

5 Inputs and Deflators

Introduction

5.1 In the next three chapters, we consider the process of putting into effect the principles outlined in Chapter 4. This chapter sets out the issues and progress made under the review with regard to measurement of inputs processing of input data, and pay and price deflators. Application to specific functions of the work to date concerning inputs and pay and price deflators will be covered in Chapters 8-11.

Input Measures

5.2 The previous chapter proposed general principles on the measurement of inputs and their deflators (Principles F and G). These point to significant changes. The consideration of the measurement of inputs, and of the price deflators applied, has turned out to be an important element of the review. Moreover, it is an element that applies to all functions of government. Correctly measuring and deflating inputs is, indeed, even more important for those functions where output is not measured directly, in that the deflated input figures themselves enter the GDP growth rate calculation.

5.3 In assessing the availability and supply of data used in the National Accounts, we have concluded that there is insufficient recognition across government of the importance of data on government spending to produce accurate national accounts. In turn, ONS and the Treasury need to develop stronger relationships with data suppliers.

5.4 **Recommendation 5.1:** we recommend that the importance of accurate data on government spending for the National Accounts be recognised at the highest level, for example, by including suitable requirements in the letters of appointment of Accounting Officers and Principal Finance Officers.

5.5 The following main issues have been identified:

1. complex data flows involving multiple suppliers;
2. data classification;
3. poor data timeliness and periodicity;
4. possible solutions offered by the new Treasury data system, Combined On-line Information System (COINS);
5. measurement of capital inputs to production; and
6. measurement of labour inputs to production.

- 5.6** ODPM, ONS and Treasury action plans have moved work on this area forward since the beginning of the review. This work is important and the departments should continue to work collaboratively.

New Developments

- 5.7** Before discussing these issues in detail, we describe new developments which should provide better mechanisms for joined up working across government and facilitate the process of acquiring better quality financial information.
- 5.8** New sources of consolidated audited financial year data are gradually becoming available through the 'dry run' processes leading to the publication of accounts based on the Generally Accepted Accounting Practice (GAAP) – the 'Whole of Government Accounts' (WGA) – covering first central government, then in due course expanding to include local government and public corporations. (It is important to note that individual departmental resource accounts, Non-Departmental Public Bodies (NDPBs) accounts and public corporation accounts are already available on a GAAP basis.)
- 5.9** These new consolidated outturn financial year data will also be integrated with the quarterly and monthly central government data, and other financial year data produced by the Treasury through its Single Data System project. The new Treasury data system COINS is due to be implemented during 2005/06 and is discussed in more detail in paragraphs 5.37-5.47 below. The financial management systems of individual central government departments are also coming under scrutiny in a series of reviews led by Mary Keegan, Head of the Government Accountancy Service. These aim to simplify and strengthen government financial management frameworks and processes.
- 5.10** We now set out our concerns about input measures and processes which became apparent during the review, report on progress made by the review team in collaboration with departments, and recommend where further work is needed.

Issue 1: Complex Data Flows

5.11 There are a multitude of data sources for inputs, processed within a complex structure. The data required have at least the following main sources:

- central government departments and the Devolved Administrations, via the Treasury;
- English local authorities, via the ODPM;
- Scottish local authorities, via the Scottish Executive;
- Welsh local authorities, via the Welsh Assembly Government;
- Northern Ireland local authorities data, via the Central Expenditure Division in the Department of Finance & Personnel for Northern Ireland and then the Treasury;
- Customs and Excise; and
- NHS Trusts and NHS Foundation Trusts (England), via the Department of Health and the Treasury.

The annex at the end of this chapter provides more detail on data flows and sources.

5.12 There is a lack of communication and understanding in how the data are used to produce the National Accounts. People upstream in the processing chain are often unaware of what will happen to the data further down the chain. Equally, people downstream often find it difficult to obtain explanations for apparent oddities, paradoxes and strange movement in the data they receive. Yet the validity of the data depends on end-user requirements being communicated to the data suppliers, and those later in the chain documenting the sources and methods of adjustment applied (see Annex paragraph 3 for further detail). Of particular importance is the need for contextual information. If, for example, there are large year-on-year changes in the data returns or large revisions, these need to be accompanied by explanatory material. This may involve ONS making reclassifications to the National Accounts to reflect changing methods of service delivery, or following through to other figures to ensure consistency when there has been a change in responsibilities between departments. The lack of documentation not only contributes to a lack of clarity across key players in the data processing chain but there is also a risk to business continuity in the accurate compilation of the National Accounts, when key staff move posts.

5.13 Data go through several processing stages before being published in the National Accounts. All of these stages require various people at central government departments, the Treasury, ONS, local authorities and the Devolved Administrations to provide information which is then transformed into various formats to meet the needs of the National Accounts. The multiple stages of the procedure are illustrated in paragraphs 5 and 6 in the Annex.

- 5.14** We have identified a number of weaknesses in the processing chain regarding central and local government data. Some of these are purely about the process itself and should be rectified once COINS is implemented. Other weaknesses may not be resolved by COINS and will need to be addressed by ONS and the Treasury with the departments involved by other means. A more detailed analysis of the issues and discussion of whether they may or may not be addressed by COINS can be found in paragraphs 5.39-5.46.
- 5.15** Good progress has been made by ONS on documenting the data processing chain. This documentation will also need to incorporate new processes as they come on stream from COINS. ONS should be ready to adapt and improve its current processes to take full advantage of COINS.
- 5.16** At present, a service level agreement covers the relationship between ONS and the Treasury, including specification of work on data supply for the National Accounts. We think that ONS and the Treasury should establish similar joint agreements with all the data suppliers, as a framework for establishing roles, responsibilities and timetables to underpin Recommendation 5.1.
- 5.17** **Recommendation 5.2:** we recommend that ONS should continue work to document the data flows on government spending on public services in the National Accounts, both inside and outside ONS. This should be kept up to date as the Treasury's single data system, COINS, is implemented, and ONS should be ready to adapt and improve its current processes to take full advantage of COINS. The requirements for supply of data to ONS from COINS should be managed as part of the Service Level Agreement between the Treasury and ONS, and similar formal relationships may be needed in other areas.

Issue 2: Data Classification

- 5.18** Before illustrating the issues surrounding data classification, it may be helpful to explain some of the terminology used in the compilation of the National Accounts.
- COFOG – stands for Classification of the Functions of Government, which is the international standard used for classification of government activities for the purposes of national accounts. ONS use COFOG categories based on the UN standard, whereas the Treasury use a functional classification which is wholly consistent with UN COFOG at the high level ('Level 1') and partially consistent at a more detailed level ('Level 2') – this is further explained in paragraphs 5.23-5.26. Examples of high level functional categories are Public Order and Safety, Education and Health.
 - Economic Categories – these are based on the European System of Accounts (1995) classification of transactions. Examples of economic categories are pay, expenditure on goods and services, current grants and transfers.

- 5.19** A key element of the processing of government expenditure data is its classification into Economic Categories and functional categories. Data do not arrive from departments in the formats in which they are required. Given the complexity of the data supply chain, there are difficulties in reconciling the classifications (both economic and functional) used by departments and those required in the National Accounts. A poor match of data breakdown to National Accounts categories requires statisticians to make a number of further assumptions to enable compilation of components and hence final figures.
- 5.20** For the compilation of Local Government Final Consumption, the data supplied for local authorities in different countries of the United Kingdom vary in suitability for purpose. English, Welsh, Scottish and Northern Irish local authorities all supply budget and outturn information to their central administrations using different versions of economic categories and with different breakdowns of public services. In no case are the economic category requirements for the National Accounts completely met by the information supplied. Conversion of these data from different sources to the data formats required by the National Accounts is dependent on a number of assumptions by ONS statisticians. The validity of these assumptions, which may vary from one year to the next, can seriously affect the quality of the data.
- 5.21** The work carried out by the review team has identified problems with English Local Authority data. These, together with proposals for change (including assessment of plans for the provision of quarterly information) have been presented to stakeholders, including Local Authority Associations and the Chartered Institute of Public Finance Accountants (CIPFA). As a result, steps have been taken to set up a small, high level working group to take forward proposals for change. The working group will be chaired by ODPM, with representation by stakeholders such as ONS, the Treasury, CIPFA, LGA and the Audit Commission. This is an important development. Discussions are taking place to achieve similar improvements to the local authority data provided by devolved administrations. The data collections systems in Scotland for collecting local government expenditure have recently been reviewed in line with Best Value Accounting Code of Practice (BVACoP) classifications and advice from CIPFA. Local Authorities in Scotland were heavily involved in this review. The data quality has been improved significantly as a result.
- 5.22** There are still some outstanding issues with classification of data provided by departments. Departmental expenditure data supplied to the Treasury is attributed to a COFOG-like category (i.e. it is based on the UN COFOG category, and is compatible at Level 1, but not entirely comparable at Level 2), for use by ONS in the National Accounts and by the Treasury in *Public Expenditure Statistical Analyses* (PESA). Until recently, the attribution was of poor quality, to the extent that it did not involve departments in the process. In order to provide better data, the Treasury undertook in 2003–04 a detailed exercise, in consultation with departments, to classify departmental expenditure into a more accurate functional breakdown based on COFOG. The Treasury and ONS have recently introduced new procedures. These clarify the process for departments to use the correct functional classification for their data and for ONS to report misclassifications back to the Treasury and ultimately the departments. This allows the relevant guidance to be updated to ensure consistent coding on the correct basis in the future.

- 5.23** This new classification system used for PESA is consistent with the top-level functional breakdown of COFOG as used by ONS in the National Accounts. A more detailed breakdown is collected for PESA purposes, but this two-digit PESA breakdown is not the same as the more detailed level of UN COFOG (i.e. 'groups' or Level 2), although there is considerable overlap. ONS, however, do need to use data based on the more detailed classification of the UN COFOG (i.e. Level 2) for volume measures of government consumption. This is not consistent with the information provided by the Treasury. To overcome this, Treasury officials provide estimates of the information required by ONS based on a series of assumptions. Expenditure data at this level of detail are likely to be required for more accurate analyses of productivity in the future.
- 5.24** Although there is currently no international requirement for COFOG Level 2, we note with interest a recent move by Eurostat to request data from Member States at this more detailed breakdown of COFOG on the pure UN basis. In the short term, partial reports or estimation will be required where the PESA Level 2 COFOG does not exactly match the detailed UN Level 2 COFOG requirements. In the longer term, more detailed data will need to be collected.
- 5.25** The impending move to the international use of Level 2 COFOG data should lead to better quality output indicators and analysis of productivity measures. While we understand that ONS and the Treasury are planning to work with departments to be able to comply with this request, it must be recognised that the ability of departments to provide good quality information will also depend on the investment, in the form of training and guidance, made to collect it.
- 5.26** We welcome the ongoing work by ONS and the review team to assess the issues on COFOG: this should result in clearly defined roles and responsibilities for ONS, the Treasury and departments with respect to COFOG. In addition, we recommend that any inconsistencies are rectified in the National Accounts as soon as practically possible and that guidance is amended to reflect relevant issues. As arrangements currently stand, the Treasury advises departments how to allocate their expenditure to the most appropriate activity (i.e. function), for example, spending on Health, Police. This advisory role does involve ONS. However we question whether the current arrangements are the best that could be achieved and recommend that ONS and the Treasury review these procedures; in particular whether joint governance would be a better approach or whether the various components should be brought together in one unit.
- 5.27** Similar data classification issues have arisen with the correct use of economic categories. In some cases, for example, expenditure which should be classified as expenditure on goods and services (and hence part of General Government Final Consumption (GGFC)) has been wrongly classified as a transfer (i.e. not part of GGFC): work in the context of this review has led ONS to conclude that this was the case for Legal Aid. These types of misclassifications will affect the total for GGFC, as transfers are excluded from this figure. ONS is reviewing the extent of this problem, and we recommend they should draw up a work programme to develop guidance and rectify inaccuracies. This is important work which must continue.

Data by Country and Function

- 5.28** Analysis of expenditure data by government function and UK country is needed to match the new measures for functions, which departments in Scotland, Wales and Northern Ireland are developing, as set out later in this chapter. This is currently challenging because of the complexity of compilation. The National Accounts show spending figures by government function, but only at a UK level, and these functional figures are not disaggregated into the four countries. Meanwhile, the Regional Accounts, which provide an overview of the economic performance of the United Kingdom at a regional level, show spending figures for the four countries, but they are not split by government function.
- 5.29** It is possible to estimate a breakdown of spending by country and government function by using the source data behind the National Accounts. However, the results yielded by this method are not satisfactory:
- The source data do not include capital consumption or adjustments, which are added at a UK level. These can be allocated to each country by pro-rating according to the shares of each country in total expenditure before the addition of capital consumption and adjustments, but this is not ideal. This problem should be remedied, at least for central government, when ONS move to using capital consumption figures provided by Resource Accounting Budgeting data rather than via its own Perpetual Inventory Model (PIM) – see paragraphs 5.53-5.56.
 - Secondly, the source data reflect spending by each of the four governments, rather than functional spending within the country. For example, using this method, spending on certain functions in Wales and Northern Ireland appears extremely low, due to much of it being the responsibility of, and thus classified under, England.
- 5.30** The Treasury publication *Public Expenditure Statistical Analyses* (PESA) publishes analyses of public expenditure split by both the country and region for whose benefit the expenditure is incurred and by Treasury COFOG function and sub-function. However, these analyses exclude capital consumption and various National Accounts adjustments. They use different data sources in places. They do not distinguish between final consumption and transfers in the published analyses.
- 5.31** These problems need to be addressed. It should be possible to make progress in the context of work already under way to implement the recommendations of the McLean report.
- 5.32** In light of the above, it is clear that further work is needed if a clear split of functional spending between countries is to be obtained. ONS should therefore work with the Treasury, ODPM and the Devolved Administrations in improving data collection procedures at this, more disaggregated level.

5.33 Recommendation 5.3: We recommend that ONS and the Treasury should work together, and with ODPM and the Devolved Administrations, to improve the accuracy of data classification for government spending on public services in the National Accounts. In particular:

- ONS should engage actively in the Local Authority Working Group which ODPM are setting up, aiming for data to be collected at source in ways consistent with ONS economic categories, and to improve timeliness.
- ONS and the Treasury should plan to collect Level 2 COFOG data, as now required by Eurostat, and should work with departments to ensure they understand what is required so that data are classified accurately at source.
- ONS should review accuracy of current classification in the National Accounts, by Government function and by economic category, and should rectify any inconsistencies.
- ONS and the Treasury should review their respective roles in advising departments on classification issues to assess whether current arrangements are the best that could be achieved, in the interests of clarity for data suppliers and accuracy in compiling the National Accounts, and other purposes for which the same data are used.
- ONS and the Treasury should develop a satisfactory basis for attributing government spending, consistent with the National Accounts, between functional classification, economic category and country within the United Kingdom, as this will be required for productivity analysis (e.g. matching appropriate deflators for different countries).

Issue 3: Poor Data Timeliness and Periodicity

5.34 Poor data timeliness and lack of appropriate periodicity for some components of the National Accounts mean that ONS statisticians often have to make assumptions, use forecasts or budget estimates, so as not to delay production of final figures. These estimates may or may not correspond to actual outturns. This principally applies to local authority data, where the data supplied for the compilation of current price GGFC are provided only on an annual basis, often up to a year after the financial year to which they relate. However, for central government (except for the Northern Ireland Executive and some non-departmental public bodies (NDPBs) at present), high-level monthly outturn and more detailed quarterly outturn by COFOG are supplied via the Treasury. Where there is slow delivery of financial year data and an absence of quarterly outturns, there is a heavy reliance on budget estimates or forecasting for the most recent time periods and interpolation for earlier quarters. This means that this aggregate is subject to frequent revisions. This links with a series of reviews which the Head of the Government Accountancy Service is leading.

- 5.35** In line with international standards, ONS publish National Accounts data on a calendar year basis, whereas all UK financial accounting, including that of the government, is on a financial year basis. As calendar year covers different parts of two financial years, the transition between quarterly and financial years is dependent on good quality quarterly information. So, in compiling data for calendar year 2002, the last quarter of financial year 2001/02 and the first three quarters of 2002/03 are needed. Where there is little quarterly information available, such as for local government and Northern Ireland, estimation is required. An example covering both central and local government is given in the Annex at the end of this chapter (Tables A5.2 and A5.3).
- 5.36** For central government, all departmental expenditure information is provided to the Treasury using either high level in-year monitoring systems or more detailed financial year submissions. Monthly and quarterly data from most departments are provided as part of the Treasury's in-year monitoring of expenditure against financial year budgets; data are supplied for the current year only. More detailed financial year information are updated several times a year to give budget (in-year as well as forecast), provisional outturn and finally audited data for all departments. This detail informs all COFOG allocations and in conjunction with the latest quarterly data, allows the Treasury to provide all required COFOG information on a quarterly basis. Quarterly and monthly audited information is not required from departments, but where there are significant revisions between in-year and audited data, a best estimate of the new quarterly profile is requested.
- 5.37** For local authorities, data are supplied by OPDM and the Devolved Administrations at the budget forecast and outturn stages. There is little quarterly in-year monitoring except for capital expenditure. Issues relating to coverage mean that quarterly information relating to wages and salaries and debt interest can only be used as a guide in the estimation process. Even when data are final, they remain unaudited. Until recently final outturn financial year data was only available from almost 12 months after the end of the financial year, but improvements have already been made and there are further improvements to come. These improvements come partly through acceleration of the timetable for local authorities approving and auditing their accounts, and partly through acceleration of the internal compilation process by ODPM.
- 5.38** It might be feasible for local authorities to provide expenditure information on a sample basis rather than a full census; though at a risk of loss of accuracy. Further consideration should be given to the options for sampling to reduce the respondent burden in the work programme to be undertaken by a newly formed high level working group (see paragraph 5.21).

Issue 4: Possible Solutions Offered by COINS

- 5.39** The processing of input data should be facilitated once the Treasury's single data system COINS is rolled out in 2005/06 (see paragraph 5.9). COINS, one of the drivers for which was the recommendation in the National Statistics Quality Review of Government Accounts and Indicators, will replace the Treasury's existing three data systems (General Expenditure and Monitoring System (GEMS), Public Expenditure System (PES) Database and GOLD) used to collect expenditure data from central government departments, Devolved Administrations and NDPBs (via their parent department). Local authority data for England for financial years will continue to be sent to the Treasury (via COINS) by ODPM.
- 5.40** Delivering this new combined system will require a strong partnership between central government departments, the Devolved Administrations and the Treasury, in order to integrate budgeting, in-year reporting and end-year reporting processes. Among the planned benefits cited by the Treasury are:
- improved data quality at reduced costs;
 - collecting information that the centre needs once and putting it into a shared data warehouse;
 - improvements in quality of departmental data through greater ability to cross-check, and therefore reduced staff time involved in reconciling and/or explaining differences between data sources; and
 - easier comparison and reconciliation between the different measures of the public finances that ONS and the Treasury use.
- 5.41** Once COINS is fully operational, additional monthly and quarterly data will be available through COINS, for review by the spending teams within the Treasury, which should remove some of the issues with duplication of data collection. Data will be validated when entered into COINS against a number of system checks and balances, addressing some of the quality issues.
- 5.42** We discussed earlier some of the weaknesses found in the processing chain. Many procedural issues should be rectified once COINS is implemented (see Table A5.4). Examples of these are:
- Certain machinery of government changes which result in quarterly and annual data being adjusted differently.
 - Devolved Administrations' data not broken down by standard economic categories.
- 5.43** However, some issues will not be solved by a new system and will need to be addressed by ONS and the Treasury with the departments involved via other means (see Table A5.4 in the Annex). Examples of these are:

- The monthly and quarterly path of some departmental data can be implausible – revisions to previous periods' data are sometimes attributed to the latest month rather than in the actual months in which they occurred.
- No outturn data are provided by some departments for their NDPBs.
- No adequate breakdown of spending on goods and services is currently available, other than some limited information on Health expenditure and Defence expenditure. This information is required for accurate deflation of current price expenditure.

5.44 COINS is a welcome improvement to the existing three, and often inconsistent, data systems and it should alleviate some of the processing problems found to date. However, it would be unwise simply to believe that a new system will 'deliver all'. It will be important to ensure that users are trained properly to input data directly onto the database and that a well-resourced user support is maintained. This applies not only for existing users of the system, but also for those in the future. Training is needed to ensure staff who input financial data understand why it is that the information is important. Guidance should be comprehensive and evolutionary.

5.45 The Treasury is formulating a training plan, with documentation for end users of the system. Work started in November 2004 and is due to be completed by April 2005 when COINS implementation begins, and will involve several government departments as pilot users. The type and level of training being planned is consistent with general practice for new IT developments such as COINS. However, we strongly recommend that ONS and the Treasury seize this opportunity to improve the overall training programme for data suppliers to ensure that the right information gets into the system at source.

5.46 It is crucial that ONS is viewed as an important customer once COINS is implemented and that it plays an influential role in the further development of COINS.

5.47 **Recommendation 5.4:** we recommend that ONS and the Treasury should regard ONS as an important end-user of the COINS system, fully engaged in plans for future development. We suggest that ONS is involved in a thorough Post-Implementation Review of COINS; ensure there is an ongoing mechanism by which issues of data quality can be addressed; and is involved in the design and delivery of enhanced training for data suppliers.

Issue 5: Measurement of Capital Inputs to Production

5.48 As set out in paragraphs 4.50-4.53, capital inputs to production should be measured as capital services. However, compilation of estimates of capital services is in its infancy. The publication of the OECD manual *Measuring Productivity* should bring about more work worldwide in the development of estimates of capital services.

- 5.49** In the United Kingdom, ONS has published experimental estimates of the growth in capital services. These estimates are presented for broad industry and type of asset groupings over the period 1991 to 2002. No disaggregation by function or between public and private sector is given. The development of these estimates should be continued in order to improve their quality as well as the level of detail presented. In particular, distinguishing between the growth by function and between the public and private sectors is essential for understanding the productivity associated with public expenditure on, say Health or Education.
- 5.50 Recommendation 5.5:** We recommend that ONS should continue to develop estimates of capital services, aiming to increase the level of detail presented to distinguish between functions and public and private sectors, to assist in analysis of productivity of public service spending.
- 5.51** In the interim, the capital consumption figures themselves require improvement. There are inconsistencies in the data held to measure aspects of capital within government. The main issues are:
- inconsistencies regarding the measurement of capital consumption of government assets; and
 - under-estimation of investment in Information and Communication Technology (ICT), particularly software.
- 5.52** There are currently two sources of data for central government capital consumption. Capital consumption is described as the reduction in the value of the stock of fixed assets used in the production of goods and services, such as wear and tear, normal obsolescence or normal accidental damage.
- 5.53** For National Accounts purposes, capital consumption estimates are produced by ONS using PIM. However, a second and more reliable source of data is that collected by the Treasury as part of WGA, using data supplied by individual government bodies. WGA are based on UK GAAP and are fully audited by the National Audit Office (NAO). At present, the Treasury have undertaken two dry runs for preparing Central Government Accounts (CGA) (2001/02 and 2002/03); data quality has improved during the dry run process, with publication of the 2003/04 CGA planned by the Treasury. Expanding this exercise to cover the whole of the public sector, as defined for WGA purposes (that is, including local government, public corporations, NHS Trusts and NHS Foundation Trusts) will also start with two dry runs (2004/05 and 2005/06) before publication of data for 2006/07. GAAP based depreciation data have been collected by the Treasury since the introduction of Resource Accounting.

- 5.54** Following the recommendation made in the Interim Report (paragraph 6.18), ONS and the Treasury have carried out an assessment of the two data sources and have agreed that capital consumption of central government assets for the National Accounts should be measured using the departments' own data. However, there are a number of issues that need to be addressed in moving to using WGA estimates. Firstly, they are a new source of data and thus do not provide a history of the government assets in terms of capital consumption or capital stock. So the very significant potential improvement in quality for recent and future estimates will have to be linked to the back series now in the National Accounts. Secondly, there are several data classification issues where existing WGA data do not directly meet the needs of the National Accounts.
- 5.55** A work programme to ensure a smooth transition to the new data source has already begun. This will resolve the various data classification issues between existing WGA data and National Accounts requirements: for example, land is not included in National Accounts estimates of capital stock but is treated by WGA, as a result of valuation methodology issues, in a combined category of 'other land and buildings'. This work programme will also incorporate an assessment of the treatment of expenditure on roads, in particular whether UK practice is consistent with European statistical guidelines. ONS have given a commitment to publish these revised data for central government at the first feasible opportunity (likely to be in the latter half of 2005) and expects to incorporate the new series in the *Blue Book 2006*. NHS Trust accounts for capital consumption have already been used in the *Blue Book 2004*.
- 5.56 Recommendation 5.6:** we endorse the ONS decision to move towards use of the accounts of departments and other public bodies as a basis for estimating capital consumption, rather than its own Perpetual Inventory Model, and recommend that transition should continue, as technical issues are resolved.
- 5.57** The second issue is inconsistency regarding capitalisation of ICT software. Investigative work under the review has shown that, relative to comparable databases like the Groningen Growth and Development (GGDC) database and similar work by OECD and the Bank of England, the National Accounts in aggregate significantly underestimate software investment compared to other western countries. ONS official estimates are provided in current prices in Table 6 of the annual Input-Output Supply and Use Tables. The official data published by ONS on ICT hardware are no different from the GGDC database, supporting the external view that the primary discrepancy between ONS data and the GGDC data is in software. The discrepancy in the figures may be due to 'own account' software (i.e. software which is written in-house) not being capitalised and because purchased software is being recorded under other capital items (i.e. software is being 'bundled' with computer hardware or the product mix of investment is incorrect). It is possible that the purchased software that should be measured as investment may instead be misclassified as intermediate consumption. This would lead to an underestimate of productivity growth in times when there is an increase in the rate of purchase of software.

- 5.58** New ONS data sources, such as the results of additional questions about software added to the quarterly Business Investment release from 2002, and the annual Business Spending of Capital Items survey, will allow improvements to the estimates for businesses. This will help in estimating public sector investment only insofar as business sector IT software investment patterns can be used to proxy for government investment. The product detail available in data on government investment is too aggregated for use in the compilation of Supply and Use Tables or weighting together price indices. For example, this would mean government software purchases would be included in the larger category of ‘plant and machinery’. While this would mean that the total level of investment can be calculated, national accounting methods such as supply-use balancing for products or deflation by asset would be less reliable. Further work on ICT software would improve the measure of software used in GGFC within the National Accounts. This is important if we are to capture the true worth in productivity calculations of advances in technology, and when making international comparisons.
- 5.59** We welcome the work undertaken by ONS and the Treasury in this area and note that a work programme to revise ICT software data for the government sector in the National Accounts has begun. This will lead to better quality information being published in the National Accounts.
- 5.60** The work done so far has shown that there are still some unexplained divergences in the amount of capitalised ICT software when comparing UK national accounts information with other countries. It would be reasonable to expect that these countries would be capitalising roughly the same amount of ICT software. We are clear that there is not a divergence in formal accounting standards, but further work is needed to establish what is causing these divergences.
- 5.61** **Recommendation 5.7:** we recommend that ONS should continue work to clarify why there is a divergence between the amount of capitalised ICT software in the UK national accounts compared with other countries, with particular reference to public sector spending, and should publish revised estimates and commentary when available.

Issue 6: Measurement of Labour Inputs to Production

- 5.62** Principle F recommends that labour inputs be measured using both direct (number of hours worked, with different skill categories being weighted) and indirect (deflation of pay by a labour cost index) methods. Conceptually, the two approaches should lead to the same results. In practice, there are many reasons why the two may differ, including different coverage of indicators, use of differing assumptions, differential sampling error associated with a given survey, and so on. It is therefore important that the relative merits and demerits of each approach are fully understood.

- 5.63** ONS estimates from their direct measure of labour inputs are available only as a series of total hours worked and with a broad industry breakdown. The figures take no account of any change in the composition of the skills of the workforce. Further development work is needed to construct estimates of public service labour inputs using the direct approach which are suitable for analyses of productivity for individual government functions. These must take account of changes in the quality of labour, that is skill mix.
- 5.64** The indirect approach to estimating labour inputs requires data on labour costs as well as on 'price' movements associated with those labour costs (deflators). Expenditure on labour in the public sector is presented in accounts submitted to Parliament and these are audited by the NAO. The quality of the indirect estimates of labour inputs therefore depends mainly on the quality of the deflators, discussed in paragraphs 5.66-5.68.
- 5.65** **Recommendation 5.8:** we recommend that ONS should continue to develop its estimates of labour inputs using both the direct and indirect approaches, exploring issues on data availability and interpretation in the light of comparisons between the results of both methods. For the direct approach, ONS should expand the analysis by function, introduce a public/private split and incorporate information on changes in skill mix. On the indirect approach, ONS should improve the quality of the deflators used for public spending on labour services.

Deflators

- 5.66** In paragraph 6.18 of our Interim Report, we noted that it would be helpful for ONS to review the pay and price deflators that it uses. This work needs to be taken forward across all of the functions of government. Indeed, the deflators are even more important in those areas for which there are no direct indicators of output, since deflated input volumes appear directly as part of constant price GDP in such cases. As a benchmark for the purpose of this programme of work, it is evidently helpful to have a clear idea of the criteria against which the adequacy of individual deflators might be judged. Work with ONS in the context of this review has produced the possible list of criteria set out in Table 5.1.

Table 5.1 Quality Criteria for Deflators for Government Services

Label	Short description	Examples /explanation
1 Comprehensiveness	The set of deflators should cover all components of expenditure to be deflated.	UK expenditure should be deflated using UK, not just English deflators; Health deflators should cover the whole of the NHS, not just hospitals.
2 Coverage	The individual deflator should relate to all expenditure on the individual item to be deflated.	Deflators for labour expenditure should cover NI contributions, pensions as well as earnings.
3 Relevance	The deflator should correspond to the expenditure item to be deflated.	Expenditure on books should be deflated using an indicator of price change in books.
4 Sustainability	The deflator should be available for the foreseeable future, and for a reasonable number of periods in the past.	Micro studies on changes in price for only a single year have limited use: long time series are preferable.
5 Homogeneity	Deflation should be carried out at a level of disaggregation that maximises homogeneity of items within category.	Significant difference in the movement of pay between staff grades would suggest that separate deflators are needed.
6 Timeliness	The deflator should be available in good time after the end of the reference period.	Estimation for missing periods may introduce bias.
7 Periodicity	The deflator should be available on a quarterly basis.	Annual figures may be satisfactory but only where there is evidence of insignificant short-term change.
8 Quality change	Where changes in characteristics of a good/service occur, price indices should reflect pure price changes only.	Improvements in composition and consequently effectiveness of a drug should be distinguished from pure price change.
9 Availability of cost weights	Corresponding weights (of the same periodicity) for deflators should also be available.	

5.67 ONS is developing a specific set of quality criteria for the use of Corporate Services Price Indices as deflators to remove the price effect when compiling estimates of the output of service industries. It would be beneficial to subsume these sets of quality criteria for deflators into a single set, drawing out the common elements that are material to all deflators and the specific elements that reflect a particular use.

5.68 Recommendation 5.9: we recommend that ONS should agree quality criteria for price deflators for public services such as those in Table 5.1 (ONS might prefer to subsume them as part of wider work on quality criteria for deflators), and use them to improve deflators used in measurement of volume of public service spending and productivity.

Annex

1. As discussed above, the flow of financial data from government departments, the Devolved Administrations and local authorities to ONS via the Treasury is a complex one. To illustrate the complexities involved, we have detailed the various data flows within this Annex and where relevant included case studies.
2. There are four sections:
 - (i) Complexity of data flows: a case study;
 - (ii) Stages in the data processes;
 - (iii) Data timeliness and periodicity; and
 - (iv) Impact of the new COINS database.

(i) Complexity of data flows: a case study

3. The following case study (Figure A5.1), showing how expenditure data on police procurement are compiled, is one illustration of how complicated the flows are.
4. As discussed in Chapter 5 above, departments providing data may not always recognise the final figures as published by ONS in the National Accounts. Table A5.1 sets out an illustrative example of the types of adjustments which can take place.
5. Data initially provided by the Department of Health and other sources for Health spending show that total Health pay and procurement for 2002/03 was £66.7bn. A series of adjustments followed: revisions by departments, National Account adjustments made by ONS (such as VAT refunds), correction of misallocation of some economic category classifications, adjustments made to cover the fact that NHS Trusts and NHS Foundation Trusts were excluded from central government expenditure for Treasury purposes but included under central government for the National Accounts. The end result was that pay was now £31bn (rather than £3.4bn), net procurement was £32.7bn (rather than £63.3bn) and capital consumption was £1.6bn. The total which now appears in the National Accounts is £65.3bn (non-seasonally adjusted) and £65.5bn (seasonally adjusted). The total is broadly the same, but the components within the total are very different from the original data provided by departments.

Figure A5.1 Data flow diagram For Police procurement data from source into the National Accounts

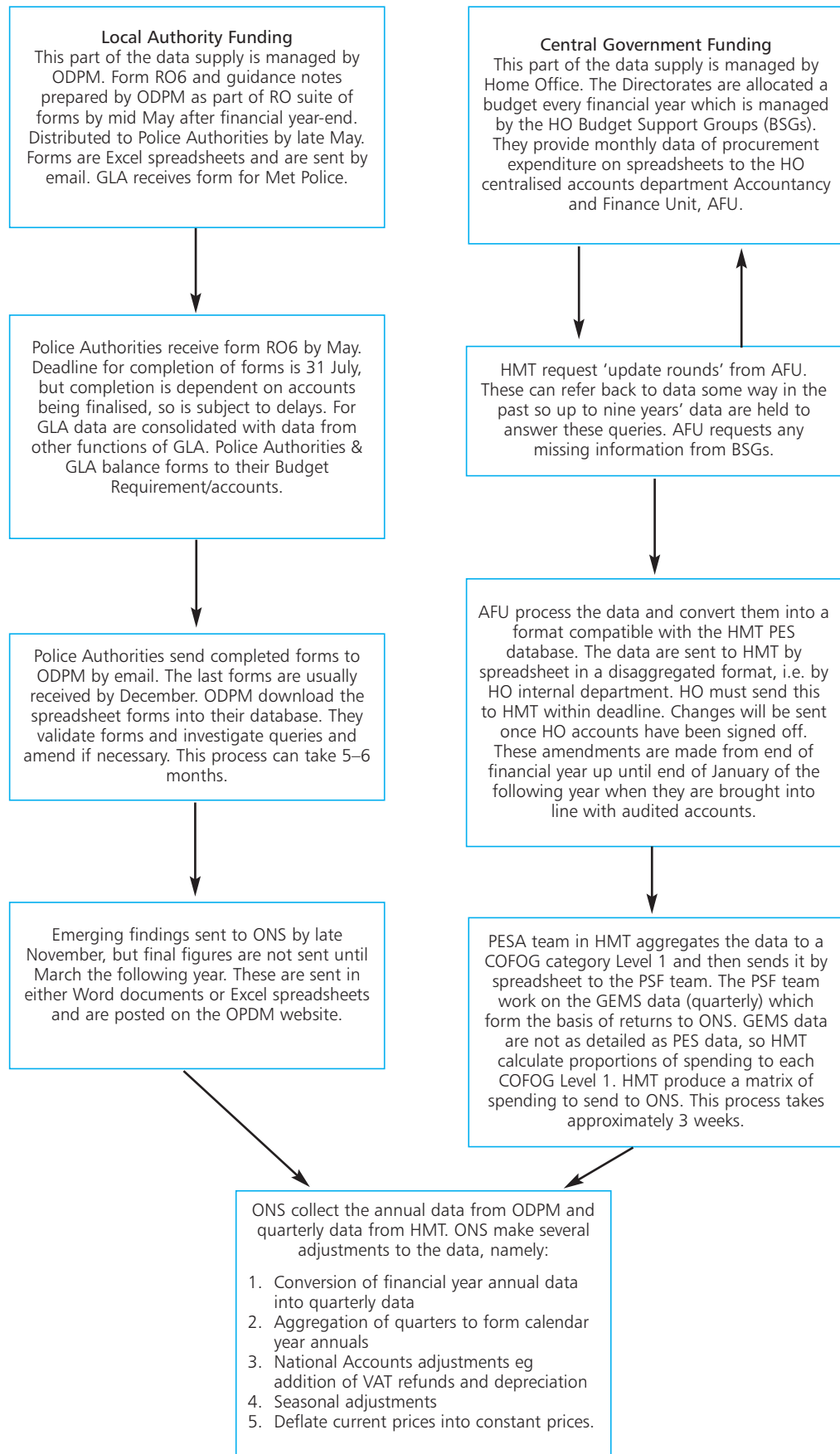


Table A5.1 Example of adjustments made to Health data (as defined under the Health government functional category) for 2002/03 as published in the *Blue Book 2004*

Data	Economic category within General Government Final Consumption	Amount (billions) (may not sum exactly due to rounding)	Reason for change/ adjustment
Initial financial year data reported by Department of Health (DH) and other departments, including Scottish Executive, Welsh Assembly and Northern Ireland Executive and allocated to the Health COFOG	Pay	£3.4	
	Net procurement	£63.3	
	Total	£66.7	
Revisions to departments' data made by departments	Net procurement	-£0.3	ONS queried DH's data via the Treasury for the last quarter of 2002/03 because it looked too high. DH agreed and provided an indication of likely data revision.
	Net procurement	-£0.4	DH and Welsh Assembly revised their data when producing data for the Public Expenditure Outturn White Paper
	Net procurement	-£0.1	DH and Welsh Assembly revised their data in line with finalised Resource Accounts submitted to the National Audit Office.
	Total	-£0.8	
National accounts adjustments	Net procurement	+ £0.2	Coverage adjustment because net procurement as reported by departments does not cover VAT refunded or EU reciprocal health schemes.
	Net procurement	-£0.6	ONS reclassification decision: Cash settlements for medical negligence had been wrongly included as net procurement on GEMS (should have been a transfer).
	Capital consumption	+ £0.2	Estimate of Department of Health and Primary Care Trust depreciation from the ONS's Perpetual Inventory Model (PIM).
	Total	-£0.2	
NHS Trust Reclassification Adjustments	Pay	+ £27.4	NHS Trusts are re-classified to Central Government in the Health COFOG. NHS Trusts' pay and capital consumption are added to Health COFOG data but net procurement no longer includes the NHS procuring services from NHS trusts so the change is largely offsetting within final consumption. The estimates for capital consumption are sourced from NHS Trusts reported data not from the PIM.
	Procurement	-£29.5	
	Capital Consumption	+ £1.3	
	Total	-£0.8	

/continued overleaf

Table A5.1 continued

Data	Economic category within General Government Final Consumption	Amount (billions) (may not sum exactly due to rounding)	Reason for change/ adjustment
<i>Blue Book 2004</i> health COFOG improvements	Net procurement	-£0.1	Various classification changes to detailed COFOG data within Government Final Consumption to reflect revised administrative arrangements for prison health, better data for military hospitals and the reclassification of nursing training to Education.
	Total	-£0.1	
Local Government data for health COFOG	Pay	+£0.1	Local government data in the health COFOG reflecting nursing care for elderly people in nursing homes.
	Net procurement	+£0.2	
	Total	+£0.3	
Total non-seasonally adjusted data for Health Final Consumption	Pay	31.0	
	Net procurement	32.7	
	Capital consumption	1.6	
	Total	£65.3	
Seasonal adjustment	Pay procurement and capital consumption	+£0.2	ONS seasonal adjustment works on a calendar year basis so financial year totals are affected by the seasonal adjustment process.
Total seasonally adjusted data	Pay procurement and capital consumption	£65.5	

(ii) Stages in the data processing

6. The data go through several processing stages before being published by ONS in the National Accounts. All these stages require various people at central government departments, the Treasury, ONS, local authorities and the Devolved Administrations providing information which is then transformed into various formats to meet the needs of the National Accounts. For central government, the following stages are typical in the processing of data for the National Accounts:

- a) **Stage 1: Departments to the Treasury** – Finance teams in departments input annual spending data, categorised by economic categories on to the Treasury’s PES database, which is maintained by the General Expenditure Policy (GEP) and Spending Teams within the Treasury. (Departments update the PES database regularly with outturn data and spending plans.) Departments also report spending by monthly and quarterly returns to the Treasury in GEMS, maintained by the Public Sector Finance (PSF) team within the Treasury. GEMS is used to monitor in-year spending against Parliamentary Supply Estimates and is the main source of outturn data for the National Accounts and the regular Public Sector Finances Press Release.

- b) **Stage 2: Treasury processing I** – The PESA branch in the Treasury assign all the data on the PES database that fall within Total Expenditure on Services (TES) to the Treasury Level 2 functional category based on COFOG, (e.g., Education and Training – primary schools; Education and Training – secondary schools, etc.) This is done in consultation with departments if the correct Level 2 category is not clear. Data are still shown by Economic Category.

The PSF team in the Treasury convert the quarterly departmental data into COFOG categories using a financial year matrix provided by the PESA branch – these data are still shown by Economic Category. PESA branch use PES data to produce PESA functional analyses and National Statistics releases at the time of the Public Expenditure Outturn White Paper (PEOWP), Pre-Budget Report and Budget. ONS also extract financial year final outturn data from the PES database.

- c) **Stage 3: Treasury processing II** – For quarterly data, PESA branch send PES Level 2 analyses to PSF (within the Treasury), which are used to create GEMS data by PESA Level 2 COFOG function. It is at this point that data needed by ONS beyond PESA Level 2 functional breakdown are apportioned by PSF to ONS COFOG Level 2 categories. PSF produce quarterly GEMS data by supply estimate, economic category and COFOG, which ONS use to produce COFOG and sub-COFOG analyses and to assign input-output categories.
- d) **Stage 4: Transfer of data from the Treasury to ONS** – The above processing produces the following output: (i) an aggregated, estimated, quarterly PESA level 2 COFOG by Economic Category matrix and (ii) a department by Economic Category matrix for all central government departments, Scotland, Wales and NDPBs; this is supplied to National Accounts Group within ONS.
- e) **Stage 5: ONS processing I** – Figures for Northern Ireland are obtained from the Treasury database via PSF and added to the GB Treasury figures to achieve total UK figures. National Accounts adjustments are applied where necessary to convert onto a correct National Accounts basis. At this stage, any data which have not been allocated COFOG categories will be pro-rated across the COFOG breakdown.
- f) **Stage 6: ONS processing II** – quarterly data are seasonally adjusted across calendar years, using a method that constrains the calendar year totals for seasonally adjusted data to be the same as the non-seasonally adjusted data. This means that financial year (seasonally adjusted) totals calculated at this point will no longer be consistent with those in departmental accounts. The adjustment process removes seasonal effects and maintains the underlying trend. Genuine step changes, such as reclassifications, remain in the data.
- g) **Stage 7: In-year revisions to GEMS data** – departments revise their quarterly GEMS data as later and better information are available towards the end of the financial year. Stages 3 to 6 are repeated with the revised data.

- h) **Stage 8: Revisions to PES data after the end of the financial year** – departments put revised data on PES, during the process of finalising their annual outturns. This happens, in particular, in connection with two main outputs; initially, for the presentation of the PEOWP to Parliament in the July following the end of the financial year; PEOWP is largely produced from the PES database. Departments again update the PES database following the production of audited Resource Accounts in the following Autumn. These revisions to data are not included in the National Accounts via a full repetition of stages 2 to 6, as departments are not required to resubmit quarterly GEMS returns in line with outturn data. The revisions are made to the National Accounts via co-operation between GEP, PSF and ONS and some liaison with departments to attempt to ensure that large revisions are allocated to the correct quarters and COFOG categories.

7. The above stages cover only the central government parts of the data supply and processing chain. The process is even more complicated for local authority data (although this may be provided by COINS sometime in the future). This is not provided to ONS by the Treasury but instead comes from ODPM for English local authorities. The respective Devolved Administrations provide ONS with data for their local authorities. The only exception is Northern Ireland who do provide financial data for their local authorities to the Treasury databases; the Treasury makes some adjustments and supplies information to ONS. ONS have no direct contact with the providers of the information for the local authorities in Northern Ireland (i.e. the Central Expenditure Division, Department of Finance & Personnel for Northern Ireland).

(iii) Data timeliness and periodicity

8. Poor timeliness and periodicity of financial data are discussed in the above chapter (see paragraphs 5.34-5.38). The following tables (A5.2 and A5.3) illustrate the timeliness and periodicity of current price expenditure data as they appear in the *Blue Book 2004*.

Table A5.2 Periodicity of central government current price expenditure data for *Blue Book 2004*

Country	2002 figures in <i>BB 2004</i>	2003 figures in <i>BB 2004</i>
England, Wales and Scotland	Based on final audited financial year data and final unaudited quarterly data for all periods: Quarter 1: last quarter of 2001/02 Quarter 2: first quarter of 2002/03 Quarter 3: second quarter of 2002/03 Quarter 4: third quarter of 2002/03	Quarter 1: based on final audited data for the last quarter of 2002/03. Quarters 2-4: first three quarters of in-year monitoring data for 2003/04 used.
Northern Ireland	Based on final audited financial year data for 2001/02 and 2002/03. All quarters are estimate. Financial year to calendar year mapping as above	Quarter 1: based on estimate of final quarter of audited 2002/03 data. Quarters 2-4: based on quarterly estimates derived from budget year forecasts for 2003/04.

Table A5.3 Periodicity of local government current price expenditure data for *Blue Book 2004*

Country	2002 figures in <i>BB 2004</i>	2003 figures in <i>BB 2004</i>
England, Wales and Scotland*	Based on final outturn data (unaudited) financial year data, and final quarterly estimates for all periods: Quarter 1: last quarter of 2001/02 Quarter 2: first quarter of 2002/03 Quarter 3: second quarter of 2002/03 Quarter 4: third quarter of 2002/03	Quarter 1: based on final (unaudited) data for the last quarter of 2002/03. Quarters 2-4: estimate of first three quarters of 2003/04 budget forecasts plus any quarterly information available.
Northern Ireland	Based on final (unaudited) financial year data for 2001/02 and 2002/03. All quarters are estimates. Financial year to calendar year mapping as above	Quarter One: based on estimate of fourth quarter of final 2002/03 data Quarters two to four: based on quarterly estimates derived from budget year forecasts for 2003/04

* Data for Scotland are based on provisional outturn information rather than final outturn.

(iv) Impact of the new COINS database

9. Paragraphs 5.39-5.47 in Chapter 5 discuss examples of some of the process issues that may or may not be rectified once the Treasury's new database, COINS, comes into effect from 2005/06 onwards. Table A5.4 below gives a more complete list of the processing issues as identified under this review.

Table A5.4 Process issues identified concerning the supply of central government expenditure data to ONS from the Treasury

Type	Issue	Cause	Likely to be resolved by COINS?
Data Classification	Product breakdown information required for accurate deflation (other than those supplied by DH and MoD) are not available	No product breakdown of procurement expenditure is collected on Treasury databases. ONS has to get this from MoD and Health (England Scotland and Wales) direct but estimate for the remaining departments.	No. Currently seen as outside of scope of COINS.
Data Classification	Functional data (COFOG 2-digit) estimated by the Treasury	The new PESA functional breakdown used on PES does not give ONS 2-digit COFOG without PSF estimating more detailed information.	Maybe. Potentially resolved by using 2-digit COFOG as functional dimension, but departments may not be able to provide this as readily as PESA Level 2.
Data Classification	Machinery of Government (MoG) changes may cause processing problems for total expenditure, functional data and data consistency.	MoG changes may distort the functional data if the various Treasury databases (GEMS and PES) are not consistent in their treatment. Potential for double-counting or omitting data if no co-ordination between departments. MoG changes may result in inconsistencies in the data supplied to the Treasury databases (PES and/or GEMS) as departments may have different accountancy procedures.	Yes. Should resolve, as functional analysis should be picked up from COINS at source (rather than as part of Treasury processing). Maybe. Will not in itself be resolved by COINS but detailed guidance on how to handle MoG changes will be included in COINS guidance. Yes. Will be resolved under COINS as each department will have to set up a new 'programme object' (i.e. line of expenditure) which will have a standard functional allocation.
Data Classification	Quality of departments' allocation of expenditure to Economic Categories is variable and can be inconsistent between the Treasury databases (GEMS and PES).	Mistakes in allocation by departments either from carelessness or lack of knowledge of national account concepts. Maybe also due to departments concentrating on full-year data at the expense of quarterly data or different people in departments provide data for the various Treasury databases.	Maybe. COINS may address: <ul style="list-style-type: none"> • by emphasising coherence of quarterly and financial year data; • by having better checking facilities; and • by ensuring better training available for departments. However, initial COINS training is focused on process rather data quality issues. Needs to be addressed by good process documentation.

Table A5.4 continued

Type	Issue	Cause	Likely to be resolved by COINS?
Data Classification	Devolved Administrations monthly and quarterly data not broken down by standard Economic Categories. (Full year data are fully set out by Economic Categories).	<p>Quarterly Scotland data have no Economic Category breakdown. (Each programme is currently allocated to an Economic Category following discussion with Scotland on the basis of its major component.)</p> <p>No quarterly data from Northern Ireland. ONS currently align PES data to the format of the previous return and estimate quarterly paths.</p> <p>Data provided for Wales are not in the standard quarterly GEMS format. The Treasury currently convert to GEMS format and include it in the Economic Category matrix. This means that its functional data are not separately available to ONS and there is potential for mistakes in the transfer.</p>	<p>Yes.</p> <p>Should resolve. Devolved Administrations will report quarterly/ monthly data on COINS to the required level.</p>
Data Classification	National Accounts Codes (NACS) data are inaccurate on GEMS.	Departments tend not to fill in National Accounts Codes (Economic Categories required on GEMS but not PES) with due care and attention. The most important ones for ONS are the asset splits of GFCF and gross procurement receipts and expenditure.	<p>Maybe.</p> <p>May resolve. Dependent on departmental behaviour. NAC level data will be available monthly and quarterly.</p>
Data Classification	The monthly and quarterly path of Scotland's (and some departments') data can be implausible.	Scotland revisions affect only the latest period supplied. Scotland (and probably some departments) supply year to date data – so any revisions to previous periods automatically appear in the latest month not the months in which they actually happen.	<p>No.</p> <p>Unlikely to resolve, unless departmental behaviour changes. However, in the long term, the Financial Management Review and the introduction of quarterly balance sheets may lead to improved quarterly data.</p>
Data Classification	Internal inconsistency between the Treasury supplied, functional and departmental matrices and FANDA.	ONS use data from both the COFOG and the departmental matrices the national accounts; hence these need to be consistent. Sometimes they are not, normally because Scotland or NDPBs' latest data has not been included in the latest COFOG calculations	<p>Yes.</p> <p>Should resolve. COFOG calculations no longer necessary.</p>

/continued overleaf

Table A5.4 continued

Type	Issue	Cause	Likely to be resolved by COINS?
Data Classification	The Treasury COFOG breakdowns of Gross Fixed Capital Formation (GFCF) do not include receipts from sales.	The COFOG breakdowns of GFCF are based on asset breakdowns (NACS) which only cover expenditure. The receipts from sales are not broken down by asset so are not added to GFCF. ONS has to do this manually.	Yes. Should resolve. COFOG calculations no longer necessary. Also there should be a better breakdown of receipts data.
Data Classification	Incorporation of outturn data by ONS/PSF may be inaccurate even at a financial year level (see periodicity issue below).	Currently revisions to outturn data from PEOWP and provisional and audited resource accounts are identified by PSF by comparing GEMS and PES financial year data and then current and previous PES data. ONS incorporates these on a best endeavours basis, including allocating EC changes to NACS but both PSF and ONS processes have considerable potential for errors.	Yes. Should resolve by providing revised output from COINS in line with the outturn finalisation processes, but this will not happen until 2005/06 outturn.
Periodicity	No quarterly path for NDPB, PECT and CFER data	No quarterly NDPB data are reported by a number of departments (DEFRA, FCO, DH, HO, DCA, NIO, and DTI).	Yes. Should resolve. Departments will report quarterly NDPB (and PECT and CFER data) on COINS. (DfT and DCMS have objected.) There will be £1m per year threshold so departments may have to report for slightly fewer organisations. NHS Trusts may complicate the situation for DH.
Periodicity	No quarterly allocation of outturn revisions.	Revisions to quarterly and monthly GEMS data as a result of the finalisation of outturn for PEOWP, provisional and audited Resource Accounts are not allocated to months/ quarters. ONS currently allocates as sees fit.	Yes. Should resolve but not immediately. Audited data will be reconciled with provisional data, at a department level and for financial years for 2005/06. Subsequently departments will need to allocate to months.
Timeliness	Timeliness for ONS.	Quarterly GEMS data are received late for ONS purposes due to a combination of i) Conflict in PSF resources between monthly and quarterly GEMS. (First 12 working days of month concentrate on monthly GEMS – ONS would ideally like quarterly delivery by 15th working day). ii) Need to reflect latest monthly GEMS data in quarterly numbers.	Yes. Should resolve. Less dependency on PSF resources. Yes. Should resolve. Quarters will be built up from monthly data after 2005/06.

Table A5.4 continued

Type	Issue	Cause	Likely to be resolved by COINS?
		iii) The ECs (GFCF) that PSF find hardest to produce COFOG data for are required the earliest by ONS	Yes. Should resolve, as long as ONS data-specification is clear. COFOG processing should not be required as will be on COINS.
		iv) PSF COFOG all the ECs not just those required by ONS	Yes. Should resolve, as long as ONS data-specification is clear.
		v) Late reporting by a number of departments (MoD DWP Scotland)	Yes. Should resolve. Either quarterly profile used or departments will have to supply data.