

Office for National Statistics
Outsourcing the 2001 Census



REPORT BY THE COMPTROLLER AND AUDITOR GENERAL
HC 1211 Session 2001-2002: 18 October 2002

executive summary

Background

- 1 On 29 April 2001 a Census was conducted in all parts of the United Kingdom. The information collected in the Census will provide population statistics and projections which are used in national planning, including the allocation of resources to health and local authorities. The Office for National Statistics (the Office) is responsible for the Census in England and Wales.
- 2 The 2001 Census was a large and labour intensive exercise. The Office employed a field force of around 73,000 temporary staff, at a budgeted cost of £54.1 million to deliver over 24 million Census forms in the three weeks prior to Census day. Most of this field force worked on the Census for fewer than 12 weeks.
- 3 Under arrangements agreed with the Royal Mail, Census forms were posted back to Census field staff in pre-paid envelopes. The Office for National Statistics estimated that the post back arrangements allowed it to reduce the overall size of the Census field force by some 42,000, compared with the 115,000 staff employed in the 1991 Census. Apart from the savings arising from a smaller field force, the Office believed that the post back would allow them to target their enumeration effort in those areas, such as inner-London, which were hard to count.
- 4 The post back arrangements were more successful than the Office's forecast. They expected 70 per cent of the forms to be returned through the post but actually received 88 per cent. Under the Office's costing model this increase should have yielded savings of some £5.5 million in the cost of field staff. In practice, however, actual pay costs of £59.9 million were some £5.8 million more than the budget.
- 5 The Office outsourced the administration of field staff payroll to an external contractor, ADP Chessington (Chessington), who were appointed in 1998. The Office's Census Division, with the help of professional advisors, were responsible for the procurement of Chessington and the management of the contract. In June 2001, The National Audit Office, while carrying out our audit of the Office's Resource Account for the year to 31 March 2001, became aware that significant problems were being experienced in processing Census pay and that these had resulted in delays in making payments to around 23,000 Census staff (30 per cent of the field force) together with higher than expected levels of error¹. This caused significant inconvenience and financial hardship for a large proportion of the Census field force and these problems were only resolved as a result of the Office for National Statistics' intervention.
- 6 This Report examines the Office for National Statistics' arrangements for the outsourcing of 2001 Census services in England and Wales and, in particular, the arrangements for the administration of field staff pay. It also considers the arrangements for the administration of the post back of Census forms and the reasons behind the overspending of the Census payroll budget.

¹ *Certificate and Report on the Office for National Statistics' 2000-01 Resource Account (HC 171 2001-02).*

Our main findings

Planning and Delivery of the 2001 Census.

- 7 The Office for National Statistics, together with the Census Offices in Scotland and Northern Ireland, used advances in scanning, image recognition and coding technology to automate the processing of 2001 Census data. A separate coverage survey, completed shortly after Census day, has allowed the Office to estimate and adjust the results for individuals missed in the main Census.
- 8 The Office expect the 2001 Census to meet its objective to deliver good quality population data in accordance with their timetable. They estimate that the overall response rate will reach 98 per cent of households, compared with 97.8 per cent in 1991. While the collection and subsequent processing of Census returns have encountered delays, the Office delivered the first Census outputs for population estimates on 30 September 2002, close to schedule. The Census statistics for the standard spending assessment for local authority grants are expected as planned in March 2003.
- 9 The Office expect that the Census in England and Wales will be delivered within the overall budget of £207 million agreed with HM Treasury in 1998, subject to the settlement of outstanding claims from contractors.
- 10 The Treasury Select Committee has already conducted an inquiry into the 2001 Census in England and Wales². Among a number of issues raised the Committee have emphasised the need to evaluate the alternatives to a full Census in the future and for robust evidence on costs and benefits to justify the expenditure involved in undertaking the Census. The Government's response to the Committee's findings³ accepted the recommendations. The Office intend to prepare a General Report on the 2001 Census, including an evaluation of its planning and implementation, together with a separate report on data quality to be published alongside the Census data.

The Outsourcing of Census services

- 11 The Office for National Statistics sought to achieve value for money on the 2001 Census by outsourcing a number of services, including the data capture and coding of completed forms, telephone helplines, printing, delivery and secure collection of Census forms, and the administration of field staff pay. For the first time, the public were also asked to post their forms back. In total outsourced services accounted for £69.1 million in England and Wales, some 33 per cent of the Census budget. An additional £7.7 million was paid to Royal Mail to cover the cost of post-back services.
- 12 The Census Director was responsible for the procurement of Census services. He established a procurement unit within Census Division and recruited external advisors to assist in the procurement and contract management process. The Census Director also chaired a Steering Committee which oversaw the process to identify and consider the procurement options for the Census and, in particular, those for the processing of Census data. He chaired two further committees which were established to manage the Census service contracts, including a Steering Committee to oversee the processing services and a Contract Management Board to oversee all other Census contracts.
- 13 In delivering their strategy for outsourcing Census services, the Office for National Statistics and the other Census Offices established that existing scanning technology was capable of dealing with the complexity and size of



² *House of Commons Treasury Committee First Report 2001-02 HC 310, The 2001 Census in England and Wales.*

³ *House of Commons Treasury Committee Ninth Special Report 2001-02 HC 852, Government Response to the Committee's First Report: The 2001 Census in England and Wales.*

the Census. They also established that the field of potential suppliers of scanning services was sufficiently large to ensure competition. All other contracts for Census services, with the exception of those for professional advice and for the Royal Mail to collect and deliver forms, were subject to competitive tender. Under the terms of the Post Office Act it was not possible for the Office to have a formal contract with the Royal Mail regarding the post back of Census forms and a service level agreement was put in place.

14 The appointment of external procurement advisors was not subject to competition and was not in accordance with the Office's and public procurement procedures. The Census Director initially employed Vogue Consultants (UK) Limited (Vogue) to prepare a report on the procurement options for Census processing. The Census Director subsequently retained them on a non-competitive basis, to advise the Census Division on the procurement and management of the contracted out services. An internal audit review in May 1999 found that the initial contract with Vogue for the preparation of the report on procurement options exceeded the Census Director's delegated authority of £20,000. The review also found that the contract for advice on the procurement and management of outsourced services, and for which the contractor had at that time received £485,000 in fees and expenses, did not meet the Office's standard terms and conditions. The Census Director was subsequently disciplined for his role in the appointment of Vogue.

15 In the light of findings of the review of the Census Director's role in the appointment of external advisors, the Office for National Statistics took a number of actions including reviewing:

- Vogue's performance as external advisors. The Office concluded that the risk of dispensing with Vogue's service outweighed the risks of retaining them. The Office, therefore, negotiated a new contract with Vogue based on the Agency's standard terms and conditions. In total Vogue were paid £1million for their work;
- the Census Director's role in the appointment of Bird & Bird as legal advisors to the Census. This found that although Bird & Bird had been appointed on a non-competitive basis, there had been no breaches in internal guidance or public procurement regulations, and that rates included in the contract were consistent with those available to other Government departments under the firm's framework agreement with the Central Computer and Telecommunications Agency (now part of OGC.buyingsolutions);
- all contracts let by Census Division. This review found that appropriate procurement procedures had been followed and concluded that the contracts for Census services represented an acceptable risk to the Office.

The Office also withdrew all procurement delegations from Census Division and appointed a Census Business Manager to strengthen financial arrangements in the Division.

16 The Office for National Statistics encountered particular difficulties in outsourcing the contract for field staff pay. Only three potential contractors provided outline proposals and indicative bids. The Office subsequently eliminated one of these bidders from the competition following checks on financial viability. The Office paid this bidder £22,000 in compensation for wasted effort.

17 Despite offering different solutions, the two remaining bids were closely rated on all aspects of evaluation apart from price. Chessington, the successful bidder, proposed the development of a Census payroll system based on its existing systems, while Capita proposed to design a Census payroll system from scratch. The difference in price arose because Chessington significantly



reduced their final bid from £1.9 million to £1.02 million based on estimates of the level of pay queries together with a re-assessment of the time needed to develop the system. Capita informed us that it was unlikely that they would have revised their bid in the light of the Office's estimates of likely pay queries. Chessington found that the payroll system took longer to develop than planned and that the higher than expected levels of error had a significant impact on Chessington's ability to deliver Census payroll services.

- 18** The Office developed a risk management framework specifically for the Census and the outsourced services. They were also able to establish effective contingency arrangements in partnership with contractors when faced with the problems in maintaining an effective Census helpline and in working with the processing contractor, Lockheed Martin, to establish a rectification plan to address the initial delays in processing. The Office's risk management strategies were less effective in other areas, most notably in the administration of field staff pay where lack of flexibility in the contract management arrangements meant that problems in the implementation of systems were not addressed as they arose.

The post back of Census forms

- 19** Overall the post back was a success. The national post back rate achieved was 88 per cent representing around 21 million forms for England and Wales. Despite the actual response rate being well in excess of expectations, the Office encountered a number of difficulties in monitoring the progress of the post back and in managing the subsequent follow up of outstanding replies. The higher volume of forms posted back contributed to backlogs in the sorting and checking of returns in some Census Districts. In a number of Districts the Office's staff were re-deployed to carry out the secondary sorting of the returns posted back instead of the Royal Mail. Variations in the pattern of posting between Districts also made it difficult for the Office to assess the outcome of the post back in some areas. These problems were compounded by weaknesses in the Office's field information systems, which prevented management from establishing a clear view of District Managers' progress in the collection and checking of responses received through the post back.
- 20** The timing of the Census Coverage Survey due to be carried out in June 2001 was essential to the overall success of the Census. It was therefore important for the Office to complete all Census follow up activities by the end of May. By 9 May around 55 per cent of the forms given out had been returned in most Census Districts, consistent with the overall percentage response rate of 70 per cent forecast. The Office were nevertheless aware that delays in the recovery of forms could adversely affect the results of the Census Coverage Survey. They, therefore, instructed District Managers in most areas to deploy field staff to chase missing forms from 9 May as planned. Due to the weaknesses in their own information, the Office authorised District Managers to take local decisions on paying field staff for additional work at piecework rates set by the Office's Census Division.
- 21** In approving additional field staff work the Office accepted that additional field staff costs would be incurred but they believed, however, that savings in field staff costs in those districts where the response rate exceeded expectations would offset the extra costs in those Districts where additional work was approved by local managers. In the event, the total cost of follow up work, including the additional work approved by local managers, was £10.3 million. However, the lack of reliable management information from the field meant the Office had no way of assessing whether the level of additional resource committed to the collection of outstanding forms was necessary. The total amounts paid to field staff by the Office reached £59.9 million, against a budget of £54.1 million representing an overspend of £5.8 million. Based on the Office's costing model, the 88 per cent post back rate achieved nationally compared to the 70 per cent anticipated, should have yielded savings of around £5.5 million.



The problems with field staff pay

- 22 The contract to administer payroll services to Census field staff did not run smoothly. Implementation of the service was late due to difficulties in agreeing the precise requirements of the service and issues raised by acceptance testing. The Office for National Statistics continued to have concerns over the functionality of the system and problems were encountered in processing the first stage payments to Census District Managers. To avoid any further delays, the Office made these payments directly. Independent reviewers appointed by the Office indicated that the problems experienced were due to errors in completing forms by field staff, the operation of exception limits for large payments, poor quality of data keying and poor calibration of the imaging equipment.
- 23 Despite attempts to fix them, the problems in the processing of Census pay continued up to and beyond Census day. In addition to the initial problems Chessington also noted significantly higher than expected levels of invalid data in forms input to the pay systems and calculated the rejection rate to be around 46 per cent, over three times the rate they had expected. Whilst most field staff were paid on time and in full some 23,000 staff (30 per cent) experienced payment delays of at least two weeks. Of these 5,650 staff suffered delays of over four weeks and received additional compensation from the Office.
- 24 The controls established between the Office and the contractor to safeguard against overpayment of field staff also failed to operate as intended. Claims triggering pre-determined exception limits were flagged for investigation by the Office's staff who had to examine the exceptions before the closure of the weekly pay runs and, where necessary, stop the claim before the payment was issued. The volume of claims over the exception limits exceeded the Office's expectations and they could not investigate the details of these claims fast enough to prevent the contractor making erroneous payments. The Office have since identified overpayments to 2,700 staff totalling nearly £498,000 and are in the process of making recoveries.
- 25 Over 12,000 field staff queried with the Office the accuracy and completeness of the payments they had received. The Office established a database at short-notice and recruited 50 temporary staff to investigate these queries, which were finally resolved by the end of October 2001, four months after they should have made final stage payments to the majority of the field force.
- 26 At the Office's request, KPMG their internal auditors, reviewed the preparations for the staff payroll system in September 1999 and again in January 2000. KPMG noted that there was a risk, given the likely volume of exceptions on expense claims during the live Census, that the Office might not have sufficient resources to investigate all cases. Notwithstanding these concerns and the actions taken by the Office, the volume of claims exceeding the system limits contributed significantly to the problems encountered.
- 27 The Office considered legal action against Chessington based on its failure to meet its contractual obligations. Following legal advice from Bird & Bird, the Office considered that they were equally at risk of a claim for damages from Chessington, on the grounds that they had failed to meet their obligations under the contract. In particular, the error rate of input forms submitted to Chessington was significantly in excess of the 2.5 per cent specified in the contract. It was therefore concluded that the contracts should be closed with the final payment being made in full and final settlement of any claims.



Recommendations

- 28 The experience of the outsourcing of the 2001 Census, and the particular problems encountered in the appointment of external advisors and in the operation of the Census payroll, raises the importance of the oversight and management of outsourced services particularly where that responsibility is devolved to a project team. It is essential that those in charge of such projects discharge their responsibilities properly; ensuring that procurement activities are managed in accordance with public sector standards; that strong internal controls are maintained; and that there is effective scrutiny of project managers.
- 29 The joint National Audit Office and Office of Government Commerce guidance on 'Getting Value for Money from Procurement' provides an accessible guide to the key principles that need to be followed in ensuring that value for money is being achieved from procurement. It also suggests some of the questions that need to be considered in assessing good practice in procurement. These key principles and questions apply to the outsourcing of the Census, and the Office for National Statistics may wish to have regard to this guidance in satisfying itself that any future procurement of services meet all aspects of good practice.
- 30 With regard to the Office's experience during the 2001 Census, we make the following recommendations for the outsourcing of services for any future Census:
- i The Office should ensure that those in charge of the Census understand their responsibilities and manage all devolved procurement activities, including the appointment of professional advisors, in accordance with the Office's procurement procedures. Senior managers must also ensure that appropriate monitoring and reporting procedures are in place to provide sufficient oversight of the conduct and outcome of procurement exercises, including value for money (paragraphs 12 and 14);
 - ii The Census is a large undertaking and its delivery depends on the successful co-ordination of a wide range of services. In outsourcing Census services the Office should ensure that the procurement strategies and contract management arrangements are effectively co-ordinated, between contractors and between those aspects of the Census, such as the field service, which are administered directly by the Office (paragraph 18);
 - iii As the experience of 2001 shows, the Office had to contend with a number of uncertainties in the delivery of the Census such as forecasting the volume of helpline calls, the rate and pattern of post back for Census forms, and the level of rejections in form processing. These uncertainties can present increased risk where Census services are outsourced. In planning any future Census, the Office should ensure that key assumptions underpinning contract terms and service performance are rigorously assessed (paragraphs 19, 22 and 27);
 - iv The Office should also ensure that all key Census services and supporting systems, including the Office's arrangements for co-ordinating those services and managing performance, are fully tested at the Census Dress Rehearsal stage (paragraphs 20 and 21);
 - v While the overall response rate achieved through the post back exceeded expectations, the Office's monitoring of its progress and subsequent follow up was less effective. If the post back is to be retained for future Censuses, the Office should develop a more accurate model for forecasting the volume of returned forms and the pattern of returns between Census Districts (paragraph 19);
 - vi The Office should also look to develop a robust field information system to provide the Office with up to date data on the progress of the post back and allow them to make better informed decisions on the deployment of field staff in the follow up of outstanding returns (paragraphs 19, 20 and 21);
 - vii The Office should also consider whether the timetable for the post back and any subsequent coverage survey allows sufficient time for the results of the post back to be collected before work begins to chase outstanding forms (paragraph 20);
 - viii In the light of the problems encountered with the Census payroll, the Office should ensure that the payroll service specification is agreed with the contractor before development work begins and, in common with other systems used in the Census, that this is fully tested at the Dress Rehearsal stage (paragraph 22);
 - ix The dispersed nature of the Census, the dependence on temporary staff, and the requirement for District and Area Managers to exercise the primary control over the authorisation and submission of payroll data to the payroll contractor presented additional risks for the Office. These risks crystallised in the difficulties encountered in the processing of payroll forms and the absence of effective controls over the £10.3 million paid in respect of piecework for follow up of outstanding forms. In considering their plans for a future Census, the Office should review the adequacy of controls over piecework approved in the field. To safeguard against the high incidence of errors and form rejections experienced in 2001, the Office should consider how the training of field staff might assist in the reduction of payroll errors and how validation checks should apply (paragraphs 22 and 23).