

Lincolnshire Police

ICT STRATEGY

2015 - 2018



policing with PRIDE

**The Police and Crime Commissioner
for Lincolnshire**

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SECTION 1

1. PURPOSE OF THIS DOCUMENT

This is an executive summary of the Lincolnshire Police ICT strategy for 2015-2018, for approval by the Office of the Police and Crime Commissioner (OPCC) for Lincolnshire.

The strategy builds upon the ICT deliverables put in place in 2012 and 2013 and commitments made in the Service Delivery Agreement between OPCC and G4S.

SECTION 2:

2. STATUS AND COVERAGE

This document is a non-technical summary of the full ICT strategy. It describes the main changes that will occur over the next three years to complement our wider Transformation Plan, and will include “art of the possible” proposals to the Force for which funding may need to be secured through the generation of positive business cases.

The strategy has been discussed and agreed at senior level and aligns to both the Police and Crime Plan and the G4S Service Development Plan, along with appropriate alignment with operational priorities and the Police and Crime Commissioner’s objectives to :-

- Reducing Crime
- A fair deal for the people of Lincolnshire
- Police and Services that are there when you need them.

This document summarises:

- The vision and principles that will guide our strategic ICT development
- How the significant ICT changes made in the early years of the Lincolnshire G4S partnership to improve services will provide a platform for subsequent transformation
- The benefits that will result for the citizens of Lincolnshire and for operational police officers
- A roadmap for implementation and an approach to managing change to build confidence.

The strategy covers a three year period, through to 2018; promoting alignment with the Force’s strategic planning cycle. However, given the pace of change in the wider Police ICT world, we are committed to reviewing and updating the strategy annually hereafter.

SECTION 3:

3. VISION AND GUIDING PRINCIPLES

This strategy will deliver the infrastructure and technologies required to underpin the Force Vision, Priorities and Policing Plan.

To secure the best policing for all the people of Lincolnshire, our Vision for ICT is to **provide an ICT environment where all our staff, can access all the information that they require – local, national and international - in a fast and efficient manner, no matter where they are, the time of day or the day of the week.**

The key challenge of our original ICT strategy has largely been overcome, as our starting point is no longer an ICT infrastructure that is recognised as not fit for the increasing demands of modern policing.

This strategy sets out how we can maintain and build upon a more stable ICT platform for the wider transformation of the police force, through the remaining years of partnership, while also delivering short-term operational benefits. It is organised under five themes. Three are about delivering business benefits – to the public, our staff and our partners – and two are about the ‘behind the scenes’ enablers:

- **Improving the user experience for the public and officers** – increasing productive time and improving public satisfaction.
- **Creating one integrated ICT system** – so that we can manage information better, improving its availability and value and enabling streamlined administrative processes.
- **Delivering a secure and resilient platform** - it is critical to stabilise the current systems before we add new technologies.
- **Improving value for money** – applying rigorous commercial methods to extract maximum value from our investment in ICT.
- **Supporting collaboration with partners** - enabling effective and efficient partnership working.

SECTION 4:

4. IMPROVING THE USER EXPERIENCE FOR THE PUBLIC AND POLICE OFFICERS

Improving the ‘customer experience’ is at the heart of our approach to ICT. Whether it is a frontline officer requiring information to make an operational decision or a member of the public calling to report a crime, effective and modern ICT is fundamental to transforming the way Lincolnshire works.

ICT touches 2,383 users in 54 locations, but data quality is variable and there are limited opportunities for the kind of modern ‘always on’ mobile data or ‘self-service’ approach that most people now take for granted. We can improve our service to the public by making it easier to interact with the Force and improving the quality of data to inform call handling and risk assessment.

4.1. Planned improvements

We will:

- Provide options and assist with a business case for a new Command and Control system with integrated functionality such as *Citizen Relationship Management (CRM)*, mapping, resource location, and radio communications
- Continue to identify systems which can be consumed within Niche RMS reducing the number of data sources.
- Simplify access to systems by taking a balanced approach to information security and will implement a 'single sign-on' solution for staff wherever technically possible.
- Enhance *Genie* (the Force search tool) to streamline the review of data under MOPI
- Revisit options for a digital evidence management solution, integrated with *Niche*, to hold photographs, voice and video interview recordings, CCTV and body-worn video recordings.
- Implement a mobile data solution to provide officers with the capability of completing system searches and forms electronically, allowing time that was previously spent returning to the station to complete such tasks to be spent within the communities of Lincolnshire, increasing officer visibility.
- Provide automated self-help facilities and upskill our Service Desk team to enhance our service to the Force
- Trial the use of on-line collaboration systems so officers can communicate more effectively
- Implement "Track my Crime" so the public can follow the progress of Force activity in line with developments to the Lincolnshire OPCC led Victim and Citizen Channels Programme and the national code of practice for victims of crime.
- Migrate all users onto the latest e-mail platform (Microsoft Exchange 2013) to benefit from new functionality.

4.2. Benefits for Members of the Public

- **A more personalized service:** Call handlers and frontline staff will have instant access to information, including the location of officers for faster deployment and details of previous contact with members of the public
- **Access to online options:** The public will have increased opportunity for online interaction with the Force, instead of paper application forms or phone calls. Potential elements of this are represented in Appendix I

4.3. Benefits for Staff

We will minimise administrative burdens for frontline staff:

- ICT applications will become single data entry, reducing input time for front-line officers, allowing them to return to duty more quickly, while making data available where needed.
- Staff will save time at the start of a shift by no longer having to sign-in separately to different operational systems.
- Staff will be able to update finance, HR, duty states and update their ICT account using self-service, making processes faster and more efficient, as well as reducing administration costs.

We will improve access to data and automate processes:

- *t-Police* will supply more reliable data and processes to support financial oversight and strategic decision making about resource deployment – e.g. event management including personnel skills search and matching.
- Direct access to digital evidence will speed up investigations and increase the chance of identifying suspects or victims.
- Searching systems will be faster and more effective.
- Staff will use up to date Microsoft software applications

4.4. Opening up Future Opportunities

Improved mobility: we have worked with Force representatives to pilot frontline data entry by officers, helping to plan for a comprehensive, medium-term mobile solution, which will position the Force to respond to rapid developments in mobile operating systems and devices over the next 12 months.

Options have been provided to the Force, a business case has been developed and the approval given for the preferred solution; an off the shelf mobile data solution which includes the capability to take electronic witness statements and the mobilisation of many paper forms and business processes. Closely working with Force project representatives, an implementation plan is being developed.

The deployment of innovative mobile solutions will also be targeted at assisting support staff functions where there are potential benefits to be gained in the reduction of paperwork by using electronic forms and single data entry.

4.5. Creating One Integrated ICT System

Information is the heart of policing, allowing resources to be deployed and decisions taken - to catch criminals, protect victims and solve emerging problems.

Lincolnshire has implemented *Niche RMS* as the core operational policing system, and the Force has made good progress by broadening its use in a number of areas. However, there are still opportunities to exploit Niche's rich capabilities, and the optimisation of Niche will continue. However, information is of variable quality, data is not efficiently shared and decisions are sometimes made on partial information and intelligence, so we will identify ways in which we can improve this via business analysts working closely with the Force.

One integrated system also means focusing on communication platforms and giving officers flexible, mobile access to information.

4.6. Planned Improvements

All systems will adopt a **single data model** wherever possible, enabling a common, comprehensive understanding of what data needs to be captured, the quality required and how it is to be stored and used. Adopting a single data model will remove the inconsistency of multiple points of data entry, save time creating data and improving quality. This single data model will enable the re-use of data across applications and support system integration.

We will further exploit the **integration of *Niche RMS* with *NSPIS Command and Control*** to remove dual key data entry and optimise case and incident management. This will allow a single view of incidents and ensure that data captured during operational activity can be collated and shared, as appropriate, within the Force and with partners.

We will **introduce the remaining module of *Niche RMS*** – functionality from the Property module will be deployed in a staged approach as agreed with the Force. This will then represent the full product suite for the RMS and will provide a platform to deliver

additional functionality and benefit to officers, for example enabling a more efficient approach to property management and potentially reducing the physical storage capacity required.

We will **rationalise our disparate ICT applications** by migrating legacy functionality onto strategic platforms such as Niche and decommissioning any redundant ICT infrastructure.

We will exploit converging digital technologies to **integrate our voice (fixed-line and mobile), data and radio platforms** wherever possible, providing the infrastructure for on-line mobile working wherever data coverage exists. Our aim is "one SIM per officer" and one network.

4.7. Benefits for the Police and the Public

Streamlining data collection and improving the value of our data: our aim is to achieve a single instance of each data entity – e.g. 'the golden nominal' – with all parts of the business using the one dataset and reporting performance from the one set of reports. This will allow officers to capture and record information once – saving officer time and reducing handling in the "back-office".

Unlocking streamlined business processes: *Niche RMS* provides for electronic tasking and workflow allowing process efficiencies across the Force, when fully utilised. T-Police delivers similar benefits for support functions.

We will **enable more effective mobile working** by providing a solution that will offer the mobilisation of forms and business processes that will allow officers to work off line, but effectively, anywhere in the county despite the limitations of connectivity. Where wireless connectivity exists, we will provide access to user's central desktop system including Email, Niche, and Command and Control.

4.8. Future Opportunities that will Open up as a Result

A level of maturity of integrated solutions is required before a full records management policy can be implemented so this is a medium term ambition within the scope of this document.

4.9. Supporting Collaboration with Partners

Partnership has never been more important for Lincolnshire, as we seek to manage serious crime with other regional forces; bring more offenders to justice with our CJS partners and build on the G4S contract through shared services with other Forces.

4.10. Planned Improvements to Work with Partners

Interactions with Criminal Justice partners require high volumes of data to be shared on a regular basis. Developments such as the digital case file put extra pressure on police ICT resources as the volume of data being stored and shared increases. To provide a basis for current and future collaboration, it is a design principle that **all investment should enable collaboration and openness to sharing data with partners** both regionally and nationally.

In support of our commitment to closer working with our partners we will:

- Align our ICT strategy with the regional ICT strategy
- Revisit options for a digital evidence management solution
- Implement the *Niche* Property module to manage physical evidence better

- Provide a corporate electronic document management solution unlocking a range of process improvements for the Force, partners and the public e.g. in the Central Ticket Office
- Continue to work with other regional Forces to receive ICT services from Lincolnshire

As part of the ongoing collaboration project between the Regional Forces, we will continue to develop a working relationship and associated protocols, with the Regional ICT teams. This will realise the anticipated benefits as outlined in their draft Operating Model and reproduced below:

- The information resource of the Region will be converged to develop an intelligence rich picture of criminals, victims and witnesses, which officers can utilize to support local, regional and national decision making.
- Communications systems will span the whole of the East Midlands so that they enable and support the Region to develop new approaches for the use and management of people assets in support of policing operations.
- The Region will maximize the operational benefits of science and technology to transform the service.
- Information systems and services will balance the need to secure data against the need to ensure officers have sufficient access to information so they can protect themselves and members of the public.
- The East Midlands Forces will maximize the benefits of a combined ICT collaboration to improve value for money and also to influence the future of ICT nationally.

Additional opportunities will be proactively sought with the local Lincolnshire County Council in respect of potential shared services and data. An example of this would be the provision of a CRM system for the Force that also encompasses County Council functionality that allows calls taken by the Force, but relate to requests for Council related functions, to be seamlessly transferred to the appropriate Council department. This functionality may also be developed to allow inter partner sharing of agreed citizen data such as residential addresses, email addresses and telephone numbers.

4.11. Opportunity to Share Services through the G4S Contract with other Forces

Ten other police forces are named on the contract under which G4S and Lincolnshire Police agreed their partnership. As such all ICT developments covered by this strategy will be developed in such a manner that **service delivery and some of the core, underlying infrastructure components can expand progressively** to handle predicted growth levels should more forces take advantage of the partnership. For example, the architecture of *t-police* that has been designed to allow for services to multiple forces from a common platform.

The shared services model which has been designed is flexible and scalable to allow for fully integrated service management or a hybrid model, depending on the needs of the additional Force(s).

4.12. Benefits to the Police and the Public

- Streamlined criminal justice processes, supported by shared applications and enhanced data sharing, releasing time savings and increasing accuracy across the CJS, through access to complete sets of documents

- Increased effectiveness through enhanced identification of offenders through digital evidence management solution
- Economies of scale from shared service operation for all participating forces.

4.13. Future Opportunities that will Open up as a Result

At the point at which additional Forces join the Lincolnshire contract, we have a clear view of the developments that will be required to implement an authentic shared service environment and generate the associated efficiency benefits.

- Unlock volume purchasing discounts
- Create an architectural development plan for expanding shared systems
- Review ICT staffing to identify efficiency savings through reducing duplication.
- Embark on a cultural change programme within a broadened regional ICT team to define a shared vision to improve performance and work on common objectives.

SECTION 5:

5. CREATING A SECURE AND RESILIENT ICT PLATFORM

The most critical parts of our ICT estate are the elements of infrastructure that our users do not see. Since the start of the partnership, G4S has been working with the Force to develop and improve infrastructure to conform to standards of security, performance and resilience required for modern policing. This includes a suitable disaster recovery provision.

The ambitions set out in this Strategy continue our fundamental shift in the technologies we use to store and transmit our data and ensure the Force are benefitting from modern technology and a forward thinking approach.

5.1. Planned Improvements

Work has started to:

- Implement a **standard operating environment** for user workstations, to provide consistent functionality to users, aiding mobility and making workstations easier to maintain. This initiative also contributes to an improved end-user experience (see Section 4).
- Build upon our **upgraded Active Directory** infrastructure to facilitate greater collaboration both within the Force and with Partners.
- Migrate applications to a **new primary data centre** hosting the key Force computer systems. Over 100 applications are being considered for hosting at the data centre and of this number over 70 have now been migrated. The new data centre is operated on a shared basis but meets industry standards and has accreditation to IL3 (restricted) security level. We will provide Lincolnshire Police with state-of-the-art ICT infrastructure services including high quality System Management software offering enhanced monitoring and proactive notification of system performance and access to new technologies and services as they arise.
- The existing on-site **Nettleham Data Centre is being converted for use as a Disaster Recovery (DR) centre** as primary elements of the ICT estate are migrated to the new shared service environment. Once migration is complete, and DR resilience achieved through a private cloud solution, Nettleham's legacy systems can be fully decommissioned.

- The technical configuration of the two data centres will enable a full **Virtual Desktop**, enabling most users to access their applications and data anywhere that is required.
- **Server virtualization** within the prime data centre is providing a flexible and scalable approach to storage which will become increasingly important to the Force as digital evidence and electronic case files become common to the majority of investigations.
- Decommission old applications that are no longer used. 83 applications to date have been through a decommissioning process, **streamlining the application estate** and working with the Force, we will continue to ensure existing applications are optimised and their full potential realised.
- **Information Security** will continue to be maintained, and enhanced wherever possible, by the timely and appropriate remediation of issues raised within IT Health Checks.
- **Embed ICT transformation** into our business as usual activity by aligning ICT people with business analysis skills to business departments to identify and implement day to day operational efficiencies.
- Support the Force in **national initiatives, readiness and compliance for changes to technology** such as the introduction of the new Public Service Network (PSN) enabling benefits by providing the conduit for shared services, better collaboration and greater efficiency across public services, transforming the way they are delivered. And the Emergency Services Mobile Communications Programme (EMSCP) replacing existing services with a new national mobile communications solution.

5.2. Benefits to the Police and the Public

- Improve the end-user experience
- Reduced administrative burdens through the simplification of operational processes
- Full compliance with Government security standards
- Higher standards of resilience
- Reduction in total cost of ownership
- Reduced environmental impact from servers
- Increased ICT system performance
- Increased flexibility as storage and performance needs change.

5.3. Future Opportunities that will Open up as a Result

These changes will create a flexible and scalable infrastructure able to respond to additional Forces joining the shared services environment.

SECTION 6:

6. IMPROVING VALUE FOR MONEY

6.1. Controlled Investment

Delivering the ICT strategy will require investment in infrastructure, applications and data storage solutions. Investments will demonstrate value for money and business benefit through a structured management regime.

There are three types of investment:

Investment Type	Investment Process
1. Pre-approved, costed and included in the G4S SDA	Demonstrate value for money in choice of proven technology to minimise delivery risk
2. Costed options within the contract	Demonstrate value for money through a "mini-business case" demonstrating actual costs and planned benefits
3. Speculative investment required due to changing business need or emerging technology	Demonstrate value for money through a "full business-case" which demonstrates options, costs and benefits

6.2. Applying commercial disciplines

Going forward we will demonstrate value for money by:

- Engaging with customers on a transparent commercial basis, focused on business benefits
- Using agreed measures to judge success
- Selecting proven technology and approaches to minimise risk

We will engage with customers on a transparent basis, focusing on business benefits

- All investment will be on a business case basis.
- The ICT delivery organisation will engage with the operational parts of the Force as with a commercial customer.
- Pricing will be transparent.
- The provider will be accountable for service levels and changes will be by negotiation.

We will use agreed measures to judge success

- Total cost of ownership over the operational lifecycle
- Operational cost reductions
- Business performance improvements/benefits.

We will select proven technology and approaches to minimise risk

- ICT provision will, where possible, be through the delivery of standard commercial off-the-shelf solutions.
- Expensive customisation will be avoided.
- Where police-specific solutions are necessary they will be developed and deployed on a shared-basis, using solutions in operation in other force areas, wherever possible.
- Service delivery will adhere strictly to industry-standard best practice (ITIL®).

SECTION 7:

7. Implementation

The OPCC and the Force can have confidence in delivery of this strategy because we are committed to four pillars of effective delivery:

- Governance to ensure proper oversight and control
- A fit for purpose ICT organisation
- Proportionate risk management
- Effective delivery of change.

7.1. Governance

We welcome the involvement of the OPCC in overseeing the delivery of the strategy.

Day to day we will work closely and collaboratively with the Commercial Partnership Team and the various joint Partnership governance structures to ensure alignment, deal with issues and risks and drive forward delivery.

To support governance, we are putting in place appropriate controls:

- All work is defined in a clear plan, supported by agreed scope and specifications.
- A transparent change control process will allow us jointly to prioritise and manage changes to agreed plans/specifications.
- Any changes beyond what has been agreed will require a business case to demonstrate cost, VFM and business benefit.

7.2. A fit for purpose ICT organisation to deliver the changes

The ICT function has been re-organised into 5 teams to fit this strategy and its structure will continually be reviewed for effectiveness:-

- **Projects** – A core team which can be supplemented by G4S to provide a flexible pool of project managers to define and specify what needs to change to meet business requirements.
- **Architecture and business analysis** – a team of people capable of translating business requirements into optimally designed and performant ICT solutions
- **Operations** – a team of domain experts able to design, deliver, support, and maintain effective ICT solutions
- **Service Delivery** – the core delivery team for day-to-day support of our ICT customers, comprising of the ICT Service Desk and a team of infrastructure technicians for on-site support. In time these resources will be mostly shared with other customers of the shared service.
- **Security** – to manage risk effectively, and to ensure governance and adherence to policy. Operating on a matrix management basis, it comprises of a Security Manager and a technical Security Specialist embedded within the Operations team to maximise our information security capability.

7.3. Risk Management

Mitigations for the key technical and business risks have been built into the strategy:

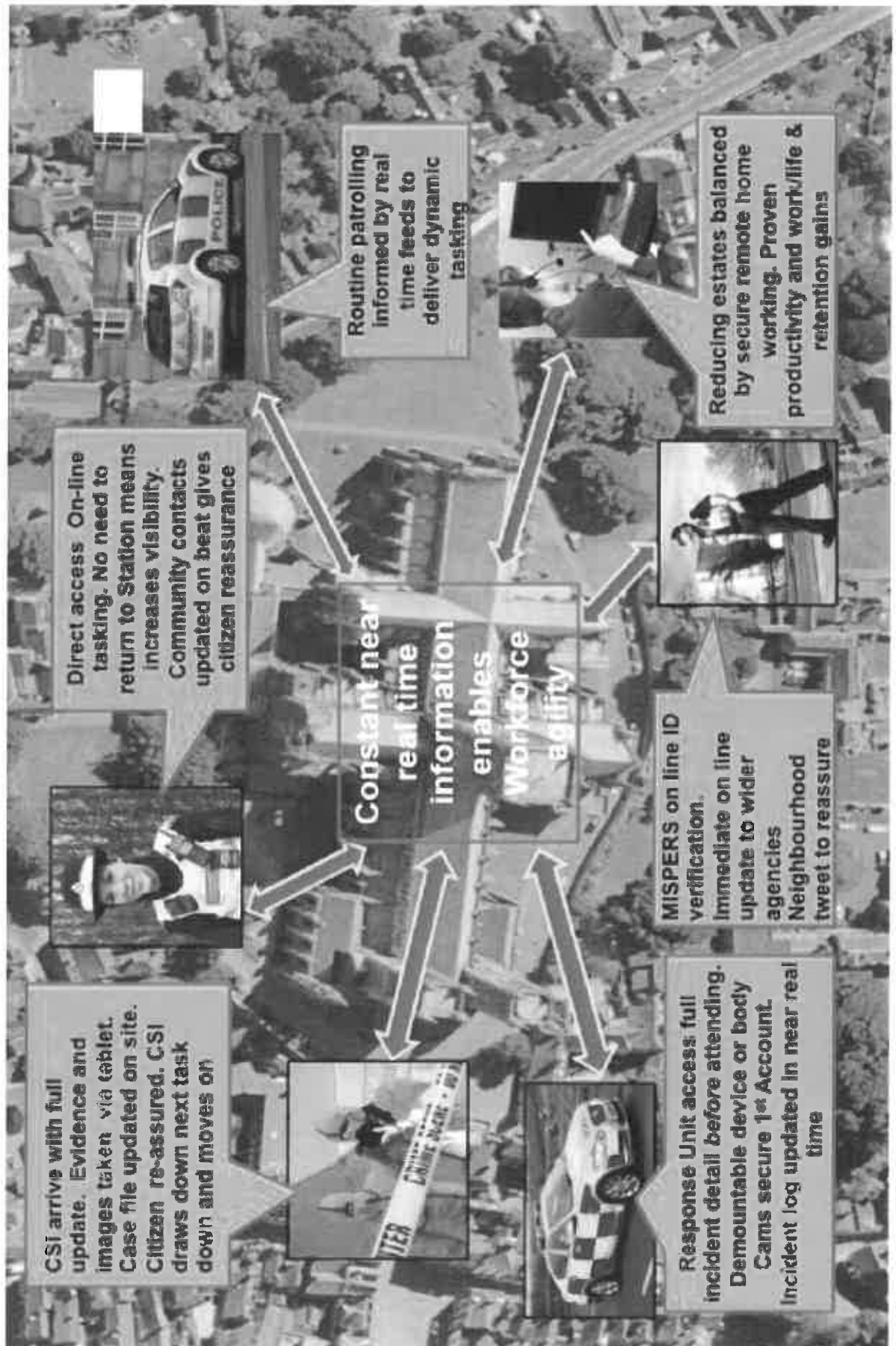
RISK	MITIGATION
1. Delivery to the agreed timescales	Effective project management and timely business input
2. New technology may fail during development or go-live	Use of proven technology rather than bespoke development Robust UAT
3. Maintaining service levels during implementation	Detailed transition planning and implement change according to risk profile & operational impact
4. Resistance to change to revised operating practices	Full participation of users in design and testing and sustained focus on user benefits
5. Choice of technology limits collaboration with other Forces	Technical architecture and infrastructure chosen to be scalable, flexible and able to deliver a shared service

7.4. Effective Delivery of Change

Our overall approach to managing change is set out in the Strategic Partnership Transformation Plan.

Implementing change to the Force's ICT systems will require robust planning, rigorous impact assessment and careful management of dependencies to reduce the level of risk the Force is exposed to. Each element of change has a different risk profile so will be treated accordingly. Changes to business critical systems will be delivered in a way which minimises risk to operational activity. Infrastructure changes can mostly be achieved without direct impact on users. Implementing new or upgraded applications, which will impact on users, will be accompanied by robust user testing, training and end-user support.

REAL TIME INFORMATION FLOW



CITIZEN ENGAGEMENT

