

**MEASURING UP** HOW GOOD ARE THE GOVERNMENT'S DATA SYSTEMS FOR MONITORING PERFORMANCE AGAINST PUBLIC SERVICE AGREEMENTS?

**JUNE 2010** 

Comprehensive Spending Review 2007 covering the period 2008-2011

Review of the data systems for Public Service Agreement 9 led by HM Treasury:

*'Halve the number of children in poverty by 2010-11, on the way to eradicating child poverty by 2020'* 

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## Contents

Summary	4	
Findings and conclusions for individual data systems	9	
PSA 9.1: Children in absolute low income households	9	
PSA 9.2: Children in relative low income households	9	
PSA 9.3: Children in relative low income households and material deprivation	9	

The National Audit Office study For further information, please contact: team consisted of: National Audit Office 157-197 Buckingham Palace Road Emma Huxley under the direction of Marcia Lant. Victoria KPMG completed the detailed London fieldwork and initial draft report SW1W 9SP working to the NAO. Tel: 020 7798 7400 This report can be found on Email: enquiries@nao.gsi.gov.uk the National Audit Office website at www.nao.org.uk

## **Summary**

#### Introduction

1. This report summarises the results of our examination of the data systems used by the Government in 2009 to monitor and report on progress against Public Service Agreements (PSA) 9 - Halve the number of children in poverty by 2010/11, on the way to eradicating child poverty by 2020.

#### The PSA and the Departments

- 2. PSAs are at the centre of the Government's performance measurement system. PSAs are usually three year agreements, set during the spending review process and negotiated between Departments and HM Treasury (HMT). They set the objectives for the priority areas of Government's work.
- 3. This PSA is led by HMT but the responsibility for collecting the data to measure performance against the PSA lies with the Department for Work and Pensions (DWP, the Department). Each PSA has a Senior Responsible Officer who is responsible for maintaining a sound system of control across Departmental boundaries that supports the achievement of the PSA. The underlying data systems are an important element in this framework of control. HMT reports performance against the indicator, not the Department.
- 4. The most recent public statement provided by HMT on progress against this PSA at the time this review was carried out was in its 2009 Annual Report.

## The purpose and scope of this review

- 5. The Government invited the Comptroller and Auditor General to validate the data systems used by Government to monitor and report its performance. During the period September 2009 to November 2009, the National Audit Office (NAO) carried out an examination of the data systems for all the indicators used to report performance against this PSA. This involved a detailed review of the processes and controls governing:
  - the match between the indicators selected to measure performance and the PSA. The indicators should address all key elements of performance referred to in the PSA;
  - the match between indicators and their data systems. The data system should produce data that allows the Department to accurately measure the relevant element of performance;

- for each indicator, the selection, collection, processing and analysis of data. Control procedures should mitigate all known significant risks to data reliability. In addition, system processes and controls should be adequately documented to support consistent application over time; and
- the reporting of results. Outturn data should be presented fairly for all key aspects of performance referred to in the target. Any significant limitations should be disclosed and the implications for interpreting progress explained.
- 6. Our conclusions are summarised in the form of traffic lights (see figure 1). The ratings are based on the extent to which the Department has:

(i) put in place and operated internal controls over the data systems that are effective and proportionate to the risks involved; and

(ii) explained clearly any limitations in the quality of its data systems to Parliament and the public.

7. The remaining sections of this report provide an overview of the results of our assessment, followed by a brief description of the findings and conclusions for each individual data system. Our assessment does not provide a conclusion on the accuracy of the outturn figures included in the Department's public performance statements. This is because the existence of sound data systems reduces but does not eliminate the possibility of error in reported data.

Rating	Description
GREEN (Fit for purpose)	The data system is fit for the purpose of measuring and reporting performance against the indicator.
GREEN (Disclosure)	The data system is appropriate for the indicator and the Department have explained fully the implications of limitations that cannot be cost-effectively controlled.
AMBER (Systems)	Broadly appropriate, but needs strengthening to ensure that remaining risks are adequately controlled.
AMBER (Disclosure)	Broadly appropriate, but includes limitations that cannot be cost- effectively controlled; the Department should explain the implications of these.
RED (Not fit for purpose)	The data system is not fit for the purpose of measuring and reporting performance against the indicator.
RED (Not established)	The Department has not yet put in place a system to measure performance against the indicator.

## Figure 1: Key to traffic light ratings

#### Overview

- 8. The aim of this PSA is to halve the number of children in poverty by 2010/11, with a view to eradicating child poverty by 2020. The PSA seeks to tackle child poverty through a combination of financial support for families, increasing parental employment and improving children's health, educational attainment and life changes. This in turn is expected to improve the health, educational attainment and life chances of those children.
- 9. This PSA is supported by three indicators, which are detailed in figure 2 below. For this PSA we have concluded that the indicators selected to measure progress are consistent with the scope of the PSA and afford a broadly reasonable view of progress.
- 10. For all three indicators the data systems underlying the indicators are deemed to be fit for the purpose of measuring and reporting performance against the indicator.
- 11. Further information can be found in the Findings and Conclusions for Individual Data Systems section of this report. Figure 2 summarises our assessment of the data systems.

No	Indicator	Rating
9.1	Children in absolute low income households	GREEN
		(Fit for purpose)
9.2	Children in relative low income households	GREEN
		(Fit for purpose)
9.3	Children in relative low income households and material	GREEN
	deprivation	(Fit for purpose)

#### Figure 2: Summary of assessments for indicator data systems

#### Findings

12. This PSA is led by HMT but the data used to measure performance against the PSA is collated by DWP. HM Treasury, rather than DWP, publicly reports performance against the indicators. The most recent public statement provided by HMT on progress against this PSA was in its 2009 Annual Report.

- 13. The Department has integrated the indicators within this PSA into its own operational and performance management activities, for instance by integrating them into its business plan and performance reports. The Department has in place satisfactory processes and controls in place designed to ensure the effective operation of business critical IT systems, including those used to collect, analyse and present performance information in respect of the Department's PSAs. The Department's Information Technology Director General is responsible for ensuring sound IT controls are established.
- 14. The Department's Finance Director General has Board level responsibility for data quality. However, issues of data quality are considered at many different levels within the Department. For example, the Department has a separate Information and Analysis Directorate, which is responsible for the Department's overall strategy on data quality and statistical sampling as well as providing information and training on compliance with the National Statistics framework and good practice for data quality in general to its analysts.
- 15. The Department's Corporate Risk Management Team within its Risk Assurance Division co-ordinates departmental risk management. The Department's Directors General and Programme Boards are responsible for risk management on individual PSA indicators and data quality risks are normally managed at this level. However, data quality risks can be escalated to the Departmental Board's Risk Register for discussion through the Department's Management Board and the Departmental Audit Committee.
- 16. The Department undertakes internal performance monitoring and reporting through its Policy and Performance team, with analysis being completed in respect of performance against its PSAs and the underlying indicators, including the preparation of detailed reports setting out progress in key areas of activity, current performance against the relevant indicators, significant risks to performance and further action to be taken in order to mitigate the risks identified and to further the achievement of the objectives of the PSA. The information provided for the performance reports is received via the Department's PSA Senior Responsible Officers and their respective Policy Leads and Lead Analysts. Performance is reported externally twice a year by the HMT in its Autumn Performance Report and its Annual Report.
- 17. Our main conclusions and recommendations on the Department's overall arrangements with respect to the PSA and the indicators that it encompasses are as follows:

- The Department's governance arrangements in respect of the PSA are satisfactory. The responsibilities for the PSA indicator and associated data quality have been clearly assigned and the Department has processes in place to monitor and report performance against those indicators, with sufficient regard given to data quality in respect of the PSA indicator.
- The Department has agreed Measurement Annexes for all of its PSA indicators, setting out the definition of the indicator and the data sources to be used.
- HMT should disclose within its reporting processes the relevant limitations in the data systems and the effect this has on reported data. For example, the statistics only cover private households and not those in residential care.

#### Assessment of indicator set

18. In undertaking the validation we reviewed the documentation associated with the PSA, including the Delivery Agreement, and considered whether the indicators selected to measure progress were consistent with the scope of this PSA. We conclude that the PSA is wide ranging and the indicators selected afford a reasonable view of progress. The indicators used within this PSA measure poverty in terms of levels of income within households as well as deprivation in terms of access to recreational activities, including leisure and outings.

## Findings and conclusions for individual data systems

- 19. The following sections summarise the results of the NAO's examination of each data system.
- 20. All three of the supporting indicators use the same data system and as such we have reported collectively for the indicators below.

#### Indicator 9.1: Children in absolute low income households

#### Indicator 9.2: Children in relative low income households

# Indicator 9.3: Children in relative low-income households and material deprivation

#### **Conclusion: GREEN (Fit for purpose)**

21. We have concluded that the data systems underlying the indicators are fit for the purpose of reporting performance against the indicators.

#### Characteristics of the data system

- 22. Performance against this indicator is determined by way of a simple calculation using data published in the Family Resources Survey (FRS) which is a National Statistic. The data for this indicator is extracted with minimal analysis or processing. The survey was launched in October 1992 to meet the information requirements of the DWP and is owned and published by the Department.
- 23. Households interviewed in the survey are asked a wide range of questions about their circumstances with a focus on areas relevant to DWP policy such as income, including receipt of social security benefits, housing costs, assets and savings. Questions are also asked on deprivation, which includes the ability to use and frequency of use of local recreational facilities as well as the ability to holiday and enjoy day trips. The annual sample size is approximately 25,000 households. Fieldwork is carried out jointly by the ONS and the National Centre for Social Research (NatCen) using computer-assisted personal interviewing.
- 24. The FRS is conducted by trained interviewers through face to face interviews with respondents in their own homes. A standard question set is used, with controls in place to verify answers given. For example, there are in-built checks as part of the Computer Assisted Personal Interviewing process which help to check respondents' responses and ensure that interviewers do not make keying errors. There are also checks to ensure that amounts are within a valid range and also cross-checks which make sure that an answer does not contradict a previous response.

## **Findings**

- 25. In developing the data system for this indicator, the Department has given consideration to the various aspects of its specific definition, such as what constitutes a statistically significant increase, in order to ensure that these are reflected appropriately in the data system and in the reported data. The Department uses this data to calculate performance against the indicator.
- 26. This indicator has been calculated for several years by the Department. The Department has in place a team who oversee the FRS. The team performs quality assurance reviews of the data received from the FRS before it is released to the Department's analysts.
- 27. The FRS only covers private households. Therefore the Households Below Average Income statistics within the FRS only cover private households and not those in residential care. Whilst it is difficult to define household income for such people, initial analysis undertaken by the Department indicates that this will not impact on the trend data reported. Due to the relatively small proportion of children living in residential care compared with those in private households, this appears to be a reasonable assessment. Additionally, the FRS is known to undercount benefit receipt, including tax credits in comparison to administrative data.
- 28. A review has been conducted by the Department and ONS investigating the reasons for the differences between the FRS and Living Conditions and Food Survey (LCF). The project concluded that neither survey was superior in measuring year on year changes, however due to the larger sample size of the FRS, the Department believe it is more accurate that the LCF in measuring poverty statistics over longer periods.
- 29. The disclosures within the HMT Annual Report could be improved by including details of the alternative dataset available from the LCF. Reporting could also be improved by incorporating a reference to the Measurement Annex and a description of the quality of the data systems, including the finding that results should be interpreted over a longer period for accuracy.
- 30. As with all indicators which source data from the FRS, there is a significant (approximately 12 month) time lag between the period when data is collected and when it is reported.