



<i>Document Name</i>	ANPR Strategy for the Police Service – 2010-2013
<i>File Name</i>	ACPO ANPR Strategy 2010-13 v1.0.doc

<i>Authorisation</i>	
<i>Signed version held by</i>	

Contents

1. Introduction.....	3
1.1 Document status	3
1.2 The scope of the strategy.....	3
1.3 The overall aim of the strategy	3
1.4 The timescale of the strategy	3
1.5 Constraints on this strategy	3
1.6 The development process	4
2. Stakeholder analysis	5
3. Strategic vision and values.....	6
3.1 Vision	6
3.2 The values which are central to this strategy	6
3.3 The wider policing capability context.....	7
3.4 Value for money and cost effectiveness.....	8
4. Current position	9
4.1 The National ANPR Infrastructure (NAI)	9
4.2 The Information Communication Technology (ICT) context	10
5. Strategic objectives	11
5.1 Capability support to policing.....	11
5.2 Three-year goals	12
5.3 Priorities for strategic change	12
5.4 Evaluation, learning and review	13
5.5 Communication Plan.....	13
6. Contact information	14

1. Introduction

1.1 Document status

This document articulates an updated strategy for the use of ANPR technology within the Police Service of England and Wales.

It is based on the current "ANPR Strategy for the Police Service – 2007-10" that was issued in September 2007, but has been significantly updated to reflect developments since that time and anticipates the challenges and opportunities that will arise in the next three years.

1.2 The scope of the strategy

This document addresses the use of ANPR at national, regional and local levels within the police service of England and Wales, acting, where appropriate, in partnership with others. It does not cover the independent use of ANPR by other public or private bodies in England and Wales, nor does it cover the use of ANPR in Scotland and Northern Ireland, other than to the extent that forces in these territories use the ANPR National Infrastructure (NAI). However, it is anticipated that non-Home Office forces and other associated organisations will adopt the principals contained herein. In the future, this strategy may be influenced by European data-sharing agreements.

1.3 The overall aim of the strategy

The overall aim of this strategy is to set out a clear statement of how the police use of ANPR technology is to be advanced over the next three years and the priorities for new actions under the scope of the national ANPR Programme.

1.4 The timescale of the strategy

This strategy covers the period from 1 April 2010 until 31 March 2013. It is restricted to this three-year period as ANPR is an area of rapid technology development and any attempt to predict the future beyond three years is likely to be made irrelevant by technological advances.

1.5 Constraints on this strategy

This strategy is based on the premise that the future development of the use of ANPR will be based on the evolution or existing assets (eg cameras, back office systems and databases, best practice advice, standards etc) rather than any radical re-specification or re-design of past investments.

There are two reasons for this. Firstly, a significant investment has been made over the past six years and the police service is yet to receive all the potential benefits from this investment. Secondly, fiscal constraints are likely to restrict the amount of new money available at local, regional and national levels and the focus over this period is very much on maximising value for money from past investment rather than on entering into major new spending commitments.

However, in spite of these constraints, this strategy envisages that the shape and nature of the NAI and the police usage of ANPR technology may be quite different at the end of this three year period.

1.6 The development process

The first draft of this document was prepared by the NPIA on the basis of the existing 2007-2010 Strategy and the discussion that took place at a "Visioning Workshop" held at NPIA Ryton on 14 April 2010. The document then went through a number of iterations of review by the ANPR Programme Board prior to its publication in October 2010.

It was agreed that this Strategy would be used as a live document and reviewed and revised as necessary during its period of operation.

2. Stakeholder analysis

The main organisations that have a stake in this strategy and whose representatives will be invited to commit to it are as follows:

- The police forces of England & Wales
- Police Service of Northern Ireland (PSNI)
- Association of Chief Police Officers of England, Wales and Northern Ireland (ACPO)
- National Policing Improvement Agency (NPIA)
- Serious Organised Crime Agency (SOCA)
- Association of Police Authorities (APA)
- Home Office

There are several secondary stakeholders. These include:

- British Transport Police (BTP)
- Department for Transport (DfT)
- Motor Insurers' Bureau (MIB)
- Driver and Vehicle Licensing Agency (DVLA)
- Vehicle and Operator Services Agency (VOSA)
- Environment Agency
- Her Majesty's Revenue and Customs (HMRC)
- UK Border Agency (UKBA)
- Her Majesty's Inspectorate of Constabulary (HMIC)
- Information Commissioner's Office (ICO)
- Department for Work & Pensions (DWP)
- Counter Terrorism Units (CTUs)
- Counter Terrorism Intelligence Unit (CTIUs)
- Security Service

Other users of ANPR systems who may derive a benefit from police ANPR installations include Port Authorities, highways operators, retail and forecourt outlets.

3. Strategic vision and values

3.1 Vision

The strategic intent of this ANPR strategy is to:

‘target criminals through their use of the roads’

We will achieve this aim by exploiting the full potential of ANPR technology, at national, regional and local levels within the police forces of England and Wales, acting, where appropriate, in partnership with others.

In achieving this intention, the ANPR Strategy will help to meet the following policing objectives to:

- Increase public confidence and reassurance;
- Reduce crime and terrorism;
- Increase the number of offences detected;
- Reduce road traffic casualties;
- Make more efficient use of police resources.

3.2 The values which are central to this strategy

The core values on which this strategy is based - and which will inform all the actions which are planned as a result – are as follows:

- ANPR technology will always be used only in accordance with the Law, and in particular with the requirements of the Data Protection, Regulation of Investigatory Powers, Human Rights and Computer Misuse Acts;
- Whilst a Vehicle Registration Mark (VRM) alone does not identify a particular individual, ANPR data will be treated as ‘personal data’ as defined in Article 2 of the European Directive 95/46/EC.;
- The continued use of ANPR technology for enforcement purposes is dependent upon maintaining the public’s confidence that the technology is being used correctly and appropriately. Our guidelines will ensure that those deploying and operating ANPR do so whilst recognising and respecting the rights and privacy of individuals;
- We will ensure that robust procedures are in place to ensure hotlists and databases are as accurate as possible and that action is taken over cloned plates whenever these are identified;
- We will continue to enforce and renew our procedures to ensure that the risk of misuse of ANPR data by staff is eliminated and that ANPR is only used for legitimate policing purposes;
- We will ensure that ANPR data can be deleted and that it is not kept longer than necessary for genuine and justifiable policing purposes;
- We will continue to maintain effective access controls to prevent unauthorised access to ANPR data and to ensure consistency of access to the national database by individual forces;

- We will continue to maintain the National ACPO ANPR Standards (NAAS) and, to the fullest extent possible, ensure that these standards are adhered to.

In addition, this Strategy acknowledges the Home Office principles of privacy and security:

- Necessity – collect data for common sense purposes: We collect data to prevent crime and disorder, to protect the public and to safeguard the rights and freedoms of citizens;
- Legality - ensure compliance with relevant privacy legislation: We ensure that all data is collected, stored and deleted in accordance with the requirements of the Data Protection Act 1998 and the Human Rights Act 1998;
- Proportionality – collect and use data to protect individuals and their communities: We apply a sliding scale so that sensitive data and surveillance techniques are used only for the most serious purposes;
- Protection – regulate the people who can hold or access sensitive data, and protect against risk of data loss: We allow only trusted authorities, such as the Police or intelligence agencies, to hold or access sensitive information with tight controls over individual access;
- Transparency – make it easy to access your data and to complain: We are open about the data we hold without compromising security, and we uphold the rights of anyone who has been unjustly treated;
- Scrutiny – ensure democratic oversight of what we do: We ensure independent scrutiny of what we do from impartial authorities approved by Parliament.

3.3 The wider policing capability context

“Building Capability – A Ten Year Strategic Framework” sets out the vision for policing capability in England and Wales from 2010 to 2020.

The ANPR Strategy supports four of the seven areas of continuing capability improvement, namely:

- developing effective operational processes, practices and doctrine, with a vision that “citizens are protected from harm and risk, and the police service is successful in preventing crime and bringing offenders to justice”;
- improving the use of information, knowledge and science, with a vision that “citizens are confident that policing makes systematic use of information, knowledge and science”;
- continuously improving the delivery of support services, with a vision that “support services for forces are efficient, effective and delivered at the right level”;
- increasing the efficiency of service delivery by forces, with a vision that “the police service maximises resources for front-line delivery to meet the needs of citizens”.

3.4 Value for money and cost effectiveness

The operating environment has changed radically since 2007 (when the previous version of this Strategy was drafted). Finances are being squeezed and the resultant focus on justifying all levels and types of spend is considerable.

At a national and local level, this manifests itself in two ways. First, there is a huge pressure for efficiencies to be maximised and costs to be minimised. Second, value must be demonstrated and ongoing investment must be justified in a consistent manner.

As a central, high-cost and visible part of the policing landscape, ANPR must be braced for such scrutiny. It will have to justify its procedures and existence against other competing funding priorities, through considered quantitative evidence rather than solely the provision of anecdotal examples.

As an aside, the surveillance and civil liberties agendas are coming into sharper focus and it is likely that ANPR will come under further scrutiny to justify its procedures.

As the policing context focuses on value for money and productivity, ANPR has a real contribution to make in allowing the timely and efficient response of resources to counter risk, threat and harm.

4. Current position

4.1 The National ANPR Infrastructure (NAI)

The Metropolitan Police Service (MPS), and more latterly the National Policing Improvement Agency (NPIA), contracted with Anite Secure Information Systems (now Northgate Public Services or Northgate) to provide a national solution for the capture and storage of Automatic Number Plate Recognition (ANPR) data.

This National ANPR Infrastructure (NAI) solution comprises two core elements:

- A Back Office Facility (BOF) within each police force
- A single centralised National ANPR Data Centre (NADC)

The strategic objective and intent is that every force captures its ANPR data locally and also submits a copy to NADC. By March 2010, this involved the capture and transfer of approximately 10-12 million ANPR reads per day. These reads are fed from over 5,000 active ANPR cameras nationally thanks to considerable investment by Local Authorities, the Home Office and forces. NADC is currently configured to be able to receive up to 50 million ANPR reads per day. This enables cross-border analysis, national enquiries and also counter-terrorism analysis to be carried out. To date, there has been limited use of the NADC query facility, but this should be rectified with the roll-out of BOFII v2.3 and the revision of the cloned plate analysis function.

There is concern over the future replacement of the national camera network due to the current financial climate. With the advances in wireless and semi-portable cameras, there may be a reduction in the cost of the standard fixed-site cameras which could alleviate some pressure. In addition, an increasing number of government agencies and private sector organisations are collecting ANPR data. If they could be encouraged to purchase NAAS-compliant cameras then this would solve the majority of the replacement issue.

The existing national Back Office Facility (BOF) provides the following capability:

- Support for 3 million reads per day per BOF (usually one per force)
- Interaction with the DVLA Make, Model and Colour data (MMC)
- BOF to BOF interaction
- Web services including interfaces to Mobile units and Command and Control Systems using a range of open web service interfaces
- An optional data mining capability to enable force analysts to carry out more comprehensive analysis of the ANPR data

In addition to the NAI, there are other tools used throughout the police service which perform ANPR functions. These include BOFs and data mining tools developed by a range of technology organisations. Work is currently being undertaken to open up the NAI to enable each force to choose the systems most appropriate to them and be able to feed the NADC with it.

The NAI is supported by National ACPO ANPR Standards (NAAS) document, which specifies the minimum standards to be met by ANPR cameras and systems before they can be connected to the NAI.

Another information gathering tool, which will be outlined in the NAAS, is the ability of forces to store non-NAAS-compliant data in their Force BOF. This can be collected from a variety of sources (i.e. traffic or private cameras) and will be used primarily for post-analysis purposes, to fill in any gaps which may be present in the NAAS-compliant data. Due to the information gathered this way being less reliable, it will not be uploaded to the NADC.

Although the current configuration of the NAI has provided a number of benefits to policing, there is some evidence that it is no longer meeting current needs. It is necessary, therefore, to conduct an early review of the requirements for the NAI in order to determine if any changes are needed to its boundaries or how it is delivered. This review will be undertaken in the first six months of Year 1.

4.2 The Information Communication Technology (ICT) context

The ANPR national BOF and NADC systems fit within the context of the police service's Information Systems Improvement Strategy (ISIS) and are governed by ISIS Principles.

ISIS is the single, coordinated strategy to enable and facilitate the transformation of Police ICT (including ICT services for counter terrorism). The main priorities of ISIS are to reduce the cost of delivering ICT services to Police by £200m by 2014 as well as increasing capability to improve operational effectiveness and to continue to increase public confidence in policing. This will be enabled through the use of common, compatible standards and technology throughout the Police Service (in England and Wales).

In May 2008, the National Policing Board (NPB), chaired by the Home Secretary, along with the ACPO Cabinet and ACPO Council endorsed ISIS and provided the mandate for the establishment of a programme of work to deliver ISIS.

The existing ANPR Programme fits well with the ISIS strategy because it entails:

- The adoption of a single technology platform by all forces in England & Wales;
- The adherence to a set of business processes, technical and data standards as defined in the National ACPO ANPR Standards (NAAS);
- The sharing of best practice in the use of ANPR through the User Group structure;
- The sharing of resources and data to mutual benefit between forces and other authorised partners.

This Strategy also acknowledges that developments in ANPR must be supportive of the "Science and Innovation in the Police Service 2010-2013" blueprint.

5. Strategic objectives

5.1 Capability support to policing

This strategy is built upon strengthening the fundamental capabilities that ANPR brings to policing and criminal justice. These are summarised as 'the three Is' – information/intelligence, intercept and investigation.

5.1.1 Information/Intelligence

At the end of March 2010, the NADC was receiving approximately 10 million reads per day, with over 7 billion vehicle sightings stored. This body of information on vehicle movements is key to the value of ANPR.

Strategic aims in this area are to:

- increase the coverage of locations of strategic importance;
- increase the accuracy of data (including VRMs and locations);
- increase the accuracy of 'hotlists';
- improve the way in which 'hotlists' are used;
- embed the analysis of ANPR data within the tasking process to combat Level 1, 2 and 3 criminality.

5.1.2 Intercept

The most highly-visible application of ANPR technology is the real-time response to hit alarms, either through control-room deployment or self-deployment in mobile units.

Strategic aims in this area are to:

- develop and promulgate best practice in safe and effective interception of vehicles of interest;
- develop protocols such that all high-priority hit alarms are dealt with in real time;
- develop protocols to effectively and efficiently deal with those vehicles of interest that are not able to be dealt with in real time.

5.1.3 Investigation

It is recognised that, at the time of writing this strategy, the use of ANPR in post-incident investigation is relatively immature when compared to intercept operations.

Therefore, strategic aims in the area of investigation are to:

- increase investigators' awareness of the opportunities provided to them by ANPR data;
- embed the consideration of the use of ANPR within the investigative process;
- develop and promulgate best practice in the sourcing, analysis and storage of ANPR in support of investigations.

5.2 Three-year goals

The key goals are that, over the period of this Strategy, the police service will have:

- used ANPR to contribute to the local delivery of policing plan objectives;
- demonstrated efficient and effective use of intercept and investigative resources;
- embedded ANPR into key force business process to yield the optimum return from investment.

Achievement of these goals will be evidenced by:

- an increase in arrest rates and sanction detections;
- maintained levels of vehicle and asset seizures;
- successful prosecution of offenders.

5.3 Priorities for strategic change

Some of the objectives have already been (and are continuing to be) achieved by the existing use of ANPR technology. However, there are a number of areas where further improvement is both desirable and achievable. The most significant areas where strategic action is required are as follows:

- To establish and communicate a clear and unambiguous statement about the police use of ANPR, the benefits that this provides to public safety and to the safeguards that are in place to protect the privacy of the law-abiding majority;
- To facilitate the effective sharing of assets and data with partner agencies at national, regional and local level in order to avoid duplication and enhance operational effectiveness;
- To maintain and improve the quality and relevance of the guidance for the police service in relation to ANPR and Data Protection, Freedom of Information, Regulation of Investigatory Powers Act and the Human Rights Act;
- To maintain and update the NAAS to encourage supplier innovation and the development of a competitive market in ANPR technology whilst safeguarding the quality and integrity of data stored within the NAI;
- To work to improve the quality and timeliness of Hotlists at national and local levels;
- To work to ensure that all bodies that are connecting to the NAI are committed to adherence to NAAS and to carrying out regular audits of equipment and processes to ensure NAAS compliance;
- To encourage Government to establish an effective legal basis for the police use of ANPR technology and for the sharing of data and assets between parties for law enforcement purposes;
- To encourage Government to implement effective counter-measures to inhibit the activities of criminals who seek to circumvent or undermine the effectiveness of ANPR technology;

- To encourage police forces to adopt a corporate approach to the procurement of ANPR equipment in accordance with ISIS principles, including the procurement of any successor products to the national BOF. (NB If forces do not commit to this voluntarily, the NPIA CIO now has the power in Law to mandate);
- To continue to capture, validate, share and further promulgate good practice to aid efficient and effective implementation of the use of ANPR technology;
- To encourage the development and use of effective ANPR analytical tools, outside of the NAI;
- To link ANPR into the national security planning for the Olympics in 2012;
- To ensure a 24/7 capability in all forces to respond to High Priority ANPR "hits";
- To provide support to the consolidation of policing services;
- To support forces' drive for efficiency and value for money.

5.4 Evaluation, learning and review

This strategy will be implemented through annual Action Plans that will be agreed by the National User Group and Programme Board shortly at the commencement of each Financial Year.

Towards the end of each Financial Year, the progress made in the implementation of this Strategy will be evaluated and any lessons to be learned will be reflected in an annual Evaluation Report and, where necessary, a further revision of this Strategy.

5.5 Communication Plan

It is very important that the priorities for strategic change are communicated to, and understood by the key stakeholders referred to in Section 2 above. This will be achieved through the widespread dissemination of the annual Action Plans and the Evaluation Reports.

6. Contact information

Further advice about the contents of this Strategy and the annual Action Plan(s) can be obtained from the following:

- National ANPR Programme Manager – mark.jones@npia.pnn.police.uk
- National ANPR Co-ordinator – john.dean@gmp.pnn.police.uk
- ANPR Implementation Team Manager – bill.mandeville@npia.pnn.police.uk
- BOF & NADC Product Manager – kelly.hulland@npia.pnn.police.uk
- ANPR National User Group Chair – simon.byrne@gmp.pnn.police.uk

APPENDIX A

Year 1 (2010-11) Action Plan

The ANPR Programme consists of many different strands of activity. These activities are overseen by the ANPR Programme Board and will continue to be progressed as "business as usual".

This Action Plan deals exclusively with major new activities that are to be launched in 2010-11.

1. Re-evaluation of the scope of the NAI

Although the current configuration of the NAI has provided a number of benefits to policing, there is some evidence that it is no longer meeting current needs. This is because:

- The capabilities of the analytical tools provided by the current BOF product have been overtaken by the "out-of-the-box" functionality of other software products. For example, 37 forces have purchased i2 which offers considerably better tools and which could be used much more effectively than the BOF Data Miner;
- Some forces are looking to be able to process more "reads" than the current BOF system can handle;
- The thinking about the potential use and benefits of NADC has moved on and it is now clear that many of the original objectives of the NADC can be achieved more cheaply and effectively by other means (eg BOF to BOF exchange).

It is however even more critical that data should be stored in a standard format, have standard data rules and sent to the NADC in a consistent process. The mechanism by which NADC currently accepts data from force BOFs is complex with various data validation and protocol timing criteria that need to be met to maintain the integrity of BOF to BOF exchanges.

It is also critical that policy deployment is enabled to ensure changes in strategy can be implemented at lowest cost and maximum speed (eg changes in retention policy).

Consideration will be given to the options for re-architecting the NAI in order to reduce the cost of the components that are delivered centrally and to introduce greater freedom for the police service to adopt other tools that might provide increased functionality (or the same functionality more cheaply).

The review will also re-consider the usefulness of the NADC for general policing purposes and will consider the alternative options for providing equivalent functionality at a cheaper price. This aspect is given added impetus by the fact that the NADC hardware will need to undergo a major refresh in 2011/12.

The aim will be to complete this evaluation by 31 August 2010.

2. Further review of the NAAS and the establishment of a new regime for ensuring NAAS compliance

NAAS compliance comes at a number of levels, Data structures, Functionality and Data itself. These different levels need to be tested in different ways in each of the components of the architecture:

- Data Structures (and interface) can be tested by examination and by passing data through a component to check that it is the same at the end as it was at the beginning;
- Functionality in terms of both availability and performance can be examined with a series of test scripts on a certified environment;
- Data compliance is much more difficult to manage. Whilst it is possible to check whether items fall within acceptable ranges or have values from an acceptable set, it is much more difficult to identify if a time stamp is correct or whether a camera is identifying all of the vehicles that it should. It is likely that this can only be ensured by regular sampling of data or periodic spot-checks.

This review will consider the various options for ensuring the integrity of the NAI. The two main options are:

- Regulatory – that is, the definition of the full architecture in terms of components and interfaces. From this the requirements of each component and interface can be documented and a set of necessary tests can be developed to prove that a component meets the standard. Under this approach, the NPIA or some other central authority would need to establish a formal testing and approval regime. Some components would require both ‘type approval testing’ and ‘installation commissioning tests’, whereas other components will only require “type approval” testing.
- Voluntary – under this approach there would be no central testing and validation and forces would be trusted to commit voluntarily to use components in conditions that they are approved and to maintain suitable support and maintenance agreements to keep the components in good working order.

The aim will be to complete this evaluation by 31 August 2010.

3. Definition of advice and guidance for forces wishing to share ANPR assets and/or data

Because more forces are looking to share ANPR assets and data either with other forces or with each other, there is a need to re-visit the guidance in the NAAS to remove the potential barriers and risks.

The aim will be to complete this advice by 31 October 2010.