the confidence of DTI staff and reduced policy quality". (Hood, Lodge et al.: 2002, p.11)

95. The absence of robust data precludes the development of strategies to ensure that reforms are managed to maximise the efficiency or productivity returns.

6. Current data availability

6.1. A sobering picture

96. The problem of weak data on public sector management arrangements is well recognised. An ambitious project commissioned by the Government of the Netherlands in 2004 (Social and Cultural Planning Office: 2004) sought to trace differences in public sector performance (in terms of productivity, quality and effectiveness in the delivery of services) of the 25 EU member states and in four non-EU members of the OECD. The report was commissioned by the government of the Netherlands during the Dutch presidency of the EU, as a contribution to identifying how the goals set out for EU member countries in the Lisbon Agenda could be achieved. It examined institutional arrangements and performance in relation to education, health care, the criminal justice system, and public administration.

97. They examined "some of the most outstanding sets of international comparative data on public sector performance" (Social and Cultural Planning Office: 2004, p.25). They noted that "(t)he data available on public administration mainly concern subjective perceptions of performance, rather than actual measurements of performance. This lack of objective data makes it impossible to draw generalised conclusions as to what is the optimal administrative system, even if we wanted to." (Social and Cultural Planning Office: 2004, p.241). They concluded that it is "difficult to perform in-depth analyses, given the limited quality of and lack of detail in the data available... Therefore, it is to be hoped that international organisations – notably Eurostat and the OECD – continue their efforts aimed to broaden the scope and enhance the quality of statistical work in progress." (Social and Cultural Planning Office: 2004, p.25)

98. In an equally authoritative review, (Pollitt and Bouckaert: 2004) reach similar conclusions. They point out that the process of collecting comparative data on public management reforms within the OECD is a frustrating process because there are "...many issues for which relevant data are either non-existent, of doubtful reliability, or of doubtful comparability" (Pollitt and Bouckaert: 2004, p.21).

99. The recent increase in the number of "governance indicators" has not assisted in resolving this problem. See Annex 3: The contribution of aggregate "Governance Indicators" to an OECD debate.

100. In the light of these rather sobering observations, comprehensive reviews of potential sources of data have been undertaken within the OECD GOV Directorate, broadly using the OECD data quality framework (Quality Framework and Guidelines for OECD Statistical Activities (Version 2003/1): 2003):

- The Social and Cultural Planning Office of the Netherlands (SCP) was been commissioned to identify and review existing available non-OECD data relevant to the project. The results were set out in (OECD: 2005a);
• SCP were also commissioned to undertake a comprehensive literature review to identify potential additional sources of data and to assess any other significant work which advanced the measurement of public sector inputs, processes and outputs, or improved cross-country comparability of data on public sector performance, or which were facilitating the construction of policy relevant government indicators. As outlined in (OECD: 2005a) no significant additional sources of data or analysis were found.

• An internal review has been undertaken of potentially relevant OECD data on government.

6.2. OECD data

101. Over 1,000 variables (primarily survey questions) that the OECD GOV Directorate has collected in past surveys have been reviewed, examining sensitivity for publication, accuracy, variable format and unit of analysis. The use of these data in published reports has also been reviewed.

Table 3: Currently available data

<table>
<thead>
<tr>
<th>REVENUES</th>
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<tr>
<td>Sub-central government</td>
<td>Revenue structure</td>
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<tr>
<td></td>
<td>Tax autonomy</td>
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<td></td>
<td>Grants</td>
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<td>Fiscal rules</td>
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<tr>
<th>INPUTS</th>
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<tbody>
<tr>
<td>Overall input mix</td>
<td>Workforce size</td>
</tr>
<tr>
<td>Labour</td>
<td>Workforce composition</td>
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<tr>
<td></td>
<td>Compensation</td>
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<tr>
<th>PROCESSES</th>
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<tbody>
<tr>
<td>Budget practices and procedures</td>
<td>System overview</td>
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<tr>
<td></td>
<td>Budget formulation</td>
</tr>
<tr>
<td></td>
<td>Budget execution</td>
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<tr>
<td></td>
<td>Reporting, review and audit</td>
</tr>
<tr>
<td>HRM arrangements</td>
<td>System overview</td>
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<td></td>
<td>Pay policy</td>
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<td></td>
<td>Ethical infrastructure and oversight</td>
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<tr>
<td>Internal and external reporting</td>
<td>Open government</td>
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<tr>
<td>Centre of government</td>
<td>E-government preparedness</td>
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<tr>
<td>Management of regulatory quality</td>
<td>Performance measurement</td>
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<td>arrangements</td>
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<td></td>
<td>Government offices</td>
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<table>
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<tr>
<th>OUTPUTS</th>
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<tbody>
<tr>
<td>Central government</td>
<td>Financial proxy output</td>
</tr>
</tbody>
</table>

102. Some 100 variables appear to be policy relevant and suitable for inclusion in this Working Paper. This represents less than 15% of the available data, with the selection made on the basis that these best meet the quality criteria (see: Box 6 below) and that they offer a broad insight on a seemingly important institutional area. The breadth of the variables is particularly important as "Government at a Glance" will not include composite indicators in the short term (see 8.4. Cautious development of composite and derived indicators).

103. The data can be roughly classified as shown in Table 3.

104. The usefulness of available time series data within these sets is limited. Only two datasets contain time series data (from the budgetary database and concerning public sector pay and employment), and there are significant conceptual and definitional challenges in both of these datasets.

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39 The table confirms that the datasets do not include comparative data on central government revenue or on non-financial output data.
6.3. Forthcoming data from national accounts

105. National accounts data have reasonable time and cross-country consistency and they are updated on a regular basis. However, they provide some problems in interpretation, partly because of the high level of aggregation. The OECD Statistics Directorate publishes national accounts data on public spending by main function (COFOG1 which distinguishes 10 main functions) for 23 OECD countries, with the data available for the period 1995-2003 in most cases. These functions are too broad for any analysis for specific services. The breakdown by function at COFOG2 level is expected to be available at the end of 2006 for 13 EU countries for the period 2000-04. Efforts are being pursued to broaden the number of countries providing data on general government spending at the COFOG2 level but these data might not be available before the end of 2006.

106. Even the COFOG2 data will not draw the distinctions between collective and individual, and cash and in kind goods and services for which the OECD modified COFOG data were developed (see Annex 6: Technical Issues), but COFOG2 data will improve the accuracy of the OECD estimations in the modified COFOG data. In addition, national account data on public spending do not account for tax expenditures which can be rather large in some areas (e.g. health care and education) and used to very different degrees between countries.

107. As yet, national accounts provide data on public spending by main functions but do not contain data on volumes and prices for these functions (a deflator of public spending is only at the aggregated general government level). However, the Eurostat work on price and volume measures for government output (Eurostat: 2001) seems set to increase political interest in aggregate measurements of government output. The European Commission decision of 17 December 2002 (2002/990) clarified the principles for the measurement of prices and volumes of government services. The context was the increasing priority given to the harmonisation of GDP growth figures from 1997, and the lack of comparable data concerning non-market services, which are an important contributor to GDP. Broadly, Commission Decision 2002/990 outlawed the use of output indicators based primarily on measuring inputs from 2006. Eurostat is now checking the "Price and Volume Inventories" of member states to assess compliance.

6.4. Data availability on outputs/outcomes for specific public services

108. There are relatively few internationally comparable output data available. Available sources have been reviewed quite extensively in (OECD: 2005a, Technical Annexes 4 and 5) and in (Social and Cultural Planning Office: 2004) and these suggest that the education, health, criminal justice and transport sectors are those where comparable output measures are most likely to be found. Unsurprisingly, this corresponds to the sectors where most progress has been made in developing output measures at the national level (Curristine: 2005, Table 2). As was noted above, there are few hard distinctions between output and outcome data as the latter often serve as the quality characteristic of the more quantitative output data.

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40 See Glossary.

41 The national accounts break down general government spending into 10 main areas (the Classification of Functions of Government): General public services; Defence; Public order and safety; Economic affairs; Environment protection; Housing and community amenities; Health; Recreation, culture and religion; Education; Social protection.

42 See Glossary.

43 This change in the basis for measuring outputs is particularly well-explained in (Lequiller: 2005)
**Education**

- OECD Programme for International Student Assessment (PISA) has data on student attainment.

- International Association for the Evaluation of Educational Achievement has data from the Trends in International Mathematics and Science Studies.

- Eurostat education data include participation, graduation and drop-out rates.

**Health**

- The Health Care Database managed by the OECD Directorate for Employment, Labour and Social Affairs (ELS) provides information on inputs (e.g. public spending, number of doctors and nurses, etc.) as well as health status indicators.\(^{44}\)

- Eurostat health care data include numbers of patients treated and treatment data.

**Public Order and Safety**

- (European Sourcebook of Crime and Criminal Justice Statistics: 2003) includes output measures for the criminal justice sector, including convictions, sanctions/measures, and the prison population.

- Interpol crime data include numbers of (accused or convicted) offenders, and the clear up rates.


- Eurobarometer has public safety data.

- (Barclay and Tavares: 2003) has data on police staffing levels and numbers of prisoners.

**Transport (COFOG2 sub-classification of Economic Affairs)**

- The International Road Federation (IRF) World Road Statistics data include data on road networks, although there are some data quality and coverage issues.

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\(^{44}\) Other potentially valuable outcome indicators of health care services are the so-called Quality adjusted life years (QALYs) index produced by the University of York and the Disability adjusted life expectancy (DALE) index produced by the WHO.
7. What analyses will the data in the Working Paper series support?

7.1. Interpreting the data in the November 2006 Working Paper

109. The November 2006 Working Paper will set out the data that are available concerning public sector inputs and processes. Non-financial output data, and outcome variables will not be included in the series until the November 2007 Working Paper. As noted, the reason for this delay is to provide some opportunity for discussion on the appropriate framework for selecting and classifying them.

110. Even this limited set of data provides some interesting scope for analysis although since no output or outcome data will be provided, no analyses of efficiency or institutional effectiveness can be undertaken. Similarly, as there are no time series data, no analyses of observed relationships or absorptive capacity can be pursued. Thus, the utility of the data in the November 2006 Working Paper will be entirely concerning benchmarking.

<table>
<thead>
<tr>
<th>Table 4: What can benchmarking with existing data indicate?</th>
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<tbody>
<tr>
<td><strong>REVENUES</strong></td>
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<tr>
<td>Sub-central government</td>
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<td><strong>INPUTS</strong></td>
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<td>Overall input mix</td>
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<td>Management of regulatory quality</td>
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<tr>
<td><strong>OUTPUTS</strong></td>
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<td>Central government</td>
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</table>

The processes will concern "general government" within the SNA-defined public sector. This refers to the operations of budget-funded units within and financed by the budgets of central, state and local governments, and social security institutions (as defined by section S.13 in the System of National Accounts – see Table 1). In practice, the initial focus in this first Working Paper is even narrower than that would suggest, as most available data refer to central government only.
7.2. Potential interpretation of data planned for the November 2007 Working Paper

111. If it sets out some available output data, the second Working Paper in the series could encourage further developments in efficiency measurement and in analyses of institutional effectiveness – while also deepening the benchmarking efforts noted above.

Analyses of efficiency

112. Depending on reaction to the parallel OECD ECO study on measuring efficiency in secondary education46, there are various candidates for extending such efficiency studies:

- Education – deepening the analysis using a broader set of output measures.
- Health – although many issues to be resolved concerning attributions as personal and social preferences play a large part in health outcomes.
- Criminal justice – some potential for reviewing the efficiency of the criminal justice sector concerning convictions, clear up rates, incidence of reported crime.
- Transport – some potential for reviewing the efficiency of the transport sector in constructing and maintaining road networks.

Analyses of institutional effectiveness

113. As noted above, institutional effectiveness measures examine the relationships between public sector structures and processes, and "executive governance outcomes". Technical Paper 3 offers the possibility for discussion that these outcomes might be captured in three types of indicators: public confidence, equity and fiscal/economic stability.

114. The November 2007 Working Paper could undertake some preliminary analysis concerning the relationship between institutional arrangements and such governance outcomes. Taking the example of public confidence in government, it may be possible to examine the relationship between HRM arrangements for ethical oversight and measures of trust. Similarly some analysis could be undertaken of the relationship between, on the one hand, institutional arrangements and, on the other, equity of service delivery or budgetary deficits (as a contributor to economic and fiscal instability) and other budgetary outcomes. Examples of the latter could include an examination of the relationships between multi-year budgeting and broad fiscal discipline or specific budgetary outcomes such as reducing expenditures on staffing.

7.3. Looking ahead to interpreting data planned for the November 2008 Working Paper

115. As time series data becomes available in this third Working Paper, the data might allow some initial work in reviewing:

1. Observed relationships (Which changes in public sector processes are associated with which changes in outputs?)
2. Absorptive capacity (Can public sector production be scaled up quickly following significant increases in sector expenditures? How quickly can outputs recover from restructuring or from reductions in expenditures?)

46 See footnote 30.
8. Expanding data coverage: project strategy

8.1. Phased approach to establish credibility

116. There is a fundamental choice of strategy in building a set of public management indicators. The principal choice is between:

1. Starting with a broad-brush approach, gathering aggregate statistics for the key stages in the public sector production process, and working towards some specific analyses; or

2. Starting with specific, in-depth studies – such as developing unit costs for various public services outputs.

117. The challenge and opportunity in the development of Government at a Glance is that there are many interested parties. The most frequent request to the OECD is for basic benchmarking data, with senior officials seeking insights into how the structures and processes in their country compare to those in other countries. Starting from specific, in-depth studies would detract from the ability of the "Government at a Glance" to offer benchmarking in the short term. Thus the proposal is to start from the collection of a wide array of data, building up to more specific studies – rather than the reverse.

118. The phasing of data inclusion in "Government at a Glance" is intended to build out from the areas in which the OECD Governance Directorate has some recognised competence. The public management data collected by the Directorate has focused historically on data concerning public sector processes, as these institutional and managerial concerns have been the mainstay of OECD public management work since the establishment of PUMA. For the November 2006 Working Paper, efforts have been made to extend this to include new analyses of input data. However, no data are to be included on non-financial outputs or outcomes, on institutional domains outside of general government, or in any specific sectors as, although some data are available in these fields, the Directorate has not as yet established itself as a centre of practitioner debate on these topics.

8.2. A changing role for OECD GOV

119. The OECD GOV Directorate has unparalleled access to member governments for data collection. The data collected on government processes for the 2006 Working Paper result largely from the willingness of member governments to respond to detailed questionnaires. OECD GOV surveys are not the only potential source of data however. Within the OECD there are many other sources of data, most particularly on outputs and outcomes. Universities and research institutions, and indeed governments themselves, may undertake selected studies which generate useful comparative information on public sector processes and outputs.

120. The strategy proposed is to establish the reputation of "Government at a Glance" so that inclusion of a dataset is a badge of honour. This requires establishing a clear data quality threshold for inclusion, ensuring consistency in the units of analysis, maximising opportunities for others to propose data, and encouraging particular collection efforts to cover key data gaps. OECD GOV must continue to undertake some data collection in core areas - as it has a distinct comparative advantage in its access to governments – but it might be necessary to combine this data collection role with an increased emphasis on networking. Combining its unique convening power with a clearer specification of technical standards and identification of data gaps will encourage other data suppliers to work on priority areas and conform to OECD standards. This may have the additional advantage of minimising overlapping survey demands on OECD member government time.
Establish a clear data quality threshold for inclusion in "Government at a Glance"

121. As noted above (see: 8 Current data availability), the data included in this Working Paper were identified from an initial assessment of available data, supported by a comprehensive literature review. The initial assessment served to determine which existing data could be appropriate for this project, and to initiate a dialogue with data owners.

122. The data included in this Working Paper as a result of that review comply with the OECD Quality Framework although there is one key concern. Data credibility can be undermined when they are provided only by governments with no corroboration. The accuracy of such self-reported data are likely to improve as "Government at a Glance" makes them more directly available to a larger community of interested policy makers, public and academics. This must remain, however, an assumption.

**Box 6: Compliance with the OECD Quality Framework for Statistical activities**

OECD defines data quality as "fitness for use" in terms of user needs. This definition is broader than has been customarily used in the past when quality was equated with accuracy. It is now generally recognised that there are other important dimensions and quality is recognised as a multi-faceted concept. The OECD Quality Framework for Statistical activities (Quality Framework and Guidelines for OECD Statistical Activities (Version 2003/1): 2003) comprises seven dimensions, which can be summarised as follows:

1. **Relevance** of data products is a qualitative assessment of the degree to which they serve the purposes for which they are sought by users. Data can be well-recognized in the field and cited in government reports (high policy relevance) or little used beyond academic papers (lower policy relevance).

2. **Accuracy** is the degree to which the data correctly estimate or describe the quantities or characteristics they are designed to measure. Data can derive from well-accepted classifications and procedures, validated by reference to independent data sources (high quality) or from *ad hoc* classifications and procedures with no cross-checking against other data (lower quality).

3. **Credibility** refers to the confidence that users place in the data products. It is determined in part by the integrity of the process through which the data is generated. Data can be based on standard, replicable procedures capturing unambiguous data (highly objective), or include survey-based data (less objective) or expert assessments (least objective).

4. **Timeliness** reflects the length of time between data availability and the event or phenomenon they describe. Key questions include: is time series available, how frequently is the data produced, and what is the planned future availability of the data?

5. **Interpretability** concerns the ease with which the user may understand and properly use and analyse the data. It is determined in part by the adequacy of the definitions of concepts, variables and terminology, information describing the limitations of the data. Key questions include: have the questions the same meaning for all countries, and is the underlying data clearly defined?

6. **Coherence** is the degree to which data are logically connected and mutually consistent – within a dataset, across datasets, over time and across countries.

7. **Accessibility** reflects how readily the data can be located and accessed. Key considerations include the source of information and the ease with which the user can gain access to the data.
Maintain consistency in the units of analysis

123. The data classification to be used in "Government at a Glance" has been set out above. In essence, it requires that all variables for inclusion are mapped along each of these dimensions:

1. Stages in the production process (inputs, public sector processes, outputs, final outcomes, and antecedents or constraints that contextualise government efficiency and effectiveness) and revenues
2. Institutional domains (general government; other public sector; private sector in the public domain)
3. Functional sectors (education; health; social protection; recreation, culture and religion; economic affairs; environmental protection; housing and community amenities; general public services; defence; public order and safety)

Maximise opportunities for others to propose data

124. Annex 2: Proposal for inclusion of a dataset within "Government at a Glance" offers a relatively straightforward form for submitting data for inclusion in "Government at a Glance". It is proposed that, in early 2007, this form should be made widely available to governments and to research bodies and academic networks.

8.3. Coordinating with data collection developments in non-OECD countries

Non-OECD middle and high income countries

125. The coverage of "Government at a Glance" should be extended to non-OECD middle and high income countries (see Box 7) for two main reasons. First, there is a potential direct benefit. The public sector reform efforts of these countries can be intrinsically similar to those of the OECD, focusing on second order challenges which build on an entrenched discipline in the behaviour of civil servants and an organizational culture of following the rules. The possibility of benchmarking themselves against key developments in OECD countries is likely to be attractive, providing a spur to country efforts on public sector improvement. Although middle income countries, by definition, have higher per capita incomes, a third of the world's poor (people living on less than $1 a day) live in middle income countries. Improving the efficiency and effectiveness of the public sector in these settings is an essential component of poverty reduction.

47 The World Bank classifies countries by income group: Economies are divided according to 2004 GNI per capita, calculated using the World Bank Atlas method. The groups are: low income, $825 or less; lower middle income, $826 - $3,255; upper middle income, $3,256 - $10,065; and high income, $10,066 or more. Annex 5: Non-OECD countries for possible inclusion in "Government at a Glance" provides a more complete list. See http://siteresources.worldbank.org/DATASTATISTICS/Resources/CLASS.XLS for the full classification as at 1 July, 2005.

Classification by income does not necessarily reflect development status and the OECD DAC classifications identify Least Developed Countries separately, based on UN definitions.

48 This is in distinction to first order reforms, typically faced by low income countries, which are intended to achieve or strengthen public sector discipline. (Manning and Parison: 2003) explores this distinction in more detail.

49 See (World Bank: 2006)
126. There is also an indirect benefit. The point is often made, with justification, that public management concerns are downstream from the over-arching governance problems that limit development. Issues such as weak parliamentary oversight, opaque arrangements for political party-financing, media with low capacity or facing government restrictions and providing the public with limited access to information concerning the performance of government, are identified as the primary obstacle to development – with public management in effect a dependent rather than independent variable. The difficulty with this analysis is that it does not suggest where or how traction might be gained. The advantage of a structured exchange between senior practitioners on public management issues is that it provides an entry point to a dialogue with the most senior officials, opening up opportunities for broader governance and policy discussions. Also indirectly, as many of the non-OECD middle income countries are the beneficiaries of various forms of technical assistance and partnership arrangements with OECD countries, comparable public management indicators would assist in providing a common basis for dialogue concerning the focus of this assistance.

<table>
<thead>
<tr>
<th>Box 7: OECD collaboration on public sector reform with middle and high income (non-OECD) countries</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>China</strong> (Lower middle-income economy)</td>
</tr>
<tr>
<td>• Collaboration between China and the OECD on public governance issues was initiated 10 years ago. In 2003-2005, the OECD conducted policy dialogue with China on the impact of governance on the efficiency and effectiveness of public action in 10 policy areas: labour policies, the banking sector, competition, intellectual property rights, foreign investment, statistics, corporate governance and the management of state assets, agriculture, environment protection and higher education. Collaboration is continuing in relation to public administration, regulatory reform, and regional development and multilevel governance.</td>
</tr>
<tr>
<td><strong>Brazil</strong> (Lower middle-income economy)</td>
</tr>
<tr>
<td>• The OECD has undertaken extensive outreach work in the region in general, including on integrity and budget reforms. Brazil is now requesting more focused assistance on public sector efficiency and the OECD is responding.</td>
</tr>
<tr>
<td><strong>Russian Federation</strong> (Upper middle-income economy)</td>
</tr>
<tr>
<td>• OECD collaboration with the Russian Federation includes key issues in modernisation of government, particularly regulatory reform, budget reform and management of the senior civil service.</td>
</tr>
<tr>
<td><strong>Governance for Development Initiative in the Middle East and North Africa</strong> (including lower middle-income economies: Algeria, Egypt (Arab Republic), Iran (Islamic Rep.), Iraq, Jordan, Morocco, Syrian Arab Rep., Tunisia, West Bank &amp; Gaza; Upper middle-income (non-OECD) economies: Lebanon; High-income (non-OECD) economies: Bahrain, Qatar, Saudi Arabia and the United Arab Emirates)</td>
</tr>
<tr>
<td>• OECD outreach work is resulting in a series of practitioner networks on specific institutional areas (public expenditure, civil service and integrity, regulatory reform, e-government). A recent ministerial level meeting in Sharm El Sheikh has provided strong political support for the activity which is now developing, with the World Bank and other donors, some regional capacity building seminars and selected country pilot projects.</td>
</tr>
<tr>
<td><strong>Regional Network of Senior Budget Officials (SBO)</strong></td>
</tr>
<tr>
<td>• Regional SBO networks have been established in Asia, Latin America and Eastern Europe that bring together the budget directors from the respective regions. These practitioner networks replicate the modus operandi of the core SBO for Member countries. As part of the regional networks, peer reviews of the budgeting systems of countries in the respective region are undertaken in a similar manner to that done for Member countries.</td>
</tr>
</tbody>
</table>

127. As "Government at a Glance" grows in profile and coverage within the OECD, it is probable that interest from non-OECD countries in contributing will grow in step. Interest could be spurred by the
establishment of a challenge fund, or similar arrangement, which could co-finance the start-up costs of collecting and contributing data for countries which demonstrate a clear business plan for developing and using public sector data.\(^{50}\)

128. In parallel, attempts will be made to include data coverage for middle income countries. Initially focusing on Brazil, Russia, India and China – but subsequently broadening to other middle-income countries (see Annex 1: Phased increase in coverage of "Government at a Glance"). Initial focus of the data for these countries is likely to be core public sector processes (fiscal and budgetary management, ethical infrastructure and oversight, centre of government structures and modes of production).

**Low income countries**

129. For low income countries, various public management indicators are under development by the World Bank and partners, or are in used in diverse ways. As examples:

- The Public Expenditure and Financial Accountability (PEFA) programme uses 28 indicators to track public financial management ("Public Expenditure and Financial Accountability: Public Financial Management Performance Measurement Framework": 2006). These indicators track a combination of processes (comprehensiveness and transparency; quality of the budget cycle); intermediate outcomes (variance between actual expenditures and revenues and original approved budget, level of and changes in expenditure arrears) and antecedents or constraints (elements of donor practices which impact the performance of country public financial management systems).

- The Doing Business Surveys track various processes and intermediate outcomes, including the regulatory procedures for starting a business and obtaining licenses, registering property, paying taxes and cross-border trading (Doing Business in 2006: Creating Jobs: 2006).

- The Investment Climate Surveys (http://rru.worldbank.org/EnterpriseSurveys/) also provide data on processes and intermediate outcomes including senior management time spent dealing with requirements of regulations, consistency in interpretations of regulations, reported corruption, time spent in meetings with tax officials, time to clear direct exports through customs.

130. There is growing interest within the World Bank and other donor agencies in the development of a newer range of "actionable" public management and other governance indicators.\(^{51}\) The World Bank has

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\(^{50}\) As an example, in the UK Department for International Development Challenge Funds, bids (essentially comprising costed proposals for assistance showing how additional funds would complement government efforts) are invited for a centrally managed fixed sum. The bids received by a widely advertised closing date are evaluated, on their technical merits and on the basis of the sustainability of the effort after the grant has been utilised. The evaluation is undertaken by an independent panel and is undertaken in two stages. Stage 1 confirms that the criteria are met, more detailed proposals submitted in stage 2 are then evaluated and winning proposals selected by the panel. Bidding is competitive and grants are allocated according to the degree to which bids met the scheme criteria and objectives. See http://www.challengefunds.org/index.htm.

\(^{51}\) "Governance should be monitored regularly. To complement existing aggregate indicators, additional effort is needed to monitor specific, actionable indicators, such as quality of public financial management, procurement practices, and checks and balances. This monitoring can help to track progress, generate greater accountability, and build demand for good governance. It can also help underpin long-term dialog between countries and development partners, to develop realistic goals and sequencing of governance
obtained funding for development work and data collection in a particular range of low income countries (essentially those with a per capita income in 2004 of less than $965). There is some emphasis on human resource management indicators.

131. The focus of the public sector processes and outcomes under study in low income countries, and the purpose of the resulting indicators, is very different from that of "Government at a Glance". In low income countries, donors are looking for evidence of improvements in first order concerns such as reductions in large scale corruption and in the institutionalisation of basic budgetary and HRM systems.52

132. The opportunity for collaboration with these World Bank and other initiatives for low income countries is primarily at the level of the data collection framework. To the extent that some low income countries will graduate from that category, as the combined result of higher per capita incomes and more robust public sectors, then consistency in the broad categories of data tracked would allow some continuity in monitoring.

8.4. Cautious development of composite and derived indicators53

Composite indicators – important but risky

133. A collection of disparate variables on key aspects of the public sector provides both opportunities and challenges for policy makers. On the one hand, if each individual variable captures a discrete and narrowly-defined concept, then it is relatively straightforward to determine what the variable is describing and consequently the action necessary to change it is reasonably clear. However, on the other hand, a profusion of separate variables gives little indication about larger reform strategy – each might mean something at the micro-level, but stepping back, they provide a scatter shot picture of developments, leaving the reader to deduce the implications.

134. The traditional way around this problem is to accompany the individual variables with composite indicators that provide a more strategic snapshot of the situation, summarising complex issues and facilitating the use of the data. Ideally, the composite indicators provide the headlines, leading policy makers into a rational debate concerning the drivers of good or bad performance.

135. There are significant risks in this approach however, very particularly in relation to public management. The primary risk is that the political significance of any measures of public sector performance is such that the debate is more likely to stay at the headline level than to trigger a serious analytic focus on the underlying success factors, problem areas or reform possibilities. Second, there is the significant possibility that such a composite indicator might suggest a spurious degree of precision in inter-country ranking, and could be downright misleading.

136. The risk of a composite indicator being misleading arises because compiling various variables into a single indicator can disguise some major definitional or conceptual problems. This problem can be quite self-evident, as for example when there are blatant disagreements or confusion as to the variable being measured. Public employment data across the OECD have been notoriously flawed as definitions of government are known to differ, and so aggregating these into any larger composite indicator would be


52 See footnote 48.

53 This section has benefited from discussions with Joaquim Oliveira Martins, Paul Conway, Douglas Sutherland (OECD Economics Department) and Enrico Giovannini, Director of the Statistics Department.
obviously misleading. Other conceptual problems can be more nuanced, however. While accountability
seems to have an intuitively clear meaning, there are many dimensions (avoidance of conflict of interest,
public procurement process, fiscal transparency, public reporting on service delivery standards, etc.) and it
is not at all clear whether, or how, these can be combined.

137. Aggregation compounds these problems as definitional uncertainties become exacerbated by
statistical mixing of apples and oranges, with somewhat arbitrary weightings. As Knack notes: "Aggregate
(composite) indexes have no explicit definition, but instead are defined implicitly by what goes into them." (Knack: 2006). At the same time, and most perniciously, aggregation can obscure weaknesses in the
underlying data by focusing attention on the aggregation techniques.

138. Aggregation also brings other risks. It can make it difficult or impossible to track data over time,
as the mix of underlying sources is changing. It can also overemphasize particular aspects of a topic, as
some of the underlying indicators are interdependent and so are really measuring the same thing.

139. (Nardo et al: 2005) highlight these risks in detail
in the OECD Handbook on Constructing Composite Indicators.

The problem of the missing theory

140. Box 8 summarises the steps identified in the
OECD Handbook as necessary for the meaningful
construction of composite indicators. The binding
constraint on the construction of composite indicators is
the existence of a clear theoretical framework. This
criterion more or less rules out the creation of any
composite indicator at the whole of government level –
as there is simply no agreed framework exists for
evaluating the efficiency or effectiveness, or indeed any
other aspect, of overall public sector performance.

141. Box 9 sets out one way to cut some of the
purposes of public sector reform. (OECD: 2005b)
emphasises that the weight given to each institutional
reform or outcome varies by country and over time. In
sum, these might be widely prevalent objectives, but
there is certainly no common framework for
determining how much they matter and for whom.
There is no prospect of any defensible single aggregate measure that would show overall public sector
performance improvements, as there is no agreement on what such improvements comprise.

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Box 8: Summary of OECD criteria for
constructing composite indicators

- Clear theoretical framework
- Indicators selected on the basis of their quality
  and relevance
- The methodological choices in weighting and
  aggregation exposed
- Different approaches for imputing missing
  values exposed
- Indicators normalised to render them
  comparable
- Indicators aggregated and weighted according
  to the underlying theoretical framework
- Explicit assessments made of the robustness of
  the composite indicator
- Composite indicator correlated with other data
- Presentation should clarify and not mislead
- Underlying indicators or values should be readily
  available

Source: Developed from (Nardo et al: 2005)

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54 See also (Knack, Kugler et al.: 2003; Sudders and Nahem: 2004; Van de Walle: 2005).
55 It is important to note that this problem of constructing a composite index at the level of the overall public
sector does not amount to a proposition that there have been no performance improvements – either in
individual countries over time, or in the OECD as a whole. It does however lead to the proposition that, in
the current state of the art, there is little to be gained and perhaps much to be lost in claiming that at this
level it is possible to move beyond practitioner anecdotes to a more scientific basis.
142. That leaves the question of whether a set of indicators could be justified that could individually identify some useful components of performance improvements at the overall public sector level, without seeking to combine these. However, even at this more modest level, reviews of public sector reforms indicate that there is simply no agreement on a theoretical framework that would justify the construction of a composite measure of any of the six disparate dimensions identified in Box 9.

143. This point is emphasised in an authoritative review of ten OECD countries (Pollitt and Bouckaert: 2004). The review identifies ten contradictory objectives of public management reform – including increase political control vs. free managers to manage vs. empower service consumers, and improve quality vs. cut costs (Pollitt and Bouckaert: 2004, pp.159-181). Any attempted theoretical framework for composite indicators would have to justify choices concerning which side of the tradeoff wins, and the balance between these objectives.

Box 9: Some dimensions of public sector reform

The recent OECD-wide review of public sector modernisation (OECD: 2005b) provides an overview of the key features of recent institutional changes within government. The review highlights the multiplicity of objectives in recent reforms. At the level of institutions and structures, the review notes that reforms have entailed refinements to the mechanisms:

- For accountability and control (changes in internal and external control, and developments in public reporting);
- For preparing and executing the budget (developments in fiscal rules, strengthened emphasis on medium term perspectives and enhanced budget transparency); and
- For public employment and management (delegation of establishment control, recruitment and human resource management, decentralised wage bargaining, personalised contracts and individual responsibility for careers, and performance management with stronger monetary and career incentives).

The review also notes that these have been driven by concerns to improve key outcomes:

- Openness (Freedom of Information improvements, charters and e-government, improved consultation and strengthened offices of the ombudsman);
- Agility (strengthening the weight assigned to local and user preferences through decentralisation, clearer market signals through contracting and user charges, and diversification of agency forms in order to provide a focus on service output); and
- Quality\(^{57}\) and efficiency (through stronger mechanisms to motivate individual and agency performance and to highlight the outputs sought through the budget process).

144. There is scope for some experimentation of course – as long as the results are regarded as a contribution to the debate and not as an authoritative reading on the "real" state of public management reform. Such experimentation is probably best not undertaken by the OECD as this could suggest an inappropriate degree of finality about the conclusions. The components of a proposed "Index of Reform Capacity" by the Bertelsmann Foundation, distinguishing between process objectives (such as

\(^{56}\) The recent development of many and various aggregate measures of "governance" has not solved the problem (see Annex 3: The contribution of aggregate "Governance Indicators"). The underlying uncertainties embodied in current academic theories are set out well in (Boyne, Farrell et al.: 2003).

\(^{57}\) The dimensions of quality in outputs are explored in detail in Technical Paper 2.
accountability of the executive to parliament, accountability of political parties, capacity to formulate structural and policy reforms, etc.) and outcomes (participation in the electoral process, education levels, etc.) are an interesting example of how such trial measures could be developed (Fischer, Heilwagen et al.: 2006).

Proceeding with caution

145. There are some more narrowly defined areas however where, at least in principle, composite indicators could be considered for "Government at a Glance". However, in each case the risks would need to be evaluated very carefully:

- At the sub-sector level, there are some experimental steps towards the development of efficiency measures and, in time, composite measures could be considered with caution in specific areas of service delivery (secondary education etc.).

- The purposes of individual agencies are generally too diverse to allow a single framework for evaluation between countries. However, it is conceivable that composite indicators could be useful to compare aspects of performance for some carefully selected agencies that have very similar and very well-defined roles (audit bodies etc.) and where there is some consensus on their outputs or intended outcomes.

- The most likely area for development of composite indicators is in narrowly-defined categories of public sector processes (degree of openness of human resource management arrangements to lateral entrants, degree of consultation in preparing regulations, etc.) or in equally narrow categories of output (quality of regulations in a particular sub-sector, etc.).

146. Even in these more narrowly defined areas, the risks of composite indicators are considerable. Where "Government at a Glance" includes such indicators, it must at the least provide a general health warning.

147. The appropriate risk mitigation strategy would be to ensure that each composite indicator complies with the criteria set out in Box 8. Annex 2: Proposal for inclusion of a dataset within "Government at a Glance" sets out a framework for a report, which could be reviewed within the OECD GOV Directorate prior to the acceptance of a composite indicator, and which would be available to the relevant expert committee or, on request, to readers of "Government at a Glance".

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58 The current work within the Economics Directorate of the OECD will assist in determining the degree of consensus on productivity measures in education. See footnote 30.

59 Although this is unlikely to deter those who are willing to take the indicators out of context in order to make a point. "The widespread use of composite indicators… reflects an understandable tendency on the part of users to reduce the complex realities of governance to a single number, for a given country in a given year, in order to facilitate a comparison of the quality of governance among countries and/or over time. Yet the very techniques used to quantify and synthesize a diversity of qualitative governance features into a single number make it difficult meaningfully to compare those numbers either across countries or over time… Our analysis of how governance indicators tend widely to be used points to a great deal of misuse in this regard, by academics and other development analysts as much as by international investors and providers of development assistance." (Arndt and Oman: 2006, pp.64-5). The implication that such indicators can assess country performance will increase the incentives to misuse the results in this way.
Derived indicators to encourage country participation

148. There is a different type of indicator that would also add some value to "Government at a Glance". Derived indicators can be constructed to encourage country engagement in the project with minimal risk of implying a measurement of country performance. The interest here is to develop measures which attract attention, encourage country participation in the debate on public management reforms, while avoiding invidious (because theory-free) rankings of public sector performance.

149. As an example, an indicator of "Country Contribution to OECD Public Sector Benchmarking" could show the degree to which country data values are available for benchmarking. One method of calculation could be a normalised (0-10) index based on the proportion of variables included in "Government at a Glance", for which there are values for at least 15 OECD countries, which a particular country has provided data for.

150. A more nuanced example would offer a simple taste of what "Government at a Glance" could provide. An indicator of "Recorded Institutional Change" could list the quantitative indicators of public sector processes for which there are time series and where there has been more than a specified variation between two dates.

8.5. Focus practitioner attention on priority areas for data collection

151. To the extent that "Government at a Glance" will collate as much as generate new data, it will be important to signal clearly to researchers and practitioners the areas in which new datasets could contribute to useful analyses. To identify priority areas for new data collection, an extensive practitioner debate will be necessary, addressing three principal questions:

Where will further benchmarking help?

152. The discussion of 7.1. Interpreting the data in the November 2006 Working Paper above flagged the areas where current data will support benchmarking comparisons. The current data are the result of various ad hoc data collection exercises and have not been reviewed in their totality for relevance. Practitioner views are needed on where deeper benchmarking can contribute to practice improvements, and the specific data that are necessary to assist.

153. As a start to that debate, the emerging areas of practice that the OECD GOV Directorate is working on might be noted as a potential areas for extended benchmarking:

- **Integrity/corruption prevention activities** focusing on the management of risk at the public private sector interface.
- **Very long-term budget projections**, highlighting the reporting practices that selected OECD member countries have for reporting on long-term budget issues.
- **Fiscal rules** that set a permanent constraint on a government's fiscal policy – whether on an expenditure basis or a deficit basis.
- **Management of very senior officials**, identifying current practices in delegated pay determination arrangements, political involvement in senior level staffing appointments, and in performance-contracting for this level.
• **Risk management**, identifying the procedures for integrating risk in regulatory impact assessments and ex-post evaluations.

• **Structure of government**, setting out basic comparators in the functional division of responsibilities between tiers of government, the nature of arms-length-organisations in the federal (national) public sector, and the Ministerial or agency organisation of the federal (national) public sector.

*Which institutional arrangements matter for efficiency and effectiveness?*

154. If progress is to be made in examining efficiency or institutional effectiveness, then data must be available on the key institutional variables within the public sector. In short, what processes and institutional arrangements matter enough to make it worth collecting data about them? Ultimately it is an empirical question whether changing the nature of the budget preparation process can affect efficiency in service delivery, or whether more open government can increase public trust. However, if data are to be collected that will allow such questions of efficiency and effectiveness to be explored, there must of course be some reasonable basis for presuming that these are likely to be key areas. Broad data fishing exercises are likely to be costly and time-consuming – it is important to narrow down the range of likely variables first.

155. One particular approach to identifying likely drivers of efficiency and effectiveness would be to undertake a period of extensive negotiation with relevant OECD expert groups and committees, posing three questions:

- Which institutional arrangements are most likely to be the drivers of efficiency in service delivery (focusing on education, health, criminal justice, and transport)?

- Which institutional arrangements are most likely to be associated with improvements in "executive governance outcomes" (defined provisionally as: public confidence, equity in service provision, and fiscal/economic stability)?

- Which particular measures would best capture these institutional arrangements?

*Which additional output data should be collected?*

156. As noted above in 6.4. *Data availability on outputs/outcomes for specific public services*, the range of internationally comparable output data is limited, comprising currently some comparable data in a few areas of education, health, criminal justice and transport. If efficiency studies are to be developed further, there is some need for the development of new comparative datasets measuring output or service quality.

157. (Van Dooren et al: 2006) shows the rapid pace of development of output indicators in the three, admittedly somewhat atypical, countries: Australia, the Netherlands and the United Kingdom. These developments at national level (Table 5) suggest areas in which comparative output data might be obtained. For example, supreme audit institutions measure their performance by means of the number of financial statement audit opinions. This is an output indicator that can in principle be used for comparison as the unit of analysis and the definition is clear. Measures that capture the quality of output delivery, for example the turnaround time for issuing a passport or the response time to consular issues, are also in use in all three settings.
Table 5: Comparable output measures under development in Australia, the Netherlands and the UK

<table>
<thead>
<tr>
<th>Central agency: Supreme Audit Institutions</th>
<th>Foreign affairs (consular services)</th>
<th>Social security</th>
<th>Elderly care homes</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Number of financial statement audit opinions</td>
<td>- Number of consular assistance cases</td>
<td>- Employment rate (overall + by target group e.g. ethnic minority groups)</td>
<td>- Number of places for lodging and care</td>
</tr>
<tr>
<td>- Number of performance audits</td>
<td>- Number of entry clearance applications</td>
<td>- Duration of unemployment</td>
<td></td>
</tr>
<tr>
<td>- Percentage of recommendations accepted by the government</td>
<td>- Response time to consular issues</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Turnaround time for passport issue</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: (Van Dooren et al: 2006)

158. There are of course significant design issues in devising comparable measures. Definitions would need to be carefully compared and adjusted. For example, many Supreme Audit Institutions use the number of performance audits as an output indicator, but the definition of performance audit is likely to vary widely between them.

159. The second avenue for the development of output indicators entails pushing harder on comparable measures of output quality. One possibility is that for goods and services that have relatively standard dimensions (some health services, gaining access to education for children recently arrived in the catchment area, etc.) a "mystery shopper" approach is used, ranking the quality of the output along a standard series of dimensions. As Box 10 suggests, "data clubs" could be another approach.

160. Again, a practitioner debate is needed to identify those output measures which have the greatest resonance for governments, and which will allow the development of relevant efficiency studies.
Box 10: Off-line experimentation through "data clubs"

One promising approach for experimenting with the development of measures for service quality lies in the establishment of "off-line" "data clubs" – or communities of practitioners that agree to share information between them on a voluntary and confidential basis until they feel confident that the measures are fair and accurate. The Community of Metros (CoMET) Benchmarking Group is owned and run by the participants, with project management, administration and analysis carried out on behalf of the group by Imperial College London. Work on developing service quality measures is overseen by a president for the benchmarking group, rotated on an annual basis. A confidentiality agreement allows full data and information exchange within the group but not externally to overcome political sensitivity. The success of CoMET has led to the formation of other similar data clubs, including an association for small to medium-sized metro systems, for national railway benchmarking (Germany, Italy, Spain), and for benchmarking in bus services.

Generalising, it seems that the key features of data clubs are:

1. Members come together in a voluntary association to address a particular set of policy questions
   a. there is a very explicit option of not participating
   b. members are not just included in a survey automatically

2. Members are representatives of their country/agency
   a. they are actively supported by their colleagues and so are able to obtain authoritative technical support and key data
   b. they can obtain an authoritative view from their government/agency on whether to proceed or opt out

3. Members actively participate in determining the survey methodology
   a. the survey is explicitly designed to produce data that members agree will be useful for their policy purposes
   b. the data suggest practical and implementable actions

4. Members can opt out of the club once they see all the results
   a. the full results of the survey are provided to all members in confidence
   b. individual members can either insist that their data remain confidential, or opt out of the club with all references to their data removed.

Data clubs ensure the active involvement of survey participants in all stages of the data collection and production process, enhancing the practicality and relevance of collected data. Most OECD data collections have some of these features, but the OECD red tape scoreboard could be seen as an example of refining the approach by a more rigorous application of some of these principles.

9. Summary of the key propositions

161. This paper has made several propositions within the text. In summary, its proposals are as follows.

9.1. Scope of data collection

1. The key test for the inclusion of data or analyses in "Government at a Glance" should be that they describe events that contribute to or can be significantly attributed to activities that are

---

60 See ("Where Does Britain Rank? - International Public Services Rankings": 2005)
61 See (OECD: 2006)
undertaken with public funds, whether within or outside of core government, and whether those funds represent a direct transfer or are provided in the form of an implicit guarantee.

2. "Government at a Glance" will not seek to explore questions concerning the sector policy objectives (outcomes) that governments are seeking to achieve.

9.2. Classification of data

1. "Government at a Glance" will encompass six categories of variables: inputs; public sector processes; outputs; outcomes, antecedents or constraints that contextualise government efficiency and effectiveness and revenues.

2. Inputs will be classified according to a "mode of production classification" in five types of inputs (basically the economic classification applied to functional sectors of outputs). Outputs will be classified according to functional sector, making use of a modified COFOG classification.

9.3. Use of the data

1. The key uses of internationally comparable data are:

   a. For individual countries, such data will enable robust benchmarking between countries, using common units of analysis, facilitating a structured practitioner dialogue and moving away from simplistic best practice.

   b. The data will contribute to OECD-wide lesson-learning concerning:

      i. Sector efficiency and broader measures of institutional effectiveness.

      ii. Observed relationships.

      iii. Absorptive capacity.

9.4. Project strategy

1. The phasing of data inclusion in "Government at a Glance" should recognise the historical focus of OECD GOV on data concerning public sector processes. The November 2006 Working Paper will extend this to include new analyses of input data. Output and outcome data will be included in the two subsequent annual Working Papers.

2. The strategy proposed is to establish the reputation of "Government at a Glance" so that inclusion of a dataset is a badge of honour. This requires establishing a clear data quality threshold for inclusion, ensuring consistency in the units of analysis, maximising opportunities for others to propose data, and encouraging particular collection efforts to cover key data gaps. *Annex 2: Proposal for inclusion of a dataset within "Government at a Glance"* offers a relatively straightforward form for submitting data for inclusion in "Government at a Glance". It is proposed that, in early 2007, this form should be made widely available to governments and to research bodies and academic networks.

3. As opportunities arise, the coverage of "Government at a Glance" should be extended to non-OECD middle and high income countries. The opportunity for collaboration with these World Bank and other initiatives for low income countries is primarily at the level of the data collection framework.
4. Composite indicators should generally be avoided at this stage, but could be considered for "Government at a Glance", with caution, in three areas:
   
a. At the sub-sector level, composite efficiency measures could be considered with caution in specific areas of service delivery (secondary education etc.).
   
b. Composite indicators could be useful to compare aspects of performance for some carefully selected agencies that have very similar and very well-defined roles (audit bodies etc.) and where there is some consensus on their outputs or intended outcomes.
   
c. Composite indicators could be developed in narrowly-defined categories of public sector processes (degree of openness of human resource management arrangements to lateral entrants, degree of consultation in preparing regulations, etc.) or in equally narrow categories of output (quality of regulations in a particular sub-sector, etc.).
   
5. Derived indicators can be constructed to encourage country engagement in the project with minimal risk of implying a measurement of country performance.
   
6. To the extent that "Government at a Glance" will collate as much as generate new data, it will be important to signal clearly to researchers and practitioners the areas in which new datasets could contribute to useful analyses. This is perhaps best undertaken by launching an extensive practitioner debate with relevant OECD expert groups and committees addressing the following questions:
   
a. Where will further benchmarking help?
      i. Which specific data are necessary to assist?
      ii. Are the current new data collection priorities for the OECD GOV Directorate the right ones?
   
b. Which institutional arrangements matter for efficiency and effectiveness?
      i. Which institutional arrangements are most likely to be the drivers of efficiency in service delivery (focusing on education, health, criminal justice, and transport)?
      ii. Which institutional arrangements are most likely to be associated with improvements in "executive governance outcomes" (defined provisionally as: public confidence, equity in service provision, and fiscal/economic stability)?
      iii. Which particular measures would best capture these institutional arrangements?
   
c. Which additional output data should be collected?
      i. Which output measures have the greatest resonance for governments?
      ii. Which measures will allow the development of relevant efficiency studies?
# ANNEX 1: PHASED INCREASE IN COVERAGE OF "GOVERNMENT AT A GLANCE"

<table>
<thead>
<tr>
<th>Date</th>
<th>Deliverable</th>
<th>Issues covered by the data</th>
<th>Country coverage</th>
<th>Practitioner/policy maker debate</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• Revenues • Inputs • Public sector processes • financial proxy output measures</td>
<td>General government</td>
<td>• Possibility of composite indicators in narrowly-defined areas • Possibility of derived indicators to encourage country engagement in the project</td>
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<td></td>
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<td>General government</td>
<td>Issues raised for debate:</td>
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<tr>
<td></td>
<td></td>
<td>• Non-financial outputs • Some outcomes</td>
<td>General government</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>General government</td>
<td>Focus extended to include specific processes concerning: • Health • Education</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>Title</td>
<td>Focus Details</td>
<td>Issues</td>
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<tr>
<td>Nov. 2008</td>
<td>&quot;Towards Better Measurement of Government&quot; <em>Working Paper Edition 3</em></td>
<td>Focus extended to include: • Antecedents or constraints that contextualise government efficiency and effectiveness</td>
<td>• Measurement of antecedents or constraints that contextualise government efficiency and effectiveness</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Focus extended to include: • Other public sector • Some experimental coverage of the private sector in the public domain</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>Focus extended to include other COFOG functional categories</td>
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<tr>
<td></td>
<td></td>
<td>Focus extended to include some data from other non-OECD middle and high income countries</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pilot composite and derived indicators calculated and offered for discussion</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Issues raised for debate: • Encouraging governments to provide better data • Improving data quality.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nov. 2009</td>
<td>&quot;Government at a Glance&quot; <em>Edition 1</em></td>
<td>Coverage to be determined</td>
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ANNEX 2: PROPOSAL FOR INCLUSION OF A DATASET WITHIN
"GOVERNMENT AT A GLANCE"

Inclusion of composite indicators in "Government at a Glance"

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<th>Data identification</th>
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<tbody>
<tr>
<td>Please briefly answer the following:</td>
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<tr>
<td><strong>Name of the indicator:</strong></td>
</tr>
<tr>
<td><strong>Respondent/Source:</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description of the indicator:</th>
</tr>
</thead>
<tbody>
<tr>
<td>What does the composite indicator cover (illustrative list only):</td>
</tr>
<tr>
<td>ƒ Measures at the sub-sector level (e.g. secondary education) - either of efficiency or of capacity?</td>
</tr>
<tr>
<td>ƒ Aspects of performance for some carefully selected agencies that have very similar and very well-defined roles (audit bodies etc.)?</td>
</tr>
<tr>
<td>ƒ Narrowly-defined categories of public sector processes (degree of openness of human resource management arrangements to lateral entrants, degree of consultation in preparing regulations, etc.)?</td>
</tr>
<tr>
<td>ƒ Narrowly-defined categories of output (quality of regulations in a particular sub-sector, etc.)?</td>
</tr>
<tr>
<td>ƒ Other?</td>
</tr>
</tbody>
</table>

<table>
<thead>
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<th>Additional data quality tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please briefly comment on the following:</td>
</tr>
</tbody>
</table>

1. **Clarity and underpinning theory**
   - Is the policy or institutional question being examined well-defined?
     - Is there reasonable professional and practitioner acceptance that this is a distinct area of interest which can usefully be classified (the senior civil service is "closed to lateral entrants" or "open to external recruitment", etc.) or ranked (the consultation arrangements for preparing regulations are more extensive in X than in Y, etc.)?
     - Is there a theory that explains why this area of interest is important?
     - NB To the extent that OECD or other Best Practice or Guidance is used as a proxy for a theoretical basis, then the indicator will measure compliance with that guidance, and not performance in any more objective sense.

2. **Relevance of underlying variables**
   - Are the variables that are proposed for inclusion in the indicator relevant to the concept, and are they accurate?

3. **Defensible methodology**
   - Have the methodological choices in weighting and aggregation been reviewed?
     - Is there a justification for the particular weightings and aggregation techniques? Do the weightings correspond with the underlying theoretical framework?
     - If the results are compared with a reasonable alternative approach, how should the resulting differences in the composite indicator be explained?

4. **Comparability**
   - Has an approach been developed for imputing missing values, and have the indicators been normalised to render them comparable?

5. **Sensitivity to assumptions**
   - Have assessments been made of the sensitivity of the composite indicator to assumptions:
     - What happens with the inclusion and exclusion of sub-indicators?
     - Have the implications of data error been modelled?
     - What happens if different arrangements were made for imputation of missing data?
     - What happens if the data were normalised using a different approach?
     - What happens if different aggregation systems were used?

6. **Correlations**
   - Does the composite indicator correlate with other data?

7. **Transparency**
   - Are the underlying indicators or values readily available?
The threshold for data quality and classification

<table>
<thead>
<tr>
<th>Data identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please briefly answer the following:</td>
</tr>
</tbody>
</table>

**Name of the indicator:**

**Respondent/Source:**

**Description of the indicator:**
- Description of what is being measured
- Country coverage
- Nature of the measure (qualitative/quantitative)
- Survey or other data collection exercise that this was part of

**Data suitability**

Please briefly answer the following:

1. **Contingent fiscal liability**
   Do the data describe events that contribute to or can be significantly attributed to activities that are undertaken with public funds, whether within or outside of core government, and whether those funds represent a direct transfer or are provided in the form of an implicit guarantee?

2. **Processes and not policies**
   Please confirm that the data do not seek to evaluate sector objectives (outcomes) that governments are seeking to achieve.

**Data quality tests**

Please briefly comment on the following:

1. **Relevance (evidence of relevance to government, OECD and academic work)**
   - Are the data requested by countries and governments?
   - What is known about users' satisfaction?
   - Do the data get publicly quoted?
   - Are the data cited in government reports?
   - Do academics or media refer to the data?
   - Does the OECD use the data?

2. **Accuracy (do they correctly represent the items they are supposed to represent?)**
   - How were the data collected?
   - If questionnaires, what types of questions were used, e.g. open?
   - Is there significant subjectivity within the data? If so, how would replicability be ensured?
   - Are definitions used clearly explained?
   - Are there significant numbers of missing values?
   - Do these involve particular countries?
What steps are being taken to improve the accuracy?
Can the validity of the data be confirmed by comparison with other international datasets?

### 3. Credibility (users place confidence in the data and it is objective and replicable)
- Does the source for the data have a reasonable track record in producing quality data?
- Are the data generally (likely to be) trusted?

### 4. Timeliness and punctuality (time, availability, series)
- When were the data published/made available?
- For which years are the data available?
- Is a time series available?
- How frequently are the data produced?
- How long is the interval between collection and publication?
- What is the planned future availability of the data?

### 5. Interpretability (ease with which the user may understand, use and analyze the data)
- Do the data refer to well-recognized concepts?
- Are the underlying concepts clearly defined?
- Do the variables have the same meaning for all countries?
- Are there any limitations on the use of the data (e.g., can only be shown within an aggregate)?
- If a time series – has there been any change in definition?
- Are there any disadvantages or advantages to the use of the current data collection method?

### 6. Coherence (degree to which data logically connected and mutually consistent)
- Has the data source changed over time?
- Have questions been modified over time?
- Are data coherent within and across datasets?
- Are the source and the year and the definition the same across countries?

### 7. How will the data and metadata be made available?
- In what form are the data and metadata available?
- Will the data be provided by CD or are they downloadable?

### Data classification
Please circle the areas that the data refer to:

<table>
<thead>
<tr>
<th>Activities of:</th>
<th>General government</th>
<th>Other public sector</th>
<th>Private sector in the public domain</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Central</td>
<td>State</td>
<td>Local</td>
</tr>
<tr>
<td>Production stage:</td>
<td>Revenues</td>
<td>Inputs</td>
<td>Public sector processes</td>
</tr>
<tr>
<td>Functional sector:</td>
<td>General public services</td>
<td>Defence</td>
<td>Public order &amp; safety</td>
</tr>
</tbody>
</table>
ANNEX 3: THE CONTRIBUTION OF AGGREGATE "GOVERNANCE INDICATORS" TO AN OECD DEBATE

1. Over the last 30 years, there has been a tremendous increase in the number and range of indicators, purporting to measure a rather broader notion of governance. These are primarily intended for the use of, or at least for promulgation by, development agencies. The initial crop of governance indicators emerged during the early 1990s, coinciding with the rediscovery that governance matters for development. This was perhaps a useful corrective to the technocratic emphasis of much of the development debate of the time. The growth in the number and coverage of indicators was substantial. Considering only the 14 sources of expert- and survey-based indicators used by Kaufmann et al. in their first aggregation exercise (Kaufmann, Kraay et al.: 1999), the vast majority of them did not exist before 1995. With the exception of the Freedom House political and civil liberties indicators, those that did exist were intended solely to evaluate "political risks" faced by foreign investors, and development researchers and practitioners were unaware of and/or uninterested in them until the 1990s.

2. 1998 was, roughly, the year when it was unambiguously accepted that institutions matter (World Bank: 1997) – and the array of indicators has continued to grow since that time. (Arndt and Oman: 2006; "Governance Data: Web-Interactive Inventory of Datasets and Empirical Tools": 2006) provide useful overviews of recent work in constructing broad measures of "governance".63

3. Many development agencies indicators are slight variations on others' themes – and there is a sense that each agency needs its own signature index.

4. The theoretical basis behind the indicators is uncertain. Public management as a field of study and practitioner debate is fraught with definitional problems, but there is some general consensus as to what is included. Few would take issue with the proposition that: "public management reforms consist of deliberate changes to the structures and processes of public sector organizations with the objective of getting them (in some sense) to run better" (Pollitt and Bouckaert: 2004, p.8). In essence, public management focuses on the plumbing of the public sector – how money is used, how people are motivated and how organisations are structured.

5. By contrast, the parameters of governance are less clear. "...(W)hile empirical research links governance-related institutions and development, there is not yet a consensus as to how to approach governance and its measurement" ("Global Monitoring Report 2006: Strengthening Mutual Accountability - Aid, Trade and Governance": 2006, p.11). The idea of governance is undoubtedly identifying a real and pressing issue – and all practitioners with experience of developing or post conflict countries would accept that the roots of problems concerning corruption or major service delivery failures are not be found within the public sector management plumbing. Broader political economy issues, such as capture of the state apparatus by entrenched interests, deliberate opacity in political party financing and corrupt judiciary, are both the consequences and the causes of the performance failures. However, exactly what is within this concept and, equally significantly, what and how any elements of it can be changed is far from clear.

62 See (Knack and Manning: 2000)

6. The absence of a well-accepted theoretical framework for governance ensures that any composite indicators are largely devices for communication – for crystallising concerns about corruption etc. into a single short and pithy summary. This is undoubtedly a useful contribution to structuring the dialogue between donor agencies and developing countries – particularly when accompanied by more explicitly qualitative assessments (Doig, McIvor et al.: 2006). However, where the concerns about broader notions of governance are less pressing, where egregious corruption and massive service delivery failure are relatively rare, then the value of the indicators is somewhat limited for two reasons.

7. First, the accuracy of the indicators is often insufficient for a more nuanced policy debate. Individual governance indicators tend to be perception-based, which can be problematic unless triangulated with some more fact-based indicators. Composite indicators generally combine the problems inherent in an over-reliance on perception-based data, with additional difficulties resulting from the aggregation process. Without a clear theoretical framework, it is not clear what the indicator is attempting to measure other than in a general and intuitive sense (Besançon: 2003).

8. Second, and as a consequence of the over-reliance on perception-based indicator, and the resort to intricate aggregation methodologies, the resulting indicators provide very little policy guidance. Arguably, they indicate that a particular institutional area within a particular country is indeed in poor (or good) shape – however, they offer little or no insights into the steps that should be taken to improve the situation.64

64 See (Knack et al: 2003) for a more detailed discussion of this point.
ANNEX 4: MEMBERSHIP OF THE INFORMAL EDITORIAL GROUPS

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Poland

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Republic of Korea
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Sweden

Tereza Novotna  
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Czech Republic

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Director General for Public Administration, Ministry of Finance and Public Administration  
Portugal

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Professor of Business Studies, University of Dublin
Ireland

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Czech Republic
ANNEX 5: NON-OECD COUNTRIES FOR POSSIBLE INCLUSION IN "GOVERNMENT AT A GLANCE"65

### Table 6: Lower middle-income economies

<table>
<thead>
<tr>
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<td>West Bank &amp; Gaza</td>
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</tr>
</tbody>
</table>

### Table 7: Upper middle-income (non-OECD) economies

<table>
<thead>
<tr>
<th>Country</th>
<th>Country</th>
<th>Country</th>
<th>Country</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Samoa*</td>
<td>Antigua and Barbuda</td>
<td>Argentina</td>
<td>Barbados</td>
<td>Belize</td>
</tr>
<tr>
<td>Botswana</td>
<td>Chile</td>
<td>Costa Rica</td>
<td>Croatia</td>
<td>Dominica</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>Estonia*</td>
<td>Gabon</td>
<td>Grenada</td>
<td>Latvia*</td>
</tr>
<tr>
<td>Lebanon</td>
<td>Libya</td>
<td>Lithuania*</td>
<td>Malaysia</td>
<td>Mauritius</td>
</tr>
<tr>
<td>Mayotte</td>
<td>Northern Islands*</td>
<td>Mariana Islands</td>
<td>Oman</td>
<td>Palau</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>Seychelles</td>
<td>South Africa</td>
<td>St. Kitts and Nevis</td>
<td>St. Lucia</td>
</tr>
<tr>
<td>St. Vincent and the Grenadines</td>
<td>Trinidad and Tobago</td>
<td>and</td>
<td>Uruguay</td>
<td>Venezuela.</td>
</tr>
</tbody>
</table>

65 Sources: World Bank  
(http://siteresources.worldbank.org/DATASTATISTICS/Resources/CLASS.XLS)  
OECD DAC (http://www.oecd.org/dataoecd/43/51/35832713.pdf)
Table 8: High-income (non-OECD) economies

<table>
<thead>
<tr>
<th>Andorra</th>
<th>Aruba</th>
<th>The Bahamas</th>
<th>Bahrain</th>
<th>Bermuda</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei</td>
<td>Cayman Islands</td>
<td>Channel Islands</td>
<td>Cyprus</td>
<td>Faeroe Islands</td>
</tr>
<tr>
<td>French Polynesia</td>
<td>Greenland</td>
<td>Guam</td>
<td>Hong Kong (China)</td>
<td>Isle of Man</td>
</tr>
<tr>
<td>Israel</td>
<td>Kuwait</td>
<td>Liechtenstein</td>
<td>Macao (China)</td>
<td>Malta</td>
</tr>
<tr>
<td>Monaco</td>
<td>Netherlands Antilles</td>
<td>New Caledonia</td>
<td>Puerto Rico</td>
<td>Qatar</td>
</tr>
<tr>
<td>San Marino</td>
<td>Saudi Arabia</td>
<td>Singapore</td>
<td>Slovenia</td>
<td>United Arab Emirates</td>
</tr>
<tr>
<td>Virgin Islands</td>
<td>(U.S.)</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: *Italicised countries* are identified as Least Developed Countries by the OECD DAC, based on UN classifications.

Countries marked with * are excluded from OECD DAC considerations as they are not aid recipients.
ANNEX 6: TECHNICAL ISSUES

Modified COFOG classification

1. The modified COFOG classification has been developed within OECD GOV Directorate following agreement by the OECD Network of Senior Budget Officials. The estimation method has been approved by the Head of National Accounts (OECD).

2. This technical note explains the methods for estimating the expenditures.

1. The transfer/in kind split is made as follows:

   a. Other current and capital transfers in COFOG2 group Foreign aid are taken out of COFOG1 group General public services. Since COFOG2 groups are not available for sectors, it is assumed that Foreign aid only exists in central government, so that the General government number can be attributed to central government. The other current and capital transfers from Foreign aid form the new group Foreign aid transfers.

   b. Other current and capital transfers between subsectors of general government in COFOG2 group Transfers of a general character between different levels of government are taken out of COFOG1 group General public services. Since COFOG2 groups are not available for sectors, it is assumed that there exist no other current and capital transfers between subsectors in COFOG1 group General public services than Transfers of a general character between different levels of government. The other current and capital transfers to state and local government from General public services form the new group General purpose and block grants. This procedure will only be applied to the sectors. In General Government the transfers between levels of government are consolidated and thus eliminated from the data. This implies that at the level of General Government the group General purpose and block grants can not occur.

   c. Interest payments are taken out of COFOG1 group General public services. The interest payments from Public debt transactions form the new group Interest.

   d. Social cash transfers are taken out of COFOG1 group Social protection. Social cash transfers form the group Social transfers.

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67 All other current and capital transfers in other COFOG groups are considered as in kind because they are earmarked contributions.

68 Table 1102 splits out the current and capital transfers of sub-sectors according to addressee sub-sector.

69 Interest payments are available from the national accounts (OECD National Accounts, part IV Government Statistics).
The individual/collective split is made as follows.

e. Subsidies are taken out of the COFOG1 groups Economic Affairs, Environmental Protection, Housing and community amenities and Recreation, culture and religion. Subsidies are considered as private, the remainder of these groups as public. The mentioned subsidies are taken together to form the new group Market Subsidies.

f. The COFOG2 groups Not elsewhere classified are taken out of the COFOG1 groups (a) Economic affairs, (b) Environmental protection, (c) Housing and community amenities, (d) Health, (e) Recreation, culture and religion, (f) Education and (g) Social protection. Not elsewhere classified is considered as public (mainly regulation of service provision), the remainder as private or partly private. Similarly, the COFOG2 group General Economic, commercial and labour affairs is taken out of the group Economic Affairs. Since COFOG2 groups are not available for sectors, it is assumed that the General Government expenditures in Not elsewhere classified and in General Economic, commercial and labour affairs can be attributed to the sectors in proportion to the expenditures for private groups in these groups. Not elsewhere classified of the mentioned COFOG groups is taken together with General Economic, commercial and labour affairs of the COFOG group Economic Affairs to form the new group Service regulation.

Apart from the transfer/in kind split and the public/private split, the proposed modified COFOG classification deviates from the COFOG classification in that (a) the COFOG2 group Basic research has been split of from COFOG1 group General public services to form the new group Basic research, (b) gross capital formation has been split of from COFOG1 group Economic affairs to form the group Infrastructure, and (c) subsidies have been split of from COFOG1 group Recreation, culture and religion and added to the group Market Subsidies. Since COFOG2 groups are not available for sectors, it is assumed that Basic research only exists in central government, so that the General government number can be attributed to Central government.

Furthermore, the remainder of Economic affairs has been renamed Public economic services, the remainder of Environmental protection has been renamed Public environmental protection services, the remainder of Housing and community amenities has been renamed Public housing and community services, the remainder of Recreation, culture and religion has been renamed Non-market recreation, culture and religion and the remainder of Social protection has been renamed Social services.

For each country five tables will be produced (general government, central government, states, local government, social security funds) with the following format.

---

70 It should be noted that social cash transfers in all other COFOG groups are considered as in kind because they are a form of compensation of employees.

71 The split between social cash transfers and social benefits in kind is available from the national accounts (OECD National Accounts, part IV Government Statistics).
## Table 9: Country modified COFOG table

<table>
<thead>
<tr>
<th>Collective/individual</th>
<th>Transfers/in kind</th>
<th>Government at a Glance</th>
<th>Source (table 1101 and 1102)</th>
<th>Economic classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collective goods</td>
<td>In kind</td>
<td>General public services</td>
<td>Remainder General public services (701)</td>
<td>all</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Basic research</td>
<td>Basic research (7014)*</td>
<td>All, table 1101</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Defence</td>
<td>Defence (702)</td>
<td>all</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Public order and safety</td>
<td>Public order and safety (703)</td>
<td>all</td>
</tr>
<tr>
<td>Public economic services</td>
<td></td>
<td>Remainder Economic affairs (704)</td>
<td>All minus subsidies and gross capital formation</td>
<td></td>
</tr>
<tr>
<td>Infrastructure</td>
<td></td>
<td>Economic Affairs (704)</td>
<td>Gross capital formation</td>
<td></td>
</tr>
<tr>
<td>Public environmental protection services</td>
<td></td>
<td>Remainder Environmental protection (705)</td>
<td>All minus subsidies</td>
<td></td>
</tr>
<tr>
<td>Public housing and community services</td>
<td></td>
<td>Remainder Public housing and community amenities (706)</td>
<td>All minus subsidies</td>
<td></td>
</tr>
<tr>
<td>Service regulation</td>
<td></td>
<td>General economic, commercial and labour affairs (7041)</td>
<td>All minus subsidies and gross capital formation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not elsewhere classified Economic affairs (7049)</td>
<td>All minus subsidies and gross capital formation</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not elsewhere classified Environmental protection (7056)</td>
<td>All minus subsidies</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not elsewhere classified Housing and community amenities (7066)</td>
<td>All minus subsidies</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not elsewhere classified health (7076)</td>
<td>All minus subsidies</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not elsewhere classified Recreation, culture and religion (7086)</td>
<td>All minus subsidies</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not elsewhere classified</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education (7098)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not elsewhere classified Social protection (7109)</td>
<td>All</td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>Foreign aid transfers</td>
<td>Foreign economic aid (7012) *</td>
<td>All, table 1101</td>
<td></td>
</tr>
<tr>
<td>Individual goods</td>
<td>In kind</td>
<td>General purpose and block grants</td>
<td>Transfers of a general character between different levels of government (7018)</td>
<td>All transfers between subsectors</td>
</tr>
<tr>
<td>------------------</td>
<td>---------</td>
<td>---------------------------------</td>
<td>---------------------------------------------------------------------------</td>
<td>---------------------------------</td>
</tr>
<tr>
<td>Interest</td>
<td>National accounts</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>Only for central government: SNA table 1101.</em></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Mode of production classification

1. This classification provides insight on how wholly or part collectively financed services are produced.

2. The basic classification is:

   **Collective goods**
   
   A. by contracting out and procurement: *intermediate consumption + property income*\(^{72}\)
   B. by general government production:
      a. production factor labour: *compensation of employees*
      b. production factor capital: *gross capital formation*

   **Individual goods**
   
   A. by contracting out and procurement: *intermediate consumption + property income*\(^{73}\)
   B. by general government production
      a. production factor labour: *compensation of employees*
      b. production factor capital: *gross capital formation*
   C. by privatization to market and non-market producers for services with social purposes (mainly education, health and social protection): *social benefits in kind*
   D. by privatization to market and non-market producers while providing financial support with the objective of influencing their levels of production, their prices or the remuneration of factors of production: *subsidies*.

3. Production by general government includes production by non-profit institutions financed (> 50%) and ”controlled” by government. Although it is a fundamentally different mode of production, the data unfortunately do not allow splitting off this mode of production from pure government production.

4. SNA tables 1101 and 1102 can be used as a source. The next table gives the table that will be provided for each country and each subsector and the sources that are used.

---

\(^{72}\) Considered as compensation for the use of property (especially land) in production.

\(^{73}\) See footnote 72.
Table 10: Country mode of production table

<table>
<thead>
<tr>
<th>Collective/individual</th>
<th>Government at a Glance</th>
<th>Mode of production</th>
<th>Economic classification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Collective goods In kind</strong></td>
<td>General public services</td>
<td>A</td>
<td>Intermediate consumption and property income</td>
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<tr>
<td></td>
<td></td>
<td>B a</td>
<td>Compensation of employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B b</td>
<td>Gross capital formation</td>
</tr>
<tr>
<td></td>
<td>Basic research*</td>
<td>A</td>
<td>Intermediate consumption and property income</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B a</td>
<td>Compensation of employees</td>
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<td></td>
<td></td>
<td>B b</td>
<td>Gross capital formation</td>
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<tr>
<td></td>
<td>Defence</td>
<td>A</td>
<td>Intermediate consumption and property income</td>
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<td>B a</td>
<td>Compensation of employees</td>
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<td>B b</td>
<td>Gross capital formation</td>
</tr>
<tr>
<td></td>
<td>Public order and safety</td>
<td>A</td>
<td>Intermediate consumption and property income</td>
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<td>B a</td>
<td>Compensation of employees</td>
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<td>B b</td>
<td>Gross capital formation</td>
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<td></td>
<td>Public economic services</td>
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<td>Intermediate consumption and property income</td>
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<td>B a</td>
<td>Compensation of employees</td>
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<td>B b</td>
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<td></td>
<td>Infrastructure</td>
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<td>B a</td>
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</tr>
<tr>
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<td></td>
<td>B b</td>
<td>Gross capital formation</td>
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<tr>
<td></td>
<td>Public environmental protection services</td>
<td>A</td>
<td>Intermediate consumption and property income</td>
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<td>B a</td>
<td>Compensation of employees</td>
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<td></td>
<td>B b</td>
<td>Gross capital formation</td>
</tr>
<tr>
<td></td>
<td>Public housing and community services</td>
<td>A</td>
<td>Intermediate consumption and property income</td>
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<td>B a</td>
<td>Compensation of employees</td>
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<td>B b</td>
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<td></td>
<td>Service regulation</td>
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<td>Compensation of employees</td>
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<td>B b</td>
<td>Gross capital formation</td>
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<tr>
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<td>Health</td>
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<td>Intermediate consumption</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B a</td>
<td>Compensation of employees</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B b</td>
<td>Gross capital formation</td>
</tr>
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<td></td>
<td></td>
<td>C</td>
<td>Social benefits in kind</td>
</tr>
<tr>
<td>Collective/individual</td>
<td>Government at a Glance</td>
<td>Mode of production</td>
<td>Economic classification</td>
</tr>
<tr>
<td>-----------------------</td>
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<tr>
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<td>Intermediate consumption</td>
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<td>B a</td>
<td>Compensation of employees</td>
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<td>B b</td>
<td>Gross capital formation</td>
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<td>C</td>
<td>Social benefits in kind</td>
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<tr>
<td>Non-market recreation, culture and religion</td>
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<td></td>
<td>A</td>
<td>Intermediate consumption</td>
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<td>B a</td>
<td>Remainder</td>
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<td>Gross capital formation</td>
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<td></td>
<td>C</td>
<td>Social benefits in kind</td>
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<td>D</td>
<td>Subsidies</td>
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<tr>
<td>Education</td>
<td>A</td>
<td>Intermediate consumption</td>
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<td>B a</td>
<td>Remainder</td>
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<td>Remainder</td>
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<td>Gross capital formation</td>
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<td>C</td>
<td>Social benefits in kind</td>
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<td>C</td>
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</tr>
<tr>
<td></td>
<td>D</td>
<td>Subsidies</td>
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</tr>
</tbody>
</table>

* Only for central government
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Dawson, Diane, Hugh Gravelle, Mary O'Mahony, Andrew Street, Martin Weale, Adriana Castelli, Rowena Jacobs, Paul Kind, Pete Loveridge, Stephen Martin, Philip Stevens and Lucy Stokes. "Developing New Approaches to Measuring NHS Outputs and Productivity". Centre for Health Economics at the University of York and the National Institute for Economic and Social Research. York and London


