METROPOLITAN POLICE Working together for a safer London

Metropolitan Police Service information, communication and technology (ICT) strategy 2010-2017

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Foreword

'New technology provides the scope for innovation and improvement; but alone cannot deliver benefits. Benefits arise from the combination of process efficiencies, reliable information that supports good policing decisions, and value for money enabling technology.

'The Directorate of Information (DoI) has been building the capability to deliver benefits from technology since its creation in 2000. We have used proven industry standard approaches, which we have introduced in a way which is right for the Metropolitan Police Service (MPS).

'We have brought about real business improvement from strategic collaboration between the business operation which needs, and can direct, change and those with the capabilities to help it happen.

'In an increasingly challenging fiscal environment the MPS needs to become more efficient, effective and flexible in the way it delivers its services.

'This requires the DoI to redouble its efforts in enabling change. We need to reduce our own unit costs and become more efficient in the way we deliver services and support the change agenda; to transform both our business and the business of policing.

'With a shared commitment and a desire for business improvement we will use our experience to help the MPS change with process, information and standard re-usable technology solutions; our approach will bring us improved performance and productivity, value for money, faster speed to market, better integration and lower maintenance overheads.'

Ailsa Beaton, OBE
Director of Information and MPS Chief Information Officer

Management summary

Strategy goals

Policing procedures, the information they use, and the technology which supports them both to make London safer, are affected by many internal and external 'drivers' (influences). Some drivers are more significant to some people than others; the drivers change, and the way business improvements to an organisation the size of ours are going to be made requires a stable target over time. For this reason, the drivers have been rolled up into a small number of goals – 'more for less', 'better decisions', and 'managed risks'. This is to allow this strategy to stay focused and be led by our business over the long term.

The goals also describe the limits of the value which information and technology can contribute to policing outcomes. We depend on officers and staff using the time improvements save, using quality information in good time, and reducing risk to achieve better outcomes for London.

These are the strategy goals and the issues which drive them:

- ***More for less***
    - ***Continuous improvement, value for money, productivity and performance***
    - MetForward – Metropolitan Police Authority
    - Operational Efficiency Programme – HM Treasury
    - Reducing Bureaucracy in Policing – Berry
    - Reducing the Data Burden on Police Forces in England and Wales – Home Office
    - Efficiency and Productivity Strategy for the Police Service – Home Office
    - Putting the Front Line First – Smarter Government – HM Government
    - Digital Britain - Business, Innovation and Skills
    - Government Information, Communication and Technology (ICT) Strategy – Cabinet Office / UK Government Chief Information Officer

- ***Better decisions***
    - ***Confidence, presence and professionalism***
    - Protecting the Public – Supporting the Police to Succeed – Home Office
    - From the Neighbourhood to the National – Policing our Communities Together – Home Office
    - The Review of Policing – HMIC (HM Inspectorate of Constabulary)
    - Engaging Communities in Fighting Crime – Cabinet Office / Casey

- ***Managed risks***
    - ***Safety and pride***
    - The Bichard Inquiry Report
    - Data Handling Procedures in Government – Final Report – Cabinet Office / Hannigan
    - Review of Criminality Information – Magee
    - Pursue Prevent Protect Prepare – The UK's Strategy for Countering International Terrorism
    - London 2012 Olympic and Paralympic Safety and Security Strategy – Home Office
    - Data Sharing Review Report – Thomas / Walport
    - Stockwell Reports 1 and 2 – Independent Police Complaints Commission (IPCC).

Delivery to support the goals

Achieving the goals of this strategy depends on the following three important aspects of delivery, which have to work together.

- Efficient procedures
- Quality, accessible police information
- Flexible, good-value technology for policing.

None of these will achieve the outcomes we need without the others.

Efficient procedures

We need a working partnership between the owners of policing procedures and those with the skills and tools needed to improve them. Also important is an oversight of how all the procedures fit together and an agreed system for introducing changes in a controlled way which will keep disruption to the front line to a minimum.

Quality, accessible information

Up until now, our information has been provided by a few very large, and many, very small, systems. Although some of these have given us good service, locking our information into these systems means that too often:

- we need to put in similar information more than once;
- different copies of information need to be maintained, leading to issues of quality; and
- making each of these systems accessible where and when they might be needed is unnecessarily complicated.

We need a much smaller number of standard platforms (hardware and software) suitable for specific jobs (working with documents, numbers, images) rather than many that are designed around specific procedures (like crime reporting, or incident response) to:

- make our information available to be used again;
- respond more quickly to the need for change; and
- reduce our maintenance costs.

Flexible, good-value technology for policing

Technology is increasingly becoming a commodity (a standard product which is available at differing prices and which there is high demand for), which allows us to drive down costs and simplify how the technology is organised – making it easier and cheaper to maintain. We will need to make the right choices – including who we work with both nationally and in London. How we keep our information secure is vital, especially when working with others.

Help we need to support delivery

As well as introducing standard platforms, we need to:

- look again at our approach to how we make change happen; and
- join up improvements in procedure and in information and technology;

to get the benefits we are looking for while keeping any negative effects to police officers to a minimum. This will involve some partnerships across the organisation, as well as some formal, standard approaches.

Standards supporting improvement

We are not the only organisation with the types of problem described above. There are some methods for managing the improvements we want, and we intend to apply them. They are a way of managing business problems rather than technical ones. The methods are described in more detail below.

Enterprise architecture

An organisation can be understood by breaking it down into parts, just like a building. ‘Enterprise architecture’ is the blueprint for the building – describing how the procedures work, the information and the technology. By getting this understanding we can agree change in a controlled way.

Information Technology Infrastructure Library (ITIL)

More than ever, we need to provide the right level of service – not too much, not too little. We need to agree what level of service we should pay for with the business interests those services support, and to express these requirements clearly to our business partners. We will use ITIL methods to do this.

Security assurance

In gaining the business efficiencies and cost reductions described above, it will be critical that we apply appropriate controls to protect our information.

1. Introduction

This document is a long-term view of how procedures, information and technology will support the present and future needs of policing and the capabilities (people, processes and tools) needed to improve them.

We need a long-term view because:

- capabilities take time to build and mature;
- investment in information and technology, and in changing how we work, needs to be strategically placed if it is to be cost-effective;
- the technology industry is constantly changing and we must achieve best value over time; and
- there is an emerging picture of the criminal justice sector, and of the public sector in London, which we must recognise and plan for.

This document is for:

- senior stakeholders in the organisation and the Metropolitan Police Authority;
- the Information Board of the Directorate of Information;
- business partners in the public sector and industry; and
- our staff.

It will:

- communicate our business direction to our main stakeholders; and
- set the scene for how strategic decisions can be made based on a shared, long-term big picture, offering best value for money.

The strategy will:

- be reviewed each year;
- be supported by sub-strategies; and
- drive an annual Strategic Plan which will describe and measure performance and necessary improvements for each coming year.

2. Environmental analysis

This section is developed from a PESTLE (Political, Economic, Social, Technological, Legal, Environmental) analysis that was agreed by the MPS Information Board on 15 December 2009, and contributed to the MPS Corporate Strategic Assessment.

2.1 Political

A change of government has implications for the future of:

- non-departmental public bodies (including the National Policing Improvement Agency);
- business convergence (how organisations merge or their boundaries change), particularly in the UK public sector;
- the shared services agenda; and
- the procedures for sharing information across government.

The implications are as follows.

- The National Policing Improvement Agency is to be dissolved. We may be asked to play an increased part in delivering services nationally (with or without an increase in resources).
- Greater emphasis on shared services for efficiency is likely, whatever the political outcome. This suggests a continued drive towards us coming together with the Greater London Authority and other UK police / criminal justice organisations.
- The new Government would tend to reverse the trend towards linking information services that support government departments, so it would become more difficult to share information.

2.2 Economic

The economic downturn will restrict the UK public sector over the long-term as a result of the spending cuts that need to be made. In respect of our major suppliers, analysts suggest their business strategies should allow them to survive the downturn, but the downturn may change their attitude to the public sector marketplace.

The implications are as follows.

- The availability of funds will continue to be restricted, suggesting that there will be a lack of investment in ICT at the same time as a need for ICT efficiencies at the front line
- The number of full-time ICT employees may be reduced, resulting in a shortage of skills.

2.3 Social

Online social networking has exploded in popularity in the last two years. This accounts for a huge increase in identify fraud and new risks to the safety of children. The other main issue is the population growth in London, which is predicted to be equivalent to London growing by a city the size of Leeds or adding a borough the size of Islington every three to four years. Much of the growth will come from abroad.

The implications are as follows.

- Crime in London will increase as the population increases. This will place a higher demand on existing resources. It is estimated that the population will become more diverse, which has implications for information (for example, languages).
- International collaboration, where we work with the police abroad, will become more important.
- There could be a skills divide between generations of staff.

2.4 Technological

Technology continues to provide opportunities for reducing costs.

The implications are as follows.

- We will be able to link up with the rest of the UK Police Service through the ISIS programme (Information Systems Improvement Strategy), both in terms of buying in products and services, and technical infrastructure.
- We can improve processing and storage through technologies such as virtualisation / thin client, making better use of resources, and ultimately moving to ‘Cloud’ computing (buying ICT resources from outside organisations).
- The growth in digital storage provides significant management challenges and opportunities.
- Using network boundaries to protect information will no longer be appropriate, especially if we are sharing networks with business partners and are using ‘Cloud’ computing. We will need new ways of protecting information – controlling access will be vital.

2.5 Legal

Recent developments in case law (S and Marper, C and Collins, Wood Vs Commissioner, Baby P, Khyri Ishaq, Pilkington, and Sonnex) are influencing the ability of organisations in the public protection network to process personal information, mainly in terms of how long information is kept, when it can be shared and who it can be shared with. There is uncertainty over the progress of the Communications Data Bill.

The implications are as follows.

- There will be implications for reviewing, storing, sharing and destroying information.
- There may be policing implications of the Communications Data Bill not being introduced.

2.6 Environmental

The ICT sector has been identified by the European Community as a way of reducing the carbon footprint of other sectors.

The implications are as follows.

- Investment priorities for ICT will need to include the potential for reducing our carbon footprint as well as sharing information through the Public Protection Network and saving money through the Service Improvement Programme
- There is more emphasis on the potential environmental savings which are possible through better management of ICT.

3. Strategic drivers which guide the ICT strategy's goals

3.1 More for less

We aim to achieve value for money, by improving the efficiency of procedures, ICT, personnel and resources. Productivity is one of the Commissioner's priorities, known as the '5Ps' (Presence, Performance, Productivity, Professionalism, Pride). MetForward, the strategy of the Metropolitan Police Authority (MPA), aims to make significant savings and productivity improvements through the way information systems and technology are used. These drivers involve doing ***more for less***.

The UK public sector has tried to reduce costs in recent times – through the reviews of Sir Peter Gershon and Sir David Varney, and most recently, HM Treasury's Operational Efficiency Programme. With the worldwide financial crisis of September 2008, and the resulting effect on public money, this drive is set to continue. Our expected budget indicates a significant shortfall in coming years. Having efficient procedures, and getting rid of activities that do not contribute to outcomes, will be vital. Jan Berry's report, 'Reducing Bureaucracy in Policing', proposes approaches to police efficiency through improving procedures.

Achieving ***more for less*** is a goal of this strategy.

3.2 Better decisions

A goal of ours is to 'build safety and confidence'. The Commissioner has set goals of presence and performance. All of these goals depend on effective police action. Actions are based on decisions, and decisions rely on access, wherever and whenever it is needed, to information that is fit for its intended purpose.

The recent white and green papers on policing, based on the Review of Policing by Sir Ronnie Flanagan and 'Engaging Communities in Fighting Crime' by Louise Casey at the Cabinet Office, describe how valuable information is to the police and the public for protecting public safety. They also propose measures to improve the way information is managed and provided to achieve policing outcomes.

A better grasp of financial information will help us to get better value from our resources.

Better decisions is a goal of this strategy.

3.3 Managed risks

Access to information that is fit for its intended purpose is vital for protecting the public. On the other hand, sensitive police information being made public undermines operations and public confidence.

Reviews of events (such as the Bichard Inquiry Report (2004) on the murders of Jessica Chapman and Holly Wells in Soham, the (2001-2003) inquiry into the death of Victoria Climbie in Haringey, and the Review of Criminality Information by Sir Ian Magee), emphasise the need to share information effectively with partner organisations in the Public Protection Network to manage risks to public safety. Louise Casey's 'Engaging Communities in Fighting Crime'

describes the value in sharing information to involve the public in the criminal justice system. At the same time, various high-profile incidents, including HM Revenue & Customs information being lost, have reduced confidence in how the public sector manages information. So we need to take risks in a controlled and managed way.

Managed risks is a goal of this strategy.

4. Delivery to support the goals

4.1 Efficient procedures

Efficient procedures will be vital for achieving more with less.

We will improve the efficiency of our business procedures. We will start by proving the value of effective process management – by identifying priority procedures, understanding them in enough detail, and transforming them – to drive out waste. We will agree one approach to how we do this.

We will demonstrate that procedures and information drive the way we use technology effectively through adopting an enterprise architecture approach. At the same time we will continue to explore new technology. For example, we can replace our physical file-management systems with electronic case papers and workflow (a sequence of actions for the work of a person, a group of people or an organisation).

We will adopt an approach that is driven by finding solutions. We will build and develop this capability and re-use it to support a best-fit approach to business change for us.

We will continue to build a core set of standard ICT platforms to automate our procedures and to re-use our information. These standard platforms are described later in this strategy.

4.2 Quality, accessible police information

There are five components to this issue:

- improving the quality of information;
- managing content;
- an information portal;
- exploitation; and
- mobility and flexibility.

Improving the quality of information

To achieve the right policing outcomes, effective decision-making must be based on information of the appropriate quality.

Our information is fragmented and obstructs effective information management. ‘Silo’ systems, coupled with a lack of joined-up information, gives rise to this problem. Other causes of poor-quality information are poor practices, and the need to gather information far from source and many times. Re-using our information for new purposes, so avoiding the need to collect it again, depends heavily on that information being of the right quality.

We use a variety of approaches to fix this problem – better design of procedures and information systems, making the most of new technology opportunities, training in good practice, and reporting on and putting right failings.

The main rewards come from improvements in procedure both before and after information is stored. Automated data cleansing (where a copy of the data is taken and changed automatically) is of limited value, tackling only obvious problems. Senior commitment to accepting responsibility for and managing information, including solving problems relating to the quality of information, is vital.

Managing content

Our approach to documents is not consistent across the organisation. Users often have great difficulty finding the content they need for their job. Our main business processes also depend on paper case files. This restricts us and exposes us to excessive costs, possible legal action and damage to our reputation.

Through Enterprise Content Management (strategies, methods and tools used to capture, manage, store, protect and provide information and documents related to processes):

- users will be able to find managed content through standard procedures or familiar office tools;
- content will be captured once and will be re-used wherever and whenever necessary;
- content will be personalised to the needs of the user; and
- content will be under a full management control, security and audit regime throughout its lifecycle.

Through Enterprise Content Management, we will be able to:

- show clear leadership on procedures and the management of content across the UK Police Service;
- improve its interaction with the public and partners through effective and efficient procedures; and
- improve information sharing and links with other organisations.

An information portal
(An information portal provides a single point of access to a variety of information and tools.)

Historically, we have used separate systems. For example:

- CRIS (Crime Report Information System) for managing crime reports; and
- CAD (Computer Aided Despatch) for managing police responses to emergency calls.

These systems have been valuable in automating our biggest procedures and continue to serve us well. However, information in these systems:

- may be entered more than once;
- is not easily available for other uses, including to guide decision-making;
- involves staff in learning how to use each system;
- is usually passive – it does not bring important information to our attention unless we ask; and
- cannot answer the question ‘What do we know about this person?’.

We will break down our systems and move towards having a single system for our information. We have started to build a single system, called a portal, of nominals (people) coming to police attention. We will present this information to officers based on the job that they do and the

information they need to do it. Over time we will increase what is possible through the portal, and how people can get access to it. It will, for example, be possible to know what is happening on that officer's ward or borough, and important information will be brought to the officer's attention without them needing to ask for it.

These developments will result in a reduction in the cost of training, easier access for staff, a reduction in the amount of information entered more than once, and improvements in the quality of information. Having a single list of nominals will free up officers' time to be used more effectively. Behind the scenes we can reorganise how our information is held, improve its quality and make it easier and cheaper to maintain.

Exploitation

Information exploitation is about making the best use of our information systems for policing outcomes. Supplying the right information in useable formats (such as information shown geographically) supports decisions on risk, leading to action. We will review our approach to Geographic Information Systems as part of future proposals for information exploitation, and introduce a strategy to improve the management of information to improve performance.

An important exploitation is the sharing of information with other agencies to prevent and solve crime. We are improving our approach to sharing information as part of our responsibility to manage police information. We also keep to the requirements of the Data Protection and Freedom of Information Acts, with one of the highest workloads in the UK public sector. Our Performance Information Bureau meets the changing demands for performance statistics and contributes to our Citizen Focus initiative, which emphasises the need to understand local needs, wishes and priorities, by providing information on performance to outside organisations and the people of London.

Mobility and flexibility

Our aim is that policing will not be restricted by technology. This means that we can decide how flexible we need to be. We are laying the foundations for mobile and flexible working, both inside and outside our organisation. The right choices now will tackle outdated working methods and will provide the basis for future innovation, making us more flexible, resilient and capable. We will continue to balance functionality against usability, focusing on business needs and benefits.

By these means we can:

- support mobility for both overt and covert requirements;
- accommodate (depending on funding) the implications arising from changes to the 'built environment' (enclosed public spaces such as shopping malls);
- allow working from home and other locations;
- enable partnership working; and
- make best use of our buildings;

to bring about new and better working practices.

4.3 Flexible, value technology for policing

There are eight components to this issue:

- a flexible infrastructure – towards cloud computing;
- engagement with the ISIS Programme and the Greater London Authority;
- managing digital images and audio;
- print strategy;
- sweating assets;
- better technology and managing solutions;
- the technology marketplace – innovation and risk; and
- in-house capabilities to support operations.

A flexible infrastructure – towards cloud computing
(Cloud computing is internet-based computing, where shared resources, software and information are provided to computers and other devices on demand.)

Our aim is to reduce the range of technologies in our infrastructure (for example, our storage, our workstations and our networks) to the point where those technologies become commodities. This will enable us to drive down costs and make better use of the assets we have. It will also allow us to simplify our infrastructure and reduce our overheads for maintaining it. In terms of our storage, we will, over time, make full use of our current servers, moving towards virtualisation (separating processing power and storage from individual devices so that full use can be made of the resources available). This will also make it easier to consolidate our data centres and make them more resilient.

Ultimately, this approach would allow us to scale our infrastructure up or down more easily to meet demand and available funding. For our information to be held outside our boundary we will have to adopt new approaches to security – making the information, not the network, secure.

We can move most of the processing away from the workstation, back on to the servers. This is called ‘thin client’ technology. The advantages of this are:

- holding less information on the workstation, and instead holding it in the data centre, will improve security;
- there is less need for onsite maintenance, so reducing costs;
- the replacement cycle for individual units is longer; and
- less electricity is used, again reducing cost, and reducing the effect on the environment.

Last, but significantly, we are applying this approach to our network. Although this will make better use of the service we receive and help to drive down cost, the significance for policing is that, with previous technologies, people often needed to travel to specific equipment to achieve an outcome. In future, once a service can be made available in one place, it can be made available almost anywhere. We will explore the risks and opportunities provided by wireless networks for policing.

We will also be able to act as providers of such services, nationally and in London, and to mix and match nationally and locally maintained services. We are already providing network services to another organisation. Extending this approach may give us a way to share the cost of providing services.

In all of this we are trying to make sure that our commercial position allows us to achieve the benefits of these approaches. We need to make choices now and in the medium term about our choice of technology partner and the deal we strike to get best value in both the short term and over the life of this strategy.

Engagement with the ISIS Programme and the Greater London Authority

We are part of both the criminal justice sector and Greater London.

The criminal justice sector is very big, with the police service at the beginning, and the courts, prisons and the National Probation Service at the end. We share common procedures with other police organisations and link these with relevant criminal justice organisations. There are opportunities to introduce consistent ICT applications across the police service arising from these common procedures, although just how common they are can make this more of a problem than it may seem at first.

The London public sector is also large, but different to the criminal justice sector. Many organisations interconnect for many business purposes. The thing we do all share is geography. This means that infrastructure, rather than applications, tends to be where we have shared interests. In exploring opportunities with the London public sector we must recognise that we have more strict security requirements than many of our London partners, and this tends to limit what it is possible to achieve through partnership working.

We need to maintain links with both the criminal justice sector and the London public sector and balance the drivers for partnership working and shared services with a focus on getting best value. We need to work with other police forces to develop national ICT solutions for policing through the ISIS Programme. Through ISIS we intend to:

- form the police ICT infrastructure into one national model by 2015; and
- save £400 million on buying in goods and services.

We are heavily involved in the ISIS Programme and will make sure that all our ICT developments are in line with this strategy. In particular, we will contribute to any national or regional developments to make sure that these meet our needs wherever possible. We will also invite, through ISIS, other forces to join in all its ICT developments to make sure that the savings that we can achieve can be shared. We will also get involved in the Future Communications Programme (for future police communications, including replacing police radios).

When we next invite tenders for contracts for outsourced services (services provided from organisations outside our organisation), we will take account of our position in the national criminal justice and London public sectors.

Managing digital images and audio

We have a lot of investment in analogue (pre-digital) technologies. Amongst other things this has resulted in the use and storage of a very large number of tapes. Although this technology has supported policing for a long time, it is outdated and increasingly expensive to maintain. We will aim to replace this technology with digital alternatives. The benefits of this approach are as follows.

- It reduces the bureaucracy of handling physical assets (for example, tapes).
- It is much easier to store, backup and retrieve related material, such as case papers
- There is much greater opportunity for preservation over time (although this is still not trivial).
- It keeps us in line with industry and the rest of the world.
- This technology provides the potential for added value (for example, through using facial-recognition software).

We will produce a strategy to tackle this issue in partnership with the Home Office Scientific Development Branch, who maintain standards in this area for the UK police service.

Print strategy

We are reviewing our approach to printing documents to see where we can improve cost-efficiency, environmental sustainability and security.

Sweating assets

We have been making the most of the assets we have invested in (referred to as 'sweating assets'). This not only involves decisions relating to equipment and licences, but also modifying our existing applications to extend their business value. This approach to extending existing functionality will also speed up how quickly we can deliver new business solutions. Introducing this approach will require a much greater contribution from those whose business interests are served.

Using an 'ICT Roadmap' of existing and future services will guide our decisions, and standard platforms will form some of the key assets to sweat in this way. Both the roadmap and standard platforms are described later in this strategy.

Better technology and managing solutions

We will improve how our major contracts meet our needs. We will question the service levels we currently apply, and the value of some of the assets we pay to maintain. We will actively challenge the value of what we are getting as a routine part of our business to provide best value. We will also continue to challenge our own practices and procedures. We need to examine whether we can achieve a better outcome through more efficient and effective management alongside the consideration of cutting services and products. We will continue to improve service, improve productivity, and reduce costs.

The technology marketplace – innovation and risk

Technology innovation has an important part to play in providing benefits and our business interests need to have the opportunity to benefit from it. Developments in technology are also sources of threats and vulnerability. We work with sectors relevant to our business and have internal arrangements with a variety of policing interests to explore potential technologies for innovation.

In-house capabilities to support operations

Operational Technology focuses on providing devices for police operations. They provide tactical technology for operational use. This technology mostly involves remote sensors, microphones, video, explosive or drug-detection devices and ground-penetrating radar. We must make sure the right measures are used protect the public without threatening civil liberties.

Remote sensors provide information while protecting both the covert nature of the investigation and the officers involved on it. Them being ‘remote’ implies that they need to be supported by a communications network. A tactical solution has been introduced in the short term and will be replaced by our commoditised network and storage when available.

We also provide ICT forensic capabilities to meet the growing need to tackle the problem of technology being used to commit crime. Our laboratories use state-of-the-art technology to gather and analyse information for investigating officers, providing a 24-hour service for all our forensic needs.

In 2009/2010, the Digital Electronic Forensic Service (DEFS) processed over 35,000 high-tech devices in support of almost 15,000 cases. At present, DEFS are dealing with a year-on-year increase of 20% in the digital devices and media being examined. As we don’t only deal with London-wide crime, DEFS are often called upon to help other forces, particularly in relation to counter terrorism.

DEFS are involved in influencing national and international agendas, and developing and creating pioneering techniques to help change the face of digital forensics worldwide.

We are exploring the possibility of devolving some electronic forensic capabilities to the front line.

5. Capabilities to support delivery

5.1 Standard platforms

Historically, our approach to finding solutions has involved defining a business need and finding a solution in the marketplace. This has the following disadvantages.

- Given the size of our organisation, all but the smallest requirements must go through a lengthy procurement procedure.
- The solutions tend to be separate systems where the information is locked inside
- Information often has to be entered more than once.
- As the solution may depend on technology new to us, the maintenance costs grow.
- Parts of the solution may be paid for but not used.
- Users of the solution have to learn how to use a new system.
- Sometimes the solution takes so long to deliver that the business need no longer exists.

To overcome these problems we are taking a different approach. We are starting to introduce a standard set of tools (platforms) to meet business needs in a cost-effective and efficient way. These standard platforms are as follows.

- Oracle and SAP —- for Enterprise Resource Planning (ERP)
- EMC Documentum – for managing content and workflow
- Microsoft Sharepoint – to collaborate internally
- Autonomy – for enterprise search requirements (finding information anywhere in the organisation)
- Business Objects – for extracting, manipulating and analysing information.

We will regularly review how these platforms fit with our needs from both technical and commercial perspectives.

Our intention is to re-use these platforms to meet all but the most specialised business needs. We can then:

- sweat these assets to get the maximum value out of them;
- improve the speed of meeting business needs by removing the procurement procedure, reducing the need for security assurance and not taking up extra space in our data centres;
- reduce total cost of ownership; and
- get better links between stored information.

Solutions Centre – efficient in-house deployment

We have begun to build our ERP Centre into a general purpose Solutions Centre to use our standard platforms for new business needs. We will introduce the use of these standard platforms to certain operational areas.

We will employ the standards set through the Enterprise Architecture Board (see Enterprise Architecture) to meet these needs in a sensible way.

5.2 Business change

The current model for changing our working practices involves independent, targeted action at all levels of the organisation. The largest change activities tend to be managed formally, but many different changes can affect local working practices at the same time. In an organisation of this size, where many factors drive change, this model is not appropriate. Unless action is taken to link up the change activities, the perception at the front line will be one of disjointed and conflicting demands for business change. Our ability to make joined-up business changes will be vital going forward. We will review our approach to business change and make proposals for improvements.

There is a need to understand our business in order to understand the effects of planned change. This understanding needs to look at how the business is now, how it should be in the future, and an agreed plan to make the transition between the two.

To make business changes across the organisation we need to work with business representatives who have the authority to agree and direct change, and who understand existing procedures so they can propose how they can be improved.

5.3 Projects and programmes

We oversee change activities through programmes and projects which we agree as priorities throughout the organisation each year. Formal oversight will be governed by PRINCE2 (Projects in Controlled Environments – a method of managing projects) and 'Managing Successful Programmes' (MSP). A Programme Management Office manages this.

Over time, our aim is to produce a model for delivering projects and programmes through contracts for making technology changes to help with business change. We are reducing our dependence on using contractors and improving our internal capability. We must review our capability, focusing on skills, resources, recruitment needs and planning for changes in staff.

We only commit to activity if there is a valid business case with clear benefits. We will also examine our existing business practices.

The capital programme provides a seven-year framework for planning ICT investment that is in line with business priorities and within financial limits. Examples of project and programmes as part of our capital programme in 2010/2011 include providing PDAs (handheld computers) to support operational policing, support for Safer Neighbourhood bases, identifying requirements for Olympics and Paralympics business cases, and providing Automatic Person Location Systems (which show staff in control rooms where an officer is) to borough-based police units.

6. Standards – enterprise architecture, ITIL and security

Elsewhere in this strategy we have described the need to involve all levels of the organisation in issues such as how to understand the implications of change and how to negotiate the right levels of service to meet business needs. There are standard approaches to dealing with both these issues, and we intend to draw on them to meet our needs. We will introduce enterprise architecture and ITIL service management for this purpose. What this means is described below.

6.1 Enterprise architecture – modelling our business to manage change

'Enterprise architecture' describes the way of:

- understanding how we are organised;
- understanding its business processes, its information and the supporting technology, and its services, both how they are now and how they should be in the future;
- how these can be influenced to bring about change; and
- the effect of changes.

It is not just an ICT tool. However, enterprise architecture will help with the design of technology. The success of this approach relies on adopting enterprise architecture as a business tool across the whole organisation. We will introduce an enterprise-architecture strategy which will have this aim.

Governing our enterprise architecture will be an Enterprise Architecture Board. This will oversee and control changes to the business, making sure change is introduced in an understandable and controlled way.

6.2 ITIL service management – negotiating priorities and service levels, and involving service suppliers

ITIL (Information Technology Infrastructure Library) is a set of best-practice guidelines for managing IT services. Owned by the Office of Government Commerce, ITIL consists of a series of publications giving guidance on providing quality IT services and the procedures, facilities and functions needed to support them.

In 2006, policy 14 (1) of the Information Systems Strategy for the Police Service made it compulsory to adopt ITIL as the consistent best-practice model for all UK police forces. In the autumn of 2010, HM Inspectorate of Constabulary will start inspecting the ways information is managed within all UK police forces. This inspection will be based, among other things, on the force's progress in adopting ITIL. We have embraced ITIL V2.0 (service management principles for service delivery processes and functions) for some time, and introducing ITIL V3.0 will extend across the DoI, building on ITIL V2.0.

The ITIL principles will give us a structured and planned service-management system which, together with enterprise architecture, will provide the foundations for how we work. They will provide real benefits by creating the opportunity to improve services and make savings through the following.

- Improved service delivery, information management, support and development which provides better-quality and more efficient ICT services to the business, adding value and leading to improved levels of customer satisfaction. (This is the main benefit of adopting ITIL principles).
- The development of an environment and culture of continual improvement and reductions in cost.
- The continuing development of a ‘service catalogue’ that will provide all the information needed for making decisions on how to improve services and cut costs
- Establishing functions with clear roles, boundaries, responsibilities and accountability
- Increasing efficiency, performance and productivity through developing and introducing consistent and repeatable procedures that will reduce waste, duplication and the scope for mistakes.

ICT Roadmap

We will have an ICT Roadmap which will describe a forward view of our business needs and will identify the need for significant decisions to be made in good time.

6.3 Policies, standards and assurance, including security

Strategies, policies and standards for business solutions must be in line with national standards such as those for security, diversity, and sustainability. It is essential that the outcomes of the ICT strategy are achievable. We will introduce a model to make sure that the size and effect of assurance activities are appropriate to the size, complexity and confidentiality of the information being protected.

We will introduce protective monitoring on our network. This will involve monitoring the infrastructure and auditing information and behaviours. We will apply appropriate measures to make our information secure outside our own internal networks. We need an approach to managing access to information based on identity and roles.

Our staff's use of information and ICT must be in line with relevant policies. We will introduce a tailored security-awareness programme covering information-handling behaviours.

7. Putting this strategy into practice

7.1 Measuring progress

Once this strategy is agreed, we will produce an action plan for putting it into practice. We will measure our performance through our annual strategic plan.

7.2 Governance

Our ICT Strategy Group will oversee the action plan to put the strategy into effect. They will report progress to the Information Board once a month.

7.3 Risks and issues

We are introducing an effective risk-management system and risks identified as a result of this strategy will be incorporated into that regime. Risk guides our business planning and helps direct our use of resources.