Public Service Agreements:
Managing Data Quality - Compendium Report

REPORT BY THE COMPTROLLER AND AUDITOR GENERAL | HC 476 Session 2004-2005 | 23 March 2005

EXECUTIVE SUMMARY

1   Good quality data are crucial for the effective use of performance measures and targets in improving public sector delivery and accountability. Good data help Departments to: manage delivery against priorities; assess whether they need to revise policies and programmes; and report reliably on their achievements.

2   HM Treasury has created a sound framework to provide Parliament and the public with consistent and regular data on Departments' progress in meeting their main Public Service Agreement (PSA) targets. Departments publish in Technical Notes the measures and data sources they intend to use to judge their performance for each target. They subsequently provide outturn data for these measures in the spring Departmental Reports and, since 2002, in Autumn Performance Reports. HM Treasury reports outturn data for 2003-06 targets on their website.

3   During 2004 the NAO examined 64 systems operated by seven Departments and the cross-cutting Sure Start programme (referred to as the eight Departments) to collect and report data relevant to their 2003-06 PSA targets. These examinations revealed that Departments had made variable progress in establishing robust systems. For some targets, Departments had overcome substantial measurement challenges to develop and operate good systems which addressed the main risks to the reliability of reported data. But for around half the systems we looked at Departments had encountered problem.

■   For 13 systems (20 per cent) Departments were not collecting data for the measures specified in their Technical Notes at the time of our validation work. This included systems for six well-established targets which had been rolled over in the same or similar form from the previous round of PSAs which ran

from April 2001. And another three systems where Departments have now stated that they do not intend to report data. Instead they will focus on developing data systems for new PSA targets which become live from April 2005;

■   For a further 20 systems (31 per cent) there were weaknesses which Departments should address to reduce the risk of gaps or errors in reported results over time.

Departments had identified some of the system weaknesses in their performance reports, but often they did not explain gaps in reporting against 2003-06 targets. Readers were, therefore, not warned to interpret results with care, given the limitations in the underlying data systems.

4   Where there are delays in establishing a robust data system for a target this will reduce its value in driving improvements in performance and accountability. Many of the problems encountered by Departments in collecting good quality data for their 2003-06 targets arose because they had not given sufficient attention to data quality issues, rather than the system weaknesses being intractable or too expensive to remedy. This report identifies the common challenges faced by Departments in managing data quality and highlights the following good practices that should be applied more widely to improve the reliability of data and public reporting.

■   **Their managers should raise the profile of data quality issues.** They could, for example, allocate clear responsibilities for data quality and maintain active management oversight of systems, including challenging outturn data, to reinforce the importance of data quality;

- **They should plan and co-ordinate the data needs for new systems.** Many weaknesses stem from inadequate attention to data issues when PSA targets are selected and specified. Departments should define the quality of data needed for effective progress monitoring, and then assess whether existing or new data systems can best meet the requirement. This process should involve staff from the relevant business areas, statisticians and analysts, and the providers of data whether within or outside the Department;

- **They should develop a corporate view of risks to data quality.** This would help ensure data quality issues are understood, actively monitored, effectively managed and, where necessary, disclosed in performance reports. Reflecting key data quality risks in wider corporate risk registers can increase the attention that is given to these issues;

- **Systems must be adequately documented and updated for any significant changes.** Clear definitions of terms, well-documented controls and unambiguous criteria for judging success enable systems to operate consistently over time and provide the foundations for making robust judgements of performance. Where Departments revise systems for live PSA targets they should update documentation and agree major changes with HM Treasury and explain them in their Technical Notes;

- **Managers should look for opportunities to apply low cost credibility checks to data.** Managers can check outturn data and trend data by comparing them with other data sets covering similar or related aspects of performance. Such controls are particularly valuable where Departments' systems draw on data which may be subject to sampling error, or data provided by other organisations;

- **Users of performance data must be made aware of limitations in underlying systems.** Identifying limitations and explaining their implications for outturn results builds trust in public reporting by helping users make informed assessments of reported results.