



National Audit Office

Third Validation Compendium Report: Volume 1

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Third Validation Compendium Report: Volume 1

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CONTENTS

SUMMARY	4	PART FOUR	
PART ONE		Strengthening the overall approach to PSA data quality management	17
Introduction	7	Establishing clear expectations for data quality management	18
The PSA system	7	Challenging reported performance and data quality	18
The NAO's role	7	Taking a managed approach to strengthening PSA data systems	19
The NAO's approach to validation	8	Involving statisticians and other data experts	20
PART TWO		Role of HM Treasury	20
Validation results	10	APPENDICES	
Departmental results for 2005-08 PSA data systems	10	1 Outline of NAO's approach to validation	21
Improvement in PSA data systems quality	10	2 Examples of 2005-08 PSA Targets and Technical Notes	23
PART THREE		3 Summary of validation conclusions for each PSA data system	25
Factors affecting the quality of PSA data systems	13	4 Good practice checklists for PSA data systems	31
System specification issues	13		
System operation issues	13		
System reporting issues	13		
What can staff responsible for data systems do to address these problems?	14		



SUMMARY

1 Good quality data are crucial if performance measures and targets are to be used effectively to improve public sector delivery and accountability. Good data help Departments to: improve programme management and performance; assess whether they need to revise policies and programmes; allocate resources and make other policy decisions; and report reliably to the public and Parliament on their achievements.

2 In 2004, the Government announced 110 Public Service Agreement (PSA) targets for 17 Departments covering the period 2005-08. PSA targets express the priority outcomes that Departments are seeking to

achieve nationally and internationally, and cover key aspects of the Government's social, economic and environmental policy. Large sums of public money are devoted to the programmes designed to deliver them.

3 The National Audit Office (NAO) previously reported on the quality of the data systems underpinning Departments' PSA targets covering the period 2003-06.¹ We are now examining the data systems used by Departments to monitor and report progress against their 2005-08 PSA targets.

¹ *Public Service Agreements: Managing Data Quality – Compendium Report 2004-05 (HC 476); Second Validation Compendium Report: 2003-06 PSA data systems 2005-06 (HC 985).*

4 During 2005-06 we validated the data systems operated by six Departments: Cabinet Office, Department for Culture, Media and Sport (DCMS), Department for Education and Skills (DfES), Department for the Environment, Food and Rural Affairs (Defra), Ministry of Defence (MOD) and HM Treasury. This report (Volume 1) summarises the results. Detailed findings for each data system are presented in Volume 2. We will report on the data systems for all 2005-08 PSA targets in 2007-08.

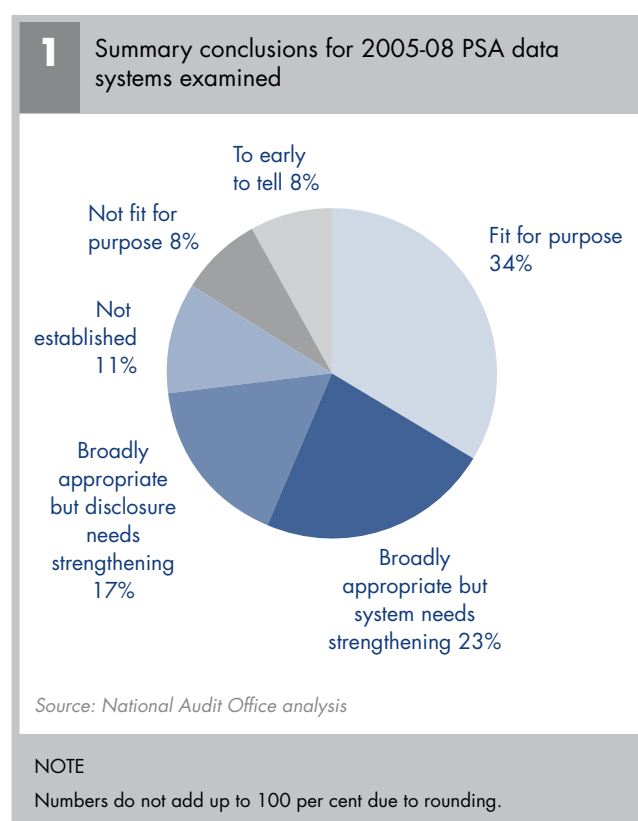
5 For the six Departments included in this report, we reviewed a total of 65 data systems used to measure progress against all 46 of their 2005-08 PSA targets.² For five of these systems (eight per cent), it was too early to assess the strength of departmental controls. For the remaining systems, we found a mixed picture (**Figure 1**).

6 Nearly three-quarters of the systems developed by Departments provided a broadly appropriate basis for measuring progress against their PSA targets, but less than half of these were fully fit for the purpose. Most required some action to strengthen measurement or reporting arrangements:

- 23 per cent of systems had weaknesses in either their design or operation. These weaknesses may not have resulted in unreliable data or may have affected only an element of the data system, but in practice Departments did not know the actual levels of error that may have resulted. Departments should address these weaknesses to reduce the likelihood of error in the future.
- In 17 per cent of systems, we found that Departments had not explained adequately in their public performance reports the impact of unavoidable limitations in the quality of their PSA data.

7 For nearly 20 per cent of systems, we found significant limitations in Departments' control arrangements: eight per cent of Departments' systems were not fit for monitoring and reporting progress on the key elements of their PSA targets, while for another 11 per cent Departments had not established the data systems needed to report progress at the time of our review.

² For the purposes of validation, PSA targets may rely on more than one data system, for example, if they include multiple, unrelated aspects of performance or comprise separate sub-targets.



8 In 2004, we examined the systems underpinning the same six Departments' PSA targets covering the 2003-06 period. **Figure 2 overleaf** compares the results from the two periods and shows that there has not been a major improvement in Departments' overall approach to the management of PSA data quality.

9 In practice, PSA targets themselves change over time and Departments develop their measurement systems accordingly. Nearly 30 per cent of the 2005-08 data systems that we examined were new or significantly different from the 2003-06 systems. Looking at just those systems that were common to both PSA periods we found that the Departments had responded to our previous recommendations and made a number of improvements, for example: better system documentation, greater checks on the quality of data obtained from external bodies, and clearer disclosure of data limitations in public performance reports. However, these improvements were offset by limitations in the new data systems established for the 2005-08 period.

2 Validation results compared

	2003-06 PSA data systems %	2005-08 PSA data systems %
Not fit for purpose/ not established	18	19
Fit for purpose	30	34
Broadly appropriate but...		
...System needs strengthening	26	23
...Disclosure needs strengthening	20	17

Source: National Audit Office analysis

NOTE

For eight per cent of 2005-08 data systems it was too early at the time of our validation to form a view on the strength of controls.

10 The lack of overall improvement highlighted in Figure 2 raises questions about the priority attached by Departments to data quality when developing, monitoring and reporting against their PSA targets. In our previous reports, we provided guidance on how Departments can strengthen their approach. Looking forward, we expect the Government to announce new PSA objectives in 2007 as part of the Comprehensive Spending Review. This provides an excellent opportunity to build in data quality management from the start for the new round of measures and targets.

11 This report summarises our validation findings for the six Departments and highlights the risks that Departments should consider when establishing or reviewing their different PSA data systems. We also highlight other actions needed to raise the importance placed by Departments on the control of key performance data, and strengthen Departments’ overall approach to PSA data quality management.

12 Consequently we recommend action at three different levels: Departmental staff responsible for managing individual PSA data systems; central Departmental staff responsible for establishing Departments’ policy towards PSA data quality; and HM Treasury, as the department responsible for oversight of the PSA framework across all Departments.

Recommendations

For staff responsible for managing PSA data systems

- a** Consider the implications for measurement and data systems when designing PSA measures and targets.
- b** Explicitly assess the risks to data quality in PSA data systems, taking into account differences between types of data.
- c** Ensure data systems and the associated controls are adequately documented and ensure supporting records are kept up to date.

For staff responsible for the Department’s data quality policy

- d** Raise the profile of PSA data systems across the Department by setting out clear expectations for data quality and reporting standards.
- e** Actively monitor PSA data quality and ensure that there is adequate challenge to outturn data.
- f** Assign responsibilities and resources to address identified data system weaknesses.
- g** Formalise the role of statisticians and other data specialists in the quality assurance of PSA data systems.

For HM Treasury

- h** Challenge Departments’ measurement arrangements early in the process of developing new PSA measures and targets.
- i** Review Departments’ response to NAO validation recommendations for strengthening PSA data systems.
- j** Provide measurement guidance to Departments setting out HM Treasury’s expectations for PSA data quality.

PART ONE

Introduction

The PSA system

“Public Service Agreements are fundamental to the Government’s approach to delivering world-class public services, combining clear national goals with unprecedented levels of transparency.” Foreword to the Public Service Agreement White Paper 2004.

1.1 Public Service Agreement (PSA) targets are intended to improve public sector delivery and accountability by helping Departments manage delivery against priorities, assess whether they need to revise policies and programmes and report reliably on their achievements (see Figure 3). If these benefits are to be maximised targets must be underpinned by good quality data.

1.2 Each of the main Departments agree their PSA targets with HM Treasury, which is responsible for oversight of the PSA framework. At the start of the Spending Review process Departments discuss with HM Treasury the broad coverage of their PSA targets, before finalising the precise wording of the targets. Once the PSA target is identified and defined, HM Treasury and the Department decide on the targeted level of improvement for each PSA target. HM Treasury issues guidance to Departments for each stage of this process.

1.3 Departments must set out exactly how they will measure performance and assess progress against their PSA targets in Technical Notes. These Notes are publicly available documents, written for the lay reader and agreed with HM Treasury (Figure 4 overleaf).

1.4 To support accountability Departments report progress against all their PSA targets twice a year, in their annual Department Report and Autumn Performance Report. HM Treasury guidance states that Departments’ reports should provide a full and accurate picture of progress against the PSA targets by reporting latest available data for all measures set out in their Technical Notes, in a clear and informative fashion. This includes

explaining the factors affecting the performance achieved and whether there are any significant limitations in the data system used for a specific target.

The NAO’s role

1.5 Following his 2001 report on Audit and Accountability in Central Government, Lord Sharman recommended that there should be external examination of Departmental information systems, as a first step towards validation of key published data. In response, in March 2002 the Government invited the Comptroller and Auditor General to review the data systems underlying PSA targets at least once during the lifetime of a target.

3 What are Public Service Agreements?

PSAs are three year agreements, negotiated between each of the main Departments and HM Treasury during the Spending Review process. The first PSAs covered the period 1999-2002, the second the period 2001-04 and the third the period 2003-06. The current PSAs cover the period 2005-08.

Each PSA sets out a Department’s high-level aim, priority objectives and key performance targets under most of these objectives.

The Agreements set for 2005-08 are available from HM Treasury’s website (http://www.hm-treasury.gov.uk/spending_review/spend_sr04/psa/spend_sr04_psaindex.cfm)

The targets specified in these Agreements include:

- Demonstrate by 2008 progress on the Government’s long-term objective of raising the trend rate of growth over the economic cycle at least meeting the Budget 2004 projection.
HM Treasury
- To enable at least 25 per cent of household waste to be recycled or composted by 2005-06, with further improvement by 2008.
Defra

Appendix 3 provides a full list of the PSA targets included in this report.

4 What should be covered in a Technical Note?

Technical Notes set out how performance against PSA targets will be measured. For each target they should:

- set down baselines, provide definitions of key terms, explain territorial coverage and set out clearly how success will be assessed; and
- describe the data sources that will be used, including who produces the data and any quality assurance arrangements.

Examples of Technical Notes are provided in Appendix 2. All Departments' Technical Notes can be accessed via the HM Treasury website: http://www.hm-treasury.gov.uk/documents/public_spending_and_services/publicservice_performance/pss_perf_table.cfm

The NAO's approach to validation

1.6 We adopted a staged approach to the development of methodology. In 2003, we piloted our approach with five Departments, examining the data systems they used for a sample of their 2001-04 targets. We then conducted a dry run validation of the data systems underpinning all of Departments' 2003-06 PSA targets. We reported the summary results of that exercise in our 2005 and 2006 Compendium reports.³

1.7 In 2005-06 we examined 65 data systems used to report on 46 PSA targets set by six Departments (Figure 5). This report presents the results of our work in two parts: this volume summarises the results and highlights factors affecting the quality of PSA data systems; Volume 2 presents our conclusions for each data system in detail. These are also available on our website www.nao.org.uk.

1.8 We plan to report the validation results for all 2005-08 PSA data systems later in 2007-08.

1.9 Our validation work examines the quality of the data systems underpinning the PSA targets. We do not validate the quality of the targets themselves, nor do we provide a conclusion about the accuracy of the outturn figures included in the Departments' public performance statements. This is because the existence of sound data system controls reduces but does not eliminate the possibility of error in reported data.

5 Validations covered in this Report

	Number of 2005-08 targets
Department for Education and Skills	14
HM Treasury	10
Department for Environment, Food and Rural Affairs	9
Ministry of Defence	6
Department for Culture, Media and Sport	4
Cabinet Office	3

Source: *Spending Review 2004*

NOTES

- 1 Appendix 3 lists all these Departments' 2005-08 PSA targets.
- 2 These totals include three PSA targets that are jointly shared by two of the above Departments.

1.10 Our validation approach is based around good practice principles for data systems agreed by HM Treasury and other central bodies (see Appendix 1). For each PSA target we assess whether the Department has put in place and operated adequate systems of control to mitigate the risk of significant error in reported data. Some PSA targets rely on multiple data systems – where, for example, they include a number of sub-targets. In these cases, we provide a conclusion for each data system.

1.11 In conducting our work we examine the risks and controls across three main elements of Departments' PSA data systems:

- **specification of data system** – whether the data used are relevant to the PSA target, adequately covering all significant aspects of performance expressed in the target;
- **operation of the system to collect, process and analyse data** – whether the system is well-defined and documented and capable of producing data that are reliable and comparable over time; and
- **reporting of results** – whether reporting is clear, transparent and comprehensive, providing latest outturn data for all significant elements of the target and explaining any data quality issues.

³ *Public Service Agreements: Managing Data Quality – Compendium Report 2004-05* (HC 476); *Second Validation Compendium Report: 2003-06 PSA data systems 2005-06* (HC 985).

1.12 We examine the quality of Departments' data systems and in some cases we undertake further work to assess the likely impact of system weaknesses on reported data. The purpose is to determine the significance of the weaknesses that we have identified. Our choice of data systems to review in greater detail is governed by our assessment of risk and feasibility.

1.13 On the basis of our examination, we aim to provide a conclusion for each data system, indicating whether the system is:

- fit for purpose;
- broadly appropriate but needs strengthening; or
- not fit for purpose.

1.14 For some targets, the system may be broadly appropriate but Departments may find that it is not possible to address all significant risks to data quality cost-effectively. In such cases we assess whether the Department has explained fully the implications of limitations that cannot be cost-effectively controlled in their performance reports. Where this is not the case, we conclude that the Department should explain the implications of these limitations more clearly to the reader.

1.15 For targets where the Department has not developed the data systems needed to report progress at the time of our review, we conclude that the department has not yet put in place a system to measure performance against the target. Where the Department has only recently developed a data system, it may not be sufficiently established for us to form a view on its fitness for purpose. In such cases, we will return at a later date to validate the system.

PART TWO

Validation results

Departmental results for 2005-08 PSA data systems

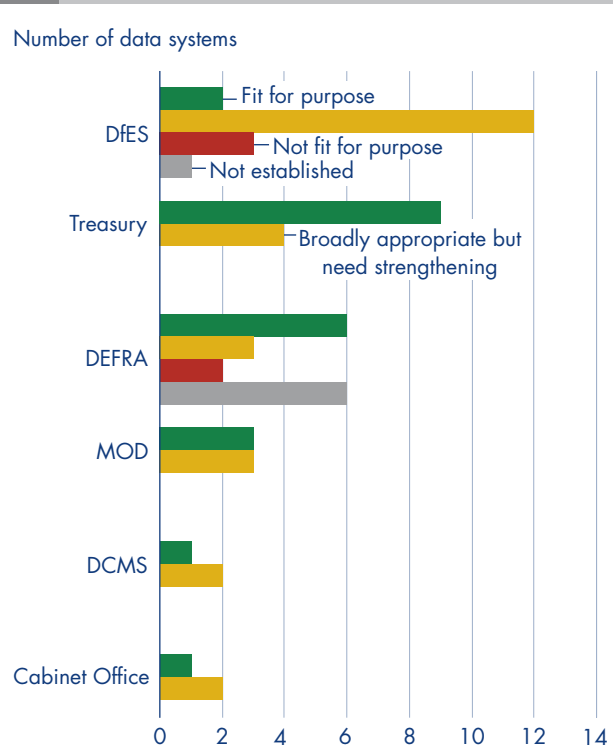
2.1 Figure 6 summarises our conclusions for each of the six Departments (Appendix 3 provides an overview of the results). For five systems, it was too early to assess the strength of Departmental controls and these are excluded from the Figure. The results include the data systems for three joint PSA targets shared between DfES and DCMS (two shared targets) and HM Treasury and Cabinet Office (one shared target).

2.2 In all cases, Departments are responsible for setting the PSA targets and specifying the data systems that they will use to assess progress. However, as described in paragraph 4.9, many of the data systems are based on data produced by external bodies and data quality is not always under the direct control of Departments themselves. In all Departments except HM Treasury, at least as many systems needed improvement as were fit for purpose. In the case of DfES, five data systems needed strengthening to ensure clearer disclosure of data system limitations – an important issue, but one that can be readily addressed.

Improvement in PSA data systems quality

2.3 In 2004, we examined the systems underpinning the same six Departments' PSA targets covering the period 2003-06. A comparison of results shows that most Departments have made some progress, but overall there has not been a step change in PSA data systems quality (Figure 7).

6 2005-08 PSA data systems validation results



Source: National Audit Office analysis

NOTE

The category "Broadly appropriate but need strengthening" combines those cases where systems need strengthening and where disclosure needs strengthening. See Appendix 1 for a description of our conclusion categories.

7 Department's 2003-06 and 2005-08 validation ratings compared



Source: National Audit Office analysis

NOTE

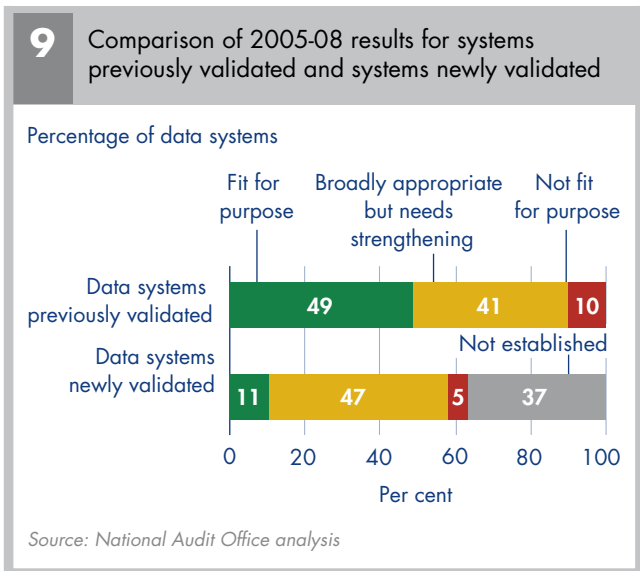
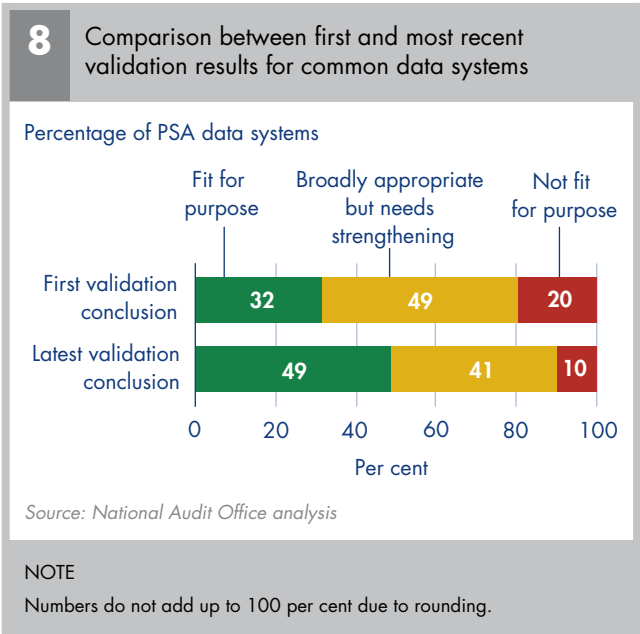
Graphs do not include data systems where it was too soon to form a view on their fitness for purpose.

2.4 In practice, many of the 2005-08 data systems were new or significantly modified compared with 2003-06 systems – nearly half in the case of Defra. In order to examine the degree of improvement in more detail, we identified the systems that were common between the PSA periods and compared our first validation conclusion for these systems with current results (Figure 8). For these purposes, we included only the systems that were sufficiently established in the first PSA period for us to provide a validation conclusion and recommendations.

2.5 The results indicate that Departments have made progress in response to our validation recommendations, with over half of these systems now rated fit for purpose compared with a little over one-third when we first validated them. We also note that because data systems may suffer from more than one weakness, steps taken by Departments to strengthen their systems may not be reflected in an improved rating if other weaknesses are also evident.

2.6 In addition, we examined the findings from the current validation round to compare results between systems that we had previously validated and systems that we validated for the first time in 2005-06 (Figure 9). The newly validated systems were mostly new systems developed for the 2005-08 PSA period but also included some older systems that had not been sufficiently established at the time of our previous validations.

2.7 Taking the results of Figure 8 and Figure 9 together suggests that Departments can respond positively to the recommendations arising from external validation but they are less effective in anticipating likely problems and applying lessons learned when developing new data systems. In some cases, it takes time to develop new systems and test the levels of accuracy and it is not surprising that the newer systems include a number that are not yet established compared with older systems carried forward from an earlier PSA period (Figure 9). But the finding demonstrates the general importance of giving sufficient attention to measurement requirements when developing PSA targets to minimise the number of systems that take time subsequently to establish.



PART THREE

Factors affecting the quality of PSA data systems

3.1 Our detailed findings for each Departmental PSA data system are presented in Volume 2 of this report. In order to assist Departments' improvement efforts, we examined these findings across all Departments to determine where problems were typically encountered and to identify common issues. We categorised the problems into system specification, system operation and reporting quality. In practice, while any one system can suffer from more than one problem, the frequency that these problems occurred was broadly similar (**Figure 10**).

System specification issues

3.2 Specification problems can have a serious impact on Departments' ability to report reliably and credibly against their PSA targets. They arise where there is a mismatch between what is targeted and what the data system measures and reports. **Figure 11 overleaf** summarises common specification issues, and illustrates these with examples.

System operation issues

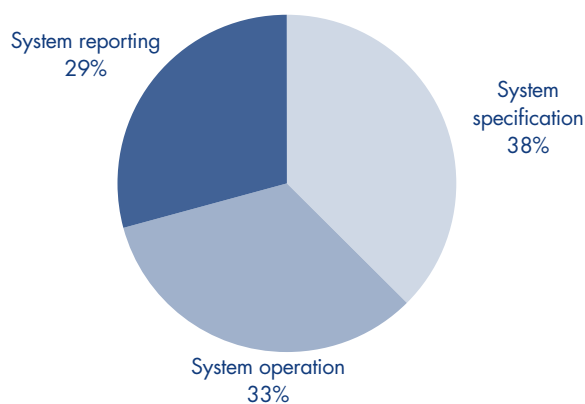
3.3 Departments should assess the risks to data reliability that can arise during the collection, processing and analysis of PSA data and have in place appropriate controls to prevent and detect error. Risks to system operation are influenced by a wide range of factors, including the complexity of data collection processes, the type of data and the expertise of those operating the system. Consequently, problems encountered during system operation vary considerably but **Figure 12 on page 15** sets out some of the most common with illustrative examples.

System reporting issues

3.4 Departments must ensure that the results of their PSA data systems are reported appropriately, if PSA targets are to inform external audiences about Departmental performance and enhance accountability. HM Treasury guidance requires Departments to give a full and accurate picture of progress against their PSA targets by reporting latest available data in a clear and informative fashion for all measures set out in their Technical Notes. This includes explaining the factors affecting the performance achieved and whether there are any significant limitations in the data system used for a specific target.

3.5 The reporting problems encountered by our validation teams related to either the clarity and consistency of reporting or the disclosure of limitations. This latter category covers cases where systems have limitations that cannot be cost-effectively remedied but where Departments have not explained the implications of these limitations when reporting results. **Figure 13 on page 16** summarises these issues, alongside examples from the Departments examined.

10 Distribution of problems (2005-08 PSA data systems)



Source: National Audit Office analysis

What can staff responsible for data systems do to address these problems?

3.6 We have previously provided checklists to help Departments assess the risks surrounding the specification, operation and reporting processes for their PSA data systems. These are reproduced in Appendix 4 for reference. In addition, we set out some broader recommendations in the Summary under the following headings:

- **Consider the implications for measurement and data systems when designing PSA measures and targets.** As the priority outcomes for Departments, PSA targets may address complex or multiple aspects of performance. This is not surprising but increases the measurement challenge. Unless measurement needs are taken into account when PSA measures and targets are designed, there is a significant risk that the data systems will not be fit for purpose.
- **Explicitly assess the risks to data quality in PSA data systems.** Staff responsible for the delivery of PSA targets have assessed and documented risks to achievement but have generally not formally assessed risks to the quality of PSA data. Departments may be aware of potential data quality risks, but they have rarely assessed the significance of these in terms of potential impact and likelihood of occurrence. However, development of effective system controls depends on sound risk assessment.
- **Ensure data systems and the associated controls are adequately documented and ensure supporting records are kept up to date.** Clear definition of terms, up-to-date description of data systems, well-documented controls and unambiguous criteria for judging success are basic but important requirements to enable systems to operate consistently over time.

11 Specification issues

Targeting conceptually difficult or complex concepts of performance presents measurement challenges

The lack of adequate measures can create problems

Defra has targeted a reduction in the productivity gap between the least productive 25 per cent of rural areas and the English median. However, there is no single established measure of rural productivity. Defra’s approach to measurement uses indicator districts to represent the least productive areas. But this practical compromise means that the data system does not actually capture the 25 per cent of rural areas with the lowest productivity.

Clear, measurable definitions can be developed to support monitoring

Defra has a target to eliminate fuel poverty in vulnerable households in England by 2010. The English House Condition Survey has developed clear definitions of “vulnerable” and “fuel poverty” allowing the Department to use the survey to assess progress against their target.

Targeting multiple elements of performance within a single target increases measurement challenges

Important elements may be omitted from the data system

DfES’ higher education target has three elements: increase participation, ensure fair access, and reduce the rate of non-completion. Ensuring fair access, for example, is a key component of the Government’s education policy, with the Office for Fair Access, established in the Higher Education Act 2004, approving over £350 million in additional finance for students from poorer backgrounds. The Department has data for the fair access and non-completion elements of the target but has not, to date, reported progress against these elements because of unavailability of baseline data. As a result, the data system supporting this target currently only reports participation in higher education.

On-going strengthening of data systems can improve coverage

For its target to improve the productivity of the tourism, creative and leisure industries, DCMS has expanded its data system over time to capture the performance of a wider range of activities in the leisure sector.

Using secondary data can pose risks if they do not closely match the element(s) of performance targeted

Available data can differ from what is actually targeted

HM Treasury and the Cabinet Office share a target to improve public services “by working with Departments to help them meet their PSA targets”. In practice both Departments use the progress data reported for each PSA target as a measure of their success. The data system does not report the value of HM Treasury’s and Cabinet Office’s contribution to Departments’ success.

Source: National Audit Office analysis

12 Operational issues

Risks during data collection should be managed

Precision of sample survey data can affect the margin of change that can be measured

DfES uses Labour Force Survey data for its target to reduce the proportion of young people not in education, employment or training (NEET). 70–85 per cent of responses for the 16 to 19 year old age group are proxy (i.e. from other household members). The Department estimates that 5.5 per cent of proxy responses are inaccurate and a further 5.1 per cent are incomplete. The resulting error margins mean that, to be reasonably certain the target has been met, a fall of three percentage points would be required rather than the two percentage points specified in the target.

Development of clear guidance and data quality checks can help manage data collection risks

For its target to narrow the gap in educational achievement between looked-after children and their peers, and improve their educational support and the stability of their lives, DfES requires that Local Authorities' Social Services Departments supply data in an approved format. The Department has provided explicit guidance on data collection to local authorities and the Department also operates helplines to resolve any queries. Once the Department receives the data, an independent statistician checks the data and compares results with previous years.

Systems based on subjective judgement need explicit controls to ensure consistent judgements over time

The assessment process should be clearly documented to ensure judgements are made on a consistent basis

The MOD uses narrative reports prepared by desk officers to assess progress against its target to develop the European Security Agenda. Although each report is an expert's assessment of progress, the processes for compiling the report and producing the overall assessment are not documented. Consequently, there is a risk that judgements will not be consistent over time.

Clearly specifying the assessment framework and ensuring there is formal challenge can mitigate risks of subjective systems

In contrast, MOD has developed a series of controls for the subjective assessments of progress against its target to achieve its objectives for Operations and Military Tasks. In particular, the Department agrees the basis for the assessment in advance and subjects the assessments to review and challenge before finalisation.

Risks associated with administrative data should be assessed and, where appropriate, controls developed

Because they are collected for other reasons, administrative data may have limitations for PSA monitoring

DfES has committed over £9 billion to "Further Education, Adult Learning and Skills and Lifelong Learning" for 2006-07. The Department has an associated target to increase the number of adults with skills for the workplace. However, data available for an important element of the target measure the number of qualifications rather than the number of individuals achieving qualifications. There is a risk, therefore, of double-counting individuals who obtain more than one qualification. Since April 2006, basic skills training has become the responsibility of one organisation, and consequently the Department expects improvements in data quality.

Specially designed controls can mitigate data quality risks in administrative data

For its target to improve children's communication, social and emotional development, the Foundation Stage Profile that DfES uses to assess progress against the target is validated at three levels: the location where the records are first inputted; the local authority; and the Department. Data can be submitted in a variety of formats, all of which have in-built validation checks.

Departments need to ensure data quality is explicitly addressed when contracting with data providers

Including clear data quality standards can be an effective control

The National Environmental Technology Centre (NETCEN) provides Defra with data on the level of greenhouse gases and CO₂ emissions. The Department specified data collection standards in its contract with NETCEN, and NETCEN's compliance with the requirements informs Defra's decisions about contract renewal. In addition, Defra holds quarterly meetings with NETCEN to discuss data quality issues.

Data obtained from external bodies poses risks for Departments who have little involvement in the system

Without knowledge of the risks and controls operated by external bodies, Departments cannot assess fitness for purpose

Sustainable development is a key Government-wide priority. As the Government's champion, Defra use 60 separate indicators to assess progress on this. The Department are reliant on external providers for the accuracy of this data, but they do not have a good understanding of data quality risks for each dataset and the controls used by providers to mitigate them.

On-going communication with external bodies about data quality issues can mitigate risks

HM Treasury uses the Consumer Prices Index provided by the Office for National Statistics (ONS) to assess progress for its inflation target. Regular monthly meetings are held between Treasury, the Bank of England and the ONS to discuss the data, and these regular discussions ensure that HM Treasury are made aware of any data quality issues as they arise.

Source: National Audit Office analysis

13 Reporting issues

Progress should be reported against all elements of the PSA target

Inconsistencies between the measures identified in Technical Notes and those reported publicly adversely affect the quality of PSA performance reporting

HM Treasury shares a target with the Department of Trade and Industry (DTI) and the Department for Communities and Local Government (DCLG) to improve economic performance in all English regions. The preferred measure of economic performance – regional Gross Value Added per head – currently has limitations, which the Departments acknowledged in their Technical Note. Because of these limitations, the Departments identified a number of interim measures in the Technical Note to assess progress up to 2006. Although outturn data for all the interim measures have been presented and updated on a joint HM Treasury, DTI, DCLG website since 2004 (at <http://62.73.191.157/regind/default.asp>), HM Treasury's latest Department report only reported performance against three of the interim measures to support its "on course" assessment of progress.

Reporting outturn data for each sub-element of a PSA target increases the transparency of public performance reports

DCMS has a target to increase the take up of cultural and sporting opportunities by adults and young people from priority groups. Priority groups are defined as women, black and minority ethnic, those with limiting disability and lower socio-economic groups. The Department's latest annual report clearly sets out provisional outturn data for each priority group against all four types of activity assessed (sport activity, arts activity, museums and galleries and visits to designated historic environment sites).

The basis for overall success should be clear

Where targets comprise multiple sub-elements, a clear statement of how overall progress is interpreted can increase transparency of public reporting

The Cabinet Office's target to increase diversity in the Senior Civil Service has four sub-targets. During our validation, the Cabinet Office informed us that all four sub-targets had to be met for success against the overall diversity target to be achieved. However, the accompanying Technical Note does not specify this and readers of the Department's performance report will not be aware of how progress against the overall target is determined.

The implications of data system limitations should be explained in public performance reports

Failure to disclose relevant limitations can affect how readers' interpret reported performance

DCMS and DfES jointly target an increase in the take-up of high quality PE by five to 16 year olds. Data for the quality of PE (Ofsted assessments) are only available for 30 schools, and are not a statistically reliable indicator of the quality of PE nationwide. This limitation was not disclosed when reporting outturn data in their latest performance report, or in the accompanying technical note.

Source: National Audit Office analysis

PART FOUR

Strengthening the overall approach to PSA data quality management

4.1 PSA targets are subject to change over time in line with changing Government priorities. Departments, therefore, will always face measurement challenges to develop new data systems. But the results of our validations of the six Departments indicate that there has not been significant improvement in the quality of PSA data systems and suggest that further steps can be taken to strengthen data management practices in Departments.

4.2 Government directs large sums of public money towards achieving Departments' PSA targets. They represent the priorities for Departments, affecting key social, economic or environmental outcomes for the nation. The data used to monitor and report progress against the PSA targets are by no means the only source of information that Departments use to manage their efforts to achieve their targets. But failure to establish robust data systems undermines much of the PSA targets' value as a force to improve public services, assist resource allocation decisions and enhance public accountability.

4.3 In practice, Departments need to take active steps to raise the profile of PSA data quality among staff. Staff are less interested in the underlying data systems given the technical nature of data quality management. Senior managers need to signal to their staff the importance attached to PSA data quality by the Department by promoting a more systematic approach to data quality management.

4.4 We identified three broad areas for Departmental action to strengthen the Departmental control framework, drawing on good practice in the management and control of financial data and the principles established for effective performance measurement systems in the FABRIC report:⁴

- establishing clear expectations for data quality management;
- active monitoring of PSA data; and
- managing the process of data system strengthening.

We also considered, as an overarching quality assurance issue, the extent to which Departments formally involved statisticians and other data experts in the development and management of their PSA data systems.

4.5 Together these represent steps that Departments can take corporately to promote a more consistent approach to PSA data management, and alert staff to Departmental expectations for PSA data quality. While the principles underlying these steps apply equally to all Departments, the significance will necessarily vary according to circumstances. For example, the degree of central oversight required in a Department such as DfES with 14 PSA targets will differ from one such as Cabinet Office with just three targets. Determining the appropriate response requires Departments to undertake a sound risk assessment.

⁴ Choosing the right FABRIC: a framework for performance information. HM Treasury, Cabinet Office, National Audit Office, Audit Commission, Office for National Statistics, 2000.

Establishing clear expectations for data quality management

4.6 Departments can raise the profile of PSA data quality among staff by communicating expectations about the management and reporting of PSA data and assigning clear roles and responsibilities to ensure that these expectations are met. In all cases, Departments had assigned responsibility to senior staff for the quality of the data reported under their PSA targets, but these responsibilities were not always set out explicitly. The extent to which the six Departments had formally set out expectations for PSA data quality management varied (see Figure 14).

4.7 Differences in the risks to data quality in part may explain the different approaches adopted by Departments. However, all Departments face common risks with their PSA data systems which would benefit from establishing more formal guidance. For example, our validations found weaknesses in the quality of disclosure in public performance reports for all Departments except MOD. At the same time, we also found examples of clear and effective disclosure of data limitations, such as Defra's PSA target to bring "...into favourable condition by 2010 95 per cent of all nationally important wildlife sites", where the Department explained system limitations and the subjectivity involved in the assessment process in its performance report.

14 Allocating roles and responsibilities

MOD have issued a formal performance management handbook which sets out data quality requirements, clearly assigns responsibilities for data system management and sets out internal reporting arrangements. Following our validation work, Defra has recently re-issued Department-wide guidance addressing data accuracy concerns and revised their guidance to staff responsible for PSA targets to address specifically the question of data integrity. DfES has also recently adapted the criteria for the production of National Statistics products to inform the management of its PSA data systems.

In contrast, we found little evidence of formal statements of PSA data quality expectations in HM Treasury, Cabinet Office and DCMS. In the cases of Cabinet Office and DCMS, this is to some extent explained by the relatively small number of PSA targets (three and four respectively). In the case of HM Treasury, the high-profile, national economic data on which their PSA targets rely are used widely outside of the Department and are therefore subject to a high degree of independent scrutiny.

Source: National Audit Office analysis

4.8 Similarly, Departments commonly use external data sources for PSA reporting but even where data are obtained from experts, Departments should ensure they have sufficient relationships with providers to ensure they are made aware of any limitations in the data that might affect PSA monitoring and reporting. In situations where Departments employed external contractors to provide data, we found evidence that data quality issues were addressed. For example, Defra have required externally-contracted data providers to sign off against the quality of their data and DCMS have specified quality assurance standards in the external contract for the Taking Part survey underpinning their PSA target 3.

4.9 However, around one-third of data systems examined use data produced by external bodies that the Departments have not commissioned for the purpose. Departments had not developed formal guidance for these systems. In some cases, individual staff responsible had established effective arrangements with external data providers. For example, Treasury's systems to report against targets relating to inflation and public sector debt. But across Departments the approach was largely ad hoc.

4.10 In both the examples of reporting and external data, explicit corporate guidance on expected standards would promote a more consistent approach within Departments to manage the risks posed.

Challenging reported performance and data quality

4.11 All of the Departments examined have a central team or individual who is responsible for coordinating the reporting and publication of PSA performance data. Such central teams can play an important challenge role internally to ensure data quality risks are addressed and performance reported correctly and consistently. In practice, however, the capacity of these teams to challenge colleagues on detailed data quality and reporting issues varies depending on the specialist skills available (Figure 15).

4.12 Central challenge can also be exercised by senior management when Departmental management boards review their Departments' performance. We would not expect management boards to review PSA data quality as a matter of routine. However, PSA targets reflect the key performance objectives for Departments and there should be a process to ensure that senior management address PSA data systems issues where there are significant risks. For example, HM Treasury's management board have frequently discussed the data system for the Department's PSA target relating to efficiency as the robustness of the underlying data directly affects the success of the programme.

Taking a managed approach to strengthening PSA data systems

4.13 In order to ensure ongoing risks are managed and identified weaknesses are addressed, Departments should develop a systematic approach to the management and improvement of their PSA data systems. In practice, they can actively review their systems and develop clear plans to implement any recommendations arising (**Figure 16**).

4.14 In some cases, Departments' systems use National Statistics data. Such data are subject to a range of quality controls as part of the framework for National Statistics from which Departments can take some assurance. However, even in these cases, there are potential risks when using National Statistics to monitor and report progress against PSA targets which Departments should assess (**Figure 17**).

4.15 In order to ensure that any limitations identified in PSA data systems are addressed systematically, Departments need formal arrangements to manage improvement activities. Defra, for example, has a central team that compiles all recommendations and tracks and records the Department's response.

15 Central challenge of PSA data

Examples of central teams who exercise a PSA data challenge function within Departments include:

- DCMS' Evidence and Analysis Unit, who include statisticians and other data specialists, review and undertake analysis on the data produced by the PSA systems managed by DCMS;
- MOD's Directorate of Performance and Analysis review reported performance when compiling quarterly performance reports, and challenge any conspicuous changes or incongruous results;
- Cabinet Office's Finance Department similarly review outturn figures and check to ensure consistency in PSA reporting; and
- Defra's Programme and Project Management Unit are responsible for publishing the Department's Annual and Autumn Performance Reports and will check for consistency, but do not challenge data quality.

Source: National Audit Office analysis

16 Internal review and improvement processes

We found evidence that Departments had improved individual data systems to address specific concerns. However, with the exception of DfES, no Department had undertaken a systematic review of all PSA data systems. In DfES, the Head of Profession for Statistics led a review of the Department's PSA data systems which coincided with our validation work. The results of both our work and the statisticians' review will inform the Department's improvement efforts.

Similarly, in only two of the Departments examined had Internal Audit undertaken any work to examine PSA data systems; in Defra and DCMS, Internal Audit have examined the systems underpinning one of their Departments' PSA targets. In some cases, Internal Audit were aware of our validation exercise and chose to avoid duplication of effort. But more generally, there is scope within available resources for Internal Audit to play an active role in the development of a more systematic review process within Departments.

Source: National Audit Office analysis

17 Data systems drawing on National Statistics

Where data systems use National Statistics, the underlying data are produced in line with the National Statistics Code of Practice and associated protocols. They are also subject to periodic independent quality review as part of the National Statistics Quality framework. While Departments may take some assurance from these controls, they should be aware of potential risks.

National Statistics are produced for a variety of uses including monitoring of long-term social and economic trends; their fitness for the specific purpose of monitoring and reporting progress against PSA targets needs to be explicitly considered. Similarly, National Statistics Quality Reviews may vary in their relevance for PSA data systems. The Reviews are necessarily infrequent and the extent to which they explicitly assess risks to PSA monitoring varies. Furthermore, Quality Reviews generally examine a basket of statistics that cover an area of study rather than a single data set. Therefore, Departments themselves need actively to consider the fitness for purpose of National Statistics for monitoring their PSAs and the implications of any relevant issues raised by the Reviews.

Source: National Audit Office analysis

Involving statisticians and other data experts

4.16 In all of our previous validation reports, we have emphasised the value of involving statisticians and other data specialists, especially when the targets are being devised, as a means of improving the quality of PSA data systems. In order to assess the potential for these specialists to contribute to central Departmental efforts we reviewed practice in the six Departments included in this report (**Figure 18**).

4.17 Given the potential value that data experts can add to the process, there appears to be scope to involve these members of staff more formally in the design of PSA targets and development of underpinning data systems. This could also include corporate responsibility for the review of documentation relating to PSA data systems (e.g. Technical Notes) and the development of guidance on the disclosure of significant system limitations in Departmental public performance reports.

Role of HM Treasury

4.18 While responsibility for improving the quality of PSA data systems rests with Departments, there is scope for HM Treasury to support and reinforce Departmental efforts in this regard. As the Department responsible for oversight of the PSA framework across Government, Treasury play an important central role in promoting good practice, both at the design and implementation stages of Departments' PSAs and by issuing guidance for Departments.

4.19 Treasury have been closely involved in the agreement of new PSA measures and targets (**see Figure 19**). Treasury will likely agree any new measures and targets for PSAs that come out of the forthcoming Comprehensive Spending Review planned for 2007 with Departments. HM Treasury should continue their efforts to ensure measurement issues are given adequate attention in discussions with Departments and strengthen the robustness of their challenge function. In particular, where existing data systems are carried over into the new PSA period, Treasury can ask Departments to explain how they have responded to any relevant recommendations arising from NAO's validation work.

4.20 During the implementation phase of the PSA period, Treasury spending teams liaise closely with Departments about ongoing financial and performance issues. This role also includes review of draft Departmental reports to ensure, among other things, that the interpretation

of progress against PSA targets is consistent with the underlying data. There is scope for spending teams to take a more systematic approach toward PSA data quality by, for example, ensuring that they are aware of the key risks affecting Departments' data systems and considering ongoing PSA data quality issues in their discussions with their Departments. Again, the results of NAO validation exercises can inform spending teams' understanding of PSA data quality risks.

4.21 Finally, Treasury play an important role in supporting Departments through the guidance they provide on PSAs. To date this has covered the setting of PSA targets, developing PSA Technical Notes and reporting performance against PSAs in Departmental and Autumn Performance Reports. There is scope for Treasury to issue guidance on measurement issues for Departments, to provide a clear summary of expectations for PSA data quality. In doing so, Treasury can make use of NAO experience in validating PSA data systems and the good practice guidelines that we have provided in our validation compendium reports.

18 Use of statisticians and other data quality experts

We found that in none of the Departments were statisticians formally responsible for quality assuring all PSA data systems and associated documentation (e.g. Technical Notes). In some cases, statisticians have been heavily involved in the development and management of systems – for example DCMS' target to increase take up of cultural and sporting opportunities, and DfES' target to improve school attendance. However, with the exception of the statistician-led review of PSA data systems within DfES (see **Figure 16**), the extent of statisticians' oversight of PSA data systems varied within Departments.

Source: National Audit Office analysis

19 Setting PSA targets

HM Treasury have been closely involved in agreeing Departments' PSA measures and targets during the Spending Review process. In their negotiations with Departments, they have consistently encouraged Departments to consider measurement arrangements earlier in the process of target-setting. In previous Spending Reviews they also introduced a degree of external challenge by establishing a Performance Information Panel, which included data experts outside of Government, to discuss Departments' measurement arrangements. The Panel contributed to improved Technical Notes in a number of cases but was less effective in addressing the detail of data system specification and Departmental controls.

Source: National Audit Office analysis

APPENDIX ONE

Outline of NAO’s approach to validation

Our validation approach is based on the good practice principles for data systems established by a HM Treasury-led working group which was set up in response to Lord Sharman’s report and which considered the practical implications of external validation. The group agreed that Departments were responsible for:

- ensuring the existence and operation of internal controls which are effective and proportionate to the risks involved; and
- being clear with Parliament and the public about the quality of their data systems.

We have amplified those principles by reference to more general performance measurement criteria we and other central bodies signed up to as part of FABRIC⁵ and to specific HM Treasury requirements for departmental reporting (**Figure 20**).

Validation is a form of systems audit and our approach focuses on the examination of risks and controls. There are a number of standard steps that we typically undertake in each validation (**Figure 21 overleaf**).

20 Good practice criteria for the three elements of a data system

Data system element	Key issues	Good practice criteria (we expect an effective data system to be):
1 Specification of the data for measuring progress towards the PSA target	Is the Department measuring all key aspects of performance expressed in the PSA target?	<p>Relevant: to what the organisation is aiming to achieve. The data stream should cover all significant aspects of performance expressed in the target;</p> <p>Well-defined: with a clear, unambiguous definition so that the data will be collected consistently, and is easy to understand and use;</p>
2 Operation of the system to collect, process and analyse data;	Are the data system management controls adequate to mitigate all known significant risks?	<p>Robust: all known significant risks should be managed. A robust system has sound procedures for identifying significant risks to data reliability and effective and proportionate controls to address those risks. It is thus capable of producing data which are:</p> <ul style="list-style-type: none"> ■ Reliable – accurate enough for their intended use; and ■ Comparable – with past periods. <p>Verifiable: with clear documentation behind it, so that the processes which produce the data can be validated.</p>
3 Reporting of results	Are outturn data reported for all key aspects of performance and are significant data limitations disclosed to the reader?	<p>A good data system will enable Departments to meet HM Treasury requirements to produce clear, transparent and comprehensive public performance reports that:</p> <ul style="list-style-type: none"> ■ present latest outturn data for all PSA targets; and ■ describe the quality of data systems.

Source: FABRIC, National Audit Office Guidance

5 Choosing the right FABRIC: a framework for performance information. HM Treasury, Cabinet Office, National Audit Office, Audit Commission, Office for National Statistics, 2000.

21 Outline validation approach

- 1 Understanding the PSA management framework
- 2 Identify risks to data reliability
- 3 Assess the significance of known risks
- 4 Assess the adequacy of controls to address known, significant risks
- 5 Evaluate the results and report

We examine the processes and controls that operate across data systems. These can include entity-wide policies and procedures covering data quality, risk assessment, documentation and monitoring of performance. The majority of work, however, focuses on the processes and controls that are specific to individual systems. We examine each system from three perspectives:

- Is the Department measuring all the key aspects of performance expressed in the target?
- Are the controls over the collection, processing and analysis of the data adequate to mitigate any significant risks?
- Are outturn data reported for all key aspects of performance and are significant data limitations disclosed to the reader?

On the basis of our examination, we aim to provide a conclusion for each data system, indicating whether the system is:

- fit for purpose;
- broadly appropriate but needs strengthening; or
- not fit for purpose.

For some targets, the system may be broadly appropriate but Departments may find that it is not possible to address all significant risks to data quality cost-effectively. In such cases we assess whether the Department has explained fully the implications of limitations that cannot be cost-effectively controlled in their performance reports. Where this is not the case, we conclude that the Department should explain the implications of these limitations more clearly to the reader.

For targets where the Department has not developed the data systems needed to report progress at the time of our review, we conclude that the department has not yet put in place a system to measure performance against the target. Where the Department has only recently developed a data system, it may not be sufficiently established for us to form a view on its fitness. In such cases, we will return at a later date to validate the system. **Figure 22** outlines the categories of conclusions that we provide.

An internal panel reviewed provisional validation reports for each Department. The findings for each individual data system, presented in Volume 2, were assessed for consistency of analysis and judgements. The internal panel, along with external assessors, also conducted a quality review of Volume 1.

22 Summary of validation conclusions

The data system is fit for the purpose of measuring and reporting performance against the target



or

The data system is appropriate for the target and the Department have explained fully the implications of limitations that cannot be cost-effectively controlled



The data system addresses the majority of risks to data quality but needs strengthening to ensure that remaining risks are adequately controlled



or

The data system addresses the majority of risks to data quality but includes limitations that cannot be cost-effectively controlled; the Department needs to explain the implications of these more clearly to the reader



The data system is not fit for the purpose of measuring and reporting performance against the target



The Department have not yet put in place a system to measure performance against the target

or

The system is not sufficiently established to form a view on its fitness for purpose

APPENDIX TWO

Examples of 2005-08 PSA Targets and Technical Notes

Each Department produces a Technical Note which sets out how it will measure performance for each of its PSA targets. Below are two complete examples – from HM Treasury and the Ministry of Defence – of Technical Notes, set in the context of their overall 2005-08 PSA framework.

HM Treasury

Aim

Raise the rate of sustainable growth and achieve rising prosperity and a better quality of life, with economic and employment opportunities for all.

Objectives

Objective I: Maintain a stable macroeconomic environment with low inflation and sound public finances in accordance with the Code for Fiscal Stability.

Performance targets

Target 2: Inflation to be kept at the target as specified in the remit sent by the Chancellor of the Exchequer to the Governor of the Bank of England (currently two per cent as measured by the 12-month increase in the Consumer Prices Index (CPI)).

Technical Note⁶

Definitions and data

The 2003 Pre-Budget Report⁷ announced a change in the operational target for monetary policy. The target is two per cent as measured by the 12-month increase in the Consumer Prices Index (CPI). The CPI is a National

Statistic and is published on a monthly basis in the ONS' publication, Consumer Price Indices.⁸ More information on the inflation target is available on the Treasury website.⁹

Meeting the target

The target applies at all times. If inflation deviates by more than one percentage point in either direction from target, an explanatory open letter is required to be sent from the Governor of the Bank of England to the Chancellor, setting out:

- the reasons why inflation has moved away from the target by more than one percentage point;
- the policy action the Monetary Policy Committee (MPC) is taking to deal with it;
- the period within which the MPC expects inflation to return to target; and
- how this approach meets the Government's monetary policy objectives.

The thresholds for the open letter do not define a target range. Their function is to define the points at which the Chancellor expects an explanatory letter because the actual inflation rate is appreciably away from its target in either direction. The full remit for the MPC is available on the Treasury's website in the form of a letter from the Chancellor to the Governor of the Bank of England, 22 March 2004.¹⁰

Ministry of Defence

Aim

Deliver security for the people of the United Kingdom and the Overseas Territories by defending them, including against terrorism, and act as a force for good by strengthening international peace and stability.

6 http://www.hm-treasury.gov.uk/media/19C/10/SR2004_technical_note_090506.pdf.

7 December 2003. See [http://www.hm-treasury.gov.uk/media/71EEC/PBR03completeterep\[1\].pdf](http://www.hm-treasury.gov.uk/media/71EEC/PBR03completeterep[1].pdf).

8 <http://www.statistics.gov.uk/STATBASE/Product.asp?vlnk=868>.

9 http://www.hm-treasury.gov.uk/documents/uk_economy/monetary_policy/ukecon_mon_index.cfm.

10 http://www.hm-treasury.gov.uk/documents/uk_economy/monetary_policy/ukecon_mon_index.cfm.

Objectives

Objective II: Be ready to respond to the tasks that might arise.

Performance targets

Target 3: Generate forces which can be deployed, sustained and recovered at the scales of effort required to meet the Government's strategic objectives.

Technical Note¹¹

The MOD aims to maintain forces and supporting assets to be able to undertake Military Tasks at the scales of effort set out in the Defence White Paper 'Delivering security in a changing world' dated 11 December 2003.

To achieve this the Armed Forces are funded to maintain force elements (FEs), e.g. Submarines, Army brigades, RAF Tornado fighter aircraft at specific readiness levels defined by the appropriate numbers of days that would be needed to enable a unit to be ready to deploy on operations in its primary role. The Department will also maintain robust plans to generate these forces, to deploy them into an operational theatre, to sustain them there and subsequently recover them back to their home base. Generating, deploying and sustaining forces will however normally require the provision of additional funding either from the Conflict Prevention Fund or the Government's Contingency Reserve.

Performance under this target will be measured against the following criterion:

- By 2008, ensure that the peacetime readiness of all the force elements required to conduct operations at the scales of effort set out in the Defence White Paper, shows a five per cent increase in the numbers reporting no serious or critical weakness compared with the average number reported in 2004-05.

In addition, the MOD will each quarter separately report on progress on its planning and contingency preparations for generating, deploying and sustaining forces on contingent operations, as judged against the following criteria:

- By 2008, ensure that the assessed ability of force elements to generate from peacetime readiness to immediate readiness for deployment on operations at what is likely to be the most demanding level for many enabling functions (two medium scales and a small scale concurrently) shows a five per cent increase in the numbers reporting no serious or critical weakness compared with the average number reported in 2004-05.

- By 2008, ensure that the assessed ability of the Department physically to deploy its forces on operations at what is likely to be the most demanding level for many enabling functions (two medium scales and a small scale concurrently), sustain them in theatre and thereafter recover them to their home bases shows a five per cent improvement in the numbers of serious or critical weaknesses reported across the key components (Land, Sea, Air, Strategic Lift) compared with the average reported for 2004-05.

Notes to the technical note

A force element is defined as being at its required state of readiness when it has achieved the required standards in the following areas:

- **Manpower** – the provision of sufficient fit for purpose manpower, appropriately trained both tactically and technically, as individuals and with high morale.
- **Equipment** – the possession of the necessary range and quantity of suitable, reliable and maintainable equipment.
- **Collective Training** – A proven ability to apply current doctrine in the full range of combined and joint operations.
- **Logistic Support** – (during peacetime and generation for operations only) the possession of appropriate holdings of supplies and spares to enable a unit to fulfil its funded commitments and to be ready, at the required readiness level, to generate for operations.
- **Logistic Sustainability** – (during operations only) the possession of appropriate holdings of combat supplies and equipment support spares, and the ability to deploy them to an area of operations, move them within that area of operations and generate (or regenerate) sufficient reserves of manpower and material to sustain the operation for an appropriate period.
- **Deployability/Recovery (to and from operations only)** – the ability to Deploy and Recover forces and associated support to, from and within the desired area of operations within the required timescale.








Weaknesses are assessed on the basis of weighted scores against defined requirements from manpower, equipment, collective performance, logistic support/sustainability and deployability/recovery.













Each quarter we will assess performance and give a projection of our progress against the target.




¹¹ <http://www.mod.uk/NR/rdonlyres/F4708784-2917-4CF6-83BB-5DDEA3B9DC5F/0/psatechnotes2005to2008.pdf>.







APPENDIX THREE









Summary of validation conclusions for each PSA data system





Dept	No.	Target	Conclusion
DFES	1	Improve children's communication, social and emotional development so that by 2008, 50 per cent of children reach a good level of development at the end of the Foundation Stage and reduce inequalities between the level of development achieved by children in the 20 per cent most disadvantaged areas and the rest of England. (Sure Start Unit target, joint with the Department for Work and Pensions.)	 Broadly appropriate, but system needs strengthening
	2	As a contribution to reducing the proportion of children living in households where no one is working, by 2008: <ul style="list-style-type: none"> (i) increase the stock of Ofsted-registered childcare by 10 per cent; (ii) increase the take-up of formal childcare by low income working families by 50 per cent; and (iii) introduce by April 2005, a successful light-touch childcare approval scheme. (Sure Start Unit target, joint with the Department for Work and Pensions.) 	 Fit for purpose  Broadly appropriate, but system needs strengthening System not yet established
	3	Reduce the under-18 conception rate by 50 per cent by 2010 as part of a broader strategy to improve sexual health. (Joint with the Department of Health.)	 Fit for purpose
	4	Halt the year-on-year rise in obesity among children under 11 by 2010 in the context of a broader strategy to tackle obesity in the population as a whole. (Joint with the Department of Health and the Department for Culture, Media and Sport).	Too early to form a view on system controls
	5	Narrow the gap in educational achievement between looked after children and their peers, and improve their educational support and the stability of their lives so that by 2008, 80 per cent of children under 16 who have been looked after for 2.5 or more years will have been living in the same placement for at least two years, or are placed for adoption.	 Broadly appropriate, but disclosure needs strengthening
	6	Raise standards in English and maths so that: <ul style="list-style-type: none"> ■ by 2006, 85 per cent of 11 year-olds achieve level 4 or above, with this level of performance sustained to 2008; and ■ by 2008, the proportion of schools in which fewer than 65 per cent of pupils achieve level 4 or above is reduced by 40 per cent. 	 Broadly appropriate, but system needs strengthening
	7	Raise standards in English, maths, ICT and science in secondary education so that: <ul style="list-style-type: none"> ■ by 2007, 85 per cent of 14 year olds achieve level 5 or above in English, maths and ICT (80 per cent in science) nationally, with this level of performance sustained to 2008; and ■ by 2008, in all schools at least 50 per cent of pupils achieve level 5 or above in each of English, maths and science. 	 Broadly appropriate, but system needs strengthening

Dept	No.	Target	Conclusion	
DFES <i>continued</i>	8	Improve levels of school attendance so that by 2008, school absence is reduced by eight per cent compared to 2003.	 Broadly appropriate, but disclosure needs strengthening	
	9	Enhance the take-up of sporting opportunities by 5 to 16 year olds so that the percentage of school children in England who spend a minimum of two hours each week on high quality PE and school sport within and beyond the curriculum increases from 25 per cent in 2002 to 75 per cent by 2006 and to 85 per cent by 2008, and to at least 75 per cent in each School Sport Partnership by 2008. (Joint with the Department for Culture, Media and Sport.)	 Broadly appropriate, but disclosure needs strengthening	
	10	By 2008, 60 per cent of those aged 16 to achieve the equivalent of five GCSEs at grades A* to C; and in all schools, at least 20 per cent of pupils to achieve this standard by 2004, rising to 25 per cent by 2006 and 30 per cent by 2008.	 Broadly appropriate, but disclosure needs strengthening	
	11	Increase the proportion of 19 year olds who achieve at least level 2 by three percentage points between 2004 and 2006, and a further two percentage points between 2006 and 2008, and increase the proportion of young people who achieve level 3.	 Broadly appropriate, but disclosure needs strengthening	
	12	Reduce the proportion of young people not in education, employment or training (NEET) by two percentage points by 2010.	 Broadly appropriate, but system needs strengthening	
	13	Increase the number of adults with the skills required for employability and progression to higher levels of training through:		 Not fit for purpose
		(i)	improving the basic skill levels of 2.25 million adults between the launch of Skills for Life in 2001 and 2010, with a milestone of 1.5 million in 2007; and	
		(ii)	reducing by at least 40 per cent the number of adults in the workforce who lack NVQ2 or equivalent qualifications by 2010. Working towards this, one million adults in the workforce to achieve level 2 between 2003 and 2006.	
	14(i)	By 2010, increase participation in higher education towards 50 per cent of those aged 18-30 and...	 Broadly appropriate, but system needs strengthening	
	14(ii)	...also make significant progress year on year towards fair access...	 Not fit for purpose	
	14(iii)	...and bear down on rates of non-completion.	 Not fit for purpose	
	MOD	1	Achieve the objectives established by Ministers for Operations and Military Tasks in which the United Kingdom's Armed Forces are involved, including those providing support to our civil communities.	 Fit for purpose
		2	Improve effectiveness of the UK contribution to conflict prevention and management as demonstrated by a reduction in the number of people whose lives are affected by violent conflict and a reduction in potential sources of future conflict where the UK can make a significant contribution. (Joint with the Foreign and Commonwealth Office and the Department for International Development.)	 Broadly appropriate, but system needs strengthening
		3	Generate forces, which can be deployed, sustained and recovered at the scales of effort required to meet the government's strategic objectives.	 Broadly appropriate, but system needs strengthening

Dept	No.	Target	Conclusion
MOD <i>continued</i>	4	Play a leading role in the development of the European Security Agenda, and enhance capabilities to undertake timely and effective security operations by successfully encouraging a more efficient and effective NATO, a more coherent and effective ESDP operating in strategic partnership with NATO, and enhanced European defence capabilities. (Joint with the Foreign and Commonwealth Office).	 Broadly appropriate, but system needs strengthening
	5	Recruit, train, motivate and retain sufficient military personnel to provide the military capability necessary to meet the Government's strategic objectives.	 Fit for purpose
	6	Deliver the Equipment Programme to time and cost.	 Fit for purpose
HM Treasury	1	Demonstrate by 2008 progress on the Government's long-term objective of raising the trend rate of growth over the economic cycle at least meeting the Budget 2004 projection.	 Fit for purpose
	2	Inflation to be kept at the target as specified in the remit sent by the Chancellor of the Exchequer to the Governor of the Bank of England (currently two per cent CPI).	 Fit for purpose
	3	Over the economic cycle, maintain: public sector net debt below 40 per cent of GDP; and the current budget in balance or in surplus.	 Fit for purpose
	4	Demonstrate further progress by 2008 on the Government's long term objective of raising the rate of UK productivity growth over the economic cycle, improving competitiveness and narrowing the gap with our major industrial competitors.	 Fit for purpose
	5	As part of the wider objective of full employment in every region, over the three years to spring 2008, and taking account of the economic cycle, demonstrate progress on increasing the employment rate. (Joint with the Department for Work and Pensions).	 Fit for purpose
	6	Make sustainable improvements in the economic performance of all English regions by 2008, and over the long term reduce the persistent gap in growth rates between the regions, demonstrating progress by 2006. (Joint with the Department for Communities and Local Government and the Department of Trade and Industry).	 Broadly appropriate, but disclosure needs strengthening
	7	Halve the number of children in relative low-income households between 1998-99 and 2010-11, on the way to eradicating child poverty by 2020. (Joint with the Department for Work and Pensions).	 Fit for purpose
	8	Promote increased global prosperity and social justice by: <ul style="list-style-type: none"> (i) working to increase the number of countries successfully participating in the global economy on the basis of a system of internationally agreed and monitored codes and standards; (ii) ensuring that 90 per cent of all eligible Heavily Indebted Poor Countries (HIPC) committed to poverty reduction that have reached Decision Point by end 2005, receive irrevocable debt relief by end 2008 and that international partners are working effectively with poor countries to make progress towards the UN2015 Millennium Development Goals. (Joint with the Department for International Development); and (iii) working with our European Union partners to achieve structural reform in Europe demonstrating progress toward the Lisbon Goals by 2008. 	 Broadly appropriate, but disclosure needs strengthening
	9	Improve public services by working with departments to help them meet: <ul style="list-style-type: none"> (i) their PSA targets consistently with the fiscal rules (joint with the Cabinet Office); and (ii) efficiency targets amounting to £20 billion a year by 2007-08, consistently with the fiscal rules. 	 Broadly appropriate, but system needs strengthening

Dept	No.	Target	Conclusion
HM Treasury <i>continued</i>	10	Deliver a further £3 billion of savings by 2007-08 in central government civil procurement through improvements in the success rate of programmes and projects and through other commercial initiatives.	 Fit for purpose
DCMS	1	Enhance the take-up of sporting opportunities by five to 16 year olds so that the percentage of school children in England who spend a minimum of two hours each week on high quality PE and school sport within and beyond the curriculum increases from 25 per cent in 2002 to 75 per cent by 2006 and to 85 per cent by 2008, and to at least 75 per cent in each School Sport Partnership by 2008. (Joint with Department for Education and Skills.)	 Broadly appropriate, but disclosure needs strengthening
	2	Halt the year on year increase in obesity among children under 11 by 2010, in the context of a broader strategy to tackle obesity in the population as a whole. (Joint target with Department for Education and Skills and Department of Health.)	Too early to form a view on system controls
	3	By 2008, increase the take-up of cultural and sporting opportunities by adults and young people aged 16 and above from priority groups, by: <ul style="list-style-type: none"> ■ Increasing the number who participate in active sports at least twelve times a year by three per cent, and increasing the number who engage in at least 30 minutes of moderate intensity level sport, at least three times a week by three per cent. ■ Increasing the number who participate in arts activity at least twice a year by two per cent and increasing the number who attend arts events at least twice a year by three per cent. ■ Increasing the number accessing museums and galleries collections by two per cent. ■ Increasing the number visiting designated Historic Environment sites by three per cent. 	 Fit for purpose
	4	By 2008, improve the productivity of the tourism, creative and leisure industries.	 Broadly appropriate, but disclosure needs strengthening
CO	1	Improve public services by working with departments to help them meet their PSA targets, consistently with the fiscal rules. (Joint with HM Treasury.)	 Broadly appropriate, but system needs strengthening
	2	By April 2008, work with departments to build the capacity of the Civil Service to deliver the Government's priorities by improving leadership, skills and diversity. <p>On diversity, meeting the specific targets of:</p> <ul style="list-style-type: none"> ■ 37 per cent women in the Senior Civil Service (SCS); ■ 30 per cent women in top management posts; ■ 4 per cent ethnic minority staff in the SCS; ■ 3.2 per cent disabled staff in the SCS; and ■ in the longer term, work to ensure that the Civil Service at all levels reflects the diversity of the population. 	 Broadly appropriate, but system needs strengthening

Dept	No.	Target	Conclusion
CO <i>continued</i>	3	By April 2008, ensure departments deliver better regulation and tackle unnecessary bureaucracy in both the public and private sectors through: <ul style="list-style-type: none"> ■ delivery of the Regulatory Reform Action Plan (RRAP), including 75 Regulatory Reform Orders (RROs) by the end of 2007-08; ■ maintaining Regulatory Impact Assessment (RIA) compliance levels at or above 95 per cent; ■ maintaining compliance with the Code of Practice on Consultation; and ■ maintaining the UK's international standing on better regulation. 	 Fit for purpose
DEFRA	1	To promote sustainable development across Government and in the UK and internationally, as measured by: <ul style="list-style-type: none"> (i) the achievement of positive trends in the Government's headline indicators of sustainable development; (ii) the UK's progress towards delivering the World Summit on Sustainable Development commitments, notably in the areas of sustainable consumption and production, chemicals, biodiversity, oceans, fisheries and agriculture; and (iii) progress towards internationally agreed commitments to tackle climate change. 	 Not fit for purpose System not yet established System not yet established
	2	To reduce greenhouse gas emissions to 12.5 per cent below 1990 levels in line with our Kyoto commitment and move towards a 20 per cent reduction in carbon dioxide emissions below 1990 levels by 2010, through measures including energy efficiency and renewables. (Joint with the Department of Trade and Industry and the Department for Transport.)	 Fit for purpose
	3	Care for our natural heritage, make the countryside attractive and enjoyable for all and preserve biological diversity by: <ul style="list-style-type: none"> (i) reversing the long-term decline in the number of farmland birds by 2020, as measured annually against underlying trends; and (ii) bringing into favourable condition by 2010 95 per cent of all nationally important wildlife sites. 	 Broadly appropriate, but system needs strengthening  Fit for purpose
	4	Reduce the gap in productivity between the least well performing quartile of rural areas and the English median by 2008, demonstrating progress by 2006, and improve the accessibility of services for people in rural areas.	 Not fit for purpose
	5	Deliver more customer-focused, competitive and sustainable farming and food industries... <ul style="list-style-type: none"> (i) agriculture's gross value added per person excluding support payments; (ii) productivity of the food industry; (iii) farming's impact on river water quality; and (iv) soil organic matter content. <p>....and secure further progress via CAP and WTO negotiations in reducing CAP trade-distorting support.</p> <ul style="list-style-type: none"> (v) reductions in EU export subsidies; (vi) reductions in EU production-linked domestic support; and 	 Broadly appropriate, but disclosure needs strengthening System not yet established System not yet established Too early to form a view on system controls Too early to form a view on system controls
			 Broadly appropriate, but disclosure needs strengthening

Dept	No.	Target	Conclusion
DEFRA <i>continued</i>		(vii) Reductions in barriers to access to EU markets	Too early to form a view on system controls
	6	To enable at least 25 per cent of household waste to be recycled or composted by 2005-06, with further improvement by 2008.	 Fit for purpose
	7	Eliminate fuel poverty in vulnerable households in England by 2010 in line with the Government's Fuel Poverty Strategy Objective. (Joint with the Department of Trade and Industry.)	 Fit for purpose
	8	Improve air quality by meeting the Air Quality Strategy targets for carbon monoxide, lead, nitrogen dioxide, particles, sulphur dioxide, benzene and 1,3-butadiene. (Joint with the Department for Transport.)	 Fit for purpose
	9	To improve the health and welfare of kept animals, and protect society from the impact of animal diseases, through sharing the management of risk with industry, including:	
		(i) a reduction of 40 per cent in the prevalence of scrapie infection (from 0.33 per cent to 0.20 per cent) by 2010;	System not yet established
		(ii) a reduction in the number of cases of BSE detected by both passive and active surveillance to less than 60 in 2006, with the disease being eradicated by 2010; and	 Fit for purpose
		(iii) a reduction in the spread of Bovine TB to new parishes below the incremental trend of 17.5 confirmed new incidents per annum by the end of 2008.	System not yet established

APPENDIX FOUR

Good practice checklists for PSA data systems

The Second Validation Compendium Report, published in March 2006, contained a series of good practice checklists for the design, operation and reporting of data systems supporting Departments PSA targets.

Checklist for data systems design

- Is the target easily measurable?
- Is the target clearly and unambiguously defined in its Technical Note? If the system is more complicated than can reasonably be set out in a public document, has it been fully documented in internal papers?
- Does the data system cover all key aspects of the target?
- Can existing data systems provide adequate data?
- Will the data system produce data that are precise enough (e.g. are sampling errors or accuracy margins understood)?
- Will the data system produce data that are accurate enough (i.e. are the data free from significant bias, does the degree of bias vary over time)?
- Where complex measures are used (e.g. indices or ratios), have they been tested to ensure that they will provide a reliable indication of performance over time?
- Will the data system produce data that are sufficiently timely?
- Have experts and other stakeholders been consulted?
- Can achievement of the target be unambiguously assessed?
- Are the Technical Notes and other documentation clear and up to date?

Checklist for data systems operation

- Is it clear who is responsible for data quality and operating controls?
- Are there effective procedures for identifying and assessing risks to data reliability?
- Have proportionate and appropriate controls been designed and put in place to prevent errors?
- Are definitions and guidance to staff on data collection, processing and analysis clear and unambiguous? Are staff adequately trained to operate the data system?
- Is the documentation of the operation of the data system clear and comprehensive? Have errors been recorded?
- Does management review data systems to ensure that they are providing data of suitable quality?
- Where weaknesses have been identified, has the Department established a programme of action to strengthen the data system?
- Is there documentary evidence of the operation of key controls?
- Are data comparable over time?
- Are qualitative assessments of progress subject to adequate review and challenge?
- Where data comes from external sources, do Departments have adequate knowledge of the data source and possible limitations?
- Where contractors are employed to manage part or all of a data system, does the contract specify data quality requirements and quality assurance arrangements?

Checklist for data systems reporting

- Are outturn data reported for all aspects of the PSA targets as specified in our Technical Note?
- Are the outturn data presented in a clear and understandable fashion?
- Are the outturn data the latest available? Is the period covered clearly identified?
- Where aspects of performance targeted have not been measured or reported, are the reasons disclosed?
- Do data systems include controls to ensure that the correct data are extracted and reported from data systems?
- Are our assessments of progress supported by the accompanying outturn data?
- Are cross references made to Technical Notes and other publicly available documents where this will help the reader get a clearer understanding of the outturn data?
- Is the quality of data systems described? Are limitations in data systems and their implications for interpreting outturn results explained?
- Are outturn data reported for all “live” PSA targets?
- For shared targets, is external reporting consistent?