



National Audit Office

**Home Office and National Policing Improvement Agency**

# Mobile Technology in Policing

## Detailed Methodology

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**JANUARY 2012**

# Detailed Methodology

**1** The study reviewed the Home Office and National Policing Improvement Agency's development and implementation of Mobile Technology in Policing in police forces, through two initiatives, the Mobile Information Programme and the MobileID Project.

## Document review

**2** We reviewed published and unpublished documents produced by the Home Office, the National Policing Improvement Agency (the Agency), and police forces, as well as reports produced by other bodies, including the Association of Chief Police Officers. The primary purpose of this review was to inform our understanding of the Mobile Information and Mobile-ID Programmes, and forces' mobile data projects.

**3** In particular, we focused on reviewing thematically the Agency's Mobile Information Programme Board papers. This informed our understanding of the implementation of the Programme, and how the Agency worked with forces in operation. We were able to explore the decisions and costs surrounding the roll-out of mobile devices across all police forces in England and Wales.

**4** We carried out desk-based research and a thematic literature review. This research included a review of: Home Office, Agency and High Level Working Group (HLWG) Board minutes and papers; Agency benefits realisation reports; reports from the Agency to the Home Office Group Investment Board (GIB); reports by the Association of Chief Police Officers (ACPO); and published and unpublished force documentation. We also explored Mobile-ID and reviewed: Board minutes and papers by the Project Board; benefits reports, cost data, and contractual information from the Agency.

**5** This document review also examined a number of published and unpublished documents authored by police forces on the business need, implementation, benefits realisation and process management of their mobile data projects.<sup>1</sup>

**6** As part of this work we also examined the Information Services Improvement Strategy (ISIS) by identifying any gaps in the strategy against key characteristics in ICT that are highlighted in our landscape review of ICT in government.<sup>2</sup> However, this study did not audit ISIS – with the primary focus on the Mobile Information and Mobile-ID Programmes.

<sup>1</sup> This was also informed by our survey of forces and our case studies visits to nine forces.

<sup>2</sup> Comptroller and Auditor General, *Information and Communications Technology in government: Landscape Review*, Session 2010-11, HC 757, National Audit Office, February 2011.

## Interviews

**7** We interviewed a number of stakeholders to determine context around both mobile technology initiatives, how they have been managed and developed, and identify the information used to support decision-making and implementation. The stakeholders we interviewed included the:

- Home Office;
- Agency;<sup>3</sup>
- Police forces;<sup>4</sup>
- Association of Chief Police Officers;<sup>5</sup> and
- Her Majesty's Inspectorate of Constabulary.

**8** We also interviewed a number of mobile technology suppliers, including: Airpoint; Beat Systems; RIM (Blackberry); and Kelvin Connect, which has been acquired recently by Airwave Solutions. We carried out semi-structured interviews using the same topic guide, including 14 questions, for all of our discussions. These interviews helped us explore how various private sector organisations support forces' mobile technology projects. We did not look to benchmark costs or performance of mobile data suppliers' solutions.

**9** Suppliers also provided us with additional documentation, which was reviewed thematically and covered areas including: system architecture; business change support; benefits realisation; and the number of forces they have provided services for.

## Survey of Police Forces

**10** We surveyed all 43 police forces in England and Wales, as well as the British Transport Police. We conducted the survey by sending questionnaires by email, accompanied by a letter outlining the study's scope, to all police forces, and out of the 44 forces surveyed – 32 responded, an overall response rate of 73 per cent. Questionnaires were completed between 16 August and 26 October 2011.

**11** We carried out our survey to examine forces' mobile data project expenditure, the capability provided by their mobile solution, the degree of business process change undertaken and the impact of the mobile devices on their operational police officers. We also used our survey to request a number of documents to support their responses.

<sup>3</sup> Includes interviews with: the Mobile Information and Mobile-ID Programme managers; the business change and benefits manager for both Programmes.

<sup>4</sup> Nine forces that we visited as case studies.

<sup>5</sup> Association of Chief Police Officers' lead in the Information Management business area.

**12** Responses to our survey included North Wales who did not apply for any capital grant funding from the Agency, West Mercia Police who have yet to invest any of their allocated funding and Devon and Cornwall who pulled out of a collaboration of South West forces and as such have not received any funding. In addition, a further seven of the forces we surveyed are still to spend all of their allocation of funding.

**13** The survey involved 19 questions, some with sub-questions. The questionnaire was subject to a number of internal quality assurance tests and reviews. We also shared our survey questions, and discussed our approach, with the Department and Agency who were satisfied.

**14** Forces were given an original deadline of one month to respond with reminders sent by the study team. However, at their request, some Forces were provided with an extension with the final return submitted on 26 October. We also ensured that all nine of our case study forces<sup>6</sup> completed the survey.

**15** Following the data entry, which was double-checked to ensure that it was inputted correctly, the quantitative data was analysed using Excel and the qualitative data from open responses was coded thematically using the Computer-Aided Qualitative Data Analysis Software (CAQDAS), Atlas.ti. The use of these analytical tools also helped to compare our survey findings with those from our case study visit interviews.

**16** We carried out a number of quantitative and financial analyses in Excel to explore cost data and the number of devices for both the Mobile Information and Mobile-ID Programmes. The qualitative analysis was carried out using a number of codes that were grouped thematically, for example around: reasons why forces have not spent all their grant funding; capability; benefits; process change activity; and any drawbacks to their mobile data projects.

### Police force case studies

**17** We visited nine Police forces: British Transport Police, Derbyshire, Hampshire, Metropolitan, Staffordshire, South Wales, Surrey, West Yorkshire and Wiltshire. These forces, with the exception of Wiltshire,<sup>7</sup> were selected, following discussion with the Agency, to provide a representative range of performance and project maturity.

**18** We carried out these case studies, between 6 September and 10 October, to provide a more detailed review of forces' mobile data projects with regard to their: expenditure, capability, process change activity, benefits realisation work, strategy and future plans, and users' engagement.

<sup>6</sup> British Transport Police, Derbyshire, Hampshire, Metropolitan, Staffordshire, South Wales, Surrey, West Yorkshire and Wiltshire.

<sup>7</sup> Wiltshire contacted us, following their receipt of our survey, as they considered themselves a best practice example of implementing mobile technology.

**19** We outlined the scope of our case studies when we contacted forces to request their completion of the survey. Once forces agreed to participate we sent them a topic guide covering a number of areas, including: background, strategy and policy; programme specific issues, performance and benefits; and process improvement. We also carried out focus groups with users in each case study force.

**20** We gave forces discretion to decide on who we should speak to, for example, to discuss the project background and strategy. We spoke to Officers of varying seniority, including the Chief Constable of Hampshire Constabulary and a number of Deputy and Assistant Chief Constables. We also carried out more than one focus group in some forces to account for their multiple mobile data technologies.

**21** Case study forces also completed our survey and provided us with additional documentation. Their survey returns were subjected to the analysis outlined above (paragraphs 15-16); and their documentation reviewed systematically (paragraph 4).

**22** We also carried out a telephone interview with a contact in the Central Scotland Police Force.<sup>8</sup> This was carried out to gain insight into the Association of Chief Police Officers of Scotland (ACPOS) mobile data project, their receipt of phase one Mobile Information Programme and plans going forward.

## Benchmarking

**23** We interviewed, either face-to-face or by telephone, five private and public sector organisations using mobile data solutions with semi-structured interviews. The organisations we interviewed, included:

- National Health Service Mobile Health Worker Programme;
- Kirklees Primary Care Trust;
- Royal Mail;
- South East Water; and
- Northern Constabulary.

**24** We carried out these interviews to explore how other private and public sector organisations manage their mobile technology projects. We did not look to benchmark actual performance between police forces, other government departments and commercial organisations.

<sup>8</sup> One of eight police forces currently in Scotland. However, on 8 September 2011, Scottish Justice Secretary announced plans for a single police and fire service for Scotland.

**25** The interviews covered a number of topic areas, including: the business need for mobile data; costs and the number of users; process change activity; project management and benefits realisation; security and technical issues; and disposal and renewal plans. We also requested documents to support the comments that were made during the interviews.