



Grant Thornton

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Public interest report

**Police and Crime Commissioner for Surrey
Chief Constable for Surrey**

Audit 2012/13

Termination of the SIREN ICT project

The contents of this report relate only to the matters which have come to our attention, which we believe need to be reported as part of our audit process. It is not a comprehensive record of all the relevant matters, which may be subject to change, and in particular we cannot be held responsible for reporting all of the risks which may affect the Office of the Police and Crime Commissioner or Office of the Chief Constable or any weaknesses in their internal controls. We do not accept any responsibility for any loss occasioned to any third party acting, or refraining from acting on the basis of the content of this report, as this report was not prepared for, nor intended for, any other purpose.

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Summary report

Introduction

1. On 28 January 2013 Grant Thornton was appointed auditor to the Police and Crime Commissioner for Surrey (the PCC) and the Chief Constable for Surrey (the Chief Constable), by the Audit Commission under Part II of the Audit Commission Act 1998 (the 1998 Act), to audit the accounts of the Police and Crime Commissioner for Surrey and the Chief Constable for Surrey. Section 8 of the 1998 Act requires the auditor to consider whether, in the public interest, to report on any matter coming to their notice in the course of the audit in order for it to be considered by the body concerned or brought to the attention of the public.
2. This report concerns the decision taken by the Police and Crime Commissioner (PCC) for Surrey to terminate the SIREN ICT project. The SIREN project had incurred a cost at termination of £14.86m and the decision to terminate has attracted considerable public and press interest. We are issuing this report in the Public Interest under section 8 of the 1998 Act due to the scale of the cost involved, the significance of the findings and the high level of interest shown by the public in the subject matter.
3. As the report is issued under section 8 it will be required to be dealt with in accordance with section 10 of the 1998 Act which requires our report to be considered by the PCC and the Chief Constable within one month at a public meeting.

Our responsibilities

4. External audit is an essential part of the process of accountability for public money. Appointed external auditors operate within the duties and powers given under the Audit Commission Act 1998 and the Code of Audit Practice (the Code) approved by Parliament. The Code determines the nature, level and scope of external audit work. Under the Code, the external auditor provides:
 - an independent opinion on a public body's accounts; and
 - an independent value for money conclusion as to whether a public body has put in place proper arrangements for securing economy, efficiency and effectiveness in its use of resources.
5. The Code of Audit Practice identifies that proper arrangements for securing economy efficiency and effectiveness include the following:
 - planning finances effectively to deliver strategic priorities and secure sound financial health;
 - reliable and timely financial reporting that meets the needs of internal users, stakeholders and local people;
 - commissioning and procuring quality services and supplies that are tailored to local needs and deliver sustainable outcomes and value for money;
 - promoting and demonstrating the principles and values of good governance; and
 - managing risks and maintaining a sound system of internal control.

6. We are required under Section 5 of the Audit Commission Act 1998 to satisfy ourselves that the Police and Crime Commissioner and Chief Constable have each made proper arrangements for securing economy, efficiency and effectiveness in their use of resources. We are also required by the Audit Commission's Code of Audit Practice to report any matters that prevent us being satisfied that the Police and Crime Commissioner and Chief Constable have each put in place such arrangements. Our audit for 2012/13, undertaken in accordance with the Code of Audit Practice, concluded that we had a matter to report: our findings in relation to the decision to terminate the SIREN ICT Project raised questions about the effectiveness of the arrangements for project management, governance and the production of information to inform decision making.

Context

7. Surrey Police Force (the Force) was part of Surrey Police Authority (the Authority), the predecessor organisation to the office of the PCC and the office of the Chief Constable. The Force was ambitious in its drive for improvement and understood that genuine transformative change often required innovation which, inherently, carried greater risk. This ambition was fully supported by the Authority at the time. The Force responded to the significant financial challenges brought about by the economic downturn in 2008 with transformative workforce re-engineering and estates rationalisation programmes. In its July 2013 report "Surrey police's response to the funding challenge", Her Majesty's Inspectorate of Constabularies (HMIC) reported that:

"The force has worked very hard to limit the impact of the cuts on its frontline workforce in a way very few other forces have been able to achieve. It has protected its crime fighting capability by driving cost reductions and savings in other areas. It is one of only four forces in England and Wales where the number of offices in frontline roles is planned to increase, and the only force in which the total number of police officers will increase over the spending review period. Crime in the county has fallen more than in most other force areas and satisfaction among victims of crime is above average for England and Wales."

8. This report is not intended to stifle innovation or properly-managed risk in the public sector. We recognise that risk is often a necessary factor in identifying and implementing transformative change programmes and innovative solutions to the challenges, financial or otherwise, facing many public sector organisations. This report should assist the PCC and Chief Constable, as the successor bodies to the Police Authority, to identify and understand the lessons that can be learned from the SIREN ICT project such that actions can be put in place to mitigate risk when undertaking similar large scale projects in the future.

Background

9. In February 2005 the Authority made the formal decision to replace the Force's existing crime, intelligence and custody suite (CIS). By 2007, in seeking to replace CIS, the Force had developed the 'Enterprise' programme: a larger scope of work encompassing the replacement of CIS and enhancements to many other business functions. The majority of the Enterprise programme comprised the Surrey Integrated Reporting Enterprise Network (SIREN) project. SIREN was concerned with the design, development and implementation of a core suite of ICT products including custody, case and intelligence for Surrey Police Force.
10. In February 2012, the current Chief Constable was appointed. In September 2012, following informal representations the previous month, the Chief Constable formally expressed the view that the on-going programme to replace the Criminal Intelligence System may no longer represent the best long-term option for the Force and for the public, in light of changing external and strategic factors. This view was raised with the Chief Executive, Treasurer and some Members of the former Police Authority, including the Chair. The Chief Constable wished to put the matter before a formal meeting of the Authority and obtained legal advice that asserted this could be done, but for "noting only" (i.e. no decision could be made), and only in a confidential (not public) meeting of the Authority. The Chief Executive also sought legal advice to inform her decision as to whether or not this issue could be put before a formal meeting of the Authority. Informed by that advice, the Chief Executive reached the view that due to the commencement of the PCC election purdah period the issue should not be considered by the full Authority prior to its dissolution. The Chief Constable immediately raised the issue with the PCC following his election in November 2012. The PCC was also promptly briefed on the SIREN issue by his Chief Executive and Treasurer.
11. On 9 April 2013 the PCC, taking into account the view expressed by the Chief Constable, took the decision to terminate the SIREN project. In making this decision, the PCC also took account of an independent review he had commissioned from Mazars LLP. At the point of termination the project was forecasting a revised implementation date of August 2013. This was 4 years later than the original planned implementation date of September 2009 envisaged during the project's initiation. The SIREN project involved a significant amount of public money and the decision to terminate has attracted considerable public and press interest. Citing potential benefits through collaboration with other regional forces as a driver for termination, the PCC said in his press release:

"My decision to withdraw from the SIREN project has not been taken lightly, but I believe that this course of action will ultimately be in the best interests of both Surrey Police and the Surrey public. It is right and proper that it will be fully reviewed by the Police and Crime Panel and by Grant Thornton, the Audit Commission's appointed external auditors."

12. In terminating the contract with the developer without cause, the PCC was required to pay, in full, the residual balance of the contractually agreed development costs but negotiated release from the contractual liability to pay any further support costs. The project consumed a considerable volume of Authority and Force resource over the previous 8 years but delivered none of the benefits envisaged in the initial business case. This means the PCC and former Authority have incurred the full cost of the development of a significant ICT product that was, ultimately, never completed or implemented.

Audit approach and scope of this report

13. This report examines the factors that led to the SIREN project being terminated and whether the termination decision, in itself, was reasonable.
14. On 7 June 2013, subsequent to the termination of the SIREN contract, the PCC decided to procure an alternative solution to SIREN from another provider, Niche RMS (Niche). As this decision is closely linked to the one to terminate we have also considered the subsequent procurement decision as part of this review.
15. In considering whether the decision taken by the PCC to terminate the project was reasonable, it was necessary to consider the reasons for termination. One of the reasons cited was that the project may no longer represent the best long-term option for the Force and the public. This was due to changing external and strategic factors and considerations. The report commissioned by the PCC to inform his decision as to whether or not to terminate the project also highlighted significant concerns in the governance and project management of the SIREN project.
16. In considering the reasonableness of the termination decision, it was necessary to consider the external and strategic factors upon which the PCC's decision was based, as well as the other information relied upon by the PCC in forming his decision to terminate. This involved consideration of the arrangements in place in respect of project and programme governance, and whether weaknesses in those arrangements delayed the project to such an extent that it was reasonable to terminate despite having incurred the full cost of the ICT development over the previous 8 years. A detailed review of the SIREN project from inception to its termination was undertaken, as well as a review of the arrangements for terminating the project and procuring a new ICT solution. We have undertaken this review in the context of our responsibilities outlined above in the section headed 'Our responsibilities'.
17. Our review focuses on the SIREN project itself and its subsequent termination. It is not a wider review of the overall management arrangements of the Force or the former Authority or, subsequently, the office of the PCC or the Chief Constable.
18. Our report sets out the findings of our review in four broad areas:
 - **Initiation** – the business case and procurement process for the SIREN project
 - **Delivery** – project management and governance of the SIREN project
 - **Termination** – of the SIREN project
 - **The Niche replacement.**

19. Our review considers events which took place both before and after the election of the PCC and the creation of the PCC and Chief Constable as separate corporations sole in November 2012. Prior to this date, the Force was not a separate legal entity, but a part of Surrey Police Authority.
20. In reaching our conclusions, we reviewed documentation produced over the life of the SIREN project and conducted interviews with key individuals involved in the project, including those who now no longer work for either the Office of the PCC or the Force.

Main conclusions

21. SIREN was an ambitious project. It matched the ambitions of the Force at the time and was fully supported by the Authority. It was evident from our review that the staff of the Force and the Authority were genuinely striving to improve their business for the overall benefit of the public. It is also clear that the decision to terminate was supported by a number of external contributory factors which could not have been envisaged at the outset.
22. However, there were a number of significant weaknesses in the arrangements for managing the SIREN project which contributed to the project's delays and, ultimately, its termination. Where established governance arrangements and internal controls did exist they often did not operate as they should have done. This was compounded because the 'checks and balances' which would have alerted the Force and the Authority to these weaknesses did not always operate as they should.
23. The ambitious vision for SIREN was not matched by the skills and experience available to, and deployed by, the Force for a major portion of the project's life. The Force was not experienced in delivering projects of this type and complexity and the chosen supplier, Memex Technology Ltd (Memex), did not make up for this shortfall in terms of managing the risk to delivery. The Force had little experience of using the Agile approach to project management, development and delivery, which was central to the way that SIREN would be delivered. Scope was poorly controlled for a significant period of the project, delays and shortfalls in funding (resulting from missing scope or skill shortages) were identified late in the process and the initial envisaged benefits quickly diminished from the outset and, ultimately, were never delivered.
24. This meant the project was exposed to risks and delays it need not have been, had project governance and management arrangements been fit for purpose and operated as they should have done. In our view this was a key factor that resulted in the project taking considerably longer than planned. This lack of experience resulted in a number of difficulties which were faced by the programme and ultimately led to its failure to deliver a viable replacement for the CIS system or any of the benefits anticipated in the initial business case.

Initiation

25. The fundamental need for change was underpinned by CIS, a key system for the Force, becoming obsolete. This carried associated risks of continued supportability and failure. There is no question that embarking on a replacement programme was needed and the fact that this system was still running at the date of termination of the SIREN project does not deter from this need as the risk of system failure and compliance issues were still present and growing.

26. The selection of Memex Technology Ltd (Memex) as the preferred bidder does not by itself appear to be a fundamental reason for the project's ultimate failure. However, we identified weaknesses in the procurement and evaluation process that suggest a lack of experience within the Force when dealing with a one off procurement with this degree of complexity. There is scope for improvement in how such procurements should be carried out in the future.
27. The procurement itself considered two routes to market – the competitive dialogue procedure and the restricted procedure. The latter was chosen. However there is evidence to suggest the former would have been more suited due to the lack of maturity and clarity of requirements. Memex and the two other shortlisted bidders were offered by the Force the opportunity to submit a 'best and final' price. Although this resulted in Memex becoming the cheapest bidder, this approach, as well as being outside the restricted process, may have impacted on the ability to deliver. Based on the evidence made available to us during our review, following our requests for information relevant to the project, we did not identify evidence to suggest that Memex was the wrong choice of supplier, having scored well during the process and being an existing supplier to the Metropolitan Police Service. However, in choosing a 'tailored development solution' rather than an 'off the shelf' solution, the Force chose an inherently riskier option. The Force, supported by the Authority, was of the view that choosing an option that provided the Force with everything they believed they needed was preferable to a generic solution. Having decided to pursue the riskier solution, it was critical that appropriate project management skills and expertise were put in place to deliver it.
28. It is worth noting that, following termination, this lesson appears to have been taken on board. The Force subsequently implemented the Niche 'off-the shelf' solution with the benefit of a third party delivery partner.

Delivery

29. During the life of the project, in line with recognised good practice and in recognition of the risk associated with the project, Surrey Police and the Police Authority sought a number of independent assurances from a variety of providers. During interviews many key stakeholders referred to these assurances as a key source for their faith in the project's progress at particular points in the project lifecycle. This was an appropriate course of action; it was reasonable for these reports to be relied upon as a source of assurance, albeit the greatest assurance should have been sought from frontline controls and oversight mechanisms in place for the project.
30. In addition, throughout the duration of the project and in response to escalating risk and difficulties encountered, the Force did put in place actions aimed at responding to and mitigating those risks:
 - a significant de-scoping exercise was undertaken in 2011, necessary to attempt to bring the project and its scope back under control;
 - an experienced Test Manager was recruited to the team in September 2011. The Test Manager put in place better configuration control and undertook an exercise to align the SIREN system functionality with the Police Activities Glossary (PAG). This approach demonstrated good practice in that it started to control and reduce the scope of the project with a view to simplifying it and bringing delivery back within acceptable risk parameters;
 - a dedicated Project Resource Manager was recruited to the team in September 2011. This had a positive impact on the team, as evidenced by the improved staff survey results;

- the project entered a significant re-planning phase in late 2012/early 2013;
 - an independent consultancy review was commissioned with a view to obtaining some assurances over the robustness of future plans and to advise on future options; and
 - the Force, prior to termination, enhanced its engagement with senior SAS/Memex executives to set out their expectations for the next phases of the project. The PCC also reinforced this with his own communications;
31. Notwithstanding the above, the lack of suitably skilled resource for a substantial part of the project inevitably impacted on its delivery. Key factors that affected delivery of the project and which led to its ultimate failure are headlined below:
- There was a failure to understand what was required under the Agile project management approach and the use of the Agile methodology was not effective. From the outset there was no experience on the customer side (the Force) of this approach – a key factor in the success of using it.
 - From an early stage, there was no acceptance of the iterative project modules delivered. Despite this, subsequent modules continued to be delivered. Neither Memex nor the Force sought to resolve this issue at an early stage. In our view, this contributed to the risk of the project rising above acceptable levels and was fundamental to the project's failure.
 - Scope was poorly controlled and a key reason for prolonged timescales and cost escalation. For example, national interfaces, a key element of the project, were not included in the initial scope and budget. In addition, Memex did not take opportunities to assert robust configuration control from the supplier-side.
 - There were a substantial amount of changes in the Senior Responsible Officer (SRO) and Project Manager roles, along with some dis-functionality of the organisational arrangements below this.
 - There was a failure to recruit, retain and allocate appropriately skilled and experienced resource to the programme. The Force failed to recruit for some key roles until very late in the project's life – for example, the key roles of business change analyst and test manager, amongst others.
 - Benefits were over stated, quickly diminished from the outset and ultimately were never delivered.
 - Governance was set up in accordance with best practice and had senior representatives from both the Force and Authority. However, senior representation, in particular in chairing of the Programme Board, diminished in the latter stages of the project.
 - There was a failure to understand the controls, checks and balances needed to deliver effective governance within a project management environment. In some instances, roles that should be delivered by separate individuals appear from the project reports to have been effectively combined and delivered by the same person. This weakened the 'healthy tensions' between these roles that need to exist to safeguard effective governance within the project.
 - There was a lack of clarity over what constitutes an issue or a risk. This may have prevented issues from being identified as such and escalated into the wider organisation for resolution.
 - Reporting was 'rose tinted' and not always representative of actual progress made by the project. Risk of, and actual, non-delivery was often underplayed and the likelihood of the project's overall success was overly-optimistic. Some project members have attributed this to a cultural aversion to communicating the potential for failure.

- Financial reporting did not provide sufficient granularity on a monthly basis to the Programme Board to enable proper challenge of the financial aspects of the project on an on-going basis.
 - Project reporting was not, in our view, subject to sufficient challenge and scrutiny by programme board members and Force Improvement as part of their Programme Management Office (PMO) assurance role. Given the volume of change taking place in the organisation during the life of the programme, it is unlikely there was sufficient capacity for the Head of Force Improvement to adequately discharge the PMO role. In the two years before termination the project had a Red/Amber/Green (RAG) status of red continuously. Allowing the project to remain rated as such was not in line with best practice.
 - The project did not employ formal critical gateway reviews. When the prospect of terminating the project was raised informally in August 2012 (after the project had been rated red for 16 months), several ex-members of the Authority stated that they were "**shocked**". Had formal gateway reviews been undertaken throughout the project, the prospect of termination, when it arose, may not have been such a surprise.
 - Cost was poorly controlled within the project. The true cost of the project was not well understood and did not include all overhead costs. This was partly because the Force did not maintain adequate time recording or other systems to accurately capture all attributable costs and record time spent by all individuals on the project. The PCC stated he requested on several occasions the cost to date to inform the decision of whether or not to terminate. This was not answered to the PCC's satisfaction and he subsequently included the question as part of the scope of a review commissioned from Mazars LLP.
32. It is apparent that the Force was learning as the project progressed. In the latter stages arrangements did improve, with some critical posts eventually being filled by appropriately skilled personnel. However this was too late to fully recover the position.
33. A fundamental factor in the project's failure was the lack of acceptance of delivered modules from very early in the project. It was evident at an early stage that the Agile approach adopted was not delivering the desired outcomes as none of the project modules were being successfully accepted. Nonetheless, the parties to the project (the Force and Memex) did not quickly enough adopt alternative approaches or otherwise change direction to overcome these setbacks. Failing to resolve this issue at an early stage meant the project accumulated excessive risk and became out of control. This was compounded by the lack of control of scope, a principal cause of the project's failure which allowed the project to move forward on very unsound foundations, extending significantly beyond the original timescales. When the Force eventually moved to the 'Waterfall' methodology (a more traditional approach to delivering projects of this nature), late in the process, it became apparent that there was still a substantial amount of work required to integrate each of the modules and that much of the work carried out prior to this point was of limited or no use without integration.
34. The Enterprise Programme, which was of critical operational importance and committed significant amounts of public funds, was subject to scrutiny via a number of forums within the Force and Authority. The weaknesses in the management of the SIREN project were in part masked by inadequate and rose-tinted reporting which hampered the ability of the Programme Board and wider stakeholders, such as the Authority and the Force's Chief Officer Group, to effectively scrutinise, challenge and act to correct the problems faced by the project.

35. Notwithstanding this, the project status was reported, and remained, red rated for two years prior to its termination. Whilst the high risk nature of the project was acknowledged and notable actions were taken to mitigate these risks, this did not return the project to an acceptable RAG status, suggesting these actions were not sufficiently substantive. Similarly, there does not appear to have been a clear drive or significant intervention from any of the scrutiny functions to put in place a recovery plan, in response to the red-rated status being reported, to move the project rating back to amber or green. This underlines the need for greater, informed challenge from senior representatives with project and programme experience.

Termination

36. The current Chief Constable, on her appointment in February 2012, was briefed that SIREN was, despite the slippage and cost escalation, able to deliver. The case for termination was first proposed a few months later, informally in August 2012 and formally in September 2012, although the Chair of the Authority was reluctant to entertain notions of termination of such a significant project, with such significant investment to date, without a full business case. An options paper was developed through several iterations and, alongside independent reports sought by the Chief Constable and the PCC, the decision to terminate was made in March 2013 with a negotiated settlement ensuing. Accounting for the election and purdah period in Autumn 2012, and the need for the PCC to make a considered decision, in our view the period outlined is not unreasonable.
37. Prior to this, the only other discussion on termination was when SAS acquired Memex in June 2010. The contract provided an option for termination in the event the supplier, Memex, was taken over by another company. After consideration, this option was not exercised.
38. The inclusion of an embedded gateway review process within the project may have provided more opportunity to consider the on-going justification for the project at various key points, particularly when additional funding requests were made in response to delays and slippage. The project arrangements contained no such gateway review process and opportunities to consider earlier termination, or more significant corrective action, may have been missed.
39. At the date of termination in 2013, the need to replace an out-dated CIS system remained. However, various significant internal and external factors had changed from the position at the inception of SIREN in 2005. Strategic factors taken into account include:
- the Force now pursuing much closer collaboration with Sussex Police (who had earlier ruled out Memex for their own system);
 - the Authority's decision to suspend and then terminate participation in the Business Partnering Programme (BPP); and
 - Memex had been unsuccessful in securing any further participating Forces for their product (thus reducing the potential to cost share going forward) and, critically, they lost the opportunity to bid for the Scottish Police Force contract, leaving Surrey Police as the sole customer for the product for the foreseeable future.

Internal factors include the fact that there appeared, according to the independent review commissioned from Mazars LLP, to be only a marginal difference between the cost of the two options being considered (continue with Memex, or terminate and replace with Niche), with timescales for delivery being similar for both solutions.

40. The external influences which prompted the decision mostly came to fruition in 2012, meaning the Force was afforded the opportunity to terminate the SIREN project with a credible and realistic replacement to hand. Collaborating with Sussex Police presented an opportunity to proceed with a solution that mitigated many of the shortfalls the Force had encountered with SIREN. Terminating the project earlier, without the alternative options presented from 2012, would have left the Force and Authority with little option but to start from scratch to identify a replacement system. An earlier termination decision could have therefore carried greater risk and uncertainty.
41. It is worth noting that the Niche replacement solution has recently been implemented in line with the planned timescales.

The Niche replacement

42. The business case for Niche could have been strengthened by better articulation of the overall vision for closer collaboration and by much more detailed work on the benefits. Dedicated resource needs to be appointed to ensure delivery of these benefits and road map beyond this financial year. The Force is clear that a separate business case is required to implement this.
43. Nevertheless, taking in to account the comparative future costs of both options (completion of SIREN or procurement of Niche), the current strategic vision of the Force to work more closely with regional partners, and the relative risks presented by implementing Niche, in our view the decisions to terminate SIREN and proceed with a different solution are reasonable.
44. However, these decisions are only reasonable as an exit strategy from a poorly managed project which, due to the delays encountered, was overtaken by changing external and strategic considerations. The fact remains that the termination decision results in the write off of a significant amount of public money which has been spent on the SIREN project and which has ultimately delivered no benefit to the taxpayer or the people of Surrey. It would have been preferable had the money and resources committed to the SIREN project in the first place been managed and governed effectively such that the intended benefits were delivered and consideration of termination need never have arisen.

Summary

45. Overall, SIREN was an ambitious project that was beyond the in-house capabilities and experience of the Force and Authority at the time. Despite this, insufficient third party support was bought in to mitigate these factors and ensure the successful delivery of a project of this scale and complexity. Memex, the chosen partner, in the face of a project moving out of control, did not sufficiently exert their own authority to bring the scope, and the project as a whole, under control. During delivery, there were lots of small decisions which built to a significant increase in time and cost over the life of the project.

46. There was a substantial amount of scrutiny in place, with oversight from the Programme Board, the Force's Strategic Change Board, the Authority's Finance and Performance Panel and the Chief Officer Group. However, this scrutiny was not sufficiently probing or robust, particularly in response to the project status being reported as red for the two years before termination. Effective governance was further frustrated by multiple changes of the SRO and Project Manager through the life of the project. Although the Force had recognised shortfalls and was taking action to improve, critical resource, including a suitable Test Manager, was recruited far too late.
47. In our view, none of the individual decisions taken were reckless – like the termination decision itself, many of them are understandable within the individual circumstances in which they were made. However, in our view a lack of experience of how to manage projects of this scale and complexity prevented effective corrective action being taken when problems first arose. Had this experience been in place (either in house or from a third party supplier), it is arguable a firmer control of the project may have been established from the outset, avoiding the significant delays and cost overruns that eventually resulted in the project's termination and the write-off of substantial public funds committed to date.

Next steps

48. As a report in the public interest issued under section 8 of the Audit Commission Act 1998, there are formal legal requirements with which the PCC and Chief Constable must comply:
- they must consider the report at a public meeting within one month of its receipt;
 - they must publicise, in advance, the meeting and the reason for it;
 - they must publicise after the meeting the decisions taken in response to the report.

Paul Grady
Director

For and on behalf of Grant Thornton UK LLP, Appointed Auditors
19 June 2014

Detailed report

Introduction

49. The detailed report is structured around the following themes:

- **Initiation**
 - Business case, tendering process and procurement
 - Weaknesses in the consideration of risk across the tender options
 - Appropriateness of the chosen procurement route
 - Absence of clause for termination on grounds of convenience
 - Benefits
- **Delivery**
 - Programme and project management
 - Scope
 - Plans
 - Quality
 - Organisation and skills
 - Governance
 - Reporting
 - Assurance
 - Cost
 - Overhead costs
 - Additional staff
 - Opportunity costs
 - Control of costs
- **Termination**
- **The Niche replacement**

Initiation

Business case, tendering process and procurement

50. The fundamental business case for replacing CIS was clearly articulated and well supported. CIS was a key system which the Force believed was becoming obsolete and was no longer fit for purpose. The Force had also identified that the system was subject to increased risk of failure and would no longer be supported by the supplier. Given this context, the decision to replace CIS in 2005 was, in our view, reasonable.
51. By 2007, Surrey Police Authority and the Force had identified a larger scope of work based not only on the replacement system but also encompassing enhancements to many other business functions. The programme was named Enterprise. It was dominated, however, by the SIREN project.

52. The selection of Memex Technology Ltd (Memex) as the preferred bidder does not by itself appear to be a fundamental reason for the project's ultimate failure. However, we identified weaknesses in the procurement and evaluation process that suggest a lack of experience within the Force when dealing with a one off procurement with this degree of complexity. There is scope for improvement in how such procurement should be carried out in the future.
53. The Force undertook a significant scoping exercise to identify the requirements of the new system. A business case was produced which supported the procurement of the ICT aspects of the Enterprise programme through the Official Journal of the European Union (OJEU).
54. There are four main types of contract award procedure available under the public contract regulations:
- **Open** (commodity supply);
 - **Restricted** (where pre-qualification is needed);
 - **Competitive Dialogue** (used where requirements are not fully understood); and
 - **Negotiated** (genuinely unique requirement and rarely used).
55. The Force chose a restricted procurement route. This is commonly used in the public sector but requires the customer to have a clear understanding of their requirements so that tenders can be assessed against these requirements.
56. From an initial field of 14 bidders, nine passed the PQQ assessment. Following receipt of tender, three options were shortlisted:
- **Memex** - a tailored solution;
 - **Niche** - an 'off-the-shelf' option; and
 - **Northgate** - the incumbent provider.
57. The tender evaluation exercise clearly intended to take the relative risks of each option into account. However, in our view there were some weaknesses in the evaluation of the relative risks.

Weaknesses in the consideration of risk across the tender options

58. The three shortlisted tenders each represented differing degrees of risk in terms of ease of implementation. The Memex solution was the highest risk option as it involved the most development of products. The incumbent provider's new system and the 'off-the-shelf' solution represented lower risk options with less or no product development, respectively.

59. From the outset the Force was keen to find a solution that would fit around existing working practices and require the minimum amount of business process re-engineering. The Force had spent considerable time and money developing a detailed User Requirement with which tenders needed to comply. It was unlikely that any supplier was going to be able to meet this requirement in full using an existing product. This meant that some product development was always likely to form part of any solution. It is reasonable to assume that the greater the degree of required product development, the higher the risk that the solution would not deliver to time and budget. The risks associated with the degree of development were enshrined in both the Tender Evaluation Framework and Tender Evaluation Plan. These included:
- an assessment of each solution for compliance with the User Requirement; and
 - a weighting within the 'Innovation' section to increase scores for innovation that had already been developed relative to those that had not.
60. The risk management section of the tender evaluation also set out to assess implementation plans, critical path analysis and the use of a recognised or proprietary project management methodology.
61. However, the record of the minutes of the 'Preferred Supplier' day on 12 September 2008 suggests that some of the scoring decisions taken undermined the effective evaluation of the risks associated with the amount of required product development included in each solution:
- **Assessment and scoring of each solution for compliance with the User Requirement:**
Where suppliers had indicated that they were willing to develop their product to comply in full with the User Requirement they were awarded full marks. This meant that suppliers with partial compliance with the User Requirement could still obtain full marks by indicating their willingness to eventually comply with it in full. Consequently, some of the comparison between the amount of product development required by suppliers – a key element of the risk of each option – was lost from the scores.
 - **Assessment and scoring of each solution for innovation that had already been developed relative to those that had not:**
At the same meeting there appears to have been some additional consideration regarding the scoring for innovation. Two of the suppliers had their scores increased for "thinking over and above the requirements in their initial bid" and for innovation in relation to any "cutting edge technology forming part of the proposed solution". As a result two of the three shortlisted suppliers, one of which was Memex, scored top marks for innovation. This adjustment to scoring late in the process undermined the ability of the scores to reflect the different stages of development – and therefore the associated risks – for the innovation in each solution.
62. The selection of Memex as the preferred bidder does not by itself appear to be a fundamental reason for the project's ultimate failure. However, it is impossible to say whether the weaknesses in the evaluation of the risks in each solution, as set out above, would have materially affected the outcome of the evaluation exercise.

63. Notwithstanding the above, it is clear that the risks associated with the need to develop part of the solution were understood within the Force. In the Supplier Evaluation and the Assessment of Risk, written on 21 July 2008, the then Director of ICT commented that the "high risk suppliers", which in his assessment included Memex, "all had significant gaps in functionality and would require costly development effort, which in itself introduces the potential for 'scope creep'." As we explore later in this report, lack of control of scope was, in our view, one of the fundamental reasons for the project's ultimate failure.

Appropriateness of the chosen procurement route

64. It is evident from our review that there was some confusion about the exact nature of a restricted procurement process amongst senior officers in the Force and Authority Members in office at the time of procurement. During the later stages of the tender evaluation process the Force appointed third party consultants to carry out a cost clarification exercise which allowed the three short listed bidders the opportunity to provide "best and final" offers in terms of price. This falls outside the restricted process as set out in public procurement regulations, although the Force did obtain independent advice that assured them they were not in breach of EU procurement rules. Following the cost clarification exercise Memex was able to reduce the price of its solution significantly. This meant it was now the lowest price solution prior to the selection of preferred bidders. Given price represented 30 per cent of the overall tender evaluation, this represented a considerable advantage. However, had the restricted procurement route been strictly adhered to, this advantage may not have arisen.
65. As noted above, the restricted procurement route requires the customer to have a clear understanding of their requirements so that tenders can be assessed against these requirements. Despite the development by the Force of the User Requirement, the gap between the User Requirement and what providers had already developed – and thus the real 'product development requirement' of any solution – was unknown, and there was not clarity over the Force's understanding of the precise requirements of the new CIS solution. Given this, and given the scale and complexity of the solution being procured, the competitive dialogue procurement route, which allows for a more iterative approach to identify and agree specific requirements, may have been a more appropriate choice. This would have permitted the cost clarification exercise and the provision of "best and final" offers without deviating from the previously agreed procurement route.
66. In our view, given the scale and complexity of the solution being procured and the lack of certainty over the specific requirements, the Force and Authority should also have considered obtaining third party assistance with the procurement process from the outset.

Absence of clause for termination on grounds of convenience

67. The Force and the Police Authority were clearly aware of some of the risks to which they were potentially exposed and asked for a clause to be included in the contract that allowed for termination should Memex be taken over by a separate corporate entity. However, it is not unusual for contracts of this type to also include a clause for termination on grounds of convenience. Given the level of risk posed by the project it would not have been unreasonable for such a clause, or an equivalent break clause, to be included in the contract. This is particularly pertinent given the supplier insisted on a 'longstop clause' in the contract, which meant that all development monies defined in the contract would be due after a specified period of time, regardless of the delivery progress. The inclusion of a clause for termination may also have led to an earlier focus on termination when significant delays and overruns became apparent. It may also have subsequently reduced the termination costs payable to Memex on exiting the contract.

Conclusions

68. There were weaknesses in the approach used to evaluate risk across the tender options. In addition, the chosen procurement route was not consistent with the nature and complexity of the procurement being sought. Further, the contract agreed with the supplier did not contain a clause for termination on the grounds for convenience.
69. In future such situations, the PCC and Chief Constable should:

Recommendations

- 1. Ensure risk is evaluated appropriately when considering tender options.**
- 2. Ensure appropriate procurement routes are used, aligned with the nature and complexity of the procurement being sought.**
- 3. Ensure contractual clauses for termination on grounds of convenience are considered for large scale, long term procurements.**

Benefits

70. The outline business case for what became known as SIREN was developed using a series of workshops to identify benefits. These ranged from straight forward savings (e.g. termination of maintenance of old systems) through to intangible benefits such as improved customer satisfaction. It was thought the non-cashable efficiency savings may be as high as £31m over a 15 year period (Business Case 3 November 2008, version 5). Conservatively, however, forecast benefits of only £13.6m over a 15 year period were factored into the investment appraisal to offset the costs of Enterprise, leaving a net total investment of £5.2m over the life of the programme.
71. The Business Case (3 November 2008, version 5) forecast benefits up to March 2013 as set out in the following table:

Table 1: Forecast benefits from Business Case dated 3 November 2008 (version 5)

BENEFITS	2009/10	2010/11	2011/12	2012/13	TOTALS
Cashable savings		£140,204	£144,410	£280,671	£565,285
CIS Maintenance savings		£292,311	£306,927	£322,273	£921,511
CIS Training savings	£199,440	£410,847	£423,172		£1,033,459
CIS ICT support cost savings			£50,000	£51,500	£101,500
CIS App savings			£50,000	£50,000	£100,000
NSPIS Case savings		£173,000	£173,000	£173,000	£519,000
TOTAL BENEFITS	£199,440	£1,016,362	£1,147,509	£877,444	£3,240,755

72. This forecast savings of over £3.2m in the first five years, with cashable savings of £565k. Benefits for years 6 to 15 were forecast at a further £10.4m (bringing the total forecast benefits to £13.6m, as stated above).
73. From quite early in the project these benefits eroded significantly, calling into question how robustly they were scrutinised in the first place. A significant proportion of these savings would have been impacted by the late delivery. However, in the case of training (the largest single element in the first 5 years) there were clearly some weaknesses in the assumptions for numbers of trainers/staff, as well as salary costs, which means it is unlikely the envisaged savings would be delivered, even without the delay in the programme. A business case review dated 14 April 2010 concluded that any training savings before 2013 were effectively wiped out and "the benefits predicted beyond 2013 of £400k per annum must also be considered to be at risk".
74. Ultimately, SIREN delivered no benefit: none of the above planned benefits were realised. In real cash terms, officers informed us that approximately £1m had to be found elsewhere in the budget for the period that the project failed to deliver its anticipated benefits. In our view, the identification and quantification of future benefits in the business case could have been more robust, and subject to greater scrutiny.

Conclusion

75. Benefits were over stated, quickly diminished from the outset and ultimately were never delivered.
76. In future such situations, the PCC and Chief Constable should:

Recommendation

- 4. Ensure anticipated benefits are realistic, robustly challenged, fairly stated and achievable.**

Delivery

Programme and project management

77. Programmes aim to bring about change through a series of linked projects which deliver the capabilities required to fulfil the original vision. Enterprise in its original guise fits this category in that the core procurement was supplemented by a number of other interfaces to national systems and required a significant business change effort to become effective.
78. An essential part of any programme is
- having a good understanding of the strategic benefits;
 - understanding how each of the projects will integrate to deliver these benefits; and
 - being able to successfully manage inter-project dependencies and therefore risk to the achievement of the overall programme.
79. The SIREN project formed the majority of the Enterprise programme and comprises the design, development and implementation of a core suite of products including custody, case and intelligence for the Force.
80. Typically, the customer (in this case, the Force) specifies what is needed, undertakes a procurement exercise and awards a contract to the successful bidder. The supplier designs/builds the product and works alongside the customer through testing and implementation then, if successful, moves into formal support. This section examines the management of the project post procurement up to the decision to terminate.
81. It is worth highlighting some of the points made in a draft project document requesting additional funding from the Capital Strategy Board in the summer of 2011. This states the need to re-plan the autumn 2011 implementation date and cites reasons for delay as follows:
- *The organisation had a substantive lack of knowledge and experience regarding the management of large scale IT developments as most police IT systems are 'off the shelf' products.*
 - *The Agile development process did not have all the necessary checks and balances to control a growth in scope as the products progressed.*
 - *The four different products were developed in silos which lead to disparities and gaps between them.*
 - *There was no clear understanding of how far through the development the programme was.*
 - *The business engagement was not uniformly strong.*
 - *The organisation's objectives for the programme changed over the course of the programme's life.*
 - *There has been little stability in the programme leaders. There have been 5 Senior Responsible Officers and 5 Programme Managers.*

82. It is worth noting that the original plan for implementation (as stated in the Business Case dated 3 Nov 2008, Version 5) was to start implementation in September 2009 with an approximate 2 year roll-out. Per the above, this had since been revised to Autumn 2011, and this, too, was now considered in need of re-planning. Moreover, it is clear the Force was aware of some of the key factors contributing to the project's delay and, ultimately, its failure. The developing theme, in terms of reported progress, seems to be eleventh hour changes to major delivery milestones with 'rose tinted' progress reported in the interim, as will be explored further in this report.

Scope

83. The amount of product development required to deliver SIREN carried an increased risk that uncontrolled scope would derail the project. Although up to two years were spent by the Force prior to the procurement process constructing a specification, it is apparent that the scope of SIREN was never fully agreed nor understood by the Force and the programme team.
84. This lack of control of scope was particularly evident during the early stages of the project. Over 140 subject matter experts were involved in the project but appear to have been lightly managed in terms of what was added (controlled and uncontrolled) to the scope. This effectively allowed a 'free-for-all' and scope was neither controlled nor constrained.
85. The document: 'Programme Enterprise User Acceptance Test Strategy – Amendments for day one delivery', dated 26 January 2012, is described as an addendum to the original Test Strategy which was created in March 2011. The following quotes can be found in this document and highlight the uncertainty over scope which had existed throughout the life of the project:
- *"parts of the original Test Strategy were adhered to and parts were not"*
 - *"many of the testing types described were not planned nor factored into the programme schedule of testing activities"*
 - *"Due to lack of a change control process being employed throughout the software development life cycle and iterations of the development, the existing set of use cases have become an unreliable set of input documentation from which to design UAT [User Acceptance Testing] Test Cases and Procedures"*
 - *"The 300 test cases that have already been produced following the direction stated within the original Test Strategy will now be parked in an archive"*
86. This new strategy, from January 2012, had been informed by an exercise to align the required business processes (as described in the Police Activities Glossary (PAG)) with the SIREN system functionality. These were verified with Memex and business representatives through workshops held in January 2012. This approach does demonstrate good practice in that it started to control and reduce the scope of the project with a view to simplifying it and bringing delivery back in to tolerance. However ultimately this decision came too late in the process and was not sufficient to remedy the situation. When Mazars LLP, at the request of the PCC, undertook their final review of the project prior to termination, they reported that the outstanding scope was subject to on-going discussions and still not fully agreed between customer and supplier.

87. Another significant factor affecting certainty of scope is that key interfaces to national systems were not quantified in terms of time and cost until September 2010. This is one year after roll-out was originally due to commence. The SRO at the time was particularly frustrated that the IT department was unable to formulate any estimates until this point.
88. The lack of control over scope appears to be one of the principal reasons for the ultimate failure of the project. The Force was not sufficiently clear what it wanted SIREN to deliver and this lack of clarity was compounded by the lack of understanding of the Agile methodology. From the supplier side, Memex did not address this shortfall by taking opportunities to assert a more robust configuration control environment. The contractual longstop date later prompted a significant review of scope from both sides.

The Agile methodology

89. The Agile methodology requires an agreed set of specifications and an agreed set of user acceptance tests based on these specifications for each of the software modules. It also requires clarity of requirement and rapid feedback from the client. Whilst a detailed user requirement was created by the Force, we can find no evidence that a functional specification for the system was ever formally agreed between the Force and Memex. The absence of this functional specification means it would have been difficult to hold the supplier to account on quality issues and issues over interfaces with national systems. Had the Force been able to successfully implement the Agile approach in the development of SIREN, it could have provided an effective check on the scope of the project and provided a safeguard against escalating costs and slipping deadlines.
90. Agile is a recognised industry standard approach. The choice of Agile was understandable given:
 - the amount of product development required during the project;
 - the lack of clarity regarding the specifications and requirements from the new system; and
 - the collaborative approach which was envisaged in the business case.
91. The use of Agile was Memex's preferred approach and was included in their tender as the way their solution would be delivered. The Force and its staff had very limited experience of managing projects using Agile, although it should have been aware from the tender that the programme was going to be delivered using an approach with which it had very little experience. The Force's corporate change and project management structures were based on the PRINCE 2 methodology. The project management and team skill sets required to deliver projects using Agile are significantly different from those required for more traditional project management approaches (like PRINCE 2). The lack of understanding of the Agile approach was evident from our interviews of staff. None of the people we interviewed within the Force were able to say which particular variant of Agile was used.
92. The Agile methodology delivers iteratively in order to gain early benefit. To achieve this it requires close integration of customer and supplier teams. The programme organisation put in place by the Force was not optimised for this approach. This was compounded by the geographical distance between the Memex team (located in Scotland) and the Force team (located in Surrey).

93. Despite the fact there was no acceptance of the iterative modules delivered, subsequent modules continued to be delivered. Neither Memex nor the Force sought to resolve this issue at an early stage. In our view, this contributed to the risk of the project rising above acceptable levels and was fundamental to the project's ultimate failure. This was compounded by the Force's inexperience with the Agile approach and the weak control of project scope.

Plans

94. During the project's life there were more than 35 different versions of Microsoft project plans. Fourteen of these plans were entitled 'Replan' and related to the period from July to September 2011. We reviewed what the Force believed to be the earliest plan (PE_PP_Dec_0.1) and the latest (SIREN Replan 290911, version 14).
95. The project plans are not of a high quality and do not fully support the reported milestones. It is at times difficult to see how the plan was used effectively to manage the project. Specific areas of concern include the following:
- The structure of the plans initially did not reflect the delivery methodology (Agile). With around 16 different software drops, we would have expected the plans to set out 16 cycles of test and acceptance, and potentially 16 implementation cycles.
 - In some instances the top down structure and logic of plans is questionable. In the October 2011 plan, for example, both Site Acceptance Testing (SAT) and User Acceptance Testing (UAT) are due to be completed (with dates of 3 November 2011 and 12 December 2011, respectively) before the test strategy, with a date of 22 December 2011, is due to be completed.
 - There are a number of activities which do not have predecessors or successors in the plans. These should be clear for all activities and demonstrate the impact on progress when a preceding activity is late. These would also allow the user to determine the critical path and ascertain what contingency was in the plan. The lack of contingency was cited in interview as the reason the project status remained red overall during the final 2 years. It is difficult to see exactly how this was determined from the plans reviewed.
 - On occasion key milestones appear to be linked to the wrong activity.
 - Few activities have resources assigned to them. Assigning resources to activities assists in task ownership and accountability.
 - There are activities not in the plans which might reasonably be expected to be included – e.g. business change activities.
96. It is vital in any project that key critical milestones are identified, defined and agreed up front to allow the Programme Board and wider stakeholders to challenge the team appropriately. The milestones reported were not always hard and were sometimes ambiguous as to exactly what was being delivered. For example, to report that "the D1 development was complete" is a softer and more ambiguous milestone than "D1 has successfully completed its Factory Acceptance Test".
97. We compared the 're-plan' dated 29 September 2011 with the Programme Highlight Report dated 17 October 2011. Given there is approximately 2 weeks between the plan and report one would expect a good correlation with the reported milestones.

Table 2: Comparison of Highlight report dated 17/10/2011 with Plan dated 29/09/2011

Milestones	Plan: 29 Sept 2011	Highlight report: 17 Oct 2011	Comment
<i>Critical project milestones (since last report) baseline / actual</i>			
Finalisation Hothouse commences	25 July 2011	5 Aug 2011	Commencing activities are much softer milestones than completion ones.
All D1 development work complete	27 Sept 2011	30 Sept 2011	Two dates in highlight report show planned and actual although this appears to be beyond the date of the report. It is also one month late.
Memex & Surrey Police commercial meeting	Not found	5 Oct 2011	Planned meetings are an easily achievable milestone and represent a third of the reported 'critical milestones'.
<i>Critical project milestones ahead: forecast dates</i>			
SIREN D1 product delivered to Surrey police	21 Oct 2011	21 Oct 2011	In line with the plan but given the development was only completed on 30/10/11 this cannot be correct. In addition, factory acceptance normally takes place after the development work is complete, adding another 2 weeks before delivery.
Environments and Application ready for testing	27 Oct 2011	24 Oct 2011	Load set up does start 3 days prior to this which questions the logic in the plan.
SAT complete	3 Nov 2011	3 Nov 2011	In line with plan but clearly should be reported as late due to late delivery of D1.
UAT cycle 1 complete	12 Dec 2011	1 Dec 2011	As above and dates reported on highlight report are for a different milestone.
First cycle of testing complete/ready for cycle 2	Not found	8 Dec 2011	
UAT cycle 2 complete	7 Feb 2012	26 Jan 2012	As with UAT cycle 1.

Milestones	Plan: 29 Sept 2011	Highlight report: 17 Oct 2011	Comment
Release received to be used for training	Not found	9 Feb 2012	
Training preparation	Not found	9 Feb 2012	This is vague – training appears to have commenced much earlier in summer 2011.
UAT cycle 3 complete	16 Mar 2012	8 Mar 2012	As with UAT cycle 1
UAT cycle 4 complete	1 May 2012	23 Apr 2012	As with UAT cycle 1
D1 ready for Go Live	11 May 2012	11 May 2012	On plan until March 12 report when it is pushed back to 18/5/12. In April 2012 it slips again to 31/5/12. In May this is then substantially de-scoped to a read only version (for delivery in June) with original D1 go-live now put back to September.

98. This comparison examines one point in time but, given the plan and report are within a few weeks of each other, the discrepancies are notable. At the point at which the final plan was drawn up the overall status of the project was red but all forecast milestone dates in the plan were shown as green.
99. Subsequent reports show the key milestones above being delivered more or less to planned dates. However, by May 2012 the highlight report reflects a decision to go live in June with a read-only D1 delivery, with the actual date for full delivery now being deferred to September 2012. Subsequently there was further re-planning activity and a further two cycles of testing were introduced. There is also evidence that further scope had to be put back to a later date to attempt to maintain delivery schedules.
100. Prior to the major change in May 2012, all highlight reports from October 2011 to April 2012 reported the milestones in the above table (Hothouse commences, D1 development work complete and Memex/Surrey Police commercial meeting) for progress in the current period, plus additional period achievements. This gives the impression, at a glance, that there was more progress in the period than there was in reality. The milestone progress of the testing cycles again appeared to be showing good progress through cycles 1-4, whereas the narrative showed that a significant amount of failures occurred during this testing and were not fully addressed prior to the next cycle, as they should have been. It would have been more accurate (and less rose-tinted) to have reported that one or more of the initial test cycles had failed and put the date back, rather than introduce two further test cycles. This would have provided a more accurate representation of progress. In interview, the programme director stated he did not believe that putting dates back was an option open to him.

101. It is also worth noting that the original roll-out was planned to commence in September 2009. As of the May 2012 Highlight report, the actual planned roll-out of the original D1 scope (a partial delivery) was now planned for September 2012, 3 years behind the original plan. Subsequently, this milestone was also missed.
102. The weaknesses in the quality of the initial plans is a concern. Of greater concern is the pattern of inconsistent reporting which presents an inaccurate and overly positive picture in respect of progress. The evidence suggests that as the delivery of milestones was missed, the implications for the delivery of subsequent key milestones were not adequately considered. Moreover, the plans themselves were not being accurately updated to reflect the most recent events. The failure to properly acknowledge or report missed milestones in a timely manner means effective corrective action could not be taken, increasing the likelihood of project failure.

Quality

103. There were issues with the technical delivery of the project through its life cycle which delayed implementation and increased costs.
104. In line with good practice, the ICT team created four environments within which to support the development. These were:
 - Test;
 - Development;
 - Live; and
 - Training and Practice.
105. Memex is of the view that these were not delivered in time to enable the testing to be undertaken earlier in the project, and that this impacted on the testing and acceptance of the developed modules.
106. Memex had not previously deployed on the Force ICT team's preferred operating system. They were not, therefore, in a position to provide a specification of the hardware needed to run the software they were delivering. This was a key issue. The ICT team reported that this made designing the infrastructure very difficult and as a result they approached commercial partners for help with designing the delivery platforms. Two industry standard platforms were tried. When neither worked, a bespoke platform for SIREN was developed by a third party provider over time, and at cost to the Force.
107. The ICT team expressed the following concerns:
 - Doubt as to whether the product could work in a high availability environment – a core requirement for the Force. The product was a text based database, not Sequel or Oracle based, which meant that it would be inherently inefficient for a high availability system.
 - The product had a memory leak that remained unresolved. It should have used 64mb of memory but instead was requiring between 500mb and 600mb.
108. The design of the high availability environment relied upon multiple databases that needed to remain in sync for searching and reporting. The project's final programme director considered that this design complexity contributed to the subsequent platform and performance problems.

109. The delay in testing can also be attributed to the inability of the Force to recruit a suitable Test Manager. This did not happen until September 2011 (two years later than the original planned implementation date). Prior to this, test resource was offered by Memex to help alleviate this problem but this offer was not taken up by the Force.
110. When the new Test Manager came into post he managed a team of 6 test analysts and inherited a test strategy that had been produced by a consultancy company. The Test Manager recalled the following issues as at September 2011:
- The 6 test analysts were not all experienced testers, did not have an in depth understanding of this area and did not have Terms of Reference detailing their role.
 - The requirements against which the testing was being designed were unclear and did not offer traceability on which to design test cases.
 - Only 'front end' testing had been carried out with nothing formally accepted.
 - There had been 15 iterative builds of the product over 18 months.
 - An inadequate change control process and incident tracking system was in place.
 - The final build release version 1.5 was due on 21 October 2011.
111. A series of decisions and actions were then taken that were all appropriate in seeking to address the issues experienced to date. The decision was made that no more iterative builds would be allowed. Arrangements were made for Business Analysts from Force Improvement to work with Memex to produce process maps, mapping the Force's processes to the Police Activities Glossary (PAG). Over a period of approximately 3 months, 212 system process maps were created along with four high level process maps. In parallel, the Test Manager created a revised test strategy (dated January 2012) which would map test scenarios to these agreed processes. In addition, terms of reference were created for the roles of the test analysts and a series of workshops run both for the testing team and wider stakeholders.
112. The Test Manager did not believe that the Agile approach to the development and delivery of the software modules was appropriate, citing as evidence the lack of progress and formal acceptance to date. The 'Waterfall approach' to testing was implemented once the process maps had been agreed. This followed best practice with the classic FAT (factory acceptance testing), SAT (site acceptance testing) and UAT (user acceptance testing) phases. Test plans and scripts were designed and results were documented with metrics. The change control process and incident tracking system were also re-designed.
113. The new test strategy had four user acceptance testing (UAT) cycles, each with testing entry and exit requirements. None of the exit criteria were met for any of the cycles. There were also new interfaces coming online during the UAT cycles, meaning the testing had to revert to factory acceptance and site acceptance testing.
114. Further issues occurred during 2012. The revised implementation date of June 2012 was missed. In July/August 2012 the build was tested but it still had faults and missing functionality. Memex offered version 1.11 of the product for November 2012 but this would only deliver half of the Force's requirements. They also offered version 1.12, which would meet all of the Force's requirements, for January 2013 and advised that it would be best to wait for version 1.12. The Force agreed.
115. Towards the end of the project, the project team exercised the contractual provision to attend FAT. This enabled the testing team to gain a much better understanding and rapport with their counterparts in Memex.

116. At the date of cancellation, it is generally believed by the project team that the latest application could have been released by August 2013. However, each of the technical staff interviewed referred to on-going concerns with the interfaces between the software, the complexity of the coding used and doubts as to the viability of future developments. All technical staff interviewed agreed that the Niche replacement solution should be a more reliable system and should deliver at least the same functionality that would have been provided by the de-scoped Memex product.

Organisation and skills

117. Several SROs, programme directors and project managers were assigned to the project over its lifetime, with police officers predominating in these roles. The appointment of police officers into key project roles was highlighted as an issue of concern from several interviewees. It was clear that, whilst all were experienced and proven police officers, they could not necessarily be expected to have the appropriate skills and experience to undertake a complex ICT project of this magnitude. This view was commonly expressed by serving officers, police staff and Authority members, who attributed the predominance of police officers into key project roles as the general 'police culture' in Surrey.
118. Some key roles weren't filled in the team until it was too late. There were some substantial problems encountered in the recruitment of key posts, including the project manager, the test manager and training managers. The absence of people in these key roles resulted in delays not being arrested and barriers and obstacles not being resolved. An appropriately skilled project manager may have been able to more quickly identify the issues and address the situation with corrective action. The difficulties in finding and retaining suitably qualified staff and the overall lack of clarity about the roles and responsibilities within the project not only acted as barriers to the project's successful delivery, but also weakened the governance arrangements within the programme and project team.
119. A report on Enterprise resourcing in June 2011 cited a number of issues including:
- "a lack of skilled resources, high rate of attrition, recruitment issues, low staff morale, overwork by key individuals and a high number of HR issues. This had caused some of the issues such as missing functionality, undeveloped test plans and critically slipping time scales."***
120. A memo from the Programme Director to Human Resources (HR) in June 2009 underlines some of these difficulties. It details a failed attempt to recruit a Project Manager at band L (£46-£49k) where 17 applications were received but none met the criteria. The role was advertised again at a higher rate (£57k) which did attract a candidate who was given a contract but subsequently moved on. There were several other project managers who followed but these delays and failure to recruit or retain the right person in the first place underline the lack of experience in resourcing a project of this scale. It was not until September 2011 that a project specific resource manager was recruited to the team.

121. The principal reasons for the difficulties to recruit and retain appropriately skilled staff centre around limits on cost, issues with security clearance and the recruitment process not always accurately targeting the project's needs. In response to this the Force recruited a dedicated resource manager in September 2011. This seemed to address some of the underlying HR issues and in the later stages of the project people were successfully recruited to and retained in key roles. This had a positive impact not only on the progress of the project but also on the morale within the team, as highlighted by the results of the Enterprise staff surveys undertaken in November 2011 and March 2013. Of the 15 questions in the surveys, five are reproduced below. The scores for these questions, recorded in November 2011, were significantly below the Force average. Considerable improvement could be seen by March 2013 in the survey results:

Table 3: Staff survey results

Question	November 2011	March 2013	Improvement (%)
I know what my role entails on a day to day basis	42.4	86.4	103%
My line manager treats me with respect	66.7	85.7	28%
My line manager takes my views and opinions seriously	57.6	76.2	32%
I am given real opportunities to improve my skills	30.3	68.4	125%
I feel trusted and empowered to do my job	48.5	81.8	68%

122. This and interviews with selected team members supports the opinion that the team was developing positively and in the latter stages had recruited some good skills. However, much of this improvement appears to have come too late in the process. It is of particular concern that, as late as November 2011, less than half the team had a good understanding of what their role entailed.

123. When undertaking a project of this nature it is important to ensure that skills are specific to the requirements of the brief and that the people filling those roles are appropriately skilled. The responsibility for these gaps in skills, knowledge and experience falls to the wider organisation and those who appointed them, rather than individuals. An organisation whose core business is not delivering complex ICT projects is unlikely to know or recognise what is required to do so successfully. A thorough assessment of whether the Force and Authority possessed the skills required to deliver and oversee the project from the outset may have resulted in a different outcome.

124. However, it is also important to acknowledge that those leading the project did genuinely try to recover the position and did do a number of things right – for example, the de-scoping exercise and subsequent contract variation agreed by Memex and the Force. It should also be recognised that, even when termination was a real possibility, the team were unwavering in their efforts to recover the situation in the belief that it was improving and could have delivered. It is laudable, given the pressures at the time, that their motivation and belief remained intact. It also appears that throughout the life of SIREN the organisation was learning, albeit it has proved to be an expensive lesson. Some of those lessons have already been implemented in the procurement and implementation of the replacement Niche solution.

Conclusions

125. There was a failure to understand what was required under the Agile project management approach and the use of the Agile methodology was not effective. From the outset there was no experience on the customer side (the Force) of this approach – a key factor in the success of using it.
126. From an early stage, there was no acceptance of the iterative project modules delivered. Despite this, subsequent modules continued to be delivered. Neither Memex nor the Force sought to resolve this issue at an early stage. In our view, this contributed to the risk of the project rising above acceptable levels and was fundamental to the project's failure.
127. Scope was poorly controlled and a key reason for prolonged timescales and cost escalation. For example, national interfaces, a key element of the project, were not included in the initial scope and budget. In addition, Memex did not take opportunities to assert robust configuration control from the supplier-side.
128. There were a substantial amount of changes in the Senior Responsible Officer (SRO) and Project Manager roles, along with some dis-functionality of the organisational arrangements below this.
129. There was a failure to recruit, retain and allocate appropriately skilled and experienced resource to the programme. The Force failed to recruit for some key roles until very late in the project's life – for example, the key roles of business change analyst and test manager, amongst others.

Recommendations

5. ***The Force should ensure that it has properly considered what skills, resources and expertise it has at its disposal to procure and deliver large scale, complex programmes, acknowledging that Police Officers cannot simply be parachuted into a role they have no experience of and be expected to perform. Consideration should be given to:***
 - a. *engaging a third party provider;*
 - b. *engaging with external partners; and*
 - c. *seeking external procurement expertise for elements outside the normal force experience.*
6. ***Given change is a constant in the current policing environment the Force should ensure some of their senior officers and staff are formally trained in change management.***
7. ***Having undertaken a number of 'lessons learned exercises for SIREN, an independent review of whether learning has been implemented needs to be undertaken.***

Governance

130. The project's high level governance frameworks were appropriately designed and followed existing guidance. There was a programme board in place which was chaired by an ACPO ranked officer as Senior Responsible Officer (SRO) and included Police Authority Members who had some experience over project management. In addition, the project's progress became a standing item on the agenda for meetings of the Authority's Finance and Performance Panel and the Force's Chief Officer Group (COG). Beneath the programme board the structure of the team as initially envisaged was also appropriate. However, there were significant periods during the project's life where the roles and responsibilities did not operate as intended.
131. A core part of ensuring effective governance in a project such as SIREN is the creation of checks and balances within the project and the project team. These generate 'healthy tensions' which are important to ensure the project stays on track and meets its intended objectives. Segregation of key functions, such as project controls and assurance, and also between individual roles within the project, enables them to operate from the correct perspective and fulfil their intended role effectively. We have identified a number of instances within SIREN where this separation of roles does not appear to have been maintained, undermining the effective governance of the project:
- From October 2010 the programme director was effectively the SRO whilst still remaining involved in the day to day delivery of the project. This resulted from wider structural changes to the Force which reduced capacity at a senior level. This meant the formal SRO no longer chaired the programme board meetings, chairing instead the Strategic Change Board which added to its agenda the holding to account of the programme board. This devalued the role of the programme board, compromising its ability to challenge and scrutinise the progress the project was making and escalate issues to the wider organisation.
 - From July 2011 the project manager and business change manager roles appear to have been undertaken by the same person. This is based on the evidence available in the project reports, although the project manager and programme director have since stated that, despite the reporting, this was not the case in practice. For projects which involve a significant amount of business change, the business change manager takes on the role of 'internal customer' for the project as well as responsibility for delivery of the benefits. Project governance arrangements missing this key individual, or not having clarity around this important role, can significantly undermine the project implementation and benefit realisation.
 - Difficulties were encountered in recruiting and retaining to key posts on the team (as discussed in the previous section) including the project manager, testing manager and training manager roles. The absence of people in these roles not only created delays but also undermined the internal checks and balances within the project.
 - One of the key functions in project governance is the role of project quality assurance, often referred to as a Project Management Office (PMO). Within the Force, this role was part of Force Improvement's remit. However, the Head of Force Improvement has stated that Force Improvement was never set up to be a full PMO in the usual sense. Resources allocated to the programme from Force Improvement were intended to be tasked by the programme, leaving the quality assurance aspects of the PMO role to the Head of Force Improvement. The Head of Force Improvement's main role, however, was focused on oversight across a number of other significant change programmes at the same time as the SIREN project. Given the volume of change taking place in the organisation during the life of the programme, it is unlikely there was sufficient capacity for the Head of Force Improvement to adequately discharge the PMO role.

132. These findings indicate a lack of understanding of some of the fundamental aspects of project governance and the purpose of various roles within the project team. This uncertainty is reflected in the results of the staff survey in November 2011; as highlighted in the previous section, only 42.4% of the SIREN team felt that they knew what their role entailed on a day to day basis.
133. The effectiveness of the Programme Board can be assessed by examining whether the urgency of issues was understood and whether they were dealt with promptly. The issue and risk lists presented to the Programme Board in December 2012 showed the following:
- a total of 16 open issues
 - a total of 8 risks – 1 very high, 6 high and 1 low risk.
134. An issue can be defined as 'a risk that has a 100% probability' – in other words it is a current barrier to progress and is having an impact on the project. By their nature, issues are often beyond the capability of the project team to resolve (otherwise they would have resolved them) and are therefore referred upwards for resolution. Issues may include a shortfall in funding or a skills gap.
135. Of the 16 issues in the log, 14 had been identified in 2012 but two had been outstanding since 2010. They were:
- *"Ent prog 01 - Phase 2 requires more detail to finalise contents. "*
 - *"ICT 01 -staffing required to support may be additional to current resource...5+ additional staff? whose budget? potential £120/130k cost. In addition there needs to be system admin activity within the business teams, which means absorbing tasks into current roles or adding to headcount. "*
136. Taking each issue in turn:
- **Ent prog 01**
In essence, this issue concerns the definition and agreement of what constitutes the scope of Phase 2 of the project. This issue would not fall into the category of 'beyond the scope of the team' as it appears to be an on-going negotiation over what is or isn't included in the scope of the project. However, from the minutes of the board meeting it transpires that phase 2 is at risk because it no longer fits within the funding window. The action requested from the board in response is that this issue is closed and a new one is opened regarding the issue of insufficient funds to undertake phase 2 with a supplementary action to quantify this. This action correctly identified the 'real' issue as opposed to the original presentation which was a statement of work in progress.
 - **ICT01**
The second issue again relates to affordability and from the minutes of the meeting and the narrative accompanying this issue there appears to be both action and progress with requests for funding being escalated through Gold Group and to the PCC, as well as action from the board on ICT to clarify the split of responsibilities.

137. There is clear evidence that the Programme Board were probing issues and taking appropriate action. However both of these issues had been outstanding since 2010, raising questions over the timeliness and urgency of that action. Furthermore, the minutes of this meeting imply actions for each of the nine issues discussed at the meeting, but only one was formally allocated an action owner. This suggests a lack of clarity over who was responsible and ultimately accountable for progressing the actions against each issue.
138. The analysis of the issues and risks reported to the Programme Board also suggests a misunderstanding of what constitutes an issue or a risk. We noted several examples of reported issues which were not issues because they were within the capability of the project team to resolve. Many of these related to core scope which hadn't been determined. Some examples include:
- *"T2 – work is required to establish transition plans. "*
 - *"T7 – ...no existing or out of date process and procedure documentation."*
139. In other cases issues flagged were really risks. For example:
- *"T5 – staff forgetting what they have learned before go-live."*
 - *"PDI 38 – 100+ workarounds which introduces the risk of user error."*
140. Equally, some risks were reported as risks when evidence suggests they had become issues. The highest risk reported was "Ent Prog 01 '...a plan without tolerance'". The comments made regarding this risk indicate that it had in fact become an issue as the project had slipped and the Project Manager had issued an exception report.
141. A review of the minutes of meetings suggests the Programme Board took an informative approach to managing the project rather than taking any active intervention. Discussions held as part of this review indicated there was significant activity: use of Gold groups, briefings at COG, review by Authority members and review of the project team by the Head of Force Improvement. However, none of this was sufficient to recover the programme and bring it within tolerance. Given the project was rated as red for the last 2 years of its existence it is surprising that a more co-ordinated and coherent recovery plan was not implemented to bring the project back into tolerance.

Conclusions

142. Governance was set up in accordance with best practice and had senior representatives from both the Force and Authority. However, senior representation, in particular in chairing of the Programme Board, diminished in the latter stages of the project.
143. There was a failure to understand the controls, checks and balances needed to deliver effective governance within a project management environment. In some instances, roles that should be delivered by separate individuals appear from the project reports to have been effectively combined and delivered by the same person. This weakened the 'healthy tensions' between these roles that need to exist to safeguard effective governance within the project.
144. There was a lack of clarity over what constitutes an issue or a risk. This may have prevented issues from being identified as such and escalated into the wider organisation for resolution.

Recommendations

8. ***The 'healthy tensions' between roles required for effective project governance should not be undermined or diluted during project delivery. The Project Management Office should be independent from day to day project activity and play an active role in assuring information is accurate and supported before it is presented to the programme board.***
9. ***There should be clarity over what constitutes an issue or a risk. This allows issues to be identified as such and escalated into the wider organisation for resolution.***

Reporting

145. To fulfil their roles effectively, project teams, programme boards and wider stakeholders in the governance arrangements are reliant on having timely and appropriate information which has been independently assured. Highlight reports are a key board level report and need to convey, effectively and efficiently, the progress and status of the project. Board members should be looking at changes to status, probing and challenging the reasons for changes and making decisions on a way forward. Essential core attributes of a highlight report include:

- **Relevance to the period.** Monthly reports should cover progress in the period with planned activity for the next period. Milestones should be selected which are representative of the previous month (should be completed), current activity (should be completed by next meeting) and the future (will be current activity for next meeting possibly with some major milestones which are further in the future).
- **Consistency.** For each monthly meeting there is effectively a three month rolling window where, for example, future milestones (month 1) move into current period (month 2) and are then shown (once) when they are completed in the third monthly meeting.
- **Presence of hard milestones.** 'Hard' milestones are undisputable and should generally be completion milestones as opposed to milestones for starting activities (with some exceptions, for example milestones in respect of the start of roll out and milestones in respect of training).
- **Completeness.** The report should highlight all issues (generally defined as those things which are impacting on the project) and top risks.
- **Financial relevance.** The report should contain the relevant financial information covering budget, actual and forecast spend over the period, as well as the overall status of the full forecast against baseline.
- **Narration and context.** The report should include narrative which supports the reported progress and an indication as to what decisions/actions are required from the board.

146. When followed, these attributes allow project board members to robustly challenge the Project Manager, focus on removing blockages and communicate accurate information to wider stakeholders.

147. One of the main reporting mechanisms from the project was from the programme highlight report produced each month for the Programme Board. In general, the project highlight reports fell short in a number of aspects. We examined a selection of reports covering the 2010/11 period. Below is a summary of our findings, focusing on the adequacy of reporting against milestones.

- **Report date 1 Oct 2010 (footer report date 13 Oct 2010)**
 The milestone 'SP functionality Review Build 8' is reported as being completed on time (6/9/2010) but the accompanying comment, 'Due to bugs, this is still under review' contradicts this. Test Strategy, Test Plan, Training Needs Analysis and LMS Contract milestones are all reported as TBA (i.e. not complete) but without any forecast date for when they might be done. Fifteen milestones forecast for future periods are all green except one which is amber. Overall report Amber.
- **Report date 22 Dec 2010**
 Test strategy and test plan are still reported as current milestones but now have red completion dates of 10/10/2010 – these milestones have now seemingly been completed around the date of the previous report. The 'SP Functionality Review Build Complete' (note this is a hard milestone) now has the actual date of 6/9/2010 highlighted in red with the comment 'Due to bugs, this is still under review (as are all the builds due to lack of acceptance testing)'. In other words, this milestone has still not been completed. Despite there now being a couple of red milestones in the forecast, the start of roll out is still green and 'on track'. All future delivery dates of software build are green, despite none being accepted to date. Four of the forecast milestones actually fall within the current deliverable period but are shown as future milestones. Overall Report Amber.
- **Report 11 Feb 2011**
 Test strategy milestone repeated exactly as in the previous report, and the test plan milestone has inexplicably disappeared. Custody UAT (a future milestone) is shown as on target for 1/12/2010 (2 months prior to the date of the report) with the comment: '1 month. Due to end 28/12/10 but on-going because delay to build. Must be completed by end Feb'. Delivery of Acceptance Manual is reported as delivered to target on 31/1/2011. The 'start of roll out' milestone is still green and considered on track. Two of the forecast milestones fall within the current deliverable period. Overall Report Green.
- **Report 16 March 2011**
 Test strategy milestone is now shown in future milestones with a forecast completion date of 31 March 2011 (the baseline was 23/4/2010 and this was previously reported as complete in earlier reports) with the accompanying comment: 'Delayed due to previous lack of expertise. Now nearly completed by Test manager (with assistance from a consultant)'. Start of Roll Out is reported as being on track. Three of the forecast milestones fall within the current deliverable period. Overall report Amber.
- **Report 19 April 2011**
 Most future milestones are now red. In addition the delivery acceptance manual, which was reported as delivered to plan in the February report, is now a red forecast milestone with a date indicating completion will be 31/03/2011. Start of Roll Out is now rated red and TBC. Overall report is now rated red and does not recover from this rating up to termination.
- **Report July 2011**
 There are no current period milestones reported for SIREN and only one future milestone. All other milestones reported relate to the other three (minor) projects under the Enterprise programme. Again, this does not follow best practice and would make it difficult for board members to gauge process and challenge effectively.

148. The inconsistencies highlighted above are also prevalent in reports from other periods during the project's life. These inconsistencies lend further weight to the notion that milestones were not underpinned by robust plans. The summary above highlights again the concerns about the frankness and accuracy of some of the reporting during the life of the project. Reporting of progress was at best 'rose-tinted' and at worst inaccurate, inconsistent, confusing and misleading. Whilst the desire to project a positive outlook and to not report "bad news" is understandable, it hindered the ability of the Programme Board, (and, ultimately, COG and the Authority) to provide robust scrutiny and challenge. This meant issues were not identified and responded to sooner, resulting in delays and extending the life of the project beyond planned timeframes.
149. However, the most significant inconsistency took place in 2010. A briefing note from a workshop with the Authority, dated 15th July 2010, stated:

"The Enterprise project had begun in 2006, but Members were assured that the project was on course to deliver as planned and was currently around 60% complete."

150. This statement is in stark contrast with the overall status of the programme during the period, reported in the highlight reports, which was red for June, July and August 2010.
151. The traffic light indicator of the overall programme, as reported in the highlight reports from January 2008 until February 2013, is shown below in Table 4.

Table 4: RAG status on highlight reports reviewed

	Jan 2008	Feb 2008	Mar 2008	Apr 2008	Jun 2008	Sep 2008	Dec 2008	Jan 2009	Feb 2009	Mar 2009	Apr 2009	May 2009	Jun 2009	Jul 2009	Aug 2009	Sep 2009	Oct 2009	Nov 2009	Dec 2009	Jan 2010	Feb 2010	Apr 2010	May 2010	Jun 2010	Jul 2010	Aug 2010	
Sep 2010	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Oct 2010	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Dec 2010	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Feb 2011	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Mar 2011	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Apr 2011	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Jun 2011	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Jul 2011	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Sep 2011	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Oct 2011	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Nov 2011	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Dec 2011	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Jan 2012	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Feb 2012	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Mar 2012	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Apr 2012	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
May 2012	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Jun 2012	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Jul 2012	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Aug 2012	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Sep 2012	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Oct 2012	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Nov 2012	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Dec 2012	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Jan 2013	Red	Yellow	Yellow	Green	Yellow	Red	Red																				
Feb 2013	Red	Yellow	Yellow	Green	Yellow	Red	Red																				

152. What is immediately obvious from the table is the project status moved into red in April 2011 and remains in that state for the next two years until it is terminated. This is not good practice. Highlight reports are a key board level report and need to convey, effectively and efficiently, the progress and status of the project. In best practice terms a red indicator means that the project is in exception: it is not going to deliver, within tolerance, to time, cost or quality or a combination of all three. Board members should be looking at changes to status, probing the reasons for change and making decisions on a way forward, including escalation to the wider organisation if appropriate. If, for example, the reason the project was red from April 2011 is because there was no contingency (as cited by one respondent) then the following process could be expected to be followed:

- the Board might reasonably request that re-planning was done.
 - the new plan would be presented to the Board with an impact statement, i.e. time, cost, scope changes.
 - this would either be accepted or rejected by the Board.
 - in the case of acceptance, the new plan would come into being with new tolerance and the project would go back to green or amber (depending on the nature of the change).
 - if rejected there may be a request for a more fundamental change or examination of options available which, in the worst case, would be termination.
153. Without following this process the project could be getting deeper into exception each month without a key indicator highlighting the fact (as it doesn't get higher than red). Once a project reaches red the extent to which it continues to go out of tolerance is difficult to monitor.
154. There were other weaknesses in the quality of the reports. Risks and issues were not explicitly identified in the highlight reports, although risk logs and issues were reported regularly at the board meeting. Again, best practice would require the top risks and all the issues to be reported, along with some suggestion as to what the project required from board members to manage and overcome these.
155. Financial reporting is presented in the highlight reports in financial year periods only. This is not adequate. It does not provide sufficient granularity to properly manage the financial aspects of the project on an on-going basis. To meet a minimum standard the report should have shown monthly actuals, forecast and variations for financial information, reporting against the project budgets and timescales rather than the Authority's financial year. This would have allowed challenge on cost over/underspend, enabling board members to better understand project variances (rather than variances to the Authority's financial years of account), provide robust challenge to such variances and thus add value in this respect. The weaknesses in the financial reporting data were evident in the difficulties experienced by the project team in producing a full cost of the scheme to date to inform the business case for the decision to terminate.
156. In projects, what is reported by the team should be assured by an independent part of the organisation, often referred to as the Programme Management Office (PMO). In the case of SIREN, this was a function of Force Improvement. This body gives members of the board some assurance that the details reported are correct, moving the debate away from the finer points and allowing the focus to be the key issues, risks and decisions. The Force followed best practice by having this assurance function in place for the SIREN project. However, the considerations earlier in this report indicate that this role was not always operating fully effectively.
157. Outside of the Programme Board there were a number of meetings where aspects of the project were subject to scrutiny and challenge. Within the Force regular updates were taken to the Strategic Change Board with more occasional information being reported to the Chief Officer Group. Similarly, updates were regularly presented to the Authority's Financial and Performance Panel with more occasional information being reported to full meetings of the Authority. The Force's Chief Officer Group and the Authority were the bodies ultimately responsible for discharging governance. Whilst the reporting lines appear reasonable, the weaknesses in the quality of reporting may have prevented these governance mechanisms from understanding the true severity of the risk and delays, which in turn may have prevented effective corrective action being identified sooner.

158. Notwithstanding this, the Force and Authority, despite the weaknesses in the quality of reporting, should not have been oblivious to the difficulties being encountered in the project. There does not, however, appear to have been a practice of continually challenging the on-going justification of the project, or the undertaking of any form of Gateway review, which may have prompted consideration of more robust responses to these issues. There were points during the project's life when consideration could have been given as to whether to proceed with the project. The project funding was confirmed by the Capital Strategy Board and the Police Authority as part of the capital programme each financial year from 2009/10 onwards. There were also requests for further funding during the programme's life. However, despite the slippage that had been experienced, the lack of anticipated benefits and the requests for additional funding, the funding continued to be agreed each year. In our view these review points were an inadequate substitute for the sort of built in, structured gateway approach which is envisaged by best practice. Periodic and planned reassessment of the project throughout its life may have resulted in an earlier decision to terminate or at the very least earlier intervention to bring the programme back in to tolerance.

159. This lack of a gateway review process was highlighted by an internal audit review of project management undertaken in 2012:

"One of the seven principles of the Prince 2 methodology requires the on-going justification for the project to be scrutinised and considered at all times. In this respect there is scope in the Corporate Strategic Change Board project process for the inclusion of a gateway (or various checkpoints) together with defined criteria and guidance to demonstrate that this consideration is consistently applied in future projects."

160. Organisational culture may be a factor behind the weaknesses in the quality of reporting. Whilst many of the risks and issues were, in fact, reported, their potential impact on the progress of the programme was either underplayed or misunderstood. With a reluctance to report 'bad news' comes the risk that downside risks are not properly identified, evaluated or understood. Our review identified a number of examples of issues and risks being raised which would indicate that a significant delay in the progress of the project might be expected. Despite this, milestones do not move and the project would often continue to be reported as on-track, with the ultimate go-live date remaining the same. This recurring theme of optimistic reporting may be culturally driven, with some project team members attributing this to an organisational reluctance to acknowledge and communicate the potential for failure. The PCC and Chief Constable may wish to further explore the underlying issues behind the optimistic nature of the reporting which occurred during the project's life.

161. In our view, the quality of reporting contained significant weaknesses which may have hindered the programme board and other senior stakeholder's ability to challenge and scrutinise the information presented. Notwithstanding this, fully effective and robust oversight mechanisms are expected not to take such reports at face value, but to rigorously challenge the assurances and underlying assumptions provided with a view to identifying inconsistencies, contesting assumptions and assessing whether reported and forecast progress is reasonable. These oversight mechanisms did at times provide such challenge. As such, it is reasonable to expect that board members and senior stakeholders could have identified the severity of some of the issues from the information available.

Conclusions

162. Reporting was 'rose tinted' and not always representative of actual progress made by the project. Risk of, and actual, non-delivery was often underplayed and the likelihood of the project's overall success was overly-optimistic. Some project members have attributed this to a cultural aversion to communicating the potential for failure.
163. Financial reporting did not provide sufficient granularity on a monthly basis to the Programme Board to enable proper challenge of the financial aspects of the project on an on-going basis.
164. Project reporting was not, in our view, subject to sufficient challenge and scrutiny by programme board members and Force Improvement as part of their Programme Management Office (PMO) assurance role. Given the volume of change taking place in the organisation during the life of the programme, it is unlikely there was sufficient capacity for the Head of Force Improvement to adequately discharge the PMO role. In the two years before termination the project had a RAG status of red continuously. Allowing the project to remain rated as such was not in line with best practice. There does not appear to have been a clear drive or significant intervention from any of the scrutiny functions to put in place a recovery plan, in response to the red-rated status being reported, to move the project rating back to amber or green. This underlines the need for greater, informed challenge from senior representatives with project and programme experience.
165. The project did not employ formal critical gateway reviews. These may have provided for a more holistic consideration of project progress and identified earlier opportunities for termination or the requirement for more severe corrective action.

Recommendations

10. ***The Force and PCC must be clear that senior management want to and need to hear bad as well as good news, and explore cultural issues which may be a barrier to open and transparent reporting of progress.***
11. ***Budget, forecast, actuals and variance financial reports for projects should be aligned with the reporting period i.e. have monthly granularity.***
12. ***For future projects of similar scale and complexity, the Office of the PCC should recruit an experienced programme and project management specialist to represent them on the programme and project board.***
13. ***Where current and future programme and project boards include employees of the Office of the PCC as members, their roles and responsibilities in the governance and accountability of the project/programme should be clearly articulated.***
14. ***Project delivery processes need to mitigate the potential impact of a 'can do' and positive reporting culture. Appropriate Project Management Resource should be allocated to projects and routine gateway reviews should be undertaken throughout the progress of the project.***

Assurance

166. During the life of the project, in line with recognised good practice and in recognition of the risk associated with the project, the Force and the Authority sought a number of independent assurances from a variety of providers. During interviews many key stakeholders referred to these assurances as a key source for their faith in the project's progress at particular points in the project lifecycle. This was an appropriate course of action; it was reasonable for these reports to be relied upon as a source of assurance, albeit the greatest assurance should have been sought from frontline controls and oversight mechanisms in place for the project.
167. Whilst it is important to understand the (often limited) scope of audit reports when considering what assurance can be gleaned, it is noted that many of the reports (prior to those commissioned for the termination) are reasonably positive in the overall conclusion about the SIREN project. The assurance reports reviewed are detailed in the table below, which shows the timings of these assurances and provides a summary of the conclusion provided.

Table 5: Independent reports relating to the Enterprise programme

Provider	Date	Title	Scope	Conclusion
<i>Internal audit</i>				
NHS South Coast Audit	June 2008	Project Enterprise	<ul style="list-style-type: none"> • Programme management 	High risk rating in final report.
Mazars (internal audit team)	June 2009	ICT Project Enterprise	<ul style="list-style-type: none"> • Project specification • Project plans • Risk assessments • Testing plans • Monitoring of project • Management reports 	<p>Substantial assurance (second highest out of four potential opinions). One significant (equivalent of medium) recommendation and two housekeeping. Good practice noted for:</p> <ul style="list-style-type: none"> • Governance framework • Adherence to PRINCE II methodology • Effective team structure.

continued.....

Provider	Date	Title	Scope	Conclusion
Mazars (internal audit team)	June 2010	ICT Project Enterprise	<ul style="list-style-type: none"> • Project management policy and procedures • Project Plan • Governance • Contract arrangements with supplier • Progress monitoring • Review meetings • Project meetings • Resource allocation • Risk management • Monitoring / reporting of operational and financial performance 	<p>Substantial assurance (second highest out of four potential opinions). No recommendations. Good practice noted for:</p> <ul style="list-style-type: none"> • Governance framework • Adherence to PRINCE II methodology • Effective team structure • Recognition that business case requires review • Project plan • Project risk register • Signed contract in place • Regular supplier update meetings • Monthly revenue and capital reports of the project to the finance and performance panel • Regular scrutiny of the project by the Police Authority.
Mazars (internal audit team)	April 2011	ICT Project Enterprise	<ul style="list-style-type: none"> • Project plans • Risk assessments • Testing plans • Monitoring of project • Management reports 	<p>Substantial assurance (second highest out of four potential opinions). 3 significant (medium) recommendations relating to financial issues, particularly the control of costs and projected benefits.</p>

Provider	Date	Title	Scope	Conclusion
RSM Tenon	June 2012	Project Management	<ul style="list-style-type: none"> Evaluating the adequacy of risk management and control activities for the project. 	<p>Report rated Green/Amber (second highest out of four potential opinions). Opinion given: "Taking account of the issues identified, the Authority can take reasonable assurance that the Force has complied with industry standard project management guidance. However, we are limiting our assurance over the effectiveness of the management of the process, as despite the robust project management framework, the STREN project continues to suffer from indefinite delays. As no comparable projects (in terms of complexity and size) are currently on-going no evidence can be provided to substantiate that current processes are effective in delivering large scale projects."</p> <p>1 medium and 2 low priority recommendations.</p>
<i>Financial reviews</i>				
Atmaana	June 2008	Investment Appraisal	<ul style="list-style-type: none"> Investment appraisal of the five supplier responses shortlisted. Plus commentary on technical and programme issues. 	<p>Northgate, Niche and Memex should be selected for the next step in the tender process, with no further involvement required from IBM and Fujitsu.</p>
Triaxa	August 2010	Business Assessment of the SAS Acquisition of Memex Ltd	<ul style="list-style-type: none"> To detail the implications for Surrey Police covering the short term delivery of the Enterprise products, longer term maintenance and support and the possible risks and benefits that the acquisition may entail. 	<p>"There should be little to concern the SPA and much to reassure them."</p>

Provider	Date	Title	Scope	Conclusion
<i>Advice</i>				
Triaxa	January 2013	Independent Review of the Options Open to Surrey Police Regarding Crime, Intelligence, Custody and Case ICT Systems.	<ul style="list-style-type: none"> Review the current status of the programme, taking account of costs incurred, assessment of the likelihood of a successful implementation of Phase 1 of the project, future costs of ownership and operational risk from using the developed software. 	Memex solution is "borderline fit for purpose in functional terms alone and is unfit for purpose when the most recent performance and availability issues are taken into account". Strongly recommended moving to the Niche system in partnership with Sussex Police.
Mazars (consultancy team)	April 2013	Project Enterprise (SIREN) Review	<ul style="list-style-type: none"> Technical, operational, financial, strategic and reputational considerations of deciding the way forward with Project Enterprise, together with the governance arrangements applied. 	"... it is evident that there is contradictory information about the status of the programme and SIREN, and gaps in the evaluation of costs going forward. It is also evident that the proposed alternative option of Niche in partnership with Sussex Police has not yet been fully evaluated. On this basis it is therefore difficult for the PCC to make a decision about the way forward for the programme and SIREN."

Conclusion

168. Our review has indicated that there were clear issues with project management, project progress and the overall status of the work. Several of our findings are mirrored in some of the later reports produced by Mazars, RSM Tenon and Triaxia.

Cost

169. The true cost of the project was not well understood within the Force. Towards the end of the project, the PCC requested from the Force the current cost-to-date of SIREN on several occasions. The Force was unable to easily determine an accurate figure and there were a number of clarification questions as to what should and should not be included. It was only after several iterations and the assistance of a third party, commissioned by the PCC, that the Force was able to establish an agreed figure. The cost to the end of March 2013 was assessed by the Force and the PCC as £14.32m, with additional negotiated settlement costs on termination of £535k resulting in a total project cost of £14.86m. Of this, the contractually agreed amount paid to Memex over the lifetime of the project was £3.3m.
170. The figure of £14.86m was quoted by the PCC in the update to his press release on 11 April 2013. We have no reason to believe this figure was quoted in anything other than genuine good faith, and was the best available assessment of the full cost of the project to date available at the time. We have considered the completeness of this figure. In our view, there are some additional costs that have not been attributed to SIREN but which arguably would provide a truer reflection of the full project cost to the Force. The Force did not maintain systems to record and quantify such costs.

Overhead costs

171. The staff costs included in the assessment in April 2013 included wage (or agency fee) plus employer NICs and pension costs. However, no overhead (OH) was added to these figures. Typically OHs for an organisation like the Force could lie between 30-50% of staff costs. The Force confirmed it typically applies an OH figure of 30% to identify the full cost of providing 'Private Hire'. These OHs would account for the cost of management, facilities, HR, IT and other back office and support costs required to facilitate the employment of project employees. Some of these costs are fixed and apportioned and others will be driven by project needs, such as HR recruitment and IT support. The time spent by Project Board Members and Finance and Performance Panel Members alone in scrutinising the project is likely to amount to several hundred thousand pounds. The consideration of the specialist consultant advice and legal advice which was sought at various points in the project (for example the SAS takeover of Memex, and events leading up to termination) would also attract OH costs.

Additional staff

172. There were over 140 Subject Matter Experts who worked on the project, attending various workshops as well as developing the requirements. None of these were booked to the project as a cost (partly because the Force does not maintain a time booking system which would have facilitated this process). In addition, we examined the Project Organisation chart (Jan 2012) and found that not all staff allocated to the project were included as part of the cost for that period. Several others were allocated to the project on light duties free of charge and anecdotally there were other IT resources dedicated to SIREN but whose costs remained within the IT budget (rather than being apportioned to the project). It is not possible to accurately quantify these additional costs in the absence of sufficient records, such as those that could have been provided by a time booking system.

Opportunity costs

173. The Business Case states a loss of interest charge (section 5.4) of circa £1m was estimated for a 5 year period due to the capital funding requirement. This was not included in the figures but agreed by the CFO that it should be. This is interest forgone as a result of the Authority's money being used to fund SIREN rather than earn interest from being invested. It is worth noting that, in actuality, interest rates over the period were lower than anticipated in the business case so the loss is likely to be much lower than the £1m envisioned.
174. As explored under the 'Benefits' section earlier in the report, £3.2m of benefits planned for the period 2009-2013 (following the original planned implementation date) were never realised. The Force has confirmed that £1m of further cashable savings were required to offset the non-delivery of anticipated benefits from the SIREN project included in the Authority's financial plans.

Control of costs

175. There was a lack of control of cost throughout the project with monthly reports only providing annual, not monthly, cost forecasts, combined with numerous unseen costs during the life of the project. Had the 'real' on-going cost been understood and reported, it might have prompted senior staff to take earlier action to address problems.
176. In addition, a significant de-scoping exercise was undertaken in 2011, necessary to attempt to bring the project and its scope back under control, but which removed a substantial amount of the previous scope. Some of the removed scope was deferred to an unspecified future delivery point. This and changes that occurred during the project life meant that Memex were paid the full contractually agreed amount for development work upon settlement (£3.3m) but for 'delivering' substantially less than the original scope (which would in itself have further undermined the envisaged benefits).
177. It should be noted, in support of the action taken, that stripping back the project to its core functionality was in line with best practice as one of the essential actions to take to recover a failing project.
178. Throughout the project life there is evidence to suggest that cost was not under control. A significant element of this was the internal team costs, which grew in line with the slippage of the project. The lack of a time recording system for staff working on the project may have hindered the monitoring of exactly how much time and staff costs were incurred on the project on an on-going basis.
179. Another area of concern from senior management was the true cost of the interfaces. By July 2010 there were 21 interfaces identified (predominantly to national systems) which did not have estimates in terms of cost. These costs were subsequently estimated at £305k at a Finance and Performance panel meeting on 2 Sept 2010. Overall the capital variation stood at £533k, as stated at the same meeting. At the Finance and Performance panel meeting of 7 July 2011, the panel approved an additional £1m as a **"best guess"** as **"the force was not yet in a position to know exact cost"**. A paper produced on 18 August 2011 appears to clarify this as an increase of £615k capital and £1,088k revenue from that date through to financial year 2013/14. The same paper assessed benefits of only £2m as still being achievable over the period 2012-2016. This was a significant reduction compared to the estimated benefits set out in the Business Case in November 2008.

Conclusions

180. Cost was poorly controlled within the project. The true cost of the project was not well understood and did not include all overhead costs. This was partly because the Force did not maintain adequate time recording or other systems to accurately capture all attributable costs and record time spent by all individuals on the project.

Recommendations

15. ***The Force should review and amend its policy on costing programmes and projects. This should align more with the way private hire is calculated, for a more accurate representation of true cost.***
16. ***To further improve on management accounting the Force should consider introducing a time booking/recording system.***

Termination

181. Serious consideration with respect to terminating the project was first raised with the Authority by the Force informally in August 2012 and formally in September 2012. Prior to this point, despite numerous setbacks in terms of cost and timescale, the team and leadership continued to believe that the SIREN project could be delivered, albeit much later than first envisaged. Right up until the termination date in April 2013, the project team and Memex continued to believe the project was deliverable, although the target date had now moved back to August 2013.
182. The current Chief Constable joined The Force in February of 2012 and was briefed on SIREN. Events unfolded from that point as follows:
- In the early part of 2012 the Business Partnering Programme (BPP) and the Olympics were the main focus and priorities for the organisation.
 - Around the time of the May/June Chief Officer Group meeting it was announced that SIREN would not now be ready to go live before the Olympics. However, the belief was that it would still deliver and the additional time over the summer would enable specific user requirements to be met.
 - In June 2012 the BPP was suspended (and subsequently terminated in September 2012) and collaboration with Sussex Police became the preferred route for the Force. (It should be noted that during the original procurement of SIREN closer working between Surrey and Sussex was not seen as feasible because the two forces had recently been party to an aborted merger process).
 - During the same time, Sussex had embarked on their own procurement action to replace similar systems to Surrey's. Early in this process it became evident that Sussex would not be following the same supplier route. Memex was eliminated as a potential supplier to Sussex because they did not have an existing commercial 'off the shelf' system.
 - As at 2012, Memex had been unsuccessful in securing any further participating Forces for their product (thus reducing the potential to cost share going forward) and, critically, they lost the opportunity to bid for the Scottish Police Force contract.

183. The culmination of these events meant that the Force was beginning to take the view that the Memex system, even if delivered, would not meet their longer term vision of closer collaboration with Sussex Police and other regional forces. Taking into account the delays and problems to date, and their new regional collaboration focus, the Force began to look at alternative options. This was discussed with the Chair of the Authority and the Chief Executive in August 2012. The Chair of the Authority was clear that a full business case would be required to terminate SIREN. An options paper (but not a full business case) recommending the termination of SIREN was prepared and shared with the Chair of the Authority, the Chief Executive and the Treasurer in October 2012, but this fell during the purdah period prior to the PCC elections. Following legal advice taken by the Authority and The Force independently of each other, the decision was taken by the Chief Executive of the Authority that the options paper would not be put in front of the Authority for consideration or decision prior to its dissolution in November 2012.
184. Following the election of the PCC the options paper was further refined (4 December 2012) to examine wider options and financial implications. Key points that were articulated which favoured a move to Niche were:
- Continuing with CIS was not considered feasible as the same risk of obsolescence remained.
 - The cost of support of the Memex solution was being driven higher by a need to significantly enhance the skill and support base for Surrey ICT, an increase estimated to be in the order of £600k to £1m per annum. This meant the cost of moving to Niche was potentially only marginally different from the cost of continuing with Memex.
 - The cost of future change and enhancements to the Memex system would be borne predominantly by Surrey as Memex had not been able to secure any further UK customers for the same product. Conversely, Niche was already being used by several Forces and costs could be shared.
 - Being on the same Niche system with neighbouring forces would make closer collaboration easier to achieve and bring (as yet un-quantified) operational benefits.
185. The financial benefits of implementing the Niche system were not fully articulated in the options paper other than those which related to the costs of the system.
186. Whilst the other options were being considered the SIREN project remained red rated and continued to encounter difficulties. In late November 2012 the latest version of the intelligence module was tested and could not support more than 40 users in a live environment. As a result the project manager issued an exception report early in December 2012. No immediate fix was identified by Memex and a decision over a revision to the project's go live date was held pending a quantification of the performance issues the product was experiencing at the time.
187. Memex identified major system changes were required to resolve the performance issues and, based on the assumption the January and February releases would pass testing, a revised go live date of July/August was proposed. At the same point the project reached the edge of its funding envelope and required bids for additional capital and revenue funding to continue. There were also emerging concerns about the on-going support costs of the product. It is understandable that much of what transpired late in 2012 and early in 2013 would have reinforced concerns about the ability of SIREN to deliver. This uncertainty and the concerns prompted a number of actions:

- The project entered a further phase of re-planning.
 - The Programme Board approached Triaxia Ltd. with a view to obtaining some assurances about the robustness of future plans and to advise on future options.
 - The Deputy Chief Constable wrote to Memex to set out the Force's expectations for the next releases. The PCC also reinforced this with his own communications.
188. These actions, taken toward the end of the project's life, were appropriate. To re-plan the project and to seek some assurances about the robustness of these plans, and re-assessing the justification for the project, represent sensible steps. Clarifying expectations with the supplier was also an important step. However, some of this activity appears to have been prompted by a desire to move from SIREN to Niche. In many ways it is a shame that the rigour applied in manoeuvring to exit from SIREN was not applied earlier in the project's life to ensure its success.
189. In January 2013 the Force commissioned Triaxia Ltd. to carry out an independent review of options regarding SIREN. This report recommended that the contract with Memex was cancelled and that Niche was procured under a framework with Sussex Police. At the same time legal advice was sought over the contractual position and liability to which the PCC may be exposed should he take the decision to terminate the contract with Memex. Legal advice provided in February 2013 could not recommend termination for cause (i.e. fault with the supplier) and, as there was no termination for convenience clause built into the contract, stated a negotiated termination would be required should the PCC wish to leave the contract.
190. In February 2013 the PCC commissioned Mazars LLP to carry out a further independent review of Project Enterprise and to consider the way forward for the project. This review was also extended to include an understanding of the potential costs and benefits of procuring Niche in partnership with Sussex.
191. The report concluded that the following were not good reasons for terminating the Memex contract:
- current issues and concerns around whether SIREN will work (in terms of functional requirements).
 - current issues and concerns around whether SIREN will work (in terms of non-functional requirements).
 - current people issues and concerns around continuing with SAS/Memex and SIREN.
 - current perception concerns around continuing with SAS/Memex and SIREN.
192. However the report does identify potential cost and operational benefits which could be realised by terminating the contract with SAS/Memex and moving to the Niche solution in partnership with Sussex Police.

193. The decision to terminate was informed by the Mazars LLP report and the advice provided by the Force, which at this stage was clearly advocating a move to Niche. Whilst this provided the PCC with what he considered to be a compelling case in respect of the downside to continuing with SIREN and the potential benefits of pursuing a Niche solution, it did not explore all potential options in the way that a full business case would have done. It is a concern that a full business case was not required to support the decision to write off the significant sum of public funds which had been spent on SIREN to date. Moreover, it is arguable the PCC was taking a significant risk in terminating the SIREN project before the business case for the Niche replacement was fully developed. Had the Niche business case turned out to be, in fact, more expensive than continuing with Memex, the writing off of a significant sum of public money could have been compounded by having to replace the Memex system with an even more expensive solution.
194. The termination decision was made on 9 April 2013 (PCC Decision making Record 025/2013). A negotiated settlement with Memex, led by the Office of the PCC, was agreed in the following terms:
- The PCC would pay the residual balance of the contractually agreed development fees; and
 - Memex would agree to forego their contractual right to all future support costs.
195. In total, the full contractually agreed development cost of £3.3m was paid to Memex.
196. Whilst presented as separate decisions, the decision to terminate the SIREN project and the decision to procure Niche with Sussex Police are clearly linked. Procuring Niche was the only alternative option which was considered during the decision to exit from SIREN. To make a judgement about the course of action taken by the PCC in exiting SIREN it is necessary to look at the business case which supported the decision to procure Niche and, where appropriate, consider how this compared with the option to continue with SIREN.
197. The overall comparison of the costs of the two options was provided by Mazars LLP. Their report to the PCC presented the option to continue with SIREN as marginally cheaper than moving to Niche over a 5 year period, but with Niche producing longer term cost benefits by being cheaper to run from year 6 onwards. The Niche case makes worst case scenario assumptions about the exit costs of SIREN and set up costs for Niche (in fact, the negotiation with Memex, led by the Office of the PCC, resulted in a more favourable position than the worst case scenario in the Mazars report, with the agreement that Memex would relinquish their contractual claim to all future support costs). The information provided to the PCC made it clear that neither option (remaining with Memex or moving to Niche) was significantly more costly than the other, especially when some allowance is made for a margin of error. This, and the non-financial factors under consideration (such as the desire for closer regional collaboration with Sussex) would have been important and reasonable factors to take into account when making the decision.

The Niche replacement

198. A business case was produced by the Force in May 2013 which dealt specifically with the implementation of Niche over the five years to March 2018. The strategic and operational benefits make a strong case in favour, particularly when taking into account views from senior stakeholders on the future roadmap towards collaboration. However, in our view the quality of the business case could have been strengthened and there are some key factors that should be considered to ensure the success of the Niche replacement:

- The plan aims to implement Niche in two phases – Crime and Intel Q4, 2013, followed by Case and Custody in Q1 2014. Residual activities continue on the plan (Appendix A) until December 2014. There is also, we understand from speaking to the Sussex team, a road map beyond these dates for further data transfer/configuration/optimisation of business process. However, the business case only provides for a project team and capital items up to the end of the 2013/14 financial year. The Force is clear a further business case is required to fully implement these changes.
- The benefits, citing quantifiable estimates of only £1.5m for replacing CIS and NSPIS, are very light on detail and required much more work (a point that was recognised in the business case).
- The governance structure has two separate programme organisations (The Force and Sussex Police) which come together at an Executive group chaired by the lead Deputy Chief Constable (DCC) for Sussex. In the case of the Surrey Board, chaired by the Programme Director, this also reports into the Surrey Strategic Change Board. There are a further two boards above the Executive group. The team is a mixed team, with some of the critical posts filled by the third party provider, and there is also a Business Change Lead identified from within the Force. These appointments address some of the weaknesses identified with the SIREN project. Given the complexity of the structure the PCC and COG may want to assure themselves that delegations are appropriate and, at a lower level, the assurance and testing functions are in the optimum place.
- There are two financial risks (out of nine overall):
 - The first of these identifies the risk to contingency if decisions, either to mobilise initially or taken further down the line, are delayed. The successful implementation of Niche suggests the risk over delayed mobilisation decisions has not been realised. However, the complex decision making structure may have a bearing on the speed of future decision making.
 - The second financial risk is that detailed scoping of the next phase may reveal significant additional financial requirements. Again it is assumed at this point in time that this risk has diminished. However, given the aggressive timescale and significance of the change required, the need for funding beyond March 2014 is a very realistic risk, if not an issue, in this programme. This may have wider implications on the retention of key team members recruited in the latter stages of SIREN.

199. As an off the shelf system which already has a significant user base (15 other Forces) Niche represents a much lower risk approach. The experience of Sussex Police with their third party provider partner has been very positive with delivery of the first phase successfully complete. With the same resourcing model now implemented by Surrey, significant skills gaps present during SIREN would appear to have been addressed for the specific implementation of Niche.

200. All technical staff interviewed agreed that the Niche product should be a more reliable system and will deliver at least the same functionality that would have been given by the de-scoped Memex product. No custom support will be needed as the current Force strategy is that solutions will now be bought 'off the shelf' wherever possible.
201. The business case for Niche could have been strengthened by better articulation of the overall vision for closer collaboration and by much more detailed work on the benefits. The strategic vision of closer collaboration with Sussex Police is compelling, although it has been articulated only in part in the business case for Niche. There is a longer road map for Niche and a bigger vision for closer collaboration. Articulating this in the business case would have strengthened the reasoning supporting this course of action. Dedicated resource needs to be appointed to ensure delivery of these benefits and road map from 2014/15 onwards. This is now being considered as part of a separate business case.
202. Nevertheless, taking in to account the comparative future costs of both options (completion of SIREN or procurement of Niche), the amount of work still required to ensure SIREN was functioning, the previous uncertainty over the August 2013 implementation date, the current strategic vision of the Force to work more closely with regional partners, and the relative risks presented by implementing Niche, in our view the decisions to terminate SIREN and proceed with a different solution are reasonable.
203. However, these decisions are only reasonable as an exit strategy from a poorly managed project which, due to the delays encountered, was overtaken by changing external and strategic considerations. The fact remains that the termination decision results in the write off of a significant amount of public money which has been spent on the SIREN project and which has ultimately delivered no benefit to the taxpayer or the people of Surrey. It would have been preferable had the money and resources committed to the SIREN project in the first place been managed and governed effectively such that the intended benefits were delivered and consideration of termination need never have arisen.

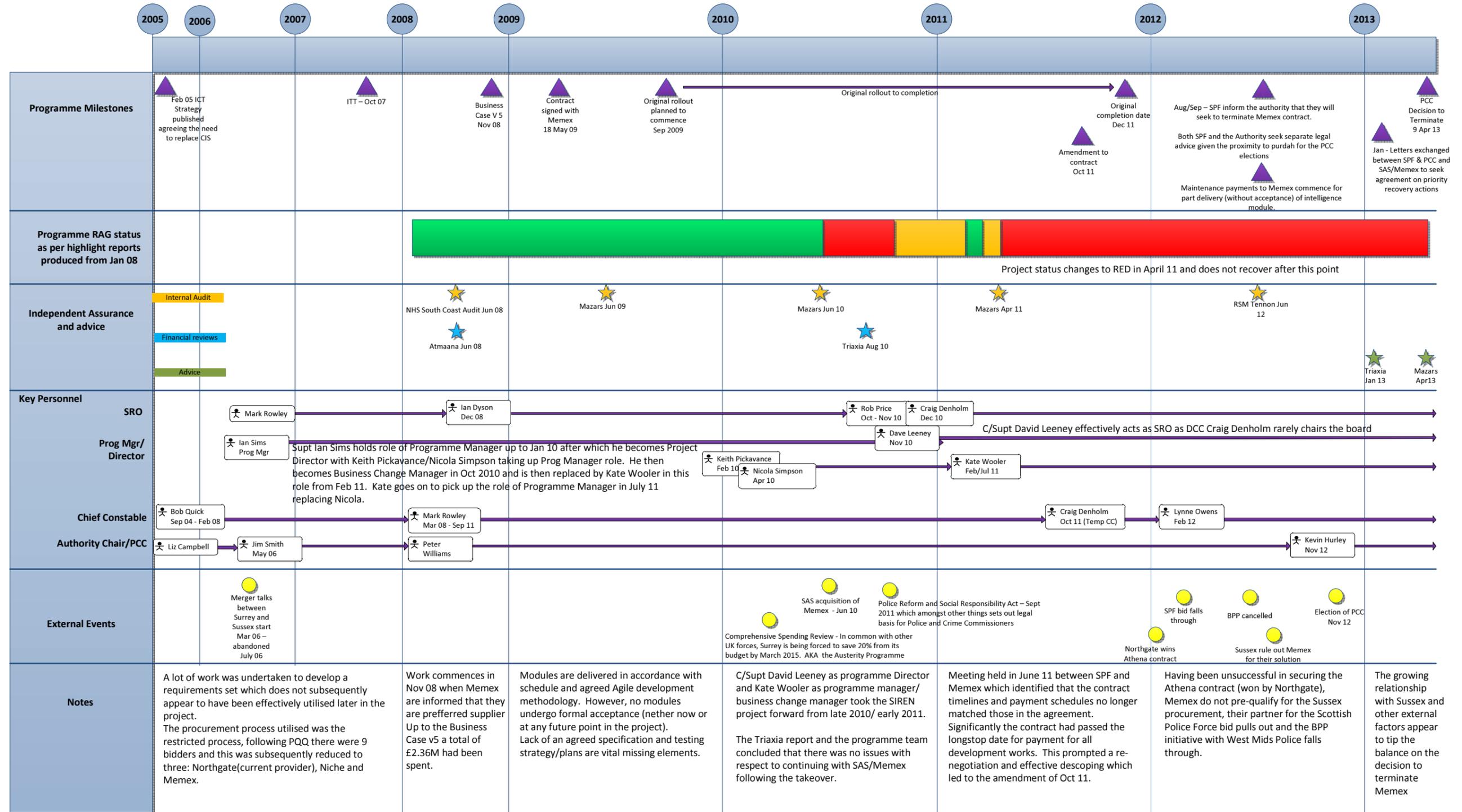
Conclusions

204. In our view the decisions to terminate SIREN and proceed with a different solution are reasonable, but only as an exit strategy from a poorly managed project which, due to the delays encountered, was overtaken by changing external and strategic considerations.
205. It is a concern that a full business case was not required to support the decision to write off the significant sum of public funds which had been spent on SIREN to date. It is arguable the PCC was taking a significant risk in terminating the SIREN project before the business case for the Niche replacement was fully developed. Had the Niche business case turned out to be, in fact, more expensive than continuing with Memex, the writing off of a significant sum of public money could have been compounded by having to replace the Memex system with an even more expensive solution.
206. The business case for Niche could have been strengthened by better articulation of the overall vision for closer collaboration and by much more detailed work on the benefits.

Recommendations

- 17. *The business case for Niche would have been strengthened by better articulation of the overall vision for closer collaboration and more detailed work on the benefits to be gained. Future business cases should include a more comprehensive assessment of all strategic, financial and non-financial factors.***
- 18. *Given the complexity of the governance structure for the Niche system, the PCC and COG should assure themselves that delegations are appropriate and, at a lower level, the assurance and testing functions are in the optimum place.***

Appendix 1: Project timeline



Appendix 2: Summary of recommendations

Initiation

1. Ensure risk is evaluated appropriately when considering tender options.
2. Ensure appropriate procurement routes are used, aligned with the nature and complexity of the procurement being sought.
3. Ensure contractual clauses for termination on grounds of convenience are considered for large scale, long term procurements.
4. Ensure anticipated benefits are realistic, robustly challenged, fairly stated and achievable.

Programme and project management

5. The Force should ensure that it has properly considered what skills, resources and expertise it has at its disposal to procure and deliver large scale, complex programmes, acknowledging that Police Officers cannot simply be parachuted into a role they have no experience of and be expected to perform. Consideration should be given to:
 - a. engaging a third party provider;
 - b. engaging with external partners; and
 - c. seeking external procurement expertise for elements outside the normal force experience.
6. Given change is a constant in the current policing environment the Force should ensure some of their senior officers and staff are formally trained in change management.
7. Having undertaken a number of 'lessons learned exercises for SIREN, an independent review of whether learning has been implemented needs to be undertaken.

Governance

8. The 'healthy tensions' between roles required for effective project governance should not be undermined or diluted during project delivery. The Project Management Office should be independent from day to day project activity and play an active role in assuring information is accurate and supported before it is presented to the programme board.
9. There should be clarity over what constitutes an issue or a risk. This allows issues to be identified as such and escalated into the wider organisation for resolution.

Reporting

10. The Force and PCC must be clear that senior management want to and need to hear bad as well as good news, and explore cultural issues which may be a barrier to open and transparent reporting of progress.
11. Budget, forecast, actuals and variance financial reports for projects should be aligned with the reporting period i.e. have monthly granularity.
12. For future projects of similar scale and complexity, the Office of the PCC should recruit an experienced programme and project management specialist to represent them on the programme and project board.
13. Where current and future programme and project boards include employees of the Office of the PCC as members, their roles and responsibilities in the governance and accountability of the project/programme should be clearly articulated.
14. Project delivery processes need to mitigate the potential impact of a 'can do' and positive reporting culture. Appropriate Project Management Resource should be allocated to projects and routine gateway reviews should be undertaken throughout the progress of the project.

Cost

15. The Force should review and amend its policy on costing programmes and projects. This should align more with the way private hire is calculated, for a more accurate representation of true cost.
16. To further improve on management accounting the Force should consider introducing a time booking/recording system.

Termination and the Niche replacement

17. The business case for Niche would have been strengthened by better articulation of the overall vision for closer collaboration and more detailed work on the benefits to be gained. Future business cases should include a more comprehensive assessment of all strategic, financial and non-financial factors.
18. Given the complexity of the governance structure for the Niche system, the PCC and COG should assure themselves that delegations are appropriate and, at a lower level, the assurance and testing functions are in the optimum place.

Appendix 3: Interviewees

Key individuals interviewed:

Current office Holders

Police and Crime Commissioner
Chief Constable

Current officers

Deputy Police and Crime Commissioner
Chief Executive for the Office of the Police and Crime Commissioner
Chief Superintendent and Programme Director (2011 until termination)
Treasurer and Chief Finance Officer for the Office of the Police and Crime Commissioner
Head of Finance and Services and Chief Finance Officer for Surrey Police
Head of Force Improvement for Surrey Police
ICT Technical Manager
Human Resources Officer
ICT Supplier Relationship Manager

Former office holders and officers

Former Chief Constable (March 2009 – February 2012) and Project SRO (2007 – 2008)
Former Deputy Chief Constable and Project SRO (Dec 2010 until termination)
Former Assistant Chief Constable and Project SRO (Dec 2008 – Sept 2010)
Former Authority Members
Former Chairs of the Police Authority
Former Head of ICT
Former Project Consultant and Deputy Programme Manager
Former Test Manager (Sept 2011 until termination)
Former Senior Procurement Officer
Former Programme Resource Manager

Others

Chief Executive Officer, Memex Technology Ltd
Programme Manager at SAS Memex
Paul Gilmour, Partner at Mazars LLP
Niche Programme Director for Sussex Police
Niche Programme Consultant from PA Consulting

The programme Manager from July 2011 until termination declined to be interviewed or respond directly to the draft report but made comments after having seen a final copy of the report. Other individuals also made comments after having seen a draft copy of the report.