Statistics Commission

Revisions to Public Sector Finances: Estimates of Depreciation for the Road Network

Statistics Commission Report No. 25

June 2005

REVISIONS TO PUBLIC SECTOR FINANCES:

ESTIMATES OF DEPRECIATION FOR THE ROAD NETWORK

An Investigation by the Statistics Commission

Background and Summary of Main Findings

Introduction

i. The following report by the Statistics Commission looks at revisions to public finances data first announced by the Office for National Statistics (ONS) on 18 February 2005, and implemented in the *Public Sector Finances* First Release of 18 March. It considers the case for making the revisions, and also the way in which the revisions were made. An Annex provides a timeline of the events leading up to the announcement of the revisions by ONS.

Background to the Statistics Commission investigation

ii. ONS announced their intention to make some revisions to the public finances data in the monthly *Public Sector Finances* First Release of 18 February. That announcement included some information about the nature of the revisions and of the likely impact on the fiscal aggregates. But details were limited, and there were no estimates of the magnitudes involved. Full details were subsequently provided in a Technical Explanatory Note, released 10 days later on 28 February.

iii. The announcement of the revisions generated significant media coverage, which focused on the impact of the revisions on the fiscal aggregates. The news stories noted that the revisions were likely to help the Government to meet its fiscal rules, and highlighted the timing of the announcement, less than a month ahead of the Chancellor's next Budget. This raised the question of whether the changes had been motivated, in some part, by political expediency.

iv. In view of the concerns that had been raised, the Commission decided to conduct a short investigation of the revisions. We wanted to understand the nature of the revisions, why they needed to be made, and the reasons for making the revisions in the way that they were made. We were also interested in learning more about the timing of the announcement – why the revisions were announced at that specific time (especially as we understood that the problem that led to the revisions was first identified over two years earlier), and whether there had been any involvement of Treasury ministers and/or senior officials in decisions about timing.

v. ONS cooperated fully with the Commission's investigation, and provided Commission secretariat staff with access to a substantial number of relevant documents covering the period from the initial identification of a problem with depreciation estimates in October 2002 through to release by ONS on 28 February 2005 of a Technical Explanatory Note with full details of the forthcoming changes. The report that follows, and the timeline of key events at Annex A, have been produced largely from these documents.

The Commission's findings – the case for the revision

vi. The main revision to public finances data relates to estimates of depreciation for the motorway and trunk road network in England that is maintained by the Highways Agency. The Statistics Commission has considered the **case** for making the revision and we find it convincing. We have also considered the **way** in which the revision has been made and consider that to be appropriate as far as we are able to tell.

vii. The use (in public sector finances and national accounts) of Highways Agency accounting data based on renewals accounting means that a sum equivalent to the depreciation on the Highways Agency road network is – by default – included in central government current expenditure. This is explained further in paras 12 and 13 of the report.

viii. At the same time, depreciation of the Highways Agency road network is <u>also</u> implicitly included in the national accounts estimate of aggregate depreciation ('consumption of fixed capital') for the central government sector. If central government current expenditure and central government depreciation are then added together – as they are in calculation of the balance on the current budget – depreciation for these roads will have been counted twice. This is wrong and the revision is needed to correct this 'double counting'.

ix. The Highways Agency is responsible for the motorway and trunk road network in England; the road networks in Scotland, Wales and Northern Ireland are the responsibility of the appropriate devolved department or agency. The devolved administrations also follow renewals accounting in accounting for their motorway and trunk road networks, and – as with Highways Agency data for England – the use by ONS of their accounting data will lead to depreciation on these roads being counted twice in calculation of the current budget. However ONS have not as yet made any revisions to public finances data to correct for ‘double counting’ of depreciation in the devolved countries. .

The Commission’s findings – timing of the revisions

x. Annex A to our report, ‘Timeline of Key Events’, sets out the Commission’s understanding of the steps leading up to the announcements on 18 February and 28 February. The only issue here that is material is whether officials in ONS acted more quickly than was prudent when deciding and announcing the revision. We note that there appears to have been a decision in about mid-December to proceed as early as possible with revisions to the public finances figures though the documentation here is unclear. We have no criticism of the decision itself. We accept that, at that point, there had been enough internal discussion of the technical issues and it was right to proceed with implementation for the *Public Sector Finances* First Release of 18 March.

xi. On the basis of the papers available to us, we have seen no evidence of any inappropriate involvement of Treasury ministers or policy officials. *Public Sector Finances* is a joint ONS/Treasury First Release, and Treasury statisticians and accountants were inevitably and rightly involved in discussions about accounting and data quality prior to the decision to make the revision. It is reasonable to suppose that various senior officials within the Treasury would have been aware of the work in hand. But this would only be material if those officials took any action intended to influence ONS inappropriately. We saw no evidence of that. We have also been given written confirmation from Treasury that ministers were not informed of the ONS work prior to receiving advice from the National Statistician on 15 February.

ESTIMATES OF DEPRECIATION FOR THE ROADS NETWORK: THE CASE FOR REVISION

Report by the Statistics Commission

Background

1. The monthly *Public Sector Finances* First Release of 18 February 2005 announced revisions to public finances data, to be made in the next monthly release. A Technical Explanatory Note, released on 28 February, gave details of the revisions. The revisions were made in the *Public Sector Finances* First Release of 18 March 2005.

2. The 18 February announcement and subsequent Technical Explanatory Note covered three separate revisions. The most significant was to the **estimates of depreciation in respect of roads** maintained by the Highways Agency. This report looks at that revision, and the reasons for it. The other two revisions, to Highways Agency expenditure (replacing provisional data with final audited data) and to debt interest payments, were routine revisions, which take on board better information. They are not material to the issues of public concern that prompted the Statistics Commission's investigation.

The nature of the revision

3. The revision is a correction to the measurement of depreciation ('consumption of fixed capital' in national accounts terminology) in respect of the motorway and trunk road network that is maintained by the Highways Agency.

4. The revision is necessary because of differences between the accounting rules used by the Highways Agency in their own accounts and those used by ONS when compiling estimates of depreciation for the public sector accounts. There has been an inconsistency between how depreciation is handled in the Highways Agency's accounts and how it is measured by ONS for the national accounts and the public sector finance accounts. **The revision corrects this inconsistency by revising ONS estimates of depreciation in respect of roads so as to be consistent with Highways Agency accounting rules.**

5. The effect of the revision is to reduce public sector depreciation by around £0.4 billion a year back to 1998-99, the first Public Sector Finances year for which resource accounts were produced.

6. As carried out, the revision does <u>not</u> involve reclassification of expenditure – references to ‘reclassification’ in some documents were shorthand for the apparent effect but we believe this has been unhelpful. There are however consequential changes to government current expenditure and to current receipts but these exactly offset one another. Estimates of government gross capital spending are not affected.

Effect on fiscal aggregates

7. The revision to depreciation has no impact on public sector (or general government) net borrowing. However, it does impact on the **public sector current budget** - a key fiscal aggregate for monitoring compliance with the government’s fiscal rules - and on public sector net investment. The current budget is defined as total receipts less current spending less depreciation; net investment is defined as gross investment less depreciation. Therefore the effect of a revision that reduces total depreciation is to increase both the current budget (higher surplus or smaller deficit) and net investment by similar amounts.

8. The fiscal rules focus on the current budget over the economic cycle. The Treasury estimates that the current economic cycle began in 1999-2000, and will run for seven years up to and including 2005-06. On this basis and assuming a similar impact from the revision in the forecast years (2004-05 and 2005-06) as in the first five years of the present cycle, the total impact on the cumulative current surplus over the full cycle could be around £3 billion.

9. The *Public Sector Finances* First Release of 18 March 2005, which incorporated the revision to depreciation, also incorporated an upward revision to public expenditure for 2003-04 of over £1 billion. This partly offset the impact on the fiscal aggregates from the depreciation revision. The total revision made on 18 March to the cumulative current surplus for the first five years of the current cycle (1999-2000 to 2003-04) was an

increase of £1.0 billion, as compared with an increase of £2.1 billion from the depreciation revision alone.

The case for the revision

10. Most data for central government expenditure in national accounts and public sector finances come from financial data collected from government departments by Treasury and passed to ONS. Since 2000, departments have produced their accounts following **resource accounting**, as set out in the Resource Accounting Manual (RAM). These accounts are audited by the National Audit Office, although data for the most recent periods will generally be provisional, prior to audit.

11. Departmental accounts include estimates of depreciation, calculated according to RAM rules. However these estimates are **not** used in national accounts or public sector finances. Instead depreciation ('consumption of fixed capital') on the fixed assets of central government is calculated by ONS using a Perpetual Inventory Model (PIM). This approach is used throughout the national accounts, not just for central government.

12. The Highways Agency, an agency of the Department for Transport, is responsible for the motorway and trunk road network in England. In its accounting for the road network, the Highways Agency follows **renewals accounting.** The RAM allows renewals accounting as an accounting option for certain infrastructure assets. As far as we can establish, the only current use of renewals accounting by central government bodies is in accounting for national road networks.

13. Under renewals accounting, the department that owns the assets – the Highways Agency in the case of the motorway and trunk network in England – is assumed to have a policy of maintaining those assets in a certain condition. The repair and maintenance expenditure needed to do this is recorded in the Highways Agency's accounts as operating expenditure, ie. as current expenditure in national accounts terms. The balance sheet shows the value of the road network being maintained - no depreciation charge is recorded (except when there is clear evidence that road condition has deteriorated, in which case an 'impairment' is recorded).

14. The use of renewals accounting means that the equivalent of a depreciation charge on Highways Agency-maintained roads is included in the national accounts data for government current expenditure on roads (though not as a separately identifiable item). However national accounts also implicitly includes an estimate of depreciation on Highways Agency assets (roads) in its PIM-based estimate of aggregate central government depreciation. **The current budget fiscal measure deducts both current expenditure and depreciation from total revenues to get to the current balance. So depreciation on Highways Agency-maintained roads has been accounted for twice in the current budget.** This is the error that the revision to the depreciation series in the public sector finances aims to correct.

15. Renewals accounting is also used by the devolved administrations in accounting for the motorway and trunk road networks in Scotland, Wales and Northern Ireland. As with Highways Agency-maintained roads in England, this will lead to depreciation on these road networks being counted twice in measurement of the balance on the current budget. The revisions made in the 18 March First Release were only in respect of the road network in England. ONS have yet to correct for similar double counting of depreciation in respect of the road networks of the devolved countries.

The way the revision was made

16. The Statistics Commission has also considered the way in which the revision was made in the public sector finances data set, and whether this could give rise to any problems in the future.

17. The Technical Explanatory Note released by ONS on 28 February explains that there are two different ways that the 'double-counting' of depreciation of the road network might be corrected. The first (the 'renewals accounting' approach) is to adjust the aggregate depreciation estimate to remove the depreciation on Highways Agency roads that is already scored in current expenditure. The second (the 'depreciation accounting' approach) is to adjust aggregate current expenditure and gross capital spending so as to shift the 'renewals' element of Highways Agency expenditure on repairs and maintenance from current expenditure to capital expenditure. In order to correct the public finances data, ONS have opted for the first approach.

18. The revision to public sector finances will also need to be made for the national accounts. Revisions policies are different for national accounts and public sector finances. That for public sector finances stresses the need for making revisions as soon as practicable once the need for a revision has been identified. Revising the national accounts is a more complex process, and revisions are generally restricted to once a year at the time of publication of the annual Blue Book (except for revisions to the most recent quarters).

19. These different policies mean that it is both appropriate and necessary to make the corrections to public finances ahead of those to national accounts. But national accounts will also have to be revised eventually – and if this is done in a different way from public sector finances, then there will need to be further revisions to the public sector finances data to retain consistency. The ONS Technical Explanatory Note sets this out clearly (para 23). The Technical Explanatory Note also explains that the impact of the correction on the fiscal aggregates is the same regardless of the way that the correction is made.

20. In deciding how to make the revision for national accounts, a key question for ONS will be whether basing depreciation (‘cost of fixed capital’) calculations on renewals accounting principles for one specific set of assets only (the Highways Agency road network) is acceptable under international guidance for national accounts. On the basis of the documents made available to us, we think it possible that it may not be. Instead we believe that it may prove necessary to employ the alternative, depreciation accounting, approach when implementing the revision in national accounts, in order to comply with international, specifically Eurostat, requirements. However, we recognise that any future revisions to public sector finances that may be necessary when the appropriate revision is implemented in national accounts will have no impact on the key fiscal aggregates.

Statistics Commission
June 2005

Annex A

TIMELINE OF KEY EVENTS

1. These notes are based on documentary evidence supplied to the Statistics Commission by the Office for National Statistics in March 2005. The names of officials have been omitted, as they are not relevant to the issues.

Stage 1: Recognising the problem

(Oct 2002 – Oct 2003)

2. The problem of ‘double-counting’ of depreciation for Highway Agency-maintained roads was first identified in October 2002. An ONS peer group appraisal of a paper on a possible method for direct output measurement for government expenditure on roads prompted ONS public finances statisticians to investigate the issue as to whether there was double counting of depreciation arising from use of renewals accounting by the Highways Agency.

3. The issue was raised with Treasury public finances statisticians and accountants at a meeting of the Public Finances Data Quality Group in July 2003, where it emerged those Treasury accountants had some concerns about the quality of Highways Agency data. But there was no substantive discussion within ONS until November 2003, when the issue was raised at the National Accounts Methods Board.

4. The main events over this period were:

- **November 2002.** Issue was first articulated in an internal ONS paper. A paper on measuring government services for road provision, circulated to the Public Sector Classification Committee (PSCC), noted the use of renewals accounting by the Highways Agency and observed, “We could be erroneously counting the PIM expenditure in the national accounts”. This was an electronic consultation – the committee did not formally meet to discuss the paper – and the response to the consultation was limited. It was subsequently (Jan 2003) decided to refer the issue to the new National Accounts Methods Board (NAMB).

- **July 2003.** Issue of the use of renewals accounting by Highways Agency discussed by the Public Sector Data Quality Group (PSDQG), a group that meets every few months to discuss issues relating to public finances data for national accounts. (PSDQG includes HMT statisticians working on public finance and expenditure data, HMT accountants developing whole of government accounts, ONS public finances experts, and ODPM statisticians working on local government spending data). ONS reported on the 'double-counting' of depreciation for roads. HMT reported on discussions regarding the accounting issues for roads spending, and some doubts about quality of the accounting data.

Stage 2: Discussing the national accounts treatment

(Nov 2003 – Jun 2004)

5. The issue was discussed by NAMB in November 2003, and again in January 2004 and March 2004. At the second (January) meeting it was decided to ask Eurostat about the use of renewals accounting for roads in national accounts. The report back to NAMB in March said that the discussions with Eurostat had been inconclusive. However a letter from Eurostat in February 2004 appears to suggest that the direct use of renewals accounting source data in the national accounts may not be acceptable.

6. At a PSDQG meeting in March, ONS public finances statisticians reported that there were divergences of view within ONS on the need to correct for 'double-counting' of depreciation.

7. The main events over this period were:

   - **November 2003.** Case taken to NAMB for first time. In answer to question, "is the maintenance expenditure on roads current or capital?" NAMB said no right or wrong answer, but majority preferred capital. Further work was commissioned.

   - **January 2004.** Further paper put to NAMB. This asked the question whether renewals accounting (for roads) should be adopted for national accounts. No clear decision was reached. NAMB decided that national accounts statisticians would write to Eurostat, seeking their views.

   - **February 2004.** Letter from Eurostat to ONS suggests that use of renewals accounting data directly in national accounts may not be acceptable. "Renewals expenditure charged to the operating cost statement is a joint measure of GFCF and depreciation and must be treated as such when converting source data to national accounts concepts."

- **19 March 2004.** Discussed again at PSDQG meeting. ONS public finances statisticians noted that there could be problems with Eurostat accepting renewals accounting, and that not all in ONS accepted that there was a ‘double-counting’ problem.

- **31 March 2004.** National accounts statisticians reported back to NAMB meeting on discussions with Eurostat, which had been inconclusive. But Eurostat believed that some road repairs spending had been wrongly classified as current. It was agreed to return to this subject at a later meeting.

Stage 3: Uncoupling public finances from national accounts

(Jul 2004 – Dec 2004)

8. In July 2004, a new revisions policy for the Public Sector Finances First Release was announced. This policy uncoupled revisions to the public finances data set from revisions to the national accounts. This meant that the issue of revising the measurement of depreciation for the public finances data series could be considered independently from that of revising the measurement of depreciation for the national accounts.

9. This separation of the revisions policies does not appear to have had an immediate effect on the ongoing discussion on the depreciation issue. For the next few months, discussions continued on the basis that this was about a revision to national accounts. But consideration of a possible national accounts revision was proceeding at a relatively slow pace. The issue was on the agenda for an NAMB meeting in November, but this item was not reached and discussion was postponed to February 2005.

10. The decision to make a revision to public finances data independently from national accounts appears to have been taken during December 2004. At a PSDQG meeting on 6 December, ONS public finances statisticians stated their preference for moving ahead with the revision as soon as possible, once data issues had been resolved, while at the same time noting that the national accounts issues were still some way short of resolution. Over the next two weeks, ONS public finances statisticians took the decision to recommend proceeding with the public finances revisions, and not to wait for the national accounts issues to be resolved. An internal minute of 23 December proposed that a revision be made for the Public Sector Finances First Release as early as possible.

11. The main events over this period were:

- **July 2004.** New revisions policy for Public Sector Finances First Release announced, uncoupling revisions to public finances data from those to national accounts. Revisions to public finances data would henceforth be made as quickly as possible. This ‘uncoupling’ had been recommended two years earlier by a National Statistics Quality Review of Government Accounts and Indicators.

- **August 2004.** Issues regarding Highways Agency accounting for roads discussed further at a PSDQG meeting, on basis of an HMT paper. HMT accountants said they needed a ‘methodology session’ to discuss various issues concerning renewals accounting. ONS public finances statisticians noted again that no agreement within ONS on how to handle for national accounts. .

- **November 2004.** Issue on agenda for NAMB meeting, but not reached.

- **6 December 2004.** Discussed again at PSDQG meeting - HMT accountants reported that accounting issues now addressed (‘methodology session’ no longer needed). Meeting agreed that the decision on a revision was for ONS. ONS public finances statisticians said that they favoured moving as soon as possible, but also noted slow progress on national accounts revisions. Next discussion at NAMB had been put back to February, and there would be need to be discussions with Eurostat after that.

- **23 December 2004.** Internal ONS minute recommended that revision to Public Sector Finances data set be made for next First Release on 21 January.

Stage 4: Announcing the revision

(Jan 2005 – Mar 2005)

12. At first, ONS were hoping to make the revision in the First Release for December published on 21 January 2005. However quality assurance procedures were not completed in time for this. After a period of uncertainty, when it seemed that data quality problems might delay the revisions for several months, the data issues were satisfactorily resolved and ONS decided that it would be possible to make the revision for the 18 February First Release.

13. At this point (9 February) the National Statistician was briefed for the first time. The course of action agreed by the National Statistician on 14 February was to pre-announce the revision in the 18 February First Release, but without any numbers. Numbers would the follow 10 days later, together with a technical note explaining the changes. The actual revision would then be made in the 18 March First Release. A pre-announcement at least one release period prior to implementation of the revision is in line with the National Statistics Code of Practice revisions protocol.

14. Treasury ministers were informed on 15 February, in line with ONS obligations under the Code of Practices protocol on consultation with ministers.

15. The revision was pre-announced in the 18 February First Release, as planned. Full details and numbers were promised for a technical note, to be released on 28 February. However following press speculation about the magnitude of the revision and the reasons behind it, ONS released further details of the nature of the revision and the reasons for it (though no numbers) in the form of letters from the National Statistician to the press and to the Chairman of the Statistics Commission, prior to the release of the technical note.

16. The main events over this period were:
    - **12 January 2005.** Decision not to make revision in First Release of 21 January, as quality assurance not complete.

- **3 February 2005.** Letter at director level from ONS (public finances) to HMT (public services directorate) informing HMT about current position on making the revision. Letter notes that quality assurance procedures may not be completed in time to make revision in either of February or March First Releases.

- **7 February 2005.** Following meeting with Treasury accountants and statisticians, which resolved main outstanding data questions, ONS public finances statisticians advised that it now looked as if quality assurance could be completed in time to make revision in 18 February First Release.

- **9 February 2005.** National Statistician briefed (for first time); subsequently (11 Feb) sent a detailed note on the revision.

- **14 February 2005.** Decision to pre-announce revision on 18 February, with revision to be made in 18 March First Release. Initial announcement would be without numbers, and would be followed shortly afterwards by a technical note, including numbers.

- **15 February 2005.** National Statistician wrote to Financial Secretary to Treasury, informing Ministers about the forthcoming revision.

- **18 February 2005.** Public Sector Finances First Release, with announcement of forthcoming revision.

- **21, 22 February 2005.** More information about the revision released in letters from National Statistician to newspapers and to Chairman of Statistics Commission.

- **24 February 2005.** Final decision on numbers (to make revision through ‘renewals approach’ rather than through ‘depreciation approach’).

- **28 February 2005.** Further ONS News Release, with numbers. Technical Explanatory Note released.

- **18 March 2005.** Public Sector Finances First Release, incorporating revision to depreciation, details of which were pre-announced on 28 February. First Release figures also incorporated a further, separate revision to public expenditure, which partly offset impact of depreciation revision on fiscal aggregates.