Home Office

# The Implementation of the National Probation Service Information Systems Strategy



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# executive summary

In 1993 the National Probation Service Information Systems Strategy (NPSISS) was established to achieve a common high quality information technology infrastructure across all of the probation services in England and Wales. The initial national programme was for the provision of a national computer infrastructure (comprising personal computers, operating software and a communications network supported by common servers) and a case recording and management system (CRAMS). The implementation programme was managed by the Home Office's Probation Unit. Bull Information Systems Limited, the main contractor, operates under an enabling agreement, signed in December 1994, to install the infrastructure and CRAMS, and provide a managed service. The agreement with Bull is due to end in December 2001. The cost of implementing the strategy over 10 years was projected to be £97 million. Roll out of the NPSISS infrastructure began in 1995 and was scheduled to be completed by March 1999.



- 2 Her Majesty's Inspectorate of Probation carried out a thematic inspection of probation services' use of information, including the progress made in the implementation of the NPSISS strategy. The Inspectorate's report "Using Information and Technology to Improve Probation Service Performance" was published in October 2000. The Inspectorate identified weaknesses in the information available to probation staff and in the IT systems and concluded that the Home Office needed to make very significant improvements to give probation services the IT systems and support they needed.
- 3 The National Audit Office collaborated with the Probation Inspectorate in its work. This report presents the results of the National Audit Office's further examination of what lessons could be learned from the Home Office's management of the NPSISS and CRAMS programme.

# Key findings

- By the end of March 2001 the NPSISS computer network covered 49 out of the 54 local probation services. From 1 April 2001 there is a new National Probation Service with 42 local areas of which 38 have access to the NPSISS network. Given that the network was introduced into autonomous and locally managed services, this was a notable achievement. The infrastructure has led to improved communication within and between probation services. Links with the Home Office and the systems of other criminal justice agencies have yet to be made.
- The CRAMS case management system was introduced in 39 out of the 54 probation services, and is used substantially by 16 of these, representing only 20 per cent of the probation service budget. CRAMS has proved difficult to use, and its development, overseen by the Home Office, did not keep pace in all respects with changing business requirements. As a result of the limitations with CRAMS the Home Office has suspended its further development except for essential maintenance of the software.
- The full economic cost of the NPSISS infrastructure, support and CRAMS is expected to be at least £118 million by the end of 2001, which would be 70 per cent at constant prices above the expenditure forecast in the Home Office's original business case for the same time period. The enabling agreement with Bull is largely open ended, with additional expenditure commitments being made as and when required. Poor specification of expected outputs, weaknesses in service monitoring and inadequate control by the Home Office over the issue of purchase orders contributed to the higher than expected cost of the programme. Since early 2000, the Home Office has held back its pursuit of IT development work because of concerns as to whether new purchase orders under its enabling agreement with Bull would meet European public procurement requirements.
- was always likely to present a significant management challenge. However, the Home Office's programme management team suffered from a lack of continuity in its leadership and was not fully resourced to deal with the scale of the issues facing it. In its first seven years, for example, the programme team had seven programme directors. In terms of day to day project management, we found that responsibilities were not always clear, and that communication between the Home Office and the services was not always effective. The Home Office has already recognised some of these issues and the Information and Technology Group for the new National Probation Service is planned to have a complement of around 50 staff compared to the previous effective complement of 12.5.

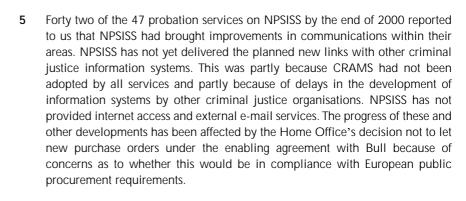
The detailed findings and lessons learned from the study are set out below.

# On installing NPSISS

By the end of 2000 the NPSISS network extended across 47 out of 54 probation services, covering 87 per cent of the premises within the networked areas; and it was rolled out to a further two services by the end of March 2001. The coverage of the network will become increasingly important with the creation of a unified National Probation Service for England and Wales in April 2001. The Home Office told us that it remained committed to extending NPSISS across all probation services but, as at February 2001, had yet to make the necessary arrangements.



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The Home Office promoted but did not actively monitor other benefits from the NPSISS programme, including business change in the probation services. As a result, it is not possible to quantify the business benefits derived from the introduction of these systems. Costs and achievements have not been monitored against projections in the original business case.

#### For the future

- At the end of 1999 the Home Office started reviewing the IT strategy for the probation service and in July 2000 it drew up a recovery programme to address challenges thrown up by the NPSISS programme. The new Information Systems Programme Board, which is responsible for defining the IT requirements of the new National Probation Service and overseeing their implementation, is taking this work forward. The new IT strategy work makes a commitment to develop further the national systems and to achieve links with other criminal justice agencies. We recommend:
  - the Home Office ensures that the national network is completed and extended to the national directorate to provide a backbone for the operation and accountability of the new National Probation Service;
  - the National Probation Service ensures that its new information strategy is firmly linked with the Service's business strategy and that performance on IT is reviewed at least annually, in full consultation with the services; and
  - the National Probation Service takes every opportunity, on future IT development, to re-engineer existing administrative systems to enable the full business benefits of IT to be achieved.

### On the problems with CRAMS

Users have found CRAMS difficult to operate. Consultants commissioned by the board overseeing the programme reported that the user interface contained defects that compromised the ability of users to perform their work. The Home Office did not ensure that the development of CRAMS kept pace in all respects with changing business needs, for instance it does not provide local probation services with direct access to operational data held by other areas in order to help in the transfer of case information, nor does it provide a national database to support new local procedures to improve the management of high-risk offenders. Generally services were having to rely on paper files, card indexes and registers to retain and access information on offenders presenting a risk of harm to the public. The Chief Inspector of Probation has commented that this lack of IT had not compromised public safety or put staff at risk.

- 9 The development of CRAMS was based on software operating in some probation areas. The Home Office underestimated the technical risks associated with transferring an existing system onto the NPSISS network. The poor user interface of CRAMS was evident from an early stage, along with the other technical problems and faults which had not been resolved by initial testing. In July 1996, a review commissioned by the Home Office from an IT consultant from the Central Computer and Telecommunications Agency noted several risks. In the consultant's view, acceptance and pilot testing of CRAMS suffered from a lack of clear direction, criteria to measure success, and coordination. Even if formally accepted, the consultant thought that the system's acceptability and usability were unknown. The Home Office team sought to address these problems but did not prevent the roll out of poor quality software.
- The requirement for CRAMS to produce reports for management purposes was not adequately specified at the start of the project, nor was a subsequent requirement from the Home Office for Bull to develop standard reports using specialist software, known as GQL, which extracts data from databases. The Probation Inspectorate found that services had to invest their own resources to make the GQL software work satisfactorily. GQL had been installed in 46 services by early 2000.
- 11 The Home Office initially expected that CRAMS would cost some £4 million but it now estimates it will have cost almost £11 million at constant prices by December 2001, including the costs of work to ensure year 2000 compliance and the costs of the additional reporting tool. During the course of the NPSISS programme probation services on the NPSISS network spent nearly £1.2 million on the purchase and development of supplementary software to record and manage cases. The five services still not on NPSISS have spent additional resources developing their alternative case management system. They estimate they have spent some £350,000 on development work and a further £30,000 a year supporting it. In total some 27 probation services are developing or using alternative computerised systems for recording or managing case details. This position has resulted in case records being held in a number of different formats, creating problems for the transfer of cases



between services. A major challenge for any new national case management system will be the need to manage the migration of information from existing systems.

#### For the future

- 12 Current plans propose a modular approach to addressing the needs for case management software, utilising systems developed by local services and introducing a new national case index. We recommend the National Probation Service:
  - develops proper user specifications for case management systems to succeed CRAMS, building on current experience and reflecting clear statements of the business objectives and requirements for the new national service - in particular, it should address their usability and their ability to produce management information;
  - ensures that proposals for any new national case management system, or any other major technical developments, are subject to a full evaluation of the likely technical risks before going ahead;
  - ensures that the organisational implications of any future IT developments are properly evaluated and that there is full user involvement, with effective management arrangements to ensure that issues arising at local level can be fed back quickly to appropriate contacts within both the Home Office and the supplier;
  - ensures that there are effective arrangements for keeping the service informed of progress against targets in the strategy;
  - explores the best contractual options for developing software to succeed CRAMS and, in adopting a modular approach, to ensure that a strong overall design is developed so that the modules fit together well; and
  - ensures that test plans, with clear objectives and criteria for determining success, are formally agreed with suppliers prior to starting the design and development of new software.









#### On the contract with Bull

- 13 The Home Office's contract with Bull was drawn up in the form of an enabling agreement. It provides for the Home Office and probation services to take out purchase orders from a specified range of products and services at prices set out in schedules to the agreement. The performance of Bull was not managed effectively. Monitoring of service levels against the enabling agreement was sporadic; and performance against the service level agreement, not agreed until 1998, was not monitored systematically.
- 14 The Home Office raised a total of 69 purchase orders between December 1994 and March 2000 and consultants commissioned by the Home Office concluded in 1998 that there were unnecessary orders, duplication and overlap, and a risk of overpayment. To rationalise the situation the Home Office negotiated with Bull a consolidated purchase order for support and maintenance at a cost of £5.4 million a year with effect from 1 April 2000. The Home Office Audit and Assurance Unit concluded that there had been significant inadequacies in the negotiation of the consolidated purchase order. The purchase order specifies the resources Bull is to use to support NPSISS rather than deliverables, leaving value for money at risk. In recognition of this the Home Office has introduced tighter service delivery management procedures.
- 15 Since November 1999 the Home Office has had concerns about whether letting new purchase orders under its enabling agreement with Bull would comply with the competition requirements under European Public Procurement Directives. Legal advice received by the Home Office suggests that any new purchase orders raised under the enabling agreement are unlawful. The Home Office has now concluded that over the remaining period of the Bull agreement, up to December 2001, any IT development work which is needed, and which cannot be delivered by Bull within the terms of the consolidated support and maintenance agreement, would have to be procured through separate legal agreements.
- 16 Failure by the Home Office to prioritise the necessary preparatory work has contributed to delay in establishing a new strategic partnership to follow the end of the enabling agreement with Bull in December 2001. As a result the Home Office is likely to have to bear additional costs from a proposed separate interim contract after the expiry of the current enabling agreement. The work to manage this interim contract is known as the first phase procurement project. On the other hand, the Home Office considers that this delay has brought the advantage of allowing the new national probation service business strategy and change programme to be specified more definitively before key decisions are taken on the strategic contract.

## For the future

- 17 The plan being taken forward by the Information Systems Programme Board stresses the importance of tighter supplier management and sets expectations for the procurement of the first phase and subsequent strategic contracts to follow on from the enabling agreement with Bull. We recommend the National Probation Service:
  - agrees with Bull specific deliverables for the remainder of the contract to ensure that it gets value from the support and maintenance agreement;

- ensures that its future IT contracts are not open ended and crucial elements not left to post-contract negotiations - they should be based on a clear specification of the expected outputs and quality of service and should ensure that appropriate contract risks are borne by the contractor; and
- ensures that it effectively manages its suppliers, involving systematic and strategic monitoring of contract performance.

# On the skills and resources of the management team:

- Over the course of the project, from 1993 to the end of 2000 there have been seven programme directors in charge of the NPSISS programme, of whom only two had significant experience of managing major IT projects. The programme management team also suffered frequent changes of staff. Technical experts and specialists within the team tended to be consultants working on short term assignments.
- 19 From 1996 the project management controls and reporting arrangements were based on the PRINCE 2 project management methodology. But the management structure did not include a project assurance function. Furthermore, formal project management methods were not embedded firmly in working practices and they fell into disuse.
- 20 In January 2000 consultants reported to the Home Office that its Information Services capability was badly under-resourced with misaligned skills, and that this was exposing the Home Office and probation services to significant business risk.

#### For the future

- 21 The Home Office has recruited a new Head of IT for the National Probation Service. His management team will comprise a Head of IT Strategy, Head of Service Management and a Head of Programme Management and he will have a complement of some 50 staff. The Home Office has agreed that project assurance will be a priority, and has appointed an experienced consultant to provide quality assurance for the first phase procurement project. We recommend that the National Probation Service:
  - pays full regard to recent recommendations made by the Committee of Public Accounts and the Cabinet Office relating to the management of IT projects;
  - undertakes a full risk assessment of its new Information Systems Strategy and introduces proper risk management procedures;
  - provides for greater continuity of leadership for its IT programme and adequate staffing; and
  - ensures that the project management team reflects an appropriate balance between the advantages gained from using secondees and the need for project experience and continuity. Timely and appropriate training should be provided to project management staff when necessary.



