

# The passport delays of Summer 1999

# Contents

<b>Executive summary</b>	<b>1</b>
<hr/>	
<b>Part 1: Introduction</b>	<b>8</b>
The Agency's aim is to provide passport services promptly and economically	8
The sequence of events culminating with the problems in 1999	13
Scope of the National Audit Office examination	16
<hr/>	
<b>Part 2: Reasons for the problems</b>	<b>17</b>
To what extent did the Agency forecast and plan for the volume of applications it received in 1999?	17
To what extent did the introduction of a new computer system cause the Agency's problems?	23
<hr/>	
<b>Part 3: The Passport Agency's response</b>	<b>38</b>
Did the Agency take timely and effective action to maintain services to the public?	38
What have been the additional costs of the crisis and who will bear the cost?	47
What action has the Agency taken to prevent these problems recurring?	51
<hr/>	
<b>Appendices</b>	
1: Key dates and events	54
2: Study methodology	56
3: Previous Reports by the Committee of Public Accounts and the C&AG	58
4: The Coopers & Lybrand Report 1989	59

<b>List of figures</b>	<b>Page</b>
Figure 1: Objectives of the Passport Agency . . . . .	9
Figure 2: The responsibilities of the Home Office and Passport Agency . . . . .	10
Figure 3: The Agency's six regional offices. . . . .	11
Figure 4: The growth in UK passport issues, 1991-92 to 1997-98. . . . .	12
Figure 5: The deterioration in processing times for passport applications, October 1998 to August 1999 . . . . .	14
Figure 6: The backlog of passport applications awaiting processing, October 1997 to August 1999 . . . . .	15
Figure 7: Comparison of annual forecasts prepared by the Agency with actual issues of passports, 1995-96 to 1998-99 . . . . .	18
Figure 8: Monthly differences between forecast and actual number of applications, April 1998 to August 1999 . . . . .	19
Figure 9: Applications received, 1999 and previous years . . . . .	20
Figure 10: Maximum processing times for passport applications, 1996-97 to 1998-99 . . . . .	22
Figure 11: The unit cost of issuing a passport, 1991-92 to 1997-98 . . . . .	23
Figure 12: Cost of options appraised by the Agency, at an assumed volume of 4 million passports a year . . . . .	24
Figure 13: The new system for processing passports. . . . .	26
Figure 14: Proportion of passports processed by each Passport Agency office in 1997-98 . . . . .	27
Figure 15: Project timetable, planned versus actual progress . . . . .	29
Figure 16: The timetable for roll-out . . . . .	32
Figure 17: Output at the Liverpool office compared to original and revised roll-out criteria . . . . .	34
Figure 18: Output at the Liverpool and Newport offices, October 1998 to July 1999 . . . . .	36
Figure 19: The effect of lost output at Liverpool and Newport . . . . .	37
Figure 20: Change in passports issued, 1999 compared to 1998 . . . . .	39
Figure 21: Staffing levels in the other offices, October 1997 to August 1999 . . . . .	40
Figure 22: Comparison of monthly output with the number of applications received October 1998 to August 1999 . . . . .	41
Figure 23: Applications transferred from the Liverpool and Newport Offices, March to July 1999. . . . .	42
Figure 24: Backlogs at the Liverpool and Newport Offices, March to July 1999 . . . . .	43
Figure 25: Public telephone calls to the Passport Agency, June 1998 to August 1999 . . . . .	44
Figure 26: Examples of customer complaints . . . . .	45
Figure 27: The cost of the delayed roll-out and emergency measures . . . . .	48
Figure 28: Siemens' service credits, December 1998 to August 1999 . . . . .	50

## Executive summary

**1** From early 1999, the United Kingdom Passport Agency (the Agency) encountered increasing difficulties in meeting demand for passports. News of the problems in the media during the Spring led to a surge of applications in May and June. At their peak, maximum processing times in the Agency's regional offices ranged between 25 and 50 days, compared to the Agency's target of 10 working days. By June 1999, around 565,000 applications were awaiting processing, amounting to a backlog of over a month's work, compared to a maximum of nearly 300,000 the previous year. The Agency's difficulties caused much anxiety for members of the public hoping to travel during the Summer. Public concern escalated until July 1999, when emergency measures – including free two-year extensions to passports – and a downturn in applications helped ease the pressure. Processing times were brought back within the 10 day target by the end of August. This report examines the causes of the problems experienced by the Agency; the Agency's response; and identifies lessons for the future.

## Main findings

### On the causes of the problems and the Agency's response

**2** Several factors contributed to cause the original problem of a shortfall in planned capacity to process passports, and to the unforeseen upsurge in demand. Together these supply and demand factors interacted to produce a crisis in public confidence in the Agency.

**3** The initial cause was the introduction of a new computerised passport processing system in two of the Agency's six offices – Liverpool and Newport. The new system was intended to replace an ageing computer system and to introduce a more secure passport. Siemens Business Services is responsible for developing and providing the new computer system and for undertaking the initial processing of applications. Security Printing & Systems Ltd is responsible for printing and despatch of a new passport with a digital image of the passport holder. The Agency had planned to roll-out the new processing system to all its offices within a tight timetable before its busy season, but this was postponed following difficulties at the first two sites. Had that worked to plan, and had the new system delivered the planned level of output, the Agency might just have been able to cope with demand during 1999.

**4** Important factors were:

- A failure to assess and test adequately the time needed by staff to learn and work the new passport processing system, which involved some changes in clerical and administrative processes as well as computerisation.
- Insufficient contingency planning in the event that implementation of the new passport processing system might not go according to plan. Extending the pilot from Liverpool to Newport before problems were fully overcome compounded the problem.
- A failure to communicate effectively with the public, both at a personal level in dealing with calls from the public to its telephone enquiry bureaux, and more generally via the media.

**5** The strategy adopted by the Agency in early 1999 to get through the busy season rested on its past experience that it would be able to increase output by increasing overtime, hiring casual staff and sorting out the processing problems with the two offices that had the new system. This strategy can now be seen to be based on a number of mistaken assumptions:

- Demand grew higher than forecast exacerbated by higher volumes of child passports than the Agency expected.
- It did not prove possible in the two offices for the Agency and Siemens to raise output to target levels.
- The Agency did not plan to take significant steps to increase its capacity to answer promptly enquiries from the public, which it should have expected to rise as processing times lengthened.

The Agency did not appreciate at the start of the year the instability of their strategy. As backlogs grew, the Agency in March submitted a recovery plan to the Home Office for further measures, including recruitment of extra staff, which was agreed.

**6** The Agency did not foresee the loss in public confidence, which led to a sharp increase in applications and enquiries about them, once the delays attracted publicity. In the second half of April demand started to rise very sharply. Although

in May monthly output was 619,000 compared to a peak of 564,000 in the previous year, maximum processing times continued to lengthen. This prompted a cycle of even more enquiries from an increasingly concerned public that the Agency could not handle. Applications for travel later in the season surged as the public reasonably 'aimed off' for the expectation of having to wait longer for delivery, fuelling a rush of applications into June. Between April and June the number of applications exceeded forecasts by around 29 per cent.

**7** In the face of mounting pressure the Home Office and the Agency concluded at the end of June that conventional measures to increase output would not act quickly enough to restore public confidence. As a result, in July the Home Office introduced emergency measures, including free two-year extensions to passports available at post offices, 100 extra staff at passport offices, and a call centre to deal with telephone queries. Steps were also taken to manage better the arrangements for members of the public queuing at passport offices. The Agency had been set a service level target of meeting 99.99 per cent of travel dates. Taking the period October 1998 to August 1999 as a whole, performance was at or around that level. However, that still meant almost 500 missed travel dates and a great deal of anxiety and inconvenience for many more customers waiting for delayed passports. The Home Office accepts that this target did not reflect a meaningful standard of quality of service for the public.

**8** A longer term factor was that, during the 1990s, the focus of Home Office target setting was on cost reduction and efficiency, while maintaining reasonable standards of customer service. The Home Office considered that the Agency had performed well - improving both its services and its efficiency - and that it compared well with its counterparts in other countries (for example, in the price of a passport). However, both the Department and the Agency acknowledge that they had failed to appreciate, against a background of rising demand, that the Agency was operating close to its capacity. As a result, when output at the Liverpool and Newport offices fell short of expectations and demand rose unexpectedly the Agency found itself unable to respond quickly and effectively.

**9** The Agency had experienced difficulties before, in 1989, when it computerised some of its clerical procedures. On that occasion, the Agency had implemented the new system in its Liverpool office, despite initial problems and lower productivity in its pilot office, Glasgow. There were severe backlogs of passport applications and deteriorating relations with staff that culminated in industrial action. A subsequent report by Coopers and Lybrand (Appendix 4) concluded that the Agency had been optimistic to press ahead with implementation before problems had been resolved; noted that there were inadequate contingency arrangements to deal with a surge in applications;

emphasised that computer-based systems must not impede their users; and concluded that more might have been done to manage risks better within resource constraints. Whilst the Agency believed that it had identified the lessons from the earlier project - for example, the Agency involved its examiners in the design of the new examination process - its plans for implementation of the new system, a more complex project, did not take sufficient account of these lessons.

**10** Many of the risks associated with implementation of the new passport processing system in 1998-99 had been identified by the Agency at the planning stage, including delay and lower productivity. But the risks and the response required had not all been realistically assessed, and when things began to go wrong the Agency's plans proved insufficient. Whilst the Agency took action to make up for lost production in Liverpool and Newport it was not able to make up for the increase in applications. The Agency was too reliant on using routine solutions, such as staff and managers working longer and longer hours, to cope. The Agency told us it was slow to bring in other measures early, such as recruiting new staff, because of concerns about the impact on unit costs and a failure to appreciate how rapidly the situation could deteriorate. The Agency was trying to do too much too quickly for the resources available to it, and it had not fully recognised the significance of the risks it was running and laid off for them.

### **On the cost of the action taken**

**11** The cost of the additional measures taken by the Agency to deal with the failures during the year from October 1998 will be around £12.6 million, after taking into account compensation received from its contractors to date. This estimate excludes the extra costs and around £9 million in lost business borne by Siemens Business Services. The total compensation paid to members of the public for missed travel dates and other expenses currently amounts to £161,000, but is likely to rise further as outstanding claims are settled. The unit cost of producing a passport in 1999-00 is likely to be between £15 and £15.50, including the impact of the exceptional measures and more recent service improvements, compared to the target of £12 in the Agency's business case. The longer term impact on unit costs remains uncertain, in part due to planned further improvements to customer service and the extent to which productivity from the new system can be improved.

**12** The Agency has received compensation totalling £69,000 from its contractors for shortfalls in performance. The Agency has waived other compensation due from Siemens, estimated by the Agency to be worth £275,000. Initially, the waivers had been granted to allow time for the new system to settle down. At Siemens' request, the Agency agreed in May to extend the waiver until the end of June 1999; Siemens had encountered technical difficulties in scanning

data from application forms prepared by the Agency, and had altered its procedures at the Agency's request in response to the surge in applications. In granting the extension, the Agency intended to allow Siemens time to clear its backlog. The Agency is now discussing with Siemens how the costs of the crisis are to be shared.

### **On the action taken to prevent the problems recurring**

**13** The new passport processing system has yet to achieve the performance targets set in the business case. While the partnership with Siemens is likely to continue, the Agency now faces a decision whether and when to roll-out the system, and the supporting process changes, to its remaining offices. In doing so, it will need to reach a view on whether it can deliver the volume of output required, within targets for processing time and at acceptable cost. The Agency will also need to be confident that it has assessed all the relevant risks and that its contingency plans will be sufficient to manage them. Temporary extra production capacity will be needed to cover for any capacity which is unavailable during the roll-out process. Recent advice from the Agency's consultants concluded that the system should be able to perform to the standards originally set for it, if a plan to define and develop process improvements is fully implemented. The Agency and Siemens are now considering a range of measures, including modifications to software and changes to clerical processes, to improve productivity. Nonetheless, the unit cost to the taxpayer of issuing a passport, which is reflected in the fee, is expected to rise to £14 during the remaining roll-out of the new system, compared to £12 in the Agency's business case, and to reduce thereafter to reflect the operation of a single system for passport processing and potential improvements in productivity.

**14** In March 1999, the Government's White Paper "Modernising Government" (Cm 4310) set out proposals for making public services more responsive to the needs of citizens, including quick and helpful telephone services, better information on services, and doing everything reasonably possible to make public services available when needed, where there is demand. The Agency's performance in 1999 fell short of these goals. The Home Office and the Agency acknowledge the shortcomings and told us that they are seeking to redress the balance between the previous emphasis on unit cost and the importance of providing a service to meet legitimate public expectations. The Agency is now considering a number of measures including expanding the capacity of its telephone enquiry service and passport issuing service to cope with demand during peak periods; improving the information it makes available to the public through advertising and via the internet; and, possibly, making greater use of high street outlets such as The Post Office to undertake initial processing of



applications. The Agency and the Home Office acknowledge that a more sophisticated approach to customer service is needed in the future. These additional measures are likely to add over £3 to the cost of producing each passport, bringing the unit cost to over £17 from 2000-01 onwards.

**15** In normal circumstances, the Home Office expects the Agency to act along commercial lines without intervening in its day to day management, in much the same way as its other Next Steps agencies. However, at a time of crisis, a small agency may not necessarily have the capacity to deal on its own with the volume of telephone queries and correspondence generated, and the need for effective and extensive communication with the media. In addition, there may be a need for additional planning capacity, recruitment action and letting contracts quickly. In this case, the Agency was slow to seek assistance – a point recognised by both the Home Office and the Agency. The Home Office told us that it would be considering its relationship with the Agency as part of its quinquennial review of the Agency now underway.

## **Lessons to be learned**

**16** The circumstances which led to the crisis at the Agency were complex. Nonetheless, the following general lessons can be drawn from this case, which apply also to other departments and agencies delivering services to the public. They are calculated to assist public bodies in managing risks effectively.

### Ten lessons to be learned:

- i Public bodies offering a demand-led public service should be aware of capacity constraints, and **have contingency plans in place to cope with any likely surge in demand**, taking full account of reasonable public expectations of service standards, the likely cost and the level of risk.
- ii Public bodies providing demand-led services should **ensure that their forecasting techniques, though necessarily imprecise, are nonetheless sufficiently robust** to enable them to manage their business efficiently, for example to enable them to plan their capacity needs.
- iii The business case drawn up to justify any new computer system should **test the likely financial cost of different options on a sufficiently wide range of business volumes**, and allow an informed judgement, taking account of the impact of any likely changes in policy.
- iv Public bodies should **undertake a formal risk analysis before introducing new computer systems** and have realistic plans to maintain services to the public if things go wrong.
- v Project managers should **plan for adequate testing of the new system** before committing to live operation, in particular for staff to learn and work the system.
- vi **Pilot tests of any new system** which is critical to business performance **should be on a limited scale** so that any shortcomings do not have a major impact on service delivery. Where pilots need to be on a large scale to test operations at high volumes, the risks should be identified and addressed in contingency plans.
- vii Organisations should **pay special attention to the interaction between the new system and those expected to use it**, and take into account users' views on the practicability and usability of the new system.
- viii Agencies should make a realistic assessment of whether they have the capacity to deal with potential problems and **be prepared to seek early assistance from their parent departments and elsewhere if necessary**.
- ix When service delivery is threatened, public bodies should have the capability to **keep the public well informed**, so as to avoid unnecessary anxiety and relieve pressure on services.
- x Public bodies should have adequate systems for recording performance, and **ensure that they are in a position to claim any compensation due** from contractors for failure to meet agreed performance standards, subject to appropriate risk-sharing within the partnership.

## Part 1: Introduction

**1.1** From February 1999, the United Kingdom Passport Agency (the Agency) encountered increasing difficulties in meeting demand for passports. By June 1999, 565,000 applications were awaiting processing, amounting to a backlog of over a month's work, compared to a maximum of nearly 300,000 the previous year. At its peak, maximum processing times in the Agency's regional offices ranged between 25 and 50 days, against a target for issuing a passport within a maximum of 10 working days days of receiving a valid application. The Agency's difficulties caused much anxiety for members of the public hoping to travel during the Summer. Public concern escalated until July 1999, when emergency measures helped ease the pressure on the Agency. Processing times were brought back within the 10 day target by the end of August. This report examines the reasons underlying the problems encountered by the Agency and identifies lessons for the future.

### **The Agency's aim is to provide passport services promptly and economically**

**1.2** The Agency was established as an Executive Agency of the Home Office in April 1991. The Agency's main aim, set out in a Framework Document published in May 1996, is to provide passport services for British nationals in the United Kingdom promptly and economically. Its objectives are shown in Figure 1. The Agency is also expected to meet a number of targets, including:

- to maintain a maximum processing time of 10 working days throughout the year for straightforward, properly completed applications; and
- to meet customers' declared travel dates for at least 99.99 per cent of passports issued.

## Objectives of the Passport Agency

### Figure 1

#### On passport security:

- to maintain the integrity of the United Kingdom Passport; and
- to monitor the incidence and nature of passport fraud, and take appropriate preventive measures.

#### On customer service:

- to provide passport services within performance targets set by the Home Secretary, with priority given to meeting known travel needs;
- to deal promptly, courteously and efficiently with written, telephone and personal enquiries from the public on passport matters;
- to provide advice and guidance to the public on passport matters; and
- to ensure that the passport service meets the needs of its customers in accordance with the principles of the Citizen's Charter.

#### On financial management:

- to ensure that passport fees are set at a level to fully recover the cost of passport services and that fees are properly brought to account in accordance with government accounting rules.

Source: UK Passport Agency

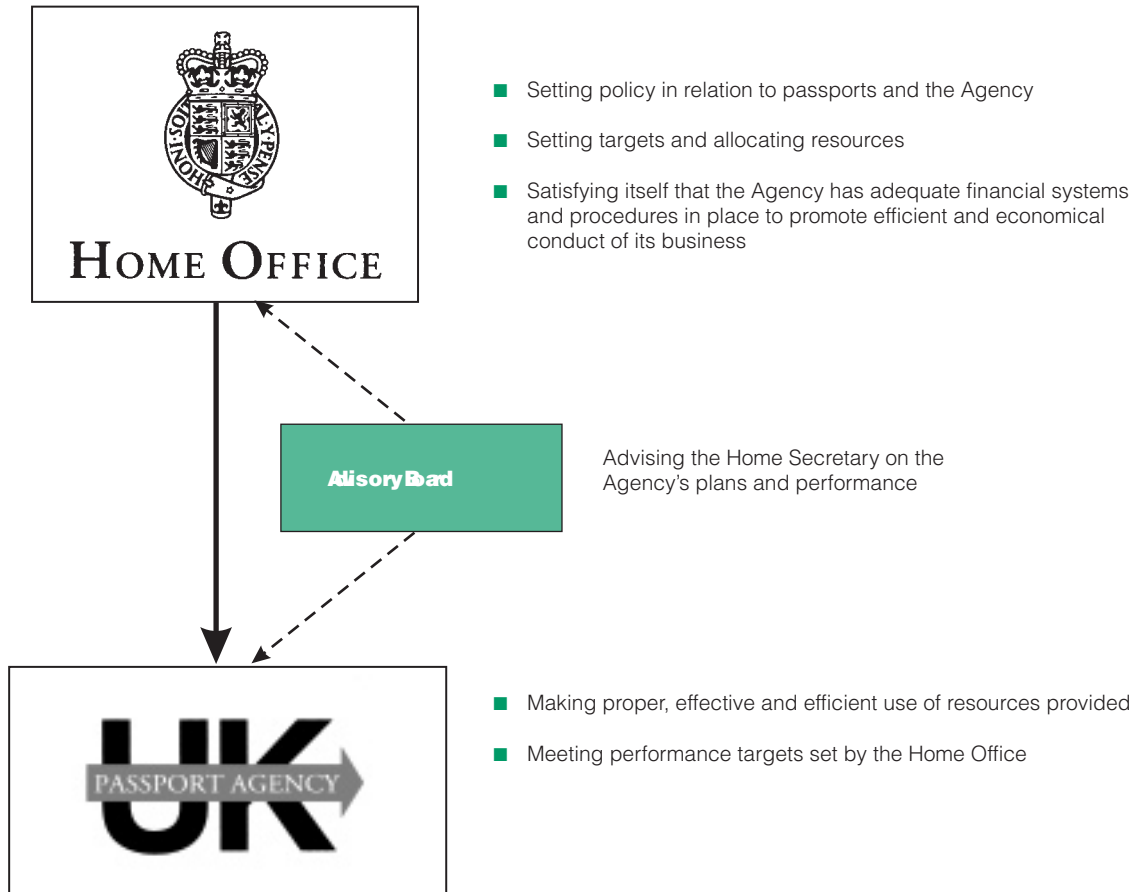
**1.3** The Chief Executive, as the Agency's Accounting Officer, is responsible for the proper, effective and efficient use of resources provided to the Agency and for meeting its performance targets. Figure 2 outlines the respective responsibilities of the Home Office and the Agency. An Advisory Board, comprising senior officials from the Home Office and members from the private sector, is responsible for advising the Home Secretary on the Agency's plans and performance.

**1.4** In 1998-99, the Agency employed an average of almost 1,800 staff in six passport offices, in Belfast, Glasgow, Liverpool, London, Newport and Peterborough, and a Headquarters located in the London office. As shown in Figure 3 on page 11, each office serves a designated area of the country and deals with both postal and across-the-counter applications, apart from the London Office which provides an across-the-counter service only.

**Figure 2**

**The responsibilities of the Home Office and Passport Agency**

*The Home Office sets policy in relation to passports, and oversees the Agency's performance. The Agency is responsible for operational performance.*



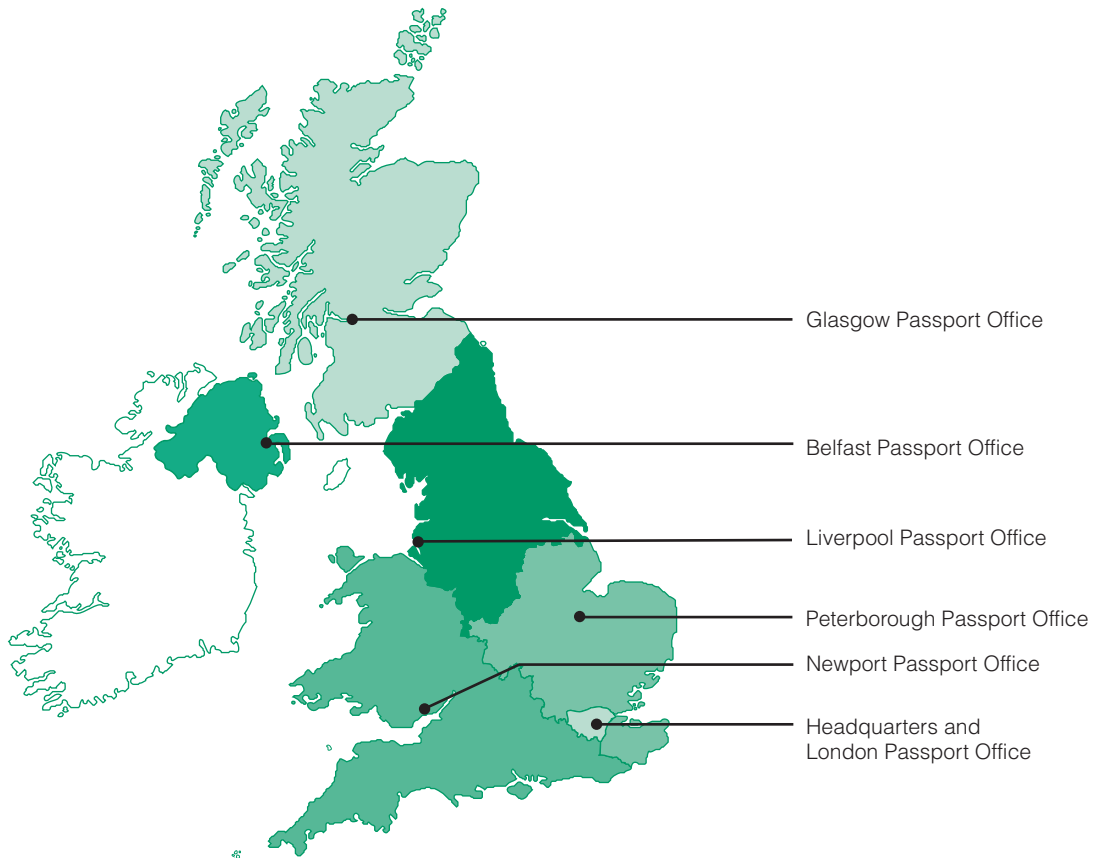
Source: UK Passport Agency Framework Document

**15** Passport fees are set by statutory instrument and were last increased in March 1998. In September 1999, the fee payable by a member of the public making a postal application for a standard 10-year passport was £21, for a 5-year child passport £11, and an additional £10 for passports issued over-the-counter at an Agency office. For an additional fee, members of the public may submit their application and have it checked over the counter at one of the Agency's high street partners - The Post Office (fee £3.20), or Worldchoice Travel (fee £3.25) - before being sent to the Agency. This use of high street partners helps reduce the number of applications submitted with obvious omissions or errors.

**Figure 3**

**The Agency's six regional offices**

*The six offices of the Passport Agency are each responsible for processing applications from their geographic region.*



**Shading indicates catchment areas for each office**

Note: Postal applications from London are processed by the Glasgow office.

Source: UK Passport Agency

**1.6** The Agency's financial objective is to recover the full cost of passport services; the full cost includes the cost of consular protection services provided by the Foreign and Commonwealth Office to UK citizens abroad. In 1998-99 full costs were £93.6 million, including expenditure by the Agency of £57.6 million, and the Agency's income totalled £89.6 million, leading to a shortfall of £4 million.

**1.7** Since its creation in 1991, the Agency has dealt with a steady increase in the number of passport applications. Figure 4 shows that the number of passports issued rose from about 3.2 million in 1991-92 to a peak of 5.1 million in 1996-97. The Agency attributes this upward trend to a number of factors, including an

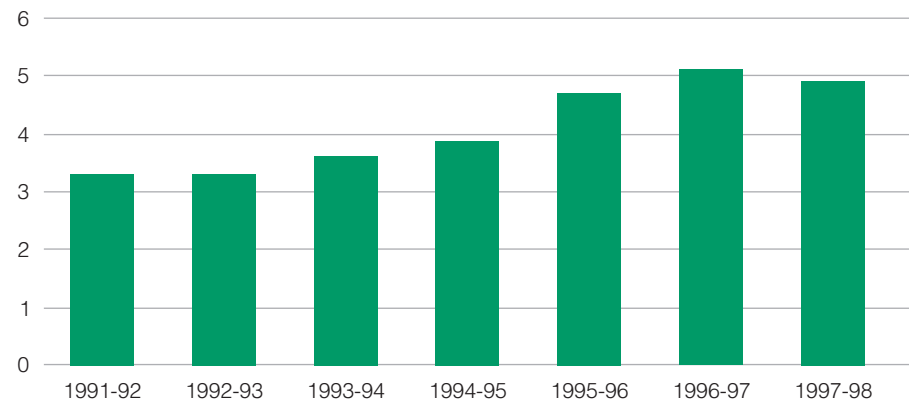
improved economic climate, greater opportunities to travel, cheaper travel, and primarily the abolition at the end of 1995 of the British Visitor's Passport (a 12-month passport previously available from post offices).

**The growth in UK passport issues, 1991-92 to 1997-98**

**Figure 4**

*The number of UK passports issued per year has increased since 1991-92, peaking at 5.1 million in 1996-97.*

**Passports issued (millions)**



Source: UK Passport Agency

**1.8** The Home Office told us that during the 1990s it increasingly allowed the Agency to operate at arm's length. In the Home Office's view, the Agency had made good progress in overcoming the longstanding problems of the 1980s and early 1990s; the Agency had improved its services and its efficiency, for example reducing its unit costs, and it compared well with its counterparts in other countries. The Agency had also been accredited for Investors in People and had been awarded a Charter Mark on three occasions for its customer service.

## **The sequence of events culminating with the problems in 1999**

**1.9** The Agency's Framework Document, published in 1996, stated that it would be looking at ways of involving the private sector in its operations and support services. By 1997 the Agency had reviewed its operations and decided to use two private sector partners to assist in the processing of passports. Siemens Business Services (referred to as Siemens in the rest of this report) was contracted to carry out initial processing of passports and to provide a new computer system to support passport processing. Security Printing & Systems Ltd (formerly The Stationery Office) was contracted to provide secure printing and despatch of passports. The Agency retained the examination and authorisation of passports as a core in-house function. These new arrangements were intended to facilitate the introduction of a more secure passport, using a digital image of the passport holder, and to share the risk of system development and operation with the Agency's private sector partners.

**1.10** The Agency implemented its new computer system and procedures in its Liverpool Office on 5 October 1998 - in keeping with the timetable set out in the original contracts. The Agency had expected output levels in the Liverpool office to reach about 30,000 issues per week by mid-November. However, when the Newport office went live six weeks later, on 16 November, output in Liverpool was just over 8,000 issues per week. On 18 November the Agency, with the agreement of its partners, suspended the planned roll-out to the remaining four offices. By this time the Agency was approaching its busy season, which usually begins in January.

**1.11** In February 1999, as the volume of applications began to increase, maximum processing times rose. In response, the Agency concentrated on meeting customers' travel dates, increased overtime working, trained existing staff as passport examiners and, the following month, began recruiting extra staff. The demand for passports continued to increase and, as Figure 5 shows, maximum processing times began to deteriorate further.

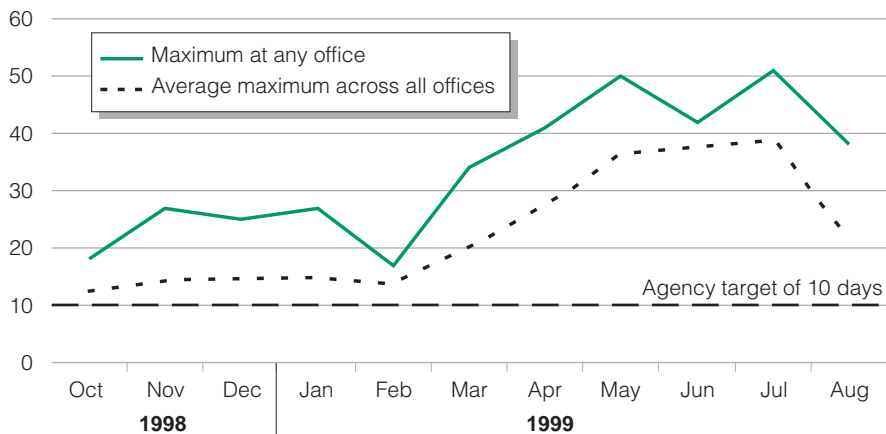


**The deterioration in processing times for passport applications, October 1998 to August 1999**

**Figure 5**

*Maximum processing times increased significantly, especially after February 1999, to reach over 50 working days for passports issued by July 1999.*

**Processing time (days)**



Notes: Maximum processing time at any office is a primary measure of service performance used by the Agency. Average processing times will be much lower, and many applications are dealt with more quickly than the maximum.

The average maximum processing time is the average of the maxima at each of the Agency's six offices, which gives a better picture of overall pressure on the Agency.

Source: National Audit Office/  
UK Passport Agency

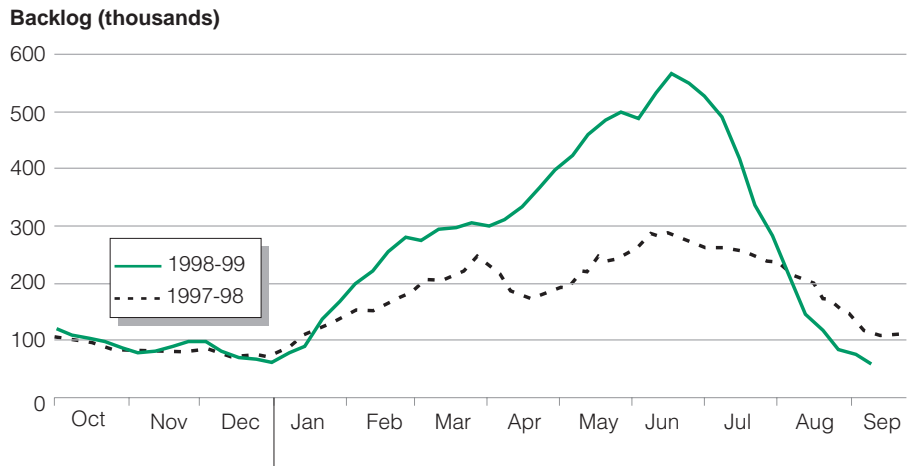
**1.12** By March, the delays in issuing passports had begun to attract Parliamentary and media attention. The number of applications then rose steeply, especially in May and June. Whilst the Agency's monthly output rose to 619,000 in May, compared to a peak of 564,000 in the previous year, Figure 6 shows that the backlog reached 565,000 in June, nearly double the largest backlog of almost 300,000 in the previous year.

**1.13** In July 1999, the Home Office authorised emergency measures to alleviate the problems, including a call centre to deal with telephone enquiries, an extra 100 staff in passport offices and a facility to extend passports at post offices at no charge for up to two years. These measures, coupled with a seasonal downturn in the number of applications, allowed the Agency to reduce its backlog to 82,500 cases and its maximum processing time to within its 10 day target by the end of August 1999. In September maximum processing times fell further to five days. At the beginning of October 1999, the facility for two-year extensions to passports was withdrawn. A summary of the key dates and events is shown in Appendix 1.

**The backlog of passport applications awaiting processing, October 1997 to August 1999**

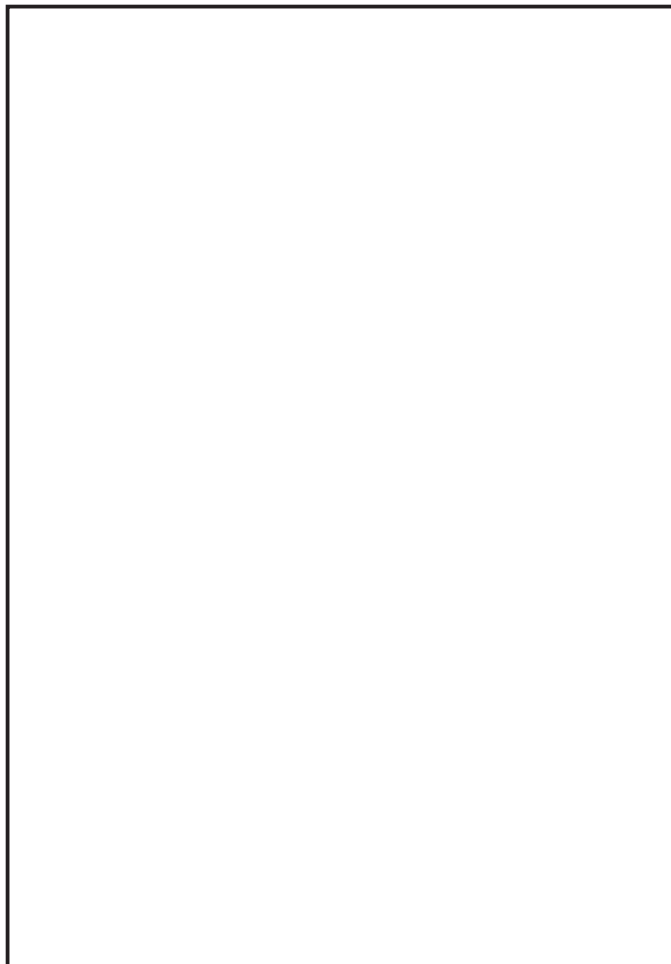
**Figure 6**

*From early 1999, the backlog of applications rose steeply, until it reached a peak of 565,000 in June 1999.*



Source: National Audit Office/  
UK Passport Agency

**Queues outside the Liverpool Passport Office in 1999**



## Scope of the National Audit Office examination

**1.14** Our examination focused primarily on events at the Agency from late 1998. In particular, we looked at:

- the reasons for the problems (Part 2); and
- the Agency's response once the problems emerged (Part 3).

This report is based on the results of interviews with Agency staff and interested parties, scrutiny of documentation kept by the Agency and analysis of performance data. Appendix 2 provides further details of the study methodology.

**1.15** We last examined the work of the Agency in our 1993 report on "Manpower Planning in the Home Office: The Passport Agency and the Nationality Division" (HC585, Session 1992-93). That report followed up recommendations made by the Committee of Public Accounts in its report on "Manpower Planning in the Civil Service" (39<sup>th</sup> Report, Session 1988-89) and our previous report on "Manpower Planning in the Civil Service" (HC398, Session 1988-89). A summary of the Committee's conclusions, which focused on the forecasting of demand for passports, manpower planning, target setting and difficulties associated with the introduction of a new computer system, is at Appendix 3 together with the Government's response and our subsequent report.

**1.16** In 1989, the Agency had experienced difficulties when it computerised some of its clerical procedures. On that occasion, the Agency had implemented the new system in its Liverpool office despite initial problems and lower productivity in its pilot office, Glasgow. There were severe backlogs of passport applications and deteriorating relations with staff that culminated in industrial action. A subsequent report by Coopers and Lybrand (extracts shown at Appendix 4), commissioned by the Home Office, concluded that the Agency had been optimistic to press ahead with implementation before problems had been resolved; noted that there were inadequate contingency arrangements to deal with a surge in applications; emphasised that computer-based systems must not impede their users; and concluded that more might have been done to manage risks better within resource constraints.

## Part 2: Reasons for the problems

**2.1** This Part examines the causes of the problems at the Agency. In particular, we looked at:

- the extent to which the Agency had forecast and planned for the volume of applications it received; and
- the extent to which the introduction of a new computerised system contributed to the problems.

### To what extent did the Agency forecast and plan for the volume of applications it received in 1999?

*The Agency's annual planning forecasts have in recent years proved to be reasonably accurate, although its month by month forecasts have been less reliable.*

**2.2** The Agency relies on forecasts of applications to ensure that it has the resources, particularly staff, to manage the demands made upon it. Since 1990, at the Agency's request, the Home Office has provided the Agency with forecasts. Taking the Home Office figures into account, but relying on its own experience, the Agency then prepares its own forecasts.

**2.3** Figure 7 shows that in recent years the Agency's annual forecasts have been reasonably accurate, except in 1997-98 when passport issues were 27 per cent higher than expected. The Agency attributes this difference to larger than expected residual demand following the abolition of the British Visitor's Passport in 1995.

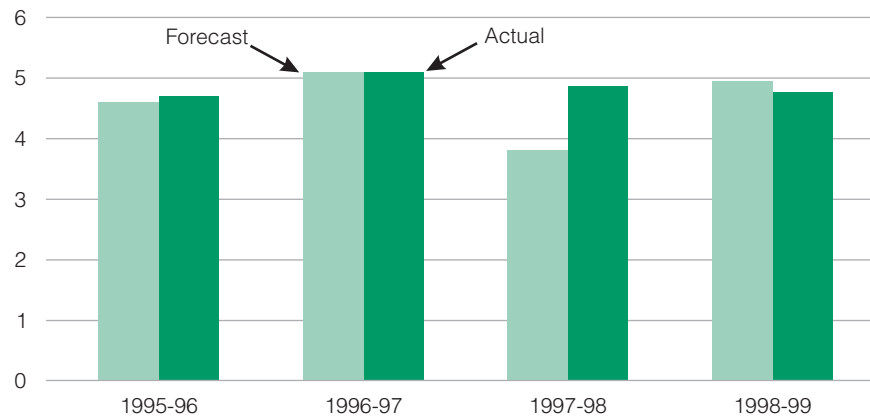
**2.4** The Agency also relies on month by month forecasts, updated periodically, as the basis for short term planning such as the recruitment of casual staff. The demand for passports is seasonal, with over 60 per cent of applications made between February and July each year in anticipation of Summer travel. However, the precise timing of applications has proved less easy to predict. For example, prior to the crisis, between April and December 1998 monthly variances against forecast averaged eight per cent or nearly 30,000 applications - equivalent to the weekly output of one of the Agency's largest offices.

**Comparison of annual forecasts prepared by the Agency with actual issues of passports, 1995-96 to 1998-99**

**Figure 7**

*In recent years, with the exception of 1997-98, the Agency's forecasts of annual passport issues have been reasonably accurate.*

**Passport issues (millions)**



Note: The Agency attributed the higher volume of issues than forecast in 1997-98 to a larger than expected residual demand following the abolition of the British Visitor's Passport at the end of 1995.

Source: National Audit Office/  
UK Passport Agency

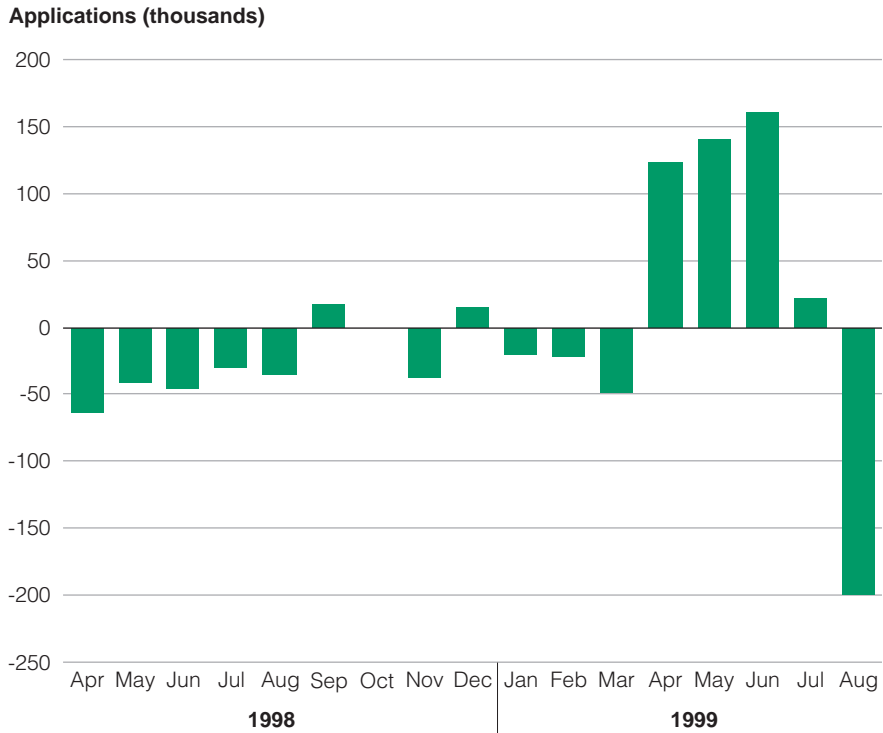
*Although applications were lower than forecast in early 1999, a surge in applications between April and June 1999 led to 425,000 more applications than forecast. Applications for child passports were higher than the Agency anticipated. The surge added to an already large backlog of applications.*

**2.5** The number of applications was less than forecast in late 1998 and early 1999, but by this time backlogs had already begun to accumulate. However, a surge in the number of applications between April and June 1999 exceeded forecasts by a sizeable margin, accounting for an extra 425,000 applications - 29 per cent more than expected (Figure 8).

**Monthly differences between forecast and actual number of applications, April 1998 to August 1999**

**Figure 8**

*For most of the period April 1998 to March 1999, the number of applications was less than forecast. However, between April and July 1999 the number of applications exceeded the forecasts by around 425,000.*



Source: National Audit Office/  
UK Passport Agency

Note: Data on actual applications is based on applications logged onto the Agency's systems, adjusted to reflect applications unopened awaiting processing.

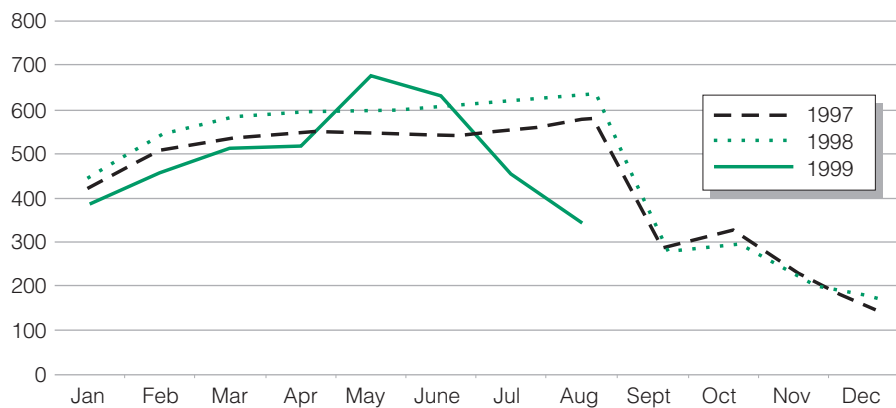
**2.6** The volume of applications received in May and June exceeded the number received in the corresponding period in previous years (Figure 9). This surge was fuelled by public awareness, via the media, of problems already experienced by the Agency and the Agency's inability to deal with telephone enquiries and correspondence. The Agency has not been able to measure the extent to which members of the public decided to submit their applications earlier than necessary, thereby contributing to the surge in applications. The Agency believes this was the most significant factor contributing to the surge.

**Applications received, 1999 and previous years**

**Figure 9**

*The pattern of applications received in 1999 shows a clear surge in May and June, over and above the seasonal rise in previous years.*

**Monthly Intake (thousands)**



Source: National Audit Office/  
UK Passport Agency

**2.7** Whilst the pattern of demand for the remainder of 1999-00 remains difficult to predict, the Agency now expects around 5.55 million passport issues in the year, compared to its original forecast of 5.1 million, a difference of 9 per cent. This total includes 5.1 million passports issued by passport offices, 400,000 passport extensions granted by The Post Office and an estimated 50,000 extensions granted by the Agency.

**2.8** The surge in applications in May and June, and the greater number of passport applications in 1999-00 than forecast, partly reflect a larger number of child passports than forecast. In April 1998, the Government announced that from October 1998 children under 16 would in time be required to carry separate passports when travelling abroad. Children already included in a passport would be able to travel using this document until they reached the age of sixteen or the passport expired or was amended, whichever was earlier. The new regulations were intended to improve security, facilitate travel, and make child abduction more difficult. The Agency was aware at the time that it let the outsourcing contracts in July 1997 that the introduction of child passports was being considered by Ministers and advised on the timing. In September 1997, a study commissioned by the Agency from the Home Office's Research and Planning Unit

forecast that approximately 800,000 child passports could be expected in 1999-00, compared to 400,000 the previous year, within an overall forecast of 5.1 million. In July 1999, the Home Office informed the Agency that within the overall forecast of 5.1 million the number of children's applications forecast in the year should have been 1.2 million. In the first six months of 1999, almost 800,000 child passport applications were received by the Agency. The Agency has not established how many of these passports were applied for in advance of need. The Agency now believes that the number of child passports issued in 1999-00 will reach 1.1 million.

**2.9** In the Agency's view, demand in 1999-00 may also have been inflated by some applicants wishing to take advantage of the free two-year extension available via post offices even though their passports were not yet due for renewal; although it is unable to calculate how many of these extensions it might otherwise have had to process during 1999-00.

*Regardless of the higher than expected volume of applications, the Agency's performance in recent years suggests that it would have been hard pressed to cope with the volume of applications in 1999. It was therefore essential that the new passport processing system did not lead to a loss in productivity.*

**2.10** In recent years, the Agency had found it more difficult to cope with the flow of applications. Figure 10 shows that over the last three years maximum processing times had increased, and in 1997-98 and 1998-99 had exceeded the Agency's target of 10 days.

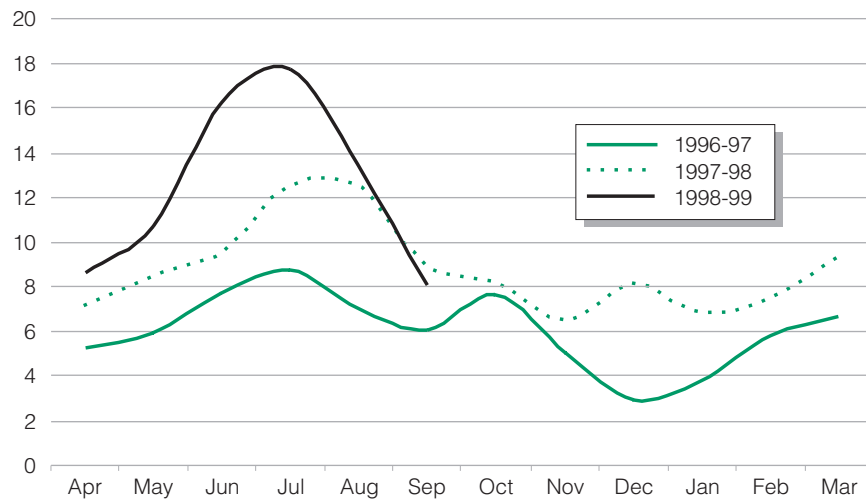


**Maximum processing times for passport applications, 1996-97 to 1998-99**

**Figure 10**

*Maximum processing times, while having a similar seasonal pattern, show a year on year deterioration in the period 1996 to 1998.*

**Average maximum processing time (days)**



Notes: 1. The graph for 1998-99 excludes the impact of the introduction of the new computer system from October 1998 onwards.

2. The average maximum processing time is the average of the maxima at each of the Agency's six offices, which gives a better picture of overall pressure on the Agency.

Source: National Audit Office/  
UK Passport Agency

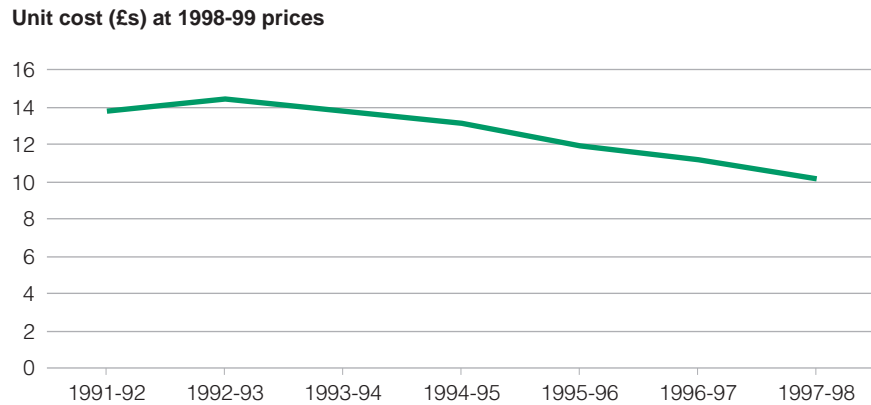
**2.11** This deterioration was unlikely to be due to poor forecasting, because the accuracy of forecasts fluctuated over this period whilst performance steadily declined during peak periods; it also occurred when the volume of applications was relatively constant, at between 4.7 million and 5.1 million issues per year. The Agency was finding it harder to cope with existing capacity and within the reducing unit cost targets it had been set and achieved. Between 1991-92 and 1997-98, as shown in Figure 11, the unit cost of processing a passport fell by over 26 per cent in real terms, from £13.74 to £10.14 (at 1998-99 prices).

**2.12** The volume of applications in 1999-00 was expected to reach 5.1 million, as high as in any previous years. To meet its service targets during 1999, the Agency needed to ensure that its new passport processing system was introduced without any significant detriment to productivity or output; and indeed it needed to improve these if the poorer performance during 1998 in respect of customer service was not to be repeated.

**The unit cost of issuing a passport, 1991-92 to 1997-98**

**Figure 11**

*The cost of issuing a passport fell between 1992-93 and 1997-98.*



Source: National Audit Office/  
UK Passport Agency

**To what extent did the introduction of a new computer system cause the Agency’s problems?**

*In 1997, to improve the efficiency and effectiveness of the passport issuing process, the Agency let contracts to the private sector to undertake some of its activities and to introduce a new computer system.*

**2.13** In April 1996, the Agency completed a review of its passport production and issuing arrangements. The existing computer system, known as the Passport Issuing and Management Information System (PIMIS) had been installed in 1989. The review concluded that:

- existing procedures and equipment were outdated, coming to the end of their useful life, and needed replacement by Autumn 1998; in particular, the Agency did not expect its computer system to be millennium compliant; and
- secure procedures and better technology, including the use of digital photographs, were needed to reduce the risk of fraudulent use of British passports and improve the efficiency and effectiveness of the Agency’s procedures.

**2.14** The Agency prepared and updated a business case between late 1996 and July 1997, which considered the five options shown in Figure 12. The Agency concluded that the best option was to run two parallel private finance contracts: one to provide a new computer system and the initial processing of applications; and a second for digital printing and despatch of the new passport from a central site. Examining and authorising passport issues would continue as an in-house function.

**Cost of options appraised by the Agency, at an assumed volume of 4 million passports a year**

**Figure 12**

*According to the Agency's business case, the option to contract out both the initial processing and the printing of passports was the cheapest at an annual volume of 4 million passports.*

Option	Total discounted cost over 10 years (£m)	Cost per passport (£)
1. "Do nothing"	Not viable <sup>1</sup>	Not viable <sup>1</sup>
2. "Do very little"	343	13.12
3. Upgrade to digital in-house system	371	13.86
4. Upgrade to digital system, contracting out the printing process	346	13.07
5. Upgrade to digital system, contracting out both initial processing and printing process	339	12.87

Source: UK Passport Agency business case 1997

Note: 1. The "do nothing" option was considered not viable because existing equipment was approaching the end of its life

**2.15** The Agency's business case assumed 4 million passports a year, below the volume of 5.5 million expected in 1999-00 and 5 million or more thereafter. The Agency also tested the options at a range of volumes and found that at volumes above 4.5 million passports a year it was cheaper to contract out only printing and despatch and to retain in-house all other functions including the development of a new computer system. Whilst the Agency tested the options on volumes ranging from 3.5 to 4.7 million, the introduction of separate passports for children pushed demand levels beyond the volumes tested in the business case. The Agency concluded that the option of letting two contracts remained preferable even at the higher volumes tested because of the greater transfer of risk to the private sector; the Agency expected that its contractors would be responsible for system design and implementation, maintaining service levels, responding to changes in the volume of applications, and providing technological updates and project financing.

**2.16** The Agency started the procurement process in 1996, and two contracts were approved by Ministers in June and July 1997:

- **Initial processing and IT support** awarded to Siemens. The contract was valued at the time at £120 million over ten years. The Agency considered three other short-listed bids: from Donnelly Pindar, IBM and EDS. The first two bidders withdrew before final negotiations commenced. Negotiations with EDS continued to the final stage, thereby maintaining competitive tension. However, their best and final offer was not evaluated by the Agency as it was ruled to be non-compliant in a number of respects, relating to future price reductions, implementation delays, and the extent of indemnities and guarantees. Under the contract, Siemens is reimbursed at a fixed rate (set at £2.72 following design definition and other changes, and the provision of additional equipment) for each passport processed by the Agency.
  
- **Final printing and despatch** awarded to Security Printing & Systems Ltd. The contract for the printing and despatch of passports was valued at the time at £120 million over ten years. The other bidders were a consortium led by International Data Ltd, and De La Rue. The bid from De La Rue was ruled non-compliant by the Agency for a number of reasons, including limitation of damages and service credits, and arrangements in the event of a delayed roll-out. Security Printing & Systems Ltd is paid a fee for each passport printed, based on the annual volume of issues and whether the Agency uses a 24 or 48 hour service, or the option of a local printing service for urgent cases. For example, the fee per issue for the 48 hour service, assuming a volume of over 5 million, is £3.21.

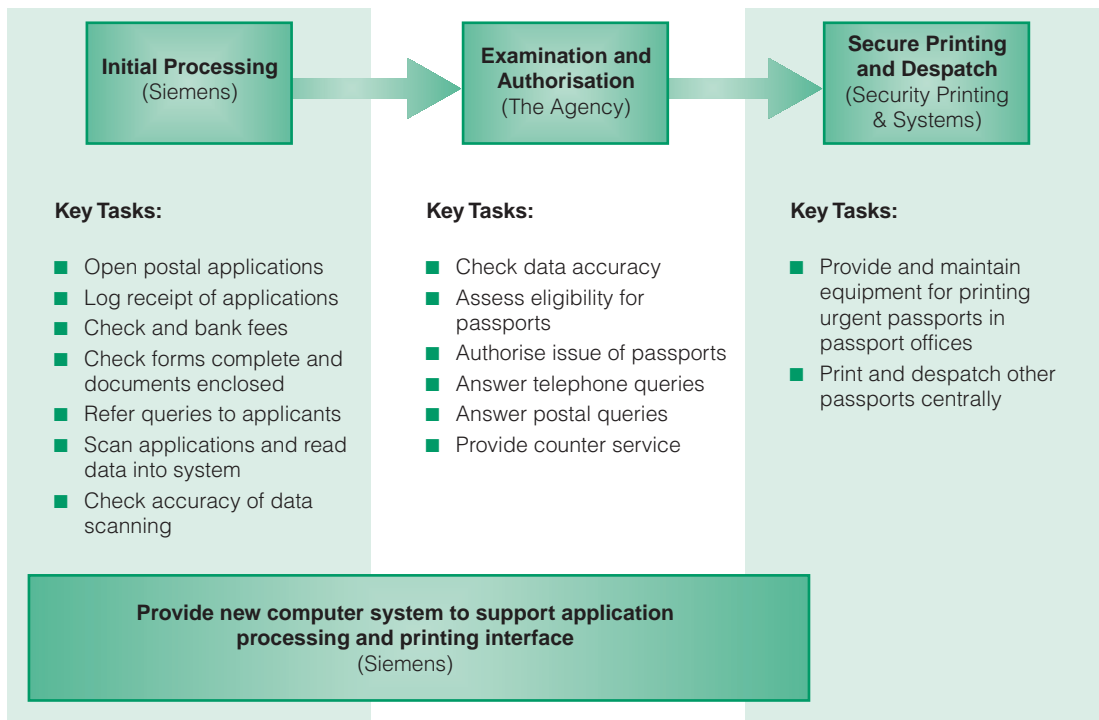
An overview of the new system for processing passports, and the allocation of responsibilities between the Agency and its contractors, is shown in Figure 13 overleaf.

**2.17** The new passport issuing process follows the same basic procedures for establishing the eligibility of applicants but the computer system for supporting the examination and printing processes is fundamentally different. The most significant change introduced by the new system was that an image of the application form would be captured, including the applicant's signature and photograph. Key information would be validated and corrected before being made available to Agency examiners within 15 hours of receiving a complete application. The new system would also provide added checks to improve security, better facilities for tracking the progress of applications and an electronic archive of applications for subsequent retrieval should it be necessary.

**Figure 13**

**The new system for processing passports**

*Passport processing has been split into three functions, two of which are carried out by the private sector. IT support for the examination stage has also been outsourced.*



Source: National Audit Office

**2.18** A Project Steering Committee, chaired by the Agency's Chief Executive, oversaw the project and included representatives from Siemens and Security Printing & Systems Ltd. The project control and reporting arrangements adopted by all parties followed the PRINCE 2 methodology, a widely accepted standard in government and industry, and included an analysis of the risks to the Agency's business.

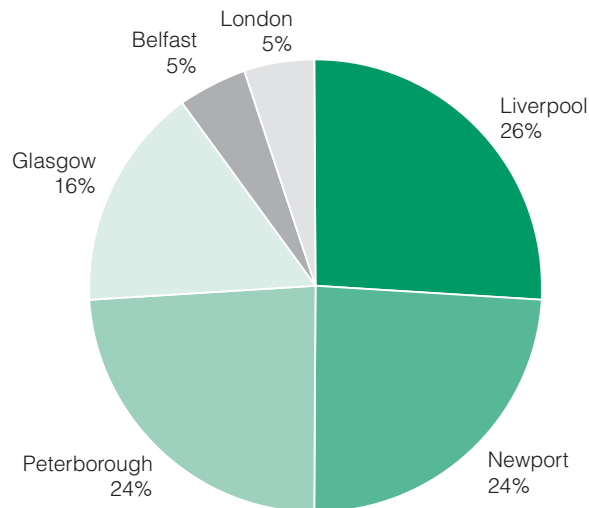
*To ensure that it could cope with the seasonal rise in applications expected in early 1999, the Agency began its computerisation programme at its largest offices, intending that they would achieve quickly previous levels of output.*

**2.19** The Agency expected its new computer system to be rolled out to its regional offices between October 1998 and February 1999. To ensure that it could tackle the usual seasonal rise in applications in early 1999, the Agency decided to begin roll-out at its largest offices, Liverpool, Newport and Peterborough, by the end of 1998. As Figure 14 shows, these offices accounted for 74 per cent of the Agency's output in 1997-98. The Agency expected that with its three largest offices running the new system, most demand would be met by running the three offices at peak volumes as soon as they were capable.

**Proportion of passports processed by each Agency office in 1997-98**

**Figure 14**

*Liverpool, Newport and Peterborough offices handled around three-quarters of passports issued in 1997-98.*



Source: National Audit Office/  
UK Passport Agency

**2.20** The Agency considered starting with a smaller office, such as Belfast or Glasgow, but had concluded that this would have meant the roll-out for the larger offices falling into the New Year, when applications were expected to rise rapidly. The Agency judged that a significant loss of output at the larger offices at this time in the year would threaten its operational performance and overload other offices. In the Agency's view, no proper pilot could have been undertaken at a small office given its operational need to begin roll-out in October 1998 and complete by March 1999.

*When the Liverpool office went live on 5 October, most elements of the implementation plan, including the staff transfer arrangements, had been completed successfully. However, delays during the design and development stages meant that the new system's impact on productivity had not been tested thoroughly.*

**2.21** The Agency had intended to award the contracts in April 1997 but negotiations with bidders continued until June and July 1997. Between signature of the contract and the first office going live in October 1998, the Agency needed to ensure that:

- all issues involving staff transfers to Siemens had been resolved; and
- the new system met the Agency's needs and was adequately tested prior to implementation.

### **Staff transfers**

**2.22** Under the contract with Siemens, some Agency staff were expected to transfer to Siemens. Permanent staff could opt to remain with the Agency or transfer to Siemens. The Agency gave an undertaking to accommodate individuals' wishes, provided these fitted with the operational objectives of both the Agency and Siemens. Under the contract with Siemens, terms of employment were to be at least as advantageous as under the Agency.

**2.23** Organising the transfer required significant effort from all parties. Between April and May 1998 all staff in the Agency were interviewed to determine individual preferences. By October, the Agency had agreed with Siemens a list of staff transfers for all its regional offices. All 400 staff expected to transfer to Siemens had opted to do so. Transfers were to take effect as each office implemented the new system, and no redundancies would be required.

### **Design, development and testing**

**2.24** The Agency's operational imperative to start the roll-out to offices in October 1998 required all parties to deliver the new systems on time. Working to an agreed overall project plan, the contractors were each responsible for designing and testing their own systems. Apart from some initial difficulties with on-site printers in Liverpool, there were no significant difficulties with the development

and implementation of the new secure printing system; the rest of this section therefore focuses on the new computer system developed by Siemens in support of the initial processing and examination of applications.

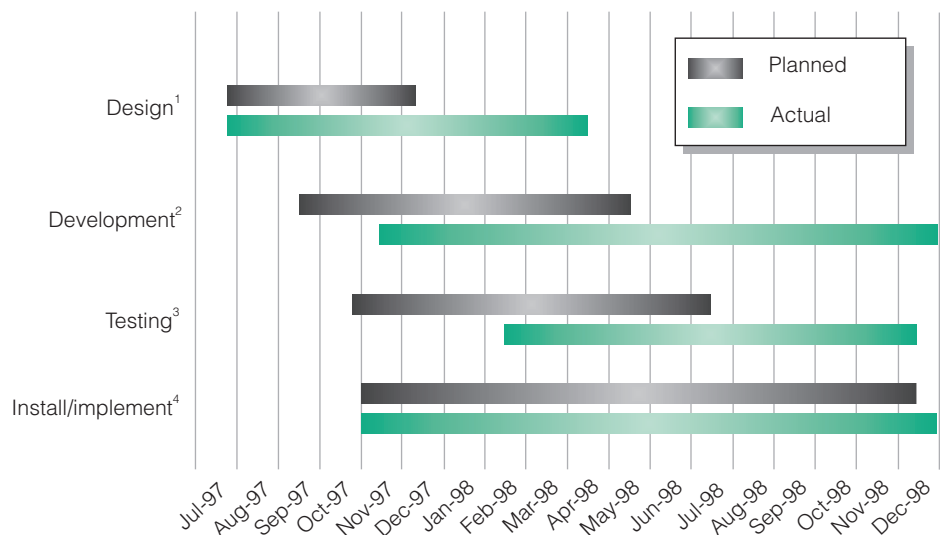
**2.25** Both the design and development stages, which overlapped to some extent, took longer than expected. The design stage was completed some four months later than expected and only six months before the 'go live' date (Figure 15). During the design phase, Siemens had to gain a detailed understanding of the Agency's existing processes and to put forward a solution that would meet the Agency's requirements. Discussions between the Agency and Siemens took longer than expected, as each party sought to clarify the other's intentions and to reach agreement on the system's specifications, for example to enable the system to retain electronic images of application forms, and to capture additional information from forms such as personal details of the counter-signatories

**Project timetable, planned versus actual progress**

**Figure 15**

*Earlier delays meant that testing of the system started almost four months later than planned.*

**Project stage**



Notes: The planned dates in this chart are drawn from the project plan agreed between the Agency and Siemens in August 1997.

1. The Design stage includes definition of requirements, processes, software, technical infrastructure and strategy.
2. The Development stage mainly encompasses software programming.
3. The Testing stage includes the specification, preparation and carrying out of system testing and factory acceptance testing.
4. Installation/Implementation includes preparation of building and office space, site installation, user training, site acceptance testing and "go live".

Source: National Audit Office/  
UK Passport Agency/Siemens



appearing on passport applications. The design phase was on evolutionary process with several versions of design documents as the new system was defined and redefined by the Agency and Siemens. This process also prolonged the subsequent development.

**2.26** As a result of delays at the design and development stages, testing started almost four months later than planned. Throughout the test phase, the Agency, advised by consultants from the Central Computer and Telecommunications Agency, had access to test records kept by the contractors, and representatives from the Agency witnessed most of the tests.

**2.27** The first stage of factory-based testing, which involved testing the new software, took place at Siemens' testing centre in July 1998. Staff from the Agency were brought to help test the various elements of the software. Further testing, including on-site testing in Liverpool, took place in August and September. By the time the system went live in October most of the system's core functions had been delivered on schedule, although some parts of the system, for example management reports, were not fully developed. Taken as a whole, the Central Computer and Telecommunications Agency advised that the system had been well-designed. In its view, the Liverpool office should go live as a "controlled pilot site" although there might be a need to extend the pilot because reliability had been a problem during testing.

**2.28** The Agency's internal audit service, supplied by Home Office Internal Audit, examined the introduction of the new system during September and early October and concluded that: "Given the tight timescales under which the project has been developed it has been well managed with sound controls in place to ensure the quality of the end products. However, there has been a compression of testing timescales..... (We) understand the compelling reasons for wanting to meet the 5 October 1998 pilot start date and acknowledge that the functionality of the (new) system was largely proven. However, the risk is that the pilot may need to have its timescales extended to ensure that robust operational and user procedures and controls are in place."

**2.29** Due to time pressures, the test programme did not extend to thorough testing of the system's impact on productivity. During the factory acceptance tests conducted at Siemens' testing centre in July 1998, the Agency had become aware that the examination stage of passport processing was taking much longer under the new system. The Agency had intended to conduct further tests on productivity on-site at Liverpool in September prior to going live but, although terminals had been set aside for this to happen, the tests did not take place due to shortage of time.

**2.30** The clerical procedures that would support the new system had not been tested and had not been fully documented by the time the training courses for the Agency's staff at Liverpool started in September. All Agency staff were given basic training by the Agency, together with further training specific to the role which they would be undertaking. Siemens trained the Agency's trainers and prepared the course material relating to the use of the computer system. Siemens took responsibility for training those staff who were due to transfer to it. A review of training for Agency staff, conducted by the Agency in October and based on feedback from staff, found that the courses had been well delivered and had met their objectives. However, the review had noted that the training objectives had related primarily to the use of the new computer, and less to the clerical procedures needed to support the new issuing system.

*The Agency's roll-out timetable was short and left it with little room for manoeuvre once the problems emerged at Liverpool. The roll-out to Newport took place despite the continuing problems at the Liverpool office.*

**2.31** The Agency's implementation plan (Figure 16) envisaged a staged roll-out of the new system between October 1998 and February 1999, starting with Liverpool and then Newport. The Agency's aim was to install the new system before the seasonal rise in applications early in the New Year. At each office, existing computer systems would be removed; building works undertaken where necessary and office layouts re-configured, with space set aside for Siemens' staff; the new system installed and tested; and staff trained. The Agency expected each office to run down its existing workload prior to its roll-out date and transfer its incoming work to other offices that would be working normally. The aim was to maintain normal service to the public.

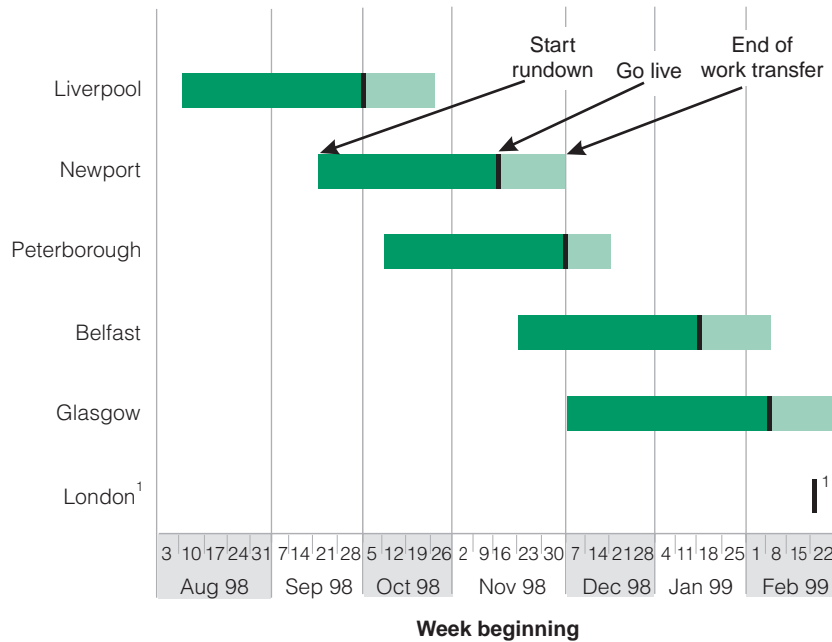
**2.32** The roll-out at Liverpool started on time, on 5 October. The Agency's timetable left it with little time to make a final decision about the roll-out to Newport, which was due to take place on 16 November. Preparations in the Newport office, including reorganisation of the building, had begun before Liverpool started live running, and a final decision on Newport had to be taken within five weeks of Liverpool going live.

**2.33** The Agency's implementation plan originally envisaged that roll-out to the other regional offices would only take place once the Liverpool office had achieved a capability of 30,000 issues per week - its normal output under the old system. The Agency's plan had assumed this target would be achieved within six weeks of going live, that is by 16 November.

The timetable for roll-out

**Figure 16**

The Agency's implementation plan envisaged a staged roll-out of the new system between October 1998 and February 1999.



Source: National Audit Office/ UK Passport Agency/ Siemens

Note: 1. The London office deals with counter applications only. The Agency expected the London office to remain open throughout the implementation period and therefore no work needed to be transferred.

**2.34** Output at Liverpool did not pick up as quickly as expected. There were two principal bottlenecks:

- Siemens' method of capturing information by scanning application forms, followed by correction by its operators, was contributing to delay. The Agency had been given advance warning of this, firstly during the evaluation of the bids when a consultant commissioned by the Agency expressed concern that there would be a "high error rate in reading hand-written letters (and) numbers...(which) would lead to a high correction level and all the resulting problems". The trials of the scanning equipment, using application forms completed by the public specifically for the trial, had also indicated that there might be problems although Siemens and the Agency thought this was because the forms had not been completed with the same care as real applications. Another problem, affecting a small percentage of applications, was the variability in the ink density and print positioning on the application forms, designed by the Agency in conjunction with Siemens and Security Printing & Systems Ltd, which caused difficulties for the scanning equipment.

- A loss of productivity at the examination stage due to examiners' lack of familiarity with the system, the need to correct errors in the data scanned and transferred by Siemens in a small percentage of cases and the large number of key-strokes and on-screen operations to be completed before a decision on eligibility for a passport could be taken and recorded. This stage, which was designed by Siemens according to specifications set by the Agency, records the checks carried out by examiners, thereby providing a more secure and accountable examination process.

**2.35** The other main factors that lay behind the failure of the Liverpool office to meet output targets were:

- Delays in providing a counter service to personal callers at the Liverpool office - urgent applications are normally dealt with by passports printed on site. The new on-site printers provided by Security Printing & Systems Ltd initially did not work as well as expected. In addition, Siemens were not always able to respond to urgent scanning requests as quickly as the Agency wanted.
- There was insufficient support available to the Agency's examining staff to answer their queries about the new system and working arrangements.

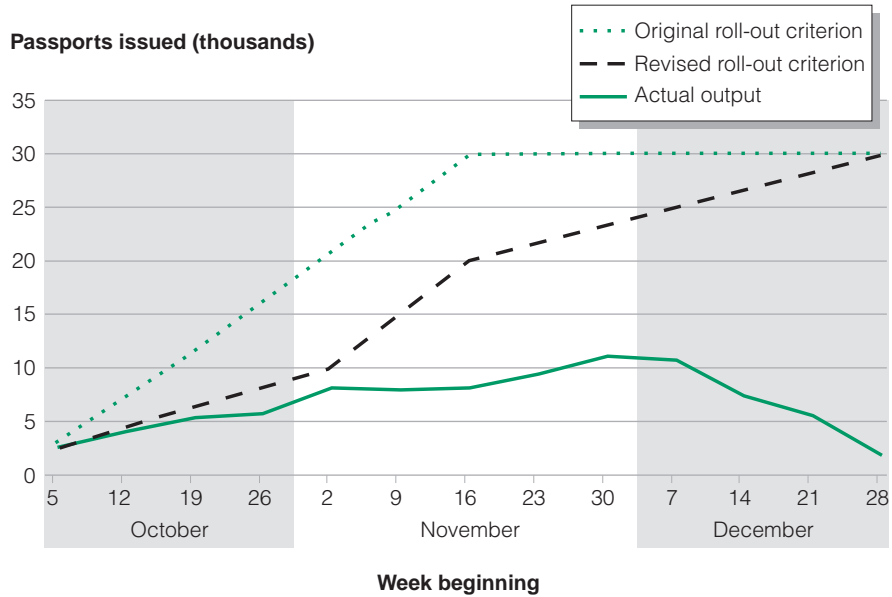
**2.36** By 14 October, senior managers within the Agency judged that the 30,000 target for Liverpool would not be deliverable within the six weeks. At this point, the roll-outs to Newport and Peterborough were at risk of being delayed, the latter possibly well beyond Christmas. The Agency therefore decided to revise its roll-out criterion - it decided that the roll-out to Newport should proceed as long as there were no outstanding serious problems and that output in Liverpool was likely to be near 10,000 at the four week point and 20,000 after six weeks.

**2.37** The final decision to roll-out to Newport was taken by the Agency's Management Board on 9 November. Output at Liverpool had reached 6,200, the latest figures available, compared to the lower target of 10,000. At this stage, the Agency had not had sufficient time to judge the rate at which output might improve; although output in Liverpool was far below the expected level, it had shown some improvement (Figure 17).

**Output at the Liverpool office compared to original and revised roll-out criteria**

**Figure 17**

*After the new system was introduced, passports issued by Liverpool office fell well short of the criteria that had been set by the Agency.*



Source: National Audit Office/ UK Passport Agency

Note: Downturn in output during December due to Christmas holiday period.

**2.38** Despite some serious reservations, the Board nonetheless decided to roll-out to Newport on schedule. The Board felt that the Liverpool Office had not been fully prepared for the scale of the change it had undergone and that the Agency had not been fully prepared for its relationship with Siemens. The Board was concerned about Siemens' ability to deliver the required output in Liverpool and had serious doubts about whether the Agency would have the ability to carry on with the roll-out programme without adversely affecting service to applicants. However, the on-site testing at Newport had gone well and the Agency believed that there were a number of arguments in favour of pressing ahead:

- The Newport office had completed almost all the tasks required of it before going live, the accommodation had been reconfigured and re-cabled, and staff had been trained - to revert to the old system at this stage would, in the Agency's judgement, not have been easy and would have taken some time.
- The Agency wished to test the new system on more than one site, in particular to test the central printing facility at higher volumes.

- Delay at this stage, only five weeks into the roll-out programme, would almost certainly have meant delaying the remainder of the roll-out programme until the following Autumn. This had significant cost and operational implications, including the extra cost of maintaining the old system for another year and of making it millennium compliant.
  
- The Agency's contract with Security Printing & Systems Ltd had guaranteed a minimum volume of two million of the new digital passports a year. The Liverpool office alone would have generated only half of this total, and if Newport did not go ahead the Agency might have been liable to pay for the full two million passports - an additional cost of over £3 million.

*Output at the Liverpool and Newport offices remained below expectations until June 1999. If the planned output at these offices had been achieved according to the original timetable, the Agency would have issued around 400,000 additional passports, enough to avoid the serious backlogs that occurred.*

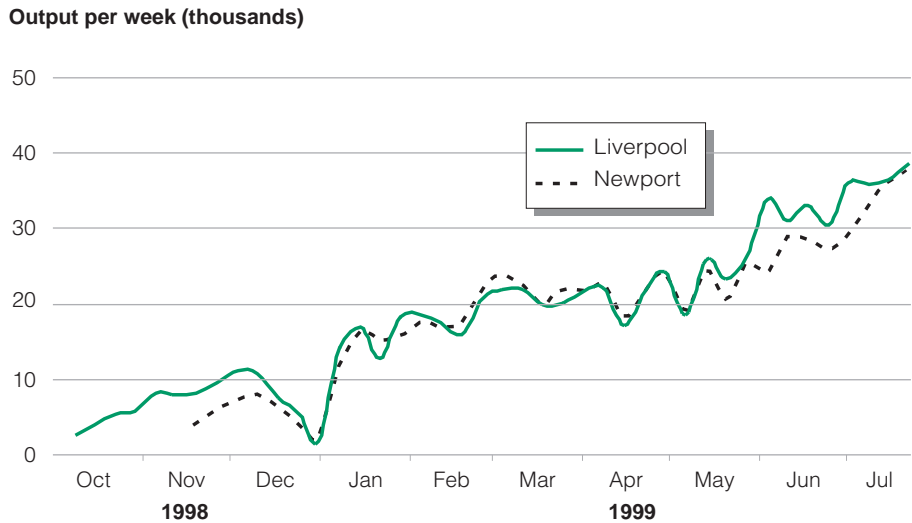
**2.39** On 18 November, as a result of experience at Liverpool and Newport the Project Steering Committee chaired by the Agency's Chief Executive decided to defer the roll-out to Peterborough, due to take place on 7 December, until revised performance criteria for the two pilot sites had been met. The revised criteria included a requirement to prove a minimum output of 30,000 issues per week from both Liverpool and Newport and a need for the systems to have run for five consecutive working days without a failure involving loss of service.

**2.40** Output at Liverpool and Newport continued to fall short of expectations for some time. Overall, it took nearer six months than six weeks to attain previous levels of output in the two offices, although output at Newport picked up more quickly. Greater experience of using the system, improved working procedures, extra staff and overtime working at both pilot sites helped to increase outputs during the Summer period to levels comparable to those achieved by the previous system. Liverpool and Newport met the target output of 30,000 each in June 1999 (Figure 18).

**Output at the Liverpool and Newport offices, October 1998 to July 1999**

**Figure 18**

*Output at the Liverpool and Newport offices did not reach target levels until June 1999.*



Source: National Audit Office/  
UK Passport Agency

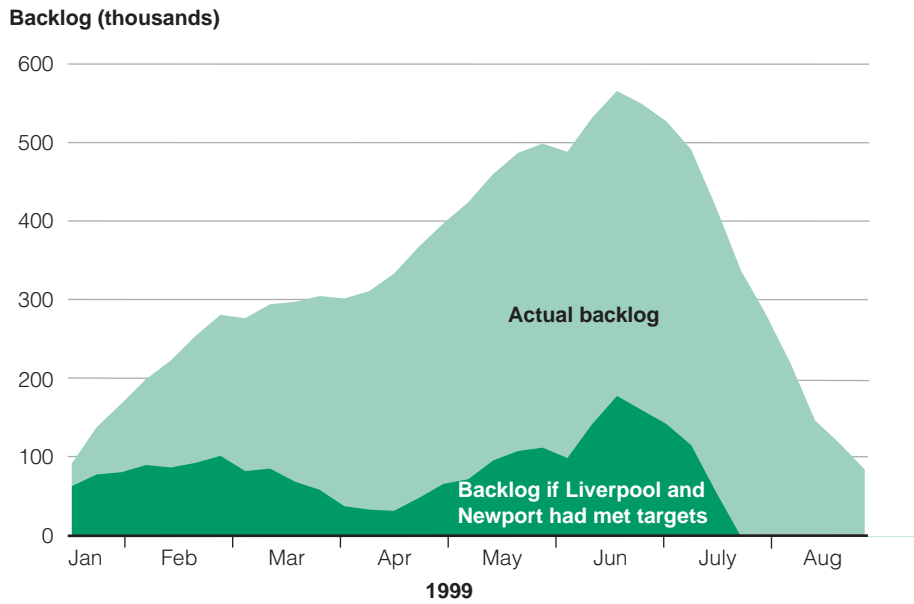
Note: Downturn in output during December and January due to Christmas and New Year holiday period.

**2.41** We estimate that if output in the first half of 1999 at Liverpool and Newport had been at the 30,000 per week anticipated in the Agency’s 1998-99 business plan, the Agency’s backlog of applications would have been reduced to around 100,000 - except for an increase in June to nearly 200,000 - compared to the actual backlog of 565,000 (Figure 19). In total, around 400,000 more passports would have been issued. This calculation assumes the Agency received the same monthly profile of applications it received in the first half of 1999 and that the Agency’s other offices performed at the levels they actually achieved during this period.

**The effect of lost output at Liverpool and Newport**

**Figure 19**

*If Liverpool and Newport had met their production targets, the backlog of applications across the Agency would have been far less severe.*



Source: National Audit Office/  
UK Passport Agency



## Part 3: The Passport Agency's response

**3.1** This Part focuses on the Agency's response to the crisis that began to develop in February 1999 and extended until July 1999. From July 1999 onwards, the introduction of emergency measures and a seasonal downturn in applications enabled the Agency to resolve the crisis. In this Part, we look at:

- the action taken by the Agency to maintain services to the public;
- the cost of taking this action, and who will bear the cost; and
- the steps taken by the Agency to stop these events recurring.

### Did the Agency take timely and effective action to maintain services to the public?

*The Agency took action to make up for the lost production in Liverpool and Newport, but despite very high levels of overtime working, increases in staff and changes in procedures, the Agency did not have sufficient capacity to respond to the increase in applications from the end of March onwards.*

**3.2** In the period leading up to the roll-out to Liverpool and Newport, and for some time after, the Agency transferred work to other offices to make up for what was expected to be a temporary loss of output. The Agency had maintained staffing at all its offices at higher than normal levels to help it cope with the transition. However, when the decision to postpone the further roll-out of the new system was taken in mid-November, the Agency had no detailed contingency plan to cover the situation it now faced, although it had identified it as a risk and had the option to revert to its old system. At this point:

- output from the Liverpool and Newport offices was at 10,000 per week, well below the planned output at that stage;
- the Peterborough office had already shut down most of its processing in preparation for the introduction of the new system, and needed to revert to its old system; and
- the Glasgow and Belfast offices were struggling to keep up with their normal intake of applications plus work transferred from the other offices.

**3.3** To revert back to the old system at Peterborough, some of the old printers were reconnected and other newly-installed terminals belonging to Siemens had to be adapted to run on the old system. Because of the changed office layout, the management team had also to devise and introduce new working arrangements to accommodate the old system’s processes. With help from Siemens, the Peterborough office was able to resume working within 10 days or so of the decision to halt roll-out.

**3.4** At the end of December 1998, the Agency expected an increase in output across all its offices in the New Year to make up for lost production and to tackle the seasonal rise in applications; the Agency continued to transfer applications between offices in order to maintain output overall. In late 1998, Siemens had recruited extra staff and had introduced modifications to the new software. Siemens also provided a specialist in work-flow planning to look at the examination stage of the new system. The recommendations arising from this review, finalised in March, resulted in some improvement to output in subsequent months.

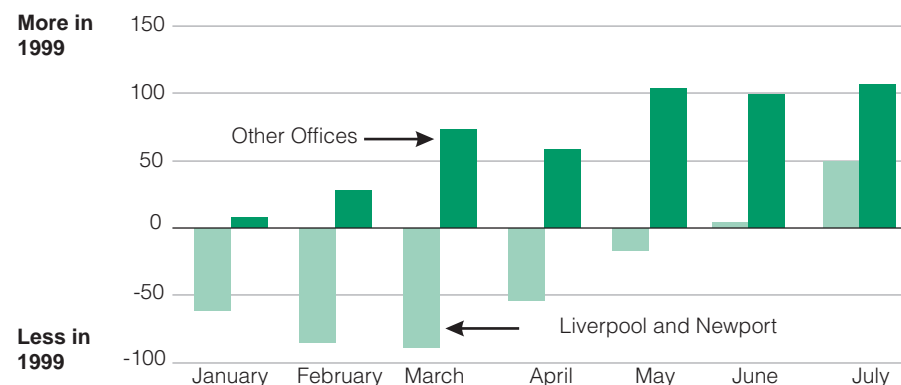
**3.5** By the end of February, however, the Agency had serious concerns about its ability to cope. Although output at Liverpool and Newport increased in early 1999 the increase was slower than expected. The Agency needed to urgently increase output from its other offices, beyond normal seasonal levels, to make up for lost output at Liverpool and Newport. Figure 20 shows that output from the other four offices increased significantly in March and remained ahead of the previous year’s output level in subsequent months. This increase in output was not sufficient to cope with the surge in demand.

**Change in passports issued, 1999 compared to 1998**

**Figure 20**

*After March 1999 output from the four other offices (Peterborough, Glasgow, Belfast and London) increased, although initially not enough to match the reduced output from Liverpool and Newport*

**Change in output (thousands) between 1998 and 1999**



Source: National Audit Office/ UK Passport Agency

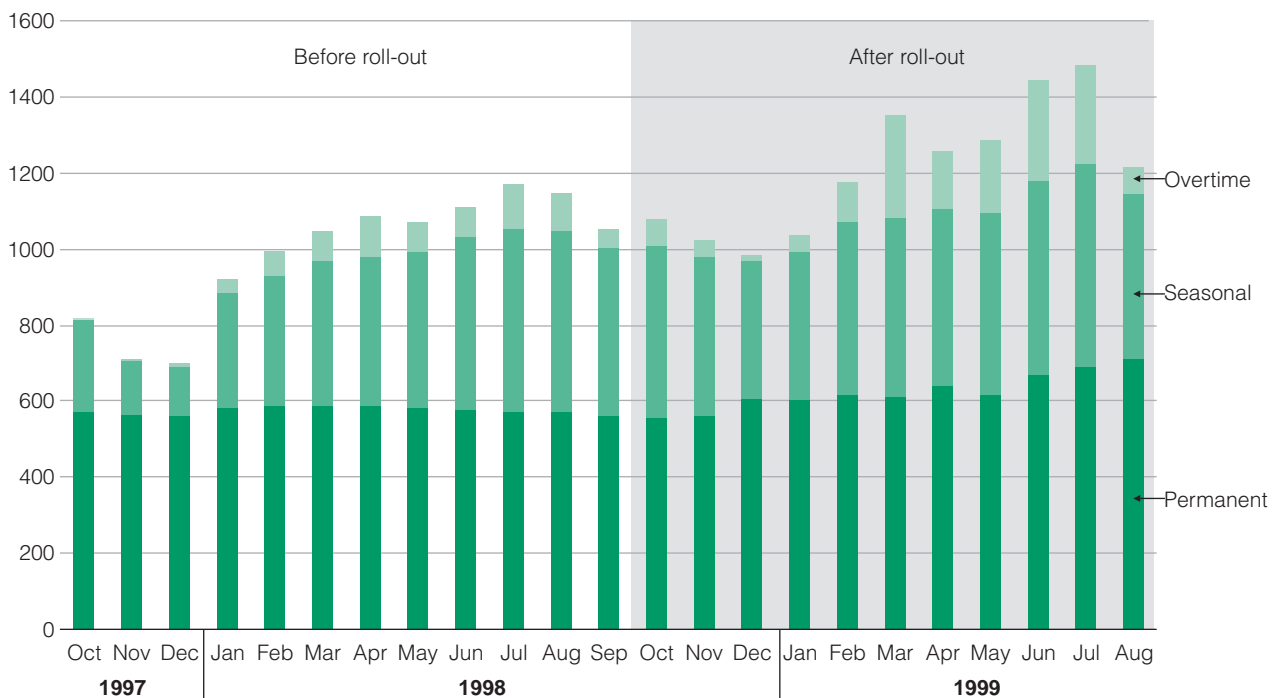
**3.6** Most of the additional output from these other offices had come from a large increase in overtime working undertaken by the Agency’s staff from March onwards (Figure 21). In January and February, the Agency had authorised some overtime working to help clear some backlogs but this had been restricted by the need to remain within unit cost targets. However, between March and July, overtime working increased significantly, with staff working long hours to deal with the workload. During this period, staff were working an average of four days overtime per month. To maintain overtime at the levels it needed, the Agency agreed a £5 per hour bonus at the end of February in addition to normal overtime rates. This was subsequently increased to £10 per hour, subject to some conditions, at the end of May and £20 per hour in July and August.

**Figure 21**

**Staffing levels in the other offices, October 1997 to August 1999**

*Staffing levels in the other offices (Peterborough, Glasgow, Belfast and London) increased in 1999, mainly due to overtime working but also the recruitment of extra staff.*

**Staffing (full time staff equivalents)**



Source: National Audit Office/UK Passport Agency

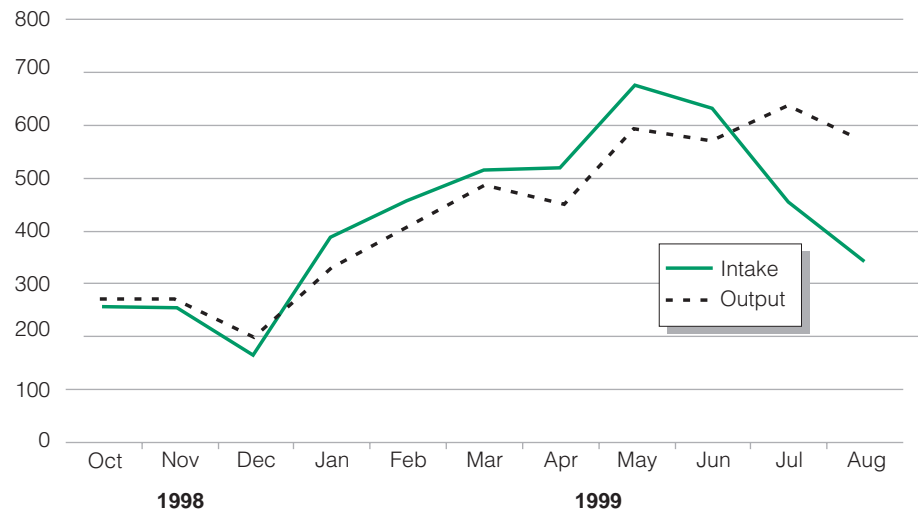
**3.7** Despite the transfer of applications between offices and extensive use of overtime, the Agency was not able to generate sufficient extra output to deal with the volume of incoming applications (Figure 22), leading to a growing backlog.

**Comparison of monthly output with the number of applications received  
October 1998 to August 1999**

**Figure 22**

*Although output rose during 1999 it failed to keep pace with the volume of new applications.*

**Passports and applications (thousands)**



Source: National Audit Office/  
UK Passport Agency

**3.8** In March, the Agency drew up a recovery plan in consultation with the Home Office. The Home Office authorised the recruitment of an extra 300 staff and improvements were introduced to streamline the systems at Liverpool and Newport. As a result of these actions the Agency expected to reduce the maximum processing time from 34 days in March to 20 days in May, 15 days by the end of June, and 10 days by the end of September. At the request of the Home Office, the Agency also reversed a decision it had taken in February to allow examiners greater discretion about the security checks needed in individual cases. The Agency’s intention had been to speed-up processing, but the Home Office were concerned that the move might be misinterpreted as a relaxation in security. The measures to allow examiners greater discretion were reintroduced in a modified form from mid-June.

**3.9** The additional staff did not immediately ease the pressure on the Agency. Whilst additional casual staff were recruited quickly to tackle basic clerical tasks in place of staff who had been promoted to passport examiners, the Agency needs two and a half months to recruit, train and obtain security clearance for new examination staff. By early July, the Agency had trained an additional 275 passport examiners since the beginning of the year, with plans to train a further 50 before the end of the year. It was only in July that the Agency’s output exceeded the volume of applications received.

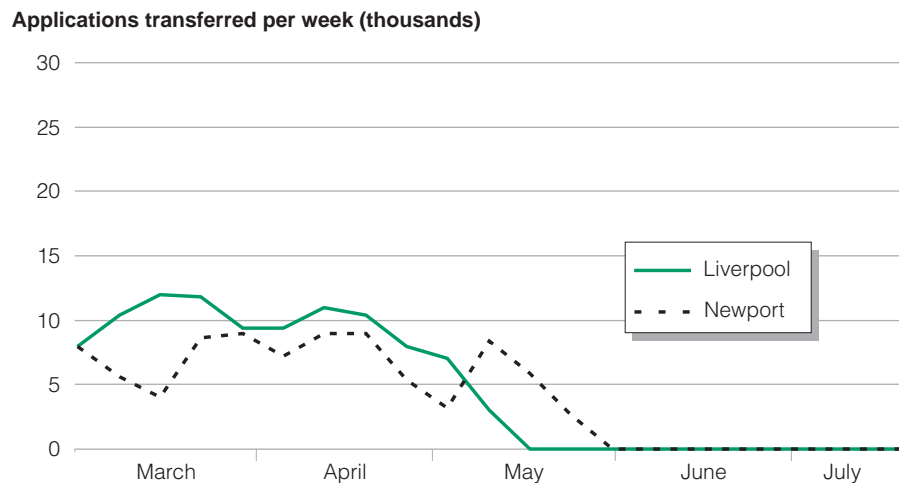
**3.10** Initially, the Agency did not seek to influence the volume and timing of demand for passports. To publicise the change to child passports, it issued press releases at the time of the announcement and in October 1998 when the measure was introduced, and distributed leaflets to post offices. The Agency issued no releases in 1999 until July. The Agency does not have a press office of its own, and relied on the Home Office’s press office to deal with the media throughout the period. When the problems began to develop early in the year, the Agency considered the option of launching a public information campaign to reassure the public but was concerned that news about lengthening processing times would have the effect of fuelling concern rather than alleviating it. As a result the Agency adopted a low profile to publicity during the early part of 1999. From March onwards, staff from the Agency gave interviews in response to requests from the national and regional media, but by this point the situation within the Agency was already serious. At no time did the Agency develop a formal communications strategy for dealing with the media.

**3.11** During April, May and June backlogs and processing times continued to deteriorate as applications surged. Between half and two-thirds of the backlog accumulated at the four offices using the old system, in part because of applications transferred from Liverpool and Newport during the early part of the year (Figure 23). Backlogs also continued to grow at Liverpool and Newport during the Summer months, both in initial processing by Siemens and examination by Agency staff (Figure 24) - after transfers of unopened post out of these offices ceased in May.

**Applications transferred from the Liverpool and Newport offices, March to July 1999**

**Figure 23**

*Applications were transferred from the Liverpool and Newport offices, until transfers stopped in May.*



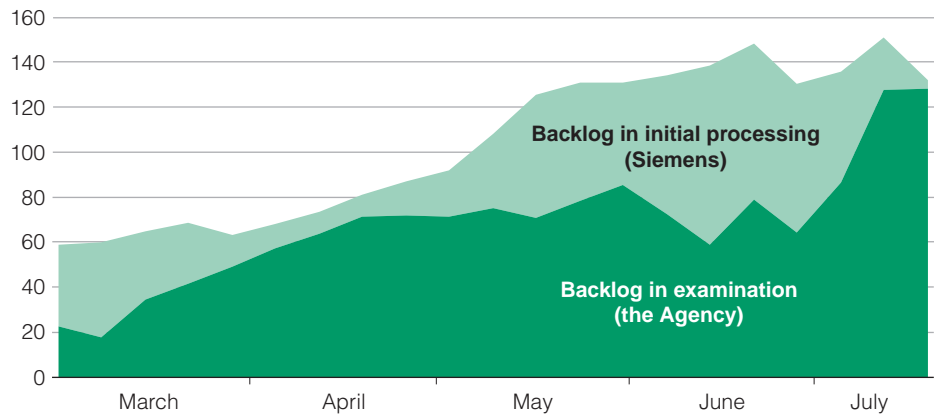
Source: National Audit Office/ UK Passport Agency/ Siemens

**Backlogs at the Liverpool and Newport offices, March to July 1999**

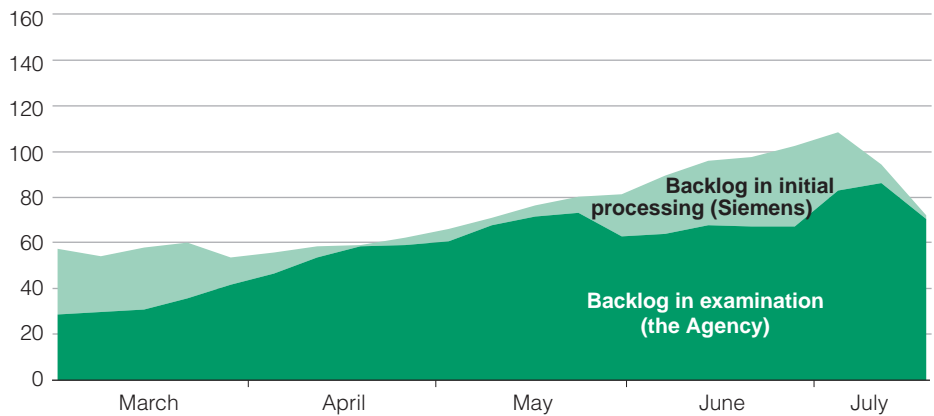
**Figure 24**

*Backlogs in Liverpool and Newport grew in the period up until July, both in initial processing and the examination stage.*

**Backlog at Liverpool (thousands)**



**Backlog at Newport (thousands)**



Source: National Audit Office/  
UK Passport Agency/Siemens

*Once the backlogs had begun to build up, members of the public had significant difficulty contacting the Agency to check on progress with their applications. By March, the telephone enquiry service was overloaded.*

**3.12** The Agency had experienced problems with its ability to answer incoming calls in 1998, but it was overwhelmed by the volume of calls received from March until July 1999. Members of the public calling the Agency usually receive a recorded message providing a menu of options offering further recorded

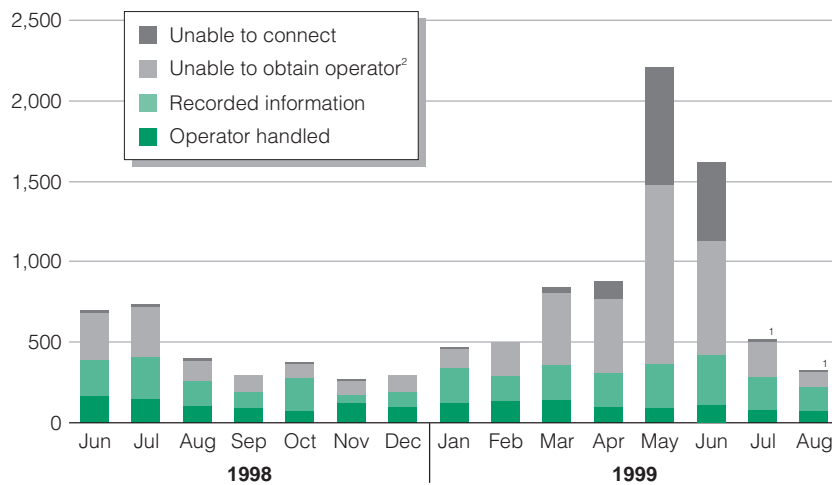
information, plus the option of speaking to an operator based in the relevant regional office. The Agency normally has a capacity of 60 to 70 phone lines. Figure 25 shows that by March over half of all calls were failing to get through to the Agency. As the backlog of applications built up, telephone queries took longer to resolve as more applications became urgent. In March, the Agency decided to withdraw some staff from telephone duties in order to devote more resources to processing applications. At peak periods in Liverpool, the telephone enquiry service was virtually shut down.

**Public telephone calls to the Passport Agency, June 1998 to August 1999**

**Figure 25**

*As backlogs and processing times increased during 1999, telephone calls to the Agency quickly overwhelmed its telephone answering system*

**Telephone calls (thousands)**



Notes: 1. The figures for July and August 1999 exclude calls to the call centre - 218,000 in July, 46,000 in August.

2. "Unable to obtain operator" represents those callers who, on connection, opted to speak to an operator but were unable to do so.

Source: National Audit Office/  
UK Passport Agency

**3.13** In March, the Agency altered its recorded message to advise callers to write to the Agency and provided a fax number for members of the public to use. The number of written queries received however quickly exceeded the Agency's ability to cope. In May, the Agency paid for Siemens to send out 135,000 letters to applicants explaining the situation. A call centre, set up in early July under a call-off contract administered by the Central Office of Information, helped to ease the pressure on the Agency.

**3.14** Surveys of passport applicants conducted by the Agency during 1999 as part of its routine monitoring of performance suggest that the telephone service was one of the biggest sources of frustration and complaints amongst applicants (for example, see the cases in Figure 26). In May and June, over 50 per cent of applicants responding to the Agency's survey found the recorded information service either not very helpful or unhelpful. Members of the public getting through to an operator tended to be more satisfied, with 85 per cent of these respondents to the survey being either satisfied or highly satisfied

**Figure 26**

**Examples of customer complaints**

**Mrs C**

"I applied for four passports on 18<sup>th</sup> March and given the fact that our holiday was on the 21<sup>st</sup> April I thought I had ample time to receive the passports. Having not received the passports 10 days before we were due to go away, I thought I should ring to see what the hold up was. After trying to get through to the Liverpool office for three hours I was told that the applications had not been received. I rang up almost every day until I was eventually told to come down to the Liverpool office. I was also told to fetch new applications counter-signed by the same person as before, duplicate birth and marriage certificates, duplicate divorce certificate and new counter-signed photographs.

With a lot of help from my family I got them. I set off early for Liverpool and got there at 10 am. I was told that I would have to pay a charge of an extra £10 per passport. I was very annoyed at this, but if I wanted to go on holiday I had to pay the charges or lose a holiday that cost well over £1,000.

End of story? No. When we came back from holiday there were two letters from Belfast. I opened them and inside was two passports - both had been issued after I got our passports from Liverpool."

**Miss W**

"Myself, my partner and my brother Simon were due to fly on 27<sup>th</sup> June. We were taking Simon as he has never been abroad before. Our passports arrived two weeks prior to departure and we assumed that Simon's would arrive not long after. To cut a long story short, the week prior to departure I tried on numerous occasions from 9am to 4pm to speak to someone at the passport office with no success. My partner and I decided after reading so many reports in the newspaper that the only option was to take time off work on the Friday and go down to collect the passport in person. We arrived at Liverpool at 9am and waited until about 3pm and there was no-one to speak to as there were hundreds of people waiting with the same dilemma.

We came home hoping that the passport would be in the post for Saturday morning, but no passport. We had to cancel Simon's holiday which was very disappointing to a 14 year old who had been looking forward to his first ever holiday abroad, as you may be able to imagine."

**3.15** The Agency told us that it is looking at options for reorganising its telephone enquiry service to enable it to improve its response during peak periods. The computer system will allow operators to trace progress on all applications via their terminals - a facility not available under the old system. Equipment has now been installed at all the Agency's offices to enable operators to track any application logged on to the new system.



*The emergency measures introduced in late June helped to reduce processing times to within the Agency's ten-day target by the end of August.*

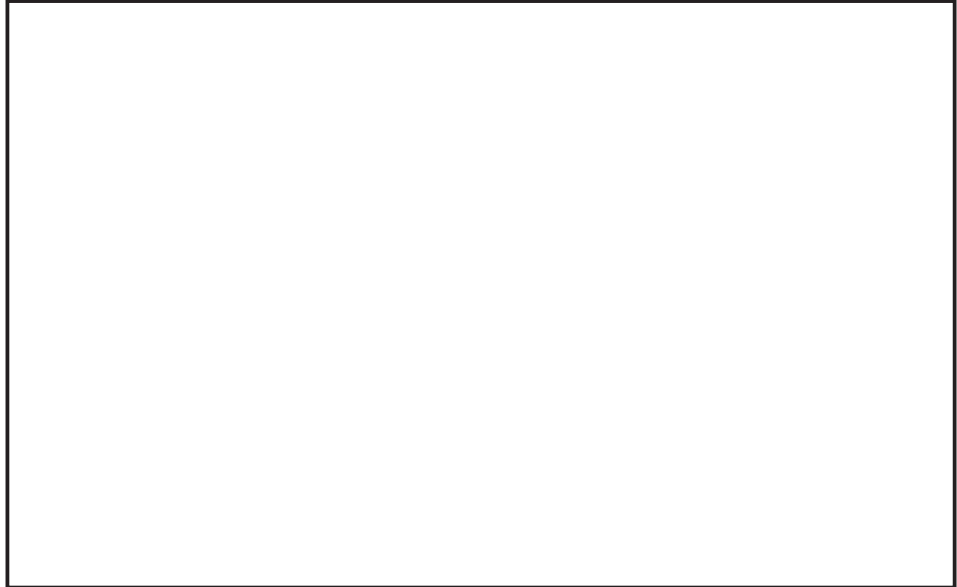
**3.16** At the end of June the Home Office, in response to public and Parliamentary pressure, introduced a series of emergency measures. These included free two-year extensions from The Post Office to members of the public seeking renewals, the establishment of a call centre to handle queries, and the recruitment of 100 staff in addition to the 300 already authorised. Between July and the end of September, 400,000 people had their passports extended at post offices. Coupled with a quicker than expected downturn in seasonal applications in August, these measures enabled the Agency to reduce the backlog to 74,500 and processing times to within the ten day target by the end of August.

*The Agency estimates that the number of missed travel dates will total almost 500, out of the 4.8 million passports issued between October 1998 and the end of August 1999. Compensation to the public amounts to £161,000 but is likely to rise as a number of outstanding claims are settled.*

**3.17** When backlogs started to rise in January and February, the Agency introduced procedures - used during peak periods in previous years - to give priority to those applications with urgent travel dates. So far, the Agency has received 487 claims for missed travel dates between October 1998 and the end of August 1999, compared to around 75 in the same period the previous year and 55 the year before. These figures compare with the total of 4.8 million passports issued in this period.

**3.18** Applicants with urgent travel dates but who were unable to contact the Agency had in some cases to visit a regional office to make a personal application; in very urgent cases, the Agency can issue passports across-the-counter. The Agency does not keep a record of the total number of visitors to its regional offices, including those for example seeking information. However, it does record the number of applications received. For example, in May 1999, the Liverpool office received about 15,000 personal applications, compared to 10,800 in May 1998; and the average waiting time increased to 2.5 hours compared to the target of one hour, excluding time spent by the public waiting outside the building. To meet the extra demand, opening hours at regional offices were lengthened and, from May onwards, to speed up processing, some 50,000 free extensions to passports were granted to personal callers. The Agency also bought umbrellas for the use of people queuing outside and provided luncheon vouchers for those facing a long wait.

Queues outside the  
London Passport Office



**3.19** Compensation payments to the public over the period October 1998 to August 1999 so far totals approximately £161,000, compared to £52,000 for the same period the previous year. This includes £61,000 for compensation for missed travel dates and £38,000 to reimburse members of the public who, having made a postal application, had to travel to a regional office to obtain an urgent passport. The amount of compensation paid will rise as outstanding claims are settled.

## **What have been the additional costs of the crisis and who will bear the cost?**

*The cost of the additional measures taken by the Agency earlier this year will total £12.6 million, excluding the extra costs borne by Siemens.*

**3.20** The total cost of the measures taken by the Agency to cope with the delayed roll out and subsequent crisis is expected to total £12.6 million. This includes some one-off costs such as the Post Office fee for handling passport extensions, and a higher unit cost of passport processing resulting from additional staff and other measures. Figure 27 provides a breakdown of these costs. The methodology used to calculate this figure is explained at Appendix 2.

**3.21** The amount paid to The Post Office in return for providing free extensions to passports is £2 million for July and August with a further payment to be made for extensions issued in September. Although the Agency has a partnership arrangement with the Post Office to help process applications, at the time these measures were introduced, the Agency's contract did not cover this eventuality.

**The cost of the delayed roll-out and emergency measures**

**Figure 27**

*The total cost to the Passport Agency of the delayed roll-out and emergency measures taken in 1999 was around £12.6 million.*

Measure	Estimated cost £
Staffing - additional staff and overtime costs due to crisis	6,000,000
Free extensions of expired passports - mainly Post Office costs <sup>1</sup>	2,900,000
Additional costs of running both the old and new passport processing systems	1,830,000
Contractual payment arising from issuing fewer digital passports than expected	680,000
Publicity	500,000
Temporary call centre	500,000
Compensation payments to the public (to date) <sup>2</sup>	110,000
Consultancy fees	75,000
Letters to applicants	30,000
Umbrellas for loan to personal callers	16,000
Temporary office accommodation	10,000
Luncheon Vouchers for personal callers	5,000
(less service credits received)	(69,000)
<b>Total</b>	<b>12,587,000</b>

Source: National Audit Office/  
UK Passport Agency

Notes 1. Subject to agreement on final payment.  
2. Estimate of additional compensation payments compared to previous year.

**3.22** The costs in Figure 27 exclude the additional costs borne by the Agency's contractors. As a result of problems at both Liverpool and Newport, Siemens had to recruit and bear the cost of around 60 additional staff on top of its initial complement of about 155 staff. Because the Agency's payments to Siemens are based on the volume of passports processed, the decision to postpone the roll-out has also reduced the Company's income, to £5.4 million for the year from October 1998 compared to the original estimate of £14 million. The payment to Security Printing & Systems Ltd for a reduced volume of new digital passports but increased volume of old-style passports is expected to be close to the Agency's original budget of £15 million for 1999-00. For the year from October 1998 the Agency is likely to have processed 1.8 million passports through the new system, less than its minimum contractual commitment to Security Printing & Systems Ltd, resulting in an estimated cost of £680,000 for digital passports not printed.

**3.23** The processing problems may also have incurred non-financial costs, such as an increased risk that the security of the passport issuing process might be compromised. For example, some of the postal applicants, who had visited a regional office to follow-up delayed applications, had to make a second application at the counter. Whilst the Agency has procedures in place to help prevent the issue

of duplicate passports, there is a risk that some applicants will receive two. Although the Agency will take steps to retrieve a duplicate issue it is sometimes reliant on the public volunteering that they have received a duplicate passport, and cannot be sure of the total number of duplicates issued. The new system will be able to detect duplicate applications.

*The unit cost of producing a passport in 1999-2000 is likely to be between £15 and £15.50, including the impact of the exceptional measures, compared to the target of £12 in the Agency's corporate plan. The longer-term impact of the system on unit cost remains uncertain but the Agency's best estimate is around £14.*

**3.24** The business case prepared by the Agency in July 1997 estimated that the unit cost per passport produced under the new system would be around £12.09 (at 1999-00 prices), assuming a volume of four million passports a year. At that time, the unit cost to the Agency of producing a passport was about £11 per issue (at 1999-00 prices). The Agency believed that the increase in the cost of the new passport was warranted by the additional security it afforded, especially through a digital image of the passport holder and the modernised issuing arrangements.

**3.25** Design changes to the project, such as a facility for retaining electronic images of application forms, added further additional costs. However, the most significant changes related to the Agency's request for additional computer equipment. As a result, the unit charge paid to Siemens per passport increased from £2.39 in the initial contract to £2.72, a 14 per cent increase; and the principal unit charge payable to Security Printing & Systems Ltd, assuming full roll-out of the system, increased from £2.92 to £3.21, a 10 per cent increase, reflecting the introduction of additional security enhancements to the passport document above those envisaged in the business case.

**3.26** The Agency now estimates that the cost of producing a passport in 1999-00, including the cost of the exceptional measures taken to cope with the crisis, is likely to be between £15 and £15.50. The Agency expects the unit cost to be around £14 during the remaining period of roll-out of the new system. It expects the cost to reduce thereafter to reflect the operation of a single issuing system and potential productivity improvements. However, the Agency is planning to introduce a series of measures to prioritise customer service that were not part of the original business case assumptions. These measures are discussed in paragraph 3.35 below and may further increase the unit cost significantly.

*The Agency had received, by the end of August compensation totalling £69,000 from its contractors for shortfalls in performance. The Agency had waived other compensation from Siemens, estimated by the Agency to be worth £275,000.*

**3.27** The Agency negotiated service standards with each of its contractors. If the contractors fail to meet these standards, the Agency can automatically claim financial recompense through the receipt of “service credits” payable to the Agency at an agreed rate.

**3.28** By the end of August, the Agency had been paid a total of £69,000 in service credits. Security Printing & Systems Ltd had agreed to pay around £4,000 - all the credits due from it under its contract. Siemens had paid £65,000; but the Agency had waived other credits estimated to be worth £275,000 for poor processing times prior to July and had still to receive further credits worth £62,000 for performance in July and August (Figure 28).

**Siemens’ service credits,  
December 1998 to  
August 1999**

**Figure 28**

*The Agency had received service credits from Siemens totalling £65,000 by August 1999 but had waived credits worth £275,000.*

At 31 August 1999	Service credits arising (£)	Of which:		
		Waived (£)	Received (£)	Due (£)
Processing times	335,000	275,000	Nil	60,000
Computer availability	40,000	Nil	40,000	Nil
Accuracy	27,000	Nil	25,000	2,000
<b>Total</b>	<b>402,000</b>	<b>275,000</b>	<b>65,000</b>	<b>62,000</b>

Source: UK Passport Agency/  
Siemens

Note: Recording system for service credits began in December 1998

**3.29** Siemens is required to process routine applications and make them available for examination by the Agency within 15 hours of receipt of post. Siemens has had difficulty in meeting this target and has expressed concern whether the target is achievable during periods of unforeseen exceptional demand. The Agency had expected the target to be applied from the first day of operation at Liverpool, but following postponement of the roll-out it agreed to not to apply the target until 31 March 1999 to allow time for the new system and procedures to settle down. At Siemens’ request the Agency further agreed in May to extend the

waiver until the end of June 1999. Siemens had earlier agreed, at the Agency's request, to alter some of its procedures in response to the surge in applications and, in return, had asked for service credits to be waived. Siemens had also experienced difficulty in scanning data from some of the Agency's application forms due to problems with the forms themselves. The Agency, with its partners, had been responsible for ensuring the forms met the specification required for the scanners. In granting the extension, the Agency intended to allow Siemens time to clear its backlog and to acknowledge the higher than anticipated demand experienced by its partner.

**3.30** In Siemens' view, the amounts in Figure 28 may overestimate the sums due because they include charges for delays in processing multiple applications when only one application has to be held back for a query or correction. On the other hand, the £275,000 for service credits waived between October 1998 and the start of July 1999 may underestimate the true position because until July 1999 the Agency did not have formal arrangements for counting the time post had spent unopened before being logged on to the system; for example, we estimate that in June alone additional service credits of £120,000 might have been payable in respect of unopened post.

## **What action has the Agency taken to prevent these problems recurring?**

*Better forecasting would help, but it is more important that the Agency has the capacity to cope both with anticipated and unforeseen demand. The Agency has taken some measures to improve its capacity, and now intends to change its strategy to prioritise service to the public. The Agency has yet to take a decision on the further roll-out of its new system.*

**3.31** To avoid a repetition of the crisis in 1999, the Agency will first need to develop better forecasts of demand so that it can plan better, and it will need to ensure that it has sufficient processing capacity (in terms of offices, hardware, software and people) to cope.

**3.32** On forecasting, at present it is not clear what volume of applications the Agency will finally receive in 1999-00 because it remains uncertain whether the larger than expected peak in demand between April and June will be matched by a corresponding trough later in the year. The Agency now expects that demand will reach 5.55 million compared to its original forecast of 5.1 million. Looking forward to 2000-01 and 2001-02, the picture is complicated by a number of factors. It is not

yet clear whether the higher than expected volume of child applications so far in 1999 will continue at the same levels in future years. In addition, in 2001-02 the 450,000 passports granted two year extensions in 1999 will come up for renewal, thereby increasing demand. Given the uncertainty it faces, the Agency is currently planning for volumes between 5.0 and 5.6 million for 2000-01 and around 5.0 million for 2001-02, and it is considering the resource implications of each volume. The Agency is also examining ways in which its monthly forecasts might be improved.

**3.33** Better forecasting will help, but it is more important that the Agency has the capacity to cope both with anticipated and unforeseen demand. On capacity, the Agency has recruited extra permanent staff, and this should help, but the key question is whether the Agency's computer systems, both old and new, will enable this increased number of staff to be sufficiently productive to meet the levels of output required. On this point, during the 1999 crisis the Agency was able to increase output dramatically at the four offices still using its old computer system, and eventually output at the two offices using the new system also increased to match levels attained with the old system - albeit at a higher unit cost, in part because of the level of overtime.

**3.34** The Agency has not yet taken a decision on when to roll-out the new system to its other four offices. It commissioned consultants, Cornwell Affiliates plc, to undertake a technical audit of the new system in June 1999. They concluded that it is capable of meeting the Agency's requirements although it will require further tuning to achieve its full potential. The Agency expects that the latest and future releases of the new software will make the computer system easier for operators to use and increase productivity. In July 1999, the Agency also commissioned the consultants Deloitte Consulting to review operations in Newport and Liverpool and to make recommendations about further roll-out. The report from Deloitte Consulting in September 1999 made a recommendation for a plan for improving the new system, including better workflow, better management information, and improved teamwork. Deloitte Consulting concluded that the system would be able to perform to the standards set in the original business case if the plan to define and develop process improvements was fully implemented. The consultants considered this would require completion of a carefully managed and well-executed project which would take a step by step approach to improving the process and, crucially, testing it under increased volumes to confirm the new system's robustness. In the meantime, the Agency has completed work on the old system to make it millennium compliant, at a cost of £200,000.

**3.35** Most importantly, on capacity the Agency has decided to change its strategy and intends to prioritise customer service rather than the previous emphasis on containing unit cost. The Agency is planning to introduce a series of measures which are likely to include outsourcing telecommunications, developing a better website, additional accommodation, longer counter opening times and an extension of its high street partnership arrangements. These additional measures are likely to add over £3 to the cost of producing each passport, bringing the unit cost to over £17 from 2000-01 onwards.



# Appendix 1

## Key dates and events

<b>July 1996</b>	Passport Agency decides to introduce the digital passport to minimise the risk of the existence of fraudulent passports, replace its existing computer system and improve its efficiency and effectiveness. This would be done through a private finance or outsourcing contract that should bring efficiency savings.
<b>April 1997</b>	Contractors' bids received.
<b>June 1997</b>	Passport Agency awards 10-year PFI contract, valued at £120 million, for printing and despatching digital passports to The Stationery Office (now Security Printing & Systems Limited).
<b>July 1997</b>	Passport Agency awards 10-year PFI contract, valued at £120 million, to Siemens Business Services for the collection, storage and transmission of passport application data.
<b>April 1998</b>	Announcement made that from October 1998 children not already on a passport would require their own passports to travel abroad. Details of requirement included on new application forms distributed from this time.
<b>5 October 1998</b>	New IT system and outsourced procedures introduced to the Passport Agency's Liverpool Office. One hundred staff transferred to Siemens. Introduction of requirement for children to hold a separate passport if not already included on a passport.
<b>9 November 1998</b>	Passport Agency Management Board decides to roll-out new system and procedures to the Newport Office.
<b>16 November 1998</b>	New system and procedures introduced to Newport Office. 96 staff transferred to Siemens.
<b>18 November 1998</b>	Passport Agency Management Board decides to postpone introduction of new system to remaining four offices.
<b>22/23 February 1999</b>	Passport Agency Management Board decide to concentrate on prioritising applications by travel dates. Other measures agreed to boost output including additional payment to staff to increase overtime working (subsequently extended and increased).

<b>Mid-March 1999</b>	Home Office expresses serious concern at developing situation. Business recovery plan agreed.
<b>May 1999</b>	Free two-year extensions to recently expired passports offered to public queuing at Passport Offices. Virtual shutdown of telephone enquiry service at Liverpool. Transfer of work from Liverpool and Newport to other offices ceases.
<b>Late June/early July 1999</b>	Range of emergency measures introduced, including additional 100 staff, free passport extensions at Post Offices, special telephone helpline established.

## Appendix 2

### Study methodology

#### Interviews

To gain an understanding of the factors influencing key decisions at the Agency leading up to the crisis, we conducted semi-structured interviews with members of the Agency's Management Board - including senior managers responsible for overseeing the computerisation. We also interviewed the statistician at the Home Office responsible for forecasting passports and examined forecast data.

We interviewed senior managers at Siemens and consulted senior managers at Security Printing & Systems Ltd and representatives from the Public and Commercial Services Union.

We visited the Liverpool, Newport and Peterborough offices. Interviews were held with regional management teams. We discussed the operation of the new system with operational staff in each office and observed each stage in action.

#### Data analysis

The analyses appearing in this report are largely drawn from data extracted from the Agency's management information systems. The figures for backlogs take account of estimates of unopened post compiled manually by Agency managers during the year.

#### Calculation of the additional costs associated with the delayed roll out and the crisis

The Agency faced additional costs following the implementation of the new computer system in October 1998. Higher staffing costs than forecast were the most significant item of additional expenditure. However, in 1999, the demand for passports was also significantly higher than forecast. Only those staff costs over and above those required to process additional demand could reasonably be attributed to the difficulties associated with the introduction of the new system.

The Agency sets staffing budgets at the start of the financial year based on forecast volumes of applications. Our calculation of additional costs is based on variances from those budgets once the budgets have been adjusted for the difference

between forecast and the actual volume of passports issued. The figure of £6 million quoted in the text for additional staff costs allows for additional work undertaken in-house by the Agency, as well as the transfer of work out of Liverpool and Newport.

### **Customer satisfaction surveys**

These surveys are commissioned by the Agency from the Home Office Research and Statistics Department. A sample of applicants at each of the Agency's regional offices are surveyed every two months seeking their views on various aspects of the Agency's service. Regional offices are asked to send questionnaires out with a sample of passports. Around 6,000 forms are distributed, of which around a third are completed and sent back. During the period covered by this report, the questionnaires were not always sent out at the Liverpool office. We have therefore not made extensive use of these surveys in report, although we have used data on the extent of satisfaction with the telephone system where this is appropriate.

### **Examination of documentation**

We examined records kept by the Agency including financial records, contractual documents, minutes of management meetings, management reports, progress reports and documents relating to the design and implementation of the computer system.

## Appendix 3

### Previous Reports by the Committee of Public Accounts and the C&AG

In June 1989, the Committee of Public Accounts took evidence from the Home Office based on a report from the Comptroller and Auditor General on “Manpower Planning in the Civil Service” (HC398, Session 1988-89). The Committee’s report considered issues relating to the then Passport Department of the Home Office (39th Report of 1988-89). The C&AG published a further report on manpower planning in April 1993 - “Manpower Planning in the Home Office: The Passport Agency and the Nationality Division” (HC585, Session 1992-93). This appendix summarises the main findings and recommendations from these reports.

<b>PAC Report (October 1989)</b>	<b>Treasury Minute (January 1990)</b>	<b>C&amp;AG’s Report (April 1993)</b>
The Home Office should investigate the impact of external factors on demand and the use of measures to encourage off peak applications.	The Home Office was carrying out market research and issued one million leaflets to encourage off season applications.	The Agency had investigated the factors influencing demand, and was developing two models to forecast it. However, both models’ recent forecasts had tended to under-estimate the level of demand.  The Agency had taken some steps to smooth demand, but they had not yet carried out an evaluation.
The Home Office makes little effective use of manpower planning.	Manpower planning review was being carried out.	The Agency’s manpower planning arrangements enabled the Agency to vary its staffing levels at short notice through overtime and employment of seasonal staff.
The Home Office should introduce work measurement to assist in the setting of cost and performance targets.	The Home Office intended to introduce work measurement at staff group level.	
The Home Office had missed unit cost targets and performance against processing targets had been very poor at peak periods. For example, the processing time at the Glasgow office was 56 days.	The Home Office’s financial provision had been increased and substantial increases in permanent staff would follow.	The Agency had met its processing target in 1991-92 and had been awarded a Charter Mark in 1992.
Computerisation project was incomplete and had not yet yielded the expected benefits. It had not proceeded smoothly, and staff had taken longer than had been expected to attune themselves to the new system.	Steps were being taken by the Department to follow up recommendations made by consultants.	The computerisation project had been completed and enhanced but did not appear so far to have enabled the Agency to bring down the unit cost of producing a passport.

## Appendix 4

### The Coopers & Lybrand Report 1989

In 1989, the Passport Department of the Home Office was implementing the Passport Issuing and Management Information system (PIMIS), the Agency's existing system for processing passports. On that occasion, the Department had begun the roll-out in its Glasgow office and had rolled out to Liverpool. Difficulties with the operation of the new PIMIS system in Glasgow and then Liverpool led to losses in productivity and output, and the roll-out was halted. Following the implementation of PIMIS, Coopers & Lybrand were commissioned to review the suitability and performance of the system. The review included the following key conclusions in respect of system implementation:

- probably the most fundamental weakness of the project was the narrow and unimaginative view of the possibilities of computerisation....The mirroring of an existing clerical operation by a computerised operation rarely provides the best solution or achieves real benefits;
- the second fundamental weakness of the PIMIS project has been insufficient user manager and staff involvement throughout the project's life;
- in view of the difficulties which were met in Glasgow (passport office) and the consequent requirement for design changes, it was, at the least, optimistic to press ahead with the implementation in Liverpool (passport office) before these problems had been resolved. As a general principle, we would recommend that a system be implemented in one location and all problems resolved, before the system is replicated elsewhere....This was a high risk decision;
- linked to this premature implementation in Liverpool was the earlier than expected surge in demand for passports....We are surprised that more adequate contingency arrangements were not available;
- computer-based systems which provide the basis of routine office operations must operate sufficiently quickly not to slow down their users; and

- the surges and, in part, the unpredictability of passport application demand result in difficulties in operations planning. The Department has had to operate within the strongest financial and staff resource constraints, while introducing a system for which the financial justification was finely balanced. However, we believe that these factors were either given or foreseeable, and we believe that their impact should have been managed better.