The police use of Automatic Number Plate Recognition

A review by a working group of interested parties aimed at addressing concerns and providing understanding of the workings and regulation of the system.

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INTRODUCTION

This report aims to provide a basic understanding of the working of Automatic Number Plate Recognition (ANPR), regulation of the systems and identification of some concerns. It arises following several investigations by the Independent Police Complaints Commission (IPCC) where recommendations have been made for improvements. Progress with acceptance and implementation of the recommendations is recorded.

The IPCC investigation into the ANPR systems in three police forces following the abduction and murder of Ashleigh Hall in October 2009 prompted major national recommendations. It was also appreciated by the IPCC that more needed to be known about ANPR in order for there to be wider public understanding. As a result, in a unique collaboration, a working group was formed to meet this need.

The working group was convened jointly by (then) Deputy Chief Constable Simon Byrne of Greater Manchester Police (now Assistant Commissioner, Metropolitan Police) in his capacity as Lead on ANPR for the Association of Chief Police Officers (ACPO) and Nicholas Long, IPCC Commissioner. Representatives of several organisations participated in the deliberations of the group including No CCTV, the Information Commissioner’s Office, the CCTV Regulator, National Policing Improvement Agency, Association of Police Authority Chief Executives and Her Majesty’s Inspectorate of Constabulary (see Annex B).

The group and this report seek to broaden understanding of ANPR and address public interest and privacy concerns over its use. This document is not meant to cover all uses of ANPR systems, such as for monitoring average speeds and traffic management. It highlights the police’s proactive use of ANPR systems in assisting the prevention and detection of crimes such as burglary, drug offences, sexual assaults and murder.

It is important to point out that the working group comprised contributors with differing perspectives and views. The composition of the group was designed to produce challenge and open and frank debate which, while not achieving consensus on all the issues and concerns relating to ANPR, has reached a set of recommendations that should result in positive changes.
BACKGROUND

The convening of the working group was triggered by the findings and recommendations from the IPCC investigation into ANPR use surrounding the murder of Ashleigh Hall. Two further IPCC investigations, those into the deaths of Hayley Adamson and Sean Robert Toombs, also highlighted concerns.

Ashleigh Hall

At 7.10pm on Sunday 25 October 2009 Ashleigh Hall informed her mother that she was intending to stay at a friend’s house overnight. She left the house and was not seen alive again. Following his arrest the following day on unrelated matters, Ashleigh’s abductor, Peter Chapman (a known sex offender), admitted to having killed a young woman the previous evening. He took police to a field in Sedgefield, County Durham, where Ashleigh’s body was discovered.

It quickly emerged that a car driven by Chapman had been circulated on the Police National Computer (PNC) and there had been a number of triggers, or ‘hits’, of static ANPR cameras. A referral was made to the IPCC by Durham Constabulary.

The IPCC conducted an independent investigation into the police response to the ANPR ‘hits’ on Chapman’s car. The following detail emerged:

On 23 October 2009, a vehicle used by Chapman had been circulated on the PNC as he was wanted for arson, breach of his sex offender registration (failure to notify a change in address) and theft.

Between 23 October 2009 and 7.10pm on 25 October 2009 there were a total of eight ‘hits’ on Chapman’s car by the use of ANPR cameras. Between 7.10pm on 25 October 2009 and 5.07pm on 26 October 2009, there were a further 8 ‘hits’ by ANPR.

<table>
<thead>
<tr>
<th>Date</th>
<th>Hits Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 October</td>
<td>2 hits in Cleveland Police area at 9.30pm and 9.46pm</td>
</tr>
<tr>
<td>24 October</td>
<td>3 hits in Cleveland Police area at 6.42pm, 7.30pm and 7.42pm</td>
</tr>
<tr>
<td>25 October</td>
<td>4 hits in Cleveland Police area at 10.26am, 11.31am, 11.59am and 11.58pm</td>
</tr>
<tr>
<td>26 October</td>
<td>2 hits in North Yorkshire Police area at 12.18am and 12.49am</td>
</tr>
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The final ‘hit’ at 5.07pm resulted in Chapman’s vehicle being stopped by Cleveland Police and his arrest for the outstanding offences.
The IPCC investigation highlighted what were described as ‘serious flaws’ in the ANPR system. It concluded that the quality of the information put into the PNC varies greatly, with the system sometimes being used for minor issues. This in turn led to the possibility of an overload of information on the ANPR monitoring systems which could lead to high and medium priority matters being missed.

The investigation report stressed the importance of effective management of the monitoring of the databases and systems. The full report can be viewed at http://www.ipcc.gov.uk/Documents/ANPR%20Report%20to%20publish.pdf

**Hayley Adamson**

About 11.20pm on Monday 19 May 2008, 16-year-old Hayley Adamson was struck and killed by a marked police vehicle as she was crossing a road in the Scotswood area of Newcastle-Upon-Tyne. A post mortem confirmed that she had died instantly as a result of the injuries she had sustained.

The police vehicle that struck Hayley was fitted with ANPR equipment. This activated when it passed a vehicle travelling in the opposite direction. The officer driving was single crewed and did not conduct any further enquiries into the reason for the vehicle appearing on the Northumbria Vehicle Information System (VIS) database which triggered the activation.

The officer performed a ‘U’ turn and began to travel in the same direction as the vehicle of interest. This vehicle was not in view of the police vehicle at the time and the officer reached speeds of 94 miles per hour in a 30 mile per hour zone in his attempt to catch up with the vehicle. The officer did not activate the emergency warning equipment on his vehicle.

Hayley Adamson was in the process of crossing the road and was struck by the police vehicle causing fatal injuries.

It transpired that the ANPR information which prompted the officer’s actions was out of date and related to the previous owner of the vehicle of interest.

The officer driving the vehicle was later convicted of causing Death by Dangerous Driving in contravention of Section 1 of the Road Traffic Act 1988 and sentenced to three years imprisonment.

The IPCC investigation report recommended that Northumbria Police should look at how information held on databases that populate ANPR is reviewed to ensure that it remains relevant and up to date.

It was also recommended guidance should be issued to officers (especially when single-crewed) in order to assist officers to make informed decisions on how best to respond to ANPR activations.

The report can be viewed in full at http://www.ipcc.gov.uk/Documents/hayley_adamson_redacted_report_v2.pdf&ved=0CA8QFjAA&usg=AFQjCNGtsGmM04cmqfXz6EG7iXVkfhYWq
Sean Robert Toombs

Sean Toombs died on 13 October 2010 when, following a pursuit on the M180, his vehicle caught alight. An inquest concluded subsequently that he had committed suicide.

On 12 October, as a result of an ANPR trace on his vehicle, Mr Toombs was arrested by Lincolnshire Police in relation to an ongoing investigation. After being interviewed he was bailed pending further enquiries at a little before midnight the same day. On 13 October, Mr Toombs’ vehicle was recorded on a police mobile ANPR device and a pursuit was authorised after the vehicle failed to stop. This ANPR activation related to the information for which he had been arrested and interviewed already the previous day.

The IPCC recommended that Lincolnshire Police adopted a method of ensuring that once a suspect had been dealt with, the vehicle registration is removed from the ANPR list as soon as possible.
1. **HOW ANPR IS USED BY POLICE**

*Definition of ANPR*

ANPR is used in three key ways by police forces:

1. to identify vehicles known to be used by criminals and disrupt their activity;
2. to gather intelligence and;
3. to investigate crime.

Cameras can be used overtly or covertly, but this is regulated by the Regulation of Investigatory Powers Act 2000 (RIPA). Using cameras that are either at fixed locations or portable, images are captured and recorded along with the vehicle registration mark (VRM) or number plate, time and location of the vehicle, which can then be instantly checked against database records of vehicles of interest. In the context of a particular investigation, relevant data may be obtained within legal constraints.

The instant search of database records of vehicles of interest can confirm whether a vehicle associated with a known criminal has been in the area at the time of a crime. Importantly, ANPR can be used in real time. This means that police officers can intercept and stop the vehicle, check it for evidence and make arrests if necessary. Police state the use of ANPR in this way has proved important in the detection and prosecution of many cases of major crime.

*The system*

ANPR is an established technology that enables vehicles to have their VRMs read using pattern recognition software and recorded on a database.

ANPR systems use video images from dedicated cameras in vehicles or fixed sites or from closed circuit television cameras (CCTV) in town centres. Cameras can be controlled either by the police or by other bodies such as local authorities. Private companies such as supermarkets and petrol filling stations also use ANPR, to enforce parking restrictions or ensure customers do not leave without paying. It is how the police use ANPR that is the subject of this report.

*How a police ANPR system works in practice*

As vehicles pass the cameras, the VRMs are read together with the time, date and location, which are recorded in a database. The VRM is then checked against a number of databases, including local and national police databases, such as the Police National Computer (PNC) and those supplied by the Driver and Vehicle Licensing Agency (DVLA) and Motor Insurers’ Bureau (MIB). These databases are known as ‘hotlists’.

If the VRM matches one in these databases, an alert is triggered, referred to as a ‘hit’. This ‘hit’ ensures police officers are immediately alerted to vehicles that are stolen, unregistered, unlicensed, uninsured or believed or known to be involved in crime.
All the VRM ‘reads’ are stored by the police force for that area on a computer, called a Back Office Facility (BOF). There are two images stored for each ‘read’; one is of the number plate itself and a wider “overview” captures an image of the whole vehicle.

There is a single central National ANPR Data Centre (NADC) which receives the records from each of the BOFs and stores all number plate reads collected by local forces making them available for researching nationally.

The NADC can provide information on vehicle movements that can assist the police in identifying patterns of behaviour of known criminals. Currently (April 2012) the NADC is receiving more than 18 million ‘reads’ each day, with almost 11.2 billion vehicle sightings stored on the database. Information is stored on individual force BOFs and the NADC for two years.

**Current safeguards**

The police have developed criteria governing the circulation of information of vehicles of interest, access to the information generated by ANPR and limits on the retention of this data. These are outlined in later sections.

There is a National ANPR Strategy for the Police Service (2010 – 2013) and there are national standards in place to ensure a consistent approach to ANPR across England and Wales.

A number of laws can apply to the use of ANPR in different contexts. These include the Data Protection Act 1998 (DPA), the Regulation of Investigatory Powers Act 2000 (RIPA) and Human Rights Act 1998 (HRA). These laws and any guidance issued under them, such as the Information Commissioner’s CCTV Code of Practice, also provide safeguards that must be complied with in the use of ANPR. (see Annex C for website links)

The Protection of Freedoms Act 2012 (PoFA) also has provisions regulating the use of ANPR. The Secretary of State must publish a code of practice for surveillance camera systems which includes ANPR. Although the provisions of the code are not directly enforceable, relevant authorities, such as the police, should have regard to these in the conduct of their functions. A Surveillance Camera Commissioner will also be appointed to promote compliance with the code and report on its operation.

**Circulation of data**

Police forces create ACT reports (which identify vehicles of interest requiring attention) on the PNC which is the primary database for national circulation of a vehicle that is of interest to the police.

The ACT report contains intelligence held on the vehicle and the reasons why the vehicle is of interest to the police.
An ACT report is used where a vehicle is considered to be of such interest that it is reasonable and proportionate for it to be the subject of national circulation and for action to be taken should it come to the attention of police. This may require it to be immediately stopped and action taken as detailed within the ACT, or for an assessment to be made in the context of the report and all relevant information, at the time the vehicle comes to notice, to determine and initiate an appropriate response. It is given a high, medium or low priority.

High priority relates to events where life is at risk and can include child abduction, murder and terrorism. ACT reports in these cases can only be authorised by a police superintendent (or equivalent staff grade). Medium priority reports are used for major and serious investigations. Low priority reports are used in investigations into volume crime or crimes that are a priority within a locality, where a vehicle and/or its occupants need to be traced. ACT reports may not be used for speed enforcement purposes, unless repeated offending, or for enforcement of minor traffic offences.

The action required should be specified as Stop, Monitor or Assess. Monitor can only “be used in exceptional circumstances and only for HIGH priority cases, where it is necessary to keep vehicle under observation pending further advice or requests from the owner of the ACT report.”

The police force that takes action in relation to an ACT report has to create a further report cancelling the circulation of the ANPR data once its operation is completed. This removes the VRM from the PNC file that is accessed by ANPR systems.

Local databases, known as ‘hotlists’, may also be used for circulation of vehicles of interest for response purposes where the interest does not meet the criteria for national circulation through PNC. The local databases are not circulated nationally.

**Access to data**

Memoranda of Understanding (MOU) – see Annex C - provide criteria for access to data, limiting the circumstances when data can be accessed and providing for only

\[1\] NPIA – Police National Computer – ACTion and REACTion Police Reports. March 2009 V2.0
authorised access. These are agreed standards between law enforcement agencies. Only signatory organisations can access the data and all have an obligation to manage access in accordance with the terms of the MOU.

Access to ANPR data is strictly restricted by law and by police guidelines. These are:

- The Data Protection Act 1998 (DPA)
- The Human Rights Act 1998 (HRA), in particular provisions giving effect to Article 8 of the European Convention on Human Rights that requires respect for private life.
- Serious Organised Crime Agency (SOCA), Statement of Information Management Practice
- Protection of Freedoms Act 2012 (PoFA)

**Retention of data**

All data captured by ANPR is held for a maximum of two years. This means that the camera reads of all car number plates, whether they are ‘of interest’ or not and the position of the car at that time, can be accessed by the police for this period. In some police forces, they have chosen only to retain the VRM image, deleting the second image, of the whole vehicle, after 90 days. There is a Memorandum of Understanding to Support Access to ANPR Data and a Memorandum of Understanding to Support the Submission and Access to data held on the NADC both under operational guidance of the National Policing Improvement Agency (NPIA).

**Police governance**

The governance of the ANPR programme operates at national, regional and force level. Chief Officers are legally liable for the information they hold. They are data controllers for their force data and data controllers in common for the NADC.

Governance arrangements are designed to ensure consistency by providing guidance in all areas of ANPR, including the quality, storage and use of data. A number of internal police Special Interest Groups represent specific aspects of ANPR use, such as how it works across different databases and police systems, counter terrorism, security of data, guidelines for investigating officers and risk management. There are also regional groups representing the local force users and those that consider the impacts of any proposed changes in ANPR or developments in technology.

All Special Interest Groups feed into a National User Group for ANPR and are a means for disseminating national guidance.
2. **The effectiveness of ANPR**

*Perceived benefits*

The police believe access to the information provided by ANPR enables them to identify suspected offenders and vulnerable people more efficiently. Where police resources are under pressure, ANPR can increase the efficiency of the police in terms of crime prevention, crime detection, counter terrorism and road safety, enabling forces to maintain and assist in improving force performance. The use of ANPR can lead to early resolution of serious cases and reduce costs.

Three of the principal benefits to the police of ANPR are to:

- Increase the information and intelligence available to identify criminals;
- Enable the police to deploy resources to respond to vehicles of interest in real time;
- Improve investigations after crimes have been committed

By using ANPR for information and intelligence, the police state they can combat crimes within a police force area and tackle those affecting more than one force. Using intelligence across police forces can play a vital role in tackling regional crime activity, serious and organised crime and terrorism.

An important benefit of ANPR is the opportunity it provides for the police to intercept vehicles in real time. The speed of ANPR technology means that when the police are monitoring ANPR systems and a vehicle ‘hits’ against a database (such as ACT) instant information is provided that enables officers to be deployed in response. This can lead to the early arrest of suspects. The use of ANPR in post-incident investigation has revealed vital evidence that has been used for counter-terrorism purposes and in supporting the prosecution of offenders.

Police recognise that, while there are clear benefits from the use of ANPR, it has to be used in a proportionate and responsible manner with effective safeguards in place to ensure against inaccuracy and misuse.

*Perceived concerns*

The working group acknowledges there are genuine concerns about ANPR and the standards that govern how it is used. These can range from privacy concerns to how effective the use of the technology is in practice.

Any technology that can lead to the obtaining, monitoring and recording of details of the public – most of whom are of no interest to the police and are going about their lawful business – inevitably engages privacy concerns. But there can be much more tangible negative consequences too.
At present billions of vehicle movements are collected by the police every year. These vehicle details are compared with ‘hotlists’ and stored in readily available national databases for two years. This period was reduced as a result of complaints to the Information Commissioner.

The consequences of inaccuracies, mistakes, poor procedures and inadequate safeguards can be significant for individuals, undermine public confidence in the police’s relationship with the citizen and also call into question the very nature of the society in which we live. For example, there have been two separate parliamentary inquiries in recent years into whether we are now living in a ‘surveillance society’ due to the rapid growth and deployment of surveillance technologies like ANPR.

At a more personal level, there have been many recent examples of the vulnerability of an individual’s personal information. Data loss incidents and security breaches involving personal information are commonly reported and the police are not immune to such incidents.

The extent of information being collected and retained on innocent individuals by the police in the UK has resulted in adverse rulings of the European Court of Human Rights, such as on the indefinite retention of DNA profiles of innocent individuals. With the introduction of the Protection of Freedoms Act the government recognises the need to strike the correct balance between law enforcement and privacy interests.

The working group debated concerns about collecting and disclosing information about members of the public, the overwhelming majority of whom are not involved in criminal activity. Although this issue was beyond the scope of the group to consider, it was acknowledged that the use of a technology that can provide a direct intervention by the police, such as initiating a pursuit to stop a vehicle, not only engages privacy concerns, but can also affect the liberty and safety of the individuals concerned. As can be seen in the tragic deaths of Ashleigh Hall and Hayley Adamson, even completely innocent individuals can suffer the most serious of consequences if ANPR and allied data is not accurate or not used or managed in an appropriate and measured way. Police procedures and resources underpinning the use of ANPR must be sufficient to ensure that there are not unwarranted adverse consequences for a law abiding member of the public.

Some specific concerns identified by the working group included:

i. The extent of ANPR Infrastructure

There are concerns that the number of ANPR cameras deployed is so extensive that this impacts significantly on the privacy of law abiding citizens by extensively recording details of their journeys.

The details of the national infrastructure of police ANPR systems are not published and the police service is opposed to publishing that information in order to safeguard the systems and the benefits that can be obtained from them. It is acknowledged that at
present consistent national standards for the development of ANPR infrastructure are not in place.

The inappropriate development of ANPR infrastructure can have a significant impact on trust and confidence in the police, as was found by the review of Project Champion\(^2\), a project that included the deployment of additional ANPR capabilities within the West Midlands. The review identified that “the concerns of the community need to be a central preoccupation of policing and transparency needs to be a constant consideration”.

\(\text{ii. Security of ANPR systems} \)

There are also concerns that the security of ANPR systems may not be sufficient to prevent unauthorised access to the systems. ANPR systems are included within police service IT infrastructure with a Risk Management and Accreditation Document Set (RMADS) in place that has been approved by the National Accradiator of police systems. These RMADS provide a set of standards for the security of the system that must be met for a connection to the national IT infrastructure to be authorised by the National Accradiator thereby providing a safeguard to the security of the system.

\(\text{iii. Access to the data} \)

There are significant concerns that the volume of data held, including that relating to the movement of law abiding citizens, may impact unnecessarily on their privacy and that data will be vulnerable to access for inappropriate purposes. This aspect of ANPR is of significant concern to the Information Commissioner’s Office (ICO) which continues to review the justification for retention and provisions for the access to and management of the data.

In liaison with the ICO, the police service has implemented a maximum retention period for data within ANPR systems of 2 years and established strict criteria for access to data based upon the type of investigation, and the period that has elapsed since it was obtained. Staff are only granted access to the extent necessary for their role and there

\(\text{\small\textit{\footnote{Project Champion Review - Sarah Thornton (2010)}}} \)
is a requirement for access to the NADC and other organisations databases that those accessing data may only do so with authority of another member of staff at the appropriate level of seniority in the circumstances. These are detailed within Memoranda of Understanding (MOU) – see Annex C. Organisations have an obligation to monitor and audit access to databases to prevent inappropriate access or to reveal circumstances where that has occurred.

iv. Data quality and consistency

These concerns arise in a number of ways, firstly that the ‘reads’ of VRM by ANPR systems may not always be correct due to misreading by the automated system, and that as a consequence inaccurate data may lead to mistaken identity, impacting adversely on innocent members of the public.

This risk is acknowledged by the police service with current safeguards, including the establishing of national standards for ANPR, known as NAAS, that set out the performance standards that must be achieved by ANPR systems, and also through the recording of images of the vehicle registration mark and an overview of the vehicle to enable verification of the accuracy of the data recorded by the systems. There are measures within the system to enable inaccurate VRM that are identified to be corrected. Nonetheless, some inaccurate reads are not identified and therefore will be included within the database. This remains an area of legitimate concern.

The second aspect of concern is with regard to the accuracy and relevance of data within the databases (hotlists) that are used to support the operation of ANPR. The currency and accuracy of police databases including the PNC ACT report and local force hotlists is of concern, particularly to ensure that details are removed once they cease to be relevant and that vehicles are not circulated unless the information supporting the circulation is reliable.

Similar concerns arise in relation to other national lists in particular those from the DVLA regarding Vehicle Excise, SORN and MOT and from the MIB regarding uninsured vehicles.

The police service recognises the validity of these concerns and has recently identified improvements to PNC ACT that will reinforce business rules and improve management of report creation, with provisions for earlier review of the continued relevance of vehicles included within ACT. As previously indicated, local force hotlists will not be subject to national circulation, as they were previously, thereby reducing the likelihood of the information within those lists becoming inaccurate whilst they remain available for use.

The accuracy of other national lists from DVLA and MIB is of importance for both operational and privacy reasons and continued liaison is maintained with both organisations in an effort to secure improved accuracy of those lists as it is evident that further improvement is required.
3. **THE WORKING GROUP’S REVIEW AND RECOMMENDATIONS**

*The Group and its work*

The working group met on five occasions. Within its Terms of Reference (see Annex B) it developed discussion around the broader purpose of ensuring the use of ANPR in relation to public interest, confidence and the police service nationally was considered. It was not part of the Group’s remit to challenge national policy in relation to ANPR, but to review and make recommendations in respect of understanding how, and for what purpose, ANPR is currently used, assessing as far as possible its effectiveness as a tool for police forces and whether its capabilities are being used appropriately with robust safeguards in place.

The concentration in deliberations was on ensuring existing processes and systems were effective and that essential safeguards were in place to protect the public interest. There was open discussion and police representatives shared information on policy and practice. Police accepted there must be greater transparency in relation to the operation of ANPR and rigorous standards for its operation; this was recognised as essential to securing greater public confidence. Key to this was the view that there had to be national consistency in application of ANPR.

During the working group’s discussions it identified the need for clearly articulated safeguards that the police should adopt on a national basis, not just to comply with existing legal requirements, but to promote good practice and inspire public trust and confidence in their use of ANPR.

*Reference group recommendations*

The working group developed three recommendations which will be forwarded to ACPO.

**Recommendation A**

The working group recognised that there are no national standards for the development of the national infrastructure for ANPR.

Therefore, we recommend that:

**Consistent national standards for the development of ANPR infrastructure must be established, implemented and communicated to the public.**

**Recommendation B**

The working group noted with concern the issue of database accuracy as reflected in the findings and recommendations of the Hayley Adamson and Sean Robert Toombs investigations. We would seek to impress upon ACPO for communication to all forces the imperative need to ensure databases are up to date and accurate and to be aware of the consequences of failure.
Therefore, we recommend that:

**All police forces should have local policies and procedures in place reflecting national standards to ensure information contained within ANPR databases is accurate and up to date.**

**Recommendation C**

The consensus among members of the working group was a set of fourteen principles, or golden rules, that would govern the use of ANPR to help ensure compliance with the law, promote good practice and to inspire public confidence, while at the same time ensuring ANPR’s effective use.

The golden rules are:

1. **The use of ANPR must take into account its effect on individuals and their privacy, with regular reviews to ensure its use remains justified.**

   Rationale: The police’s use of ANPR leads to records of billions of vehicle movements being stored and any surveillance of the citizen needs to be justified if public confidence in its use is to be maintained. The DPA and HRA require public authorities to only interfere with the private life in a justified and proportionate way. Assessments of the impact on an individual’s privacy should be undertaken to ensure this is the case.

2. **There should be as much transparency in the use of ANPR as possible, including a published contact point for access to information.**

   Rationale: Transparency is the cornerstone of public confidence, dispelling myth and suspicion. The DPA’s fair and lawful processing requirements also require a proper level of openness when collecting information about individuals.

3. **There must be clear responsibility and accountability for all ANPR activities including data collected, held and used.**

   Rationale: No system of work can be effective without clear lines of responsibility and accountability. The DPA, HRA and RIPA duties will all require clear decision-making roles.

4. **Clear rules, policies and procedures must be in place before ANPR is used, and these must be communicated to all who need to comply with them.**

   Rationale: The absence of clear policies and procedures will mean that there will be confusion on the part of those who collect, use and may disclose ANPR data with the risk that it may be used inappropriately undermining public confidence and contravening legal safeguards.
5. No more data should be stored than that which is strictly required for the purposes of policing, and this data should be deleted once its purpose has been discharged.

   Rationale: The DPA requires that only the minimum amount of data is held and is deleted when no longer necessary. HRA duties to act proportionately are also engaged. Holding large collections of unnecessary data is not just intrusive but increases information risk.

6. Access to retained information should be restricted and there must be clearly defined rules on who can gain access and for what purposes.

   Rationale: ANPR data can be a very powerful tool in identifying those of real concerns to the police, but this could also be misused. Ensuring strict access rules and controls is essential if there are to be no ‘data disasters’ that may undermine public confidence. This is also helps ensure compliance with the DPA.

7. Use and disclosure of information should only take place when it is necessary for law enforcement purposes.

   Rationale: ANPR can only be justified where there is a pressing law enforcement need. Any function or mission creep that may mean that this data is used for different, less pressing purposes will undermine public confidence in its use. This also helps compliance with the DPA.

8. Information held regarding vehicles of interest should be accurate and kept up to date.

   Rationale: The police act upon ANPR data and if this or data on ‘hotlists’ is inaccurate this can have serious consequences for individuals. The DPA also requires proper accuracy.

9. ANPR equipment must operate to approved technical standards to assure the quality of information it generates.

   Rationale: Inadequate technical standards can mean that the data generated is not fit for purpose undermining the value of, and justification for, ANPR. Ensuring proper data quality is also a requirement of the DPA.

10. ANPR data should be subject to appropriate security measures to safeguard against unauthorised access and use.

   Rationale: A central searchable record of many billions of vehicle movements is attractive to many who would wish to use it for undesirable means. Similarly if it is to help the police with prosecutions there can be no room for questioning the integrity of the data held. Ensuring adequate security is essential and is a requirement of the DPA.
11. There should be effective review and audit mechanisms to ensure legal requirements, policies and standards are complied with in practice, and regular reports should be published.

Rationale: Establishing essential safeguards and then ensuring they are followed cannot be left to chance. There must be effective auditing either by the police force concerned or an independent body, such as HMIC, if public confidence that the rules are being followed is to be maintained.

12. When the use of ANPR data is justified and complies with the legal and policy requirements, it should then be used to the fullest extent in support of law enforcement.

Rationale: ANPR is a powerful technology that may help policing. If the rules and policies exist to ensure it is used in an appropriate and effective manner then its value should be realised in practice.

13. ANPR data should be used responsibly for public good, to the benefit of both prosecution and defence cases.

Rationale: ANPR may generate information that not only benefits prosecutions, but may help prove the innocence of individuals. It should be used in a way that serves the highest ideals of ensuring access to justice and the right to a fair trial.

14. Third party ANPR data should only be used when there is a specific pressing requirement and there are assurances around its legality and quality.

Rationale: Given the variety of third party ANPR data sources that are available these should only be used where necessary to minimise unwarranted intrusion. They also need to be fit for purpose so the adverse consequences of poor quality ANPR data are avoided.
ANNEXES

Annex A

Conclusions and Recommendations from IPCC Reports

Ashleigh Hall

The report into the circumstances of the abduction of Ashleigh Hall (23 – 25 October 2009) investigated the use of ANPR.

The IPCC’s independent investigation came to the following conclusions:

- It must be noted that ANPR has its limitations. It would appear impossible for ANPR to be utilised to its full potential. This is because it is not feasible to monitor and respond to every hit from all databases. It would be unmanageable for a Force to do this as resources and budgets are not unlimited.
- To manage these limitations it is important that priority databases are identified. These databases should then be monitored as a matter of routine on a 24/7 basis. This includes the PNC database with priority given to the monitoring of ACT reports.
- The quality and accuracy of the databases is of significance. The information should be accurate and be capable of action. If the information contained within the databases is constantly found to be inaccurate or no specific action is required in response to a hit, then this does not instil confidence in the ANPR system.
- Force inconsistencies, differing priorities and differing levels of importance placed on the ANPR system by each Force, impacts significantly on the effectiveness of ANPR within each Force area.

Findings and Recommendations

The five findings and national recommendations, all of which were accepted, arising from the report are listed below together with a note of progress made by police.

Finding 1

The quality of ACT reports varies between police forces. ACT reports should not be used for minor issues. This filters down the importance of ACT Reports that require immediate response.

National recommendation

It is acknowledged that the NPIA are looking at police force variations in
relation to ACT reports and that the NPIA audit ACT reports. On the first of the month the NPIA print out every ACT report for auditing purposes. Guidelines for the creation of ACT reports are appropriate for national consistency.

All police forces should establish internal procedures to review ACT reports within 24 hours of creation. If ACT reports do not meet the criteria as specified by NPIA Guidance on PNC ACT and REACT reports, they should be removed.

Progress on recommendation

The recommendation was disseminated to all police forces. Within forces, working practices where PNC staff are responsible for meeting this standard were established. In effect, this means that they are required to review entries on the PNC database within 24 hours to ensure compliance. This will be monitored through the forum of the ANPR National User Group (NUG).

Indications are that this is now established for all, although we are not able to confirm that independently. HMIC are briefed on this requirement and will be including this as an aspect of their Inspection later this year.

Finding 2

ACT reports are given high, medium and low priority as defined in NPIA ACT and REACT police reports, March 2009, V2.0. The priority levels of the ACT reports cannot be prioritised on the alarm stack.

National recommendation

The NPIA should create the ability to filter the priority level of ACT reports on the alarm stack. It is acknowledged the NPIA are aware of this and are looking into ways to resolve this issue.

Progress on recommendation

The ability to prioritise PNC ACT reports based on high, medium and low has been established for the PNC and is in final pilot phase for use on ANPR systems. This will ne made available to forces immediately the pilot is complete, in Autumn 2012.

In addition, in order to further assist forces in prioritisation of their monitoring databases against ANPR systems, the content of the PNC extract that is monitored by ANPR has been reviewed and as a result a change became effective in September 2011 that reduces the content
of that file to outstanding ACT reports and Stolen Vehicle Reports. In the Metropolitan Police Service, this reduced the number of daily hits by 80%.

In conjunction with this is the REACT list which ensures that as soon as action is taken, the live report is removed from the ACT list.

Finding 3

If too many databases are monitored by control room staff, then this leads to an overload of information. There is a possibility of vital information being missed. It is then impossible to action or respond to ‘hits’.

National recommendation

To ensure high level hits are responded to, police forces should monitor the most important databases. This includes the PNC database, with priority being given to ACT reports.

Police forces should have policies in place to specify the particular ANPR cameras and databases the control room staff are required to monitor.

Police forces should have appropriate resources to be able to respond to the hits and the outcome should be recorded within the Control Room system.

Progress on recommendation

The ACPO National User Group has confirmed PNC as the primary database for national circulation of vehicles of interest and also that local hotlists should not be circulated outside the originating force for response purposes, fully in line with the recommendation.

Finding 4

Individual police forces should have protocols in place for the creation and management of local force databases, as identified by NPIA in the National recommendation

National Recommendation

Local force policy should be in place to ensure information contained within the database is accurate and up to date. Processes should be in place for removing inaccurate and out of date information.

To minimise the impact on police force systems, local force databases
should not be circulated outside of the owning force except in exceptional circumstances. For example, in support of prearranged operations.

Progress on recommendation

This recommendation has been shared with all forces. The management of databases to this standard is a priority and ANPR systems have been improved to allow for better data management. This will be monitored through the forum of the NUG.

Advice has been provided to all forces on the circulation of vehicles of interest that is consistent with this recommendation. When first introduced, ACT reports could only be used to advise that the vehicle should be stopped and the action outlined in the report taken. It was felt that this was too restrictive (and encouraged the use of other lists to bridge this gap). As a result, the ACT report has been extended to allow, where national circulation is warranted, the circulation of a vehicle where the action to be taken can only be determined at the time the vehicle comes to notice. This type of ACT has been called ‘ASSESS’.

Some forces have however expressed concerns at a restriction on circulation of ‘hotlists’ and this will be given further consideration by the NUG. This recommendation will be monitored through the forum of the NUG.

Finding 5

North Yorkshire Police do not have any local policies in place in relation to ANPR.

National recommendation

Every police force should ensure they have in place local ANPR policies as specified by NPIA, including: determining what to monitor, prioritisation of responses to ANPR hits 24 hours, 7 days a week, accountability and auditing of ANPR systems.

Progress on recommendation

This recommendation has been passed on to all forces. A number have already initiated working practices to meet this standard. This will be monitored through the forum of the NUG.

NPIA, in partnership with ACPO, compiled a questionnaire that was sent to all forces. This required them to self-assess against a series of questions. The criteria included progress against the recommendations
contained within the Ashleigh Hall report.

HMIC will then target any follow up work based on these responses and will test the quality and veracity of the responses made.

North Yorkshire Police have approved and implemented local policies.

**Hayley Adamson**

The investigation report into the circumstances surrounding the death of Hayley Adamson was published in April 2009 and reached the following conclusions and made the following recommendations in relation to ANPR.

**Finding 3**

Whilst the officer who responded to the ANPR activation knew that it was as a result of an entry in the Northumbria VIS database, he did not know any other details. Consequently it is questionable whether he was in a position to conduct a proportionate response to this activation.

When responding to an ANPR activation, officers need to give careful consideration as to what the appropriate level of response would be bearing in mind the road conditions and environment at the time along with the reason for the activation

**Local Recommendation**

Northumbria Police should issue guidance to officers on the use of the ANPR system particularly when officers are single crewed, in order that officers are able to make an informed decision on how best to respond to ANPR activations. It should be made clear that officers need to properly assess the risks associated with responding to an ANPR activation which may mean making further reasonable enquiries to ensure that their response is proportionate to the alert.

**Progress on recommendation**

Northumbria Police developed a protocol and procedures and risk assessment criterion which was first circulated for consultation before being formalised. Training has been updated to include this and all training records are now kept with officers’ driving records.

**Finding 4.**

The information on the Northumbria VIS “hotlist” for the vehicle which activated the ANPR system was out of date. Ownership of the vehicle had changed in the time since the intelligence was placed and the time of the
collision. This information ought to have been reflected in the intelligence connected to that vehicle.

**Local Recommendation**

**Northumbria Police should look at the process by which such intelligence is reviewed to ensure that the information that is held is accurate and up to date**

*Progress on recommendation*

Northumbria Police has circulated the work already in place relating to hot-list weeding for consultation. Further work is being developed through an ANPR steering group and the Force Intelligence Department’s review of Local Intelligence Officers.

**Sean Robert Toombs**

The report into the circumstances of the death of Sean Robert Toombs (12 – 13 October 2010) investigated the use of ANPR.

The IPCC’s independent investigation came to the following conclusions:

- The use of the ANPR system to initially locate Mr Toombs was justifiable given the nature of the allegation. However, its use after his arrest does raise some areas of concern.

- The Lincolnshire ANPR ‘hotlist’ is administered by the ANPR team within the Force Control room, and is a pilot unit. The unit is not staffed at night. The understanding within Lincolnshire Police is that any vehicle added to the local hotlist has its status reviewed after a period of fourteen days.

- In practice, a police staff member stated that she tried to review the status of each vehicle at least every other day. Although this compares favourably with the national ANPR ‘hotlist’, which has a review date of eighty-four days after being entered, it leaves vehicles on the list when the query has already been dealt with. Mr Toombs had already been dealt with when his car activated the ANPR system on the traffic car, causing it to turn around and attempt to stop him.

- It is accepted that although the member of police staff made an error of judgement in removing Mr Toombs vehicle from the ‘hotlist’, it was done with best intentions and she flagged her actions up to her supervisor immediately. This can be clearly seen in the audit of the local ANPR system.

**Local Recommendation**
It is recommended that Lincolnshire Police adopt a method of ensuring that once a suspect has been dealt with, the registration of the vehicle is removed from the ‘hotlist’ as soon as is possible.

**Progress on recommendation**

The timescales used to review the ANPR ‘hotlist’ have been highlighted as a national issue. A system has been put in place to review the content of the ‘hot list’ every six hours to try and minimise the risk of out of date information being stored on the system.

However, the ANPR system within Lincolnshire Police does not have a remote update facility and the current policy is that all vehicles fitted with the technology are updated every 24 hours.

**ANNEX B**

**Membership and Terms of Reference of the Working Group**

**Purpose**

The purpose of the group was defined as:

To examine the use of ANPR in England and Wales and how this is managed and overseen and the impact this has on public confidence.

**Membership**

Membership was by invitation. Those participating were:

Association of Chief Police Officers (Lead on ANPR)
Simon Byrne, Assistant Commissioner (Metropolitan Police)

Independent Police Complaints Commission
Nicholas Long, Commissioner

Association of Police Authority Chief Executives
Tal Michael
Mark Sellwood

CCTV Regulator (Interim)
Andrew Rennison

Greater Manchester Police
Chris Maidens

Her Majesty’s Inspectorate of Constabulary (HMIC)
Gordon Mackenzie
Information Commissioner’s Office
Jonathan Bamford

National Policing Improvement Agency (NPIA)
Mark Jones
Bill Mandeville

No CCTV
Charles Farrier

A meeting was observed by Isabella Sankey of Liberty.

AC Simon Byrne was elected Chair of the Working Group.

Elspeth Rogers of the Independent Police Complaints Commission provided administrative support.

Daniel Harris assisted with the initial drafting and layout of the report.

Thanks are given to all who provided their time and experience with particular thanks to Jonathan Bamford, Chris Maidens and Bill Mandeville for assistance with the report.

**Terms of Reference**

The group agreed the following Terms of Reference:

To:

Understand how, and for what purpose, ANPR is currently used across police forces in England and Wales.

Assess the effectiveness of ANPR as a tool for police forces and whether its capabilities are being used appropriately.

Review how, and for what purpose, ANPR is currently used within the public and private sector in England and Wales.

Review existing frameworks that govern the use of ANPR both in the public and private sector.

Seek views and concerns on privacy and civil rights issues

Assess evidence collated and make recommendations
ANNEX C

More information and further reading

More information about ANPR is available on the Association of Chief Police Officers website at: www.acpo.police.uk

Individual police forces should be able to provide local information through their websites and these should contain more about their policies for the use of ANPR.

Particular documents which may be of interest include:


Practice Advice on the Management and Use of Automatic Number Plate Recognition:

Memorandum of Understanding to Support Access to ANPR Data:
http://www.acpo.police.uk/documents/crime/2011/MoU%20of%20understanding%20to%20support%20access%20to%20ANPR%20data_Version%202_Feb%202011.pdf

Memorandum of Understanding to support the submission and access to data held on the National ANPR Data Centre (NADC)

Information Commissioner’s CCTV Code of Practice

IPCC Investigation Reports

ANPR: Independent investigation into the use of ANPR in Durham, Cleveland and North Yorkshire 23 – 26 October 2009

Investigation into the death of Hayley Adamson
http://www.ipcc.gov.uk/Documents/hayley_adamson_redacted_report_v2.pdf&ved=0CA8QFjAA&usg=AFQjCNNGtsGmM04cmqfXz6EG7iXVkfhhYWg
**GLOSSARY**

It has proved unavoidable to use initials. Each is defined in the text. The list below is for easy cross-reference.

<table>
<thead>
<tr>
<th>Initials</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ACPO</td>
<td>Association of Chief Police Officers</td>
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<tr>
<td>ACT (ion)</td>
<td>Report identifying a vehicle of interest requiring attention</td>
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<tr>
<td>ANPR</td>
<td>Automatic Number Plate Recognition</td>
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<tr>
<td>CCTV</td>
<td>Closed circuit television</td>
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<tr>
<td>BOF</td>
<td>Back Office Facility</td>
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<tr>
<td>DPA</td>
<td>Data Protection Act 1998</td>
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<tr>
<td>DVL A</td>
<td>Driver and Vehicle Licensing Agency</td>
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<tr>
<td>Hit</td>
<td>Activation of ANPR equipment in response to vehicle of interest</td>
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<tr>
<td>HMIC</td>
<td>Her Majesty’s Inspectorate of Constabulary</td>
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<tr>
<td>hotlist</td>
<td>Local (police force) database</td>
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<td>HRA</td>
<td>Human Rights Act 1998</td>
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<td>ICO</td>
<td>Information Commissioner’s Office</td>
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<td>IPCC</td>
<td>Independent Police Complaints Commission</td>
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<td>MIB</td>
<td>Motor Insurers’ Bureau</td>
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<td>MOT</td>
<td>Ministry of Transport</td>
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<td>MOU</td>
<td>Memorandum of Understanding</td>
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<td>NAAS</td>
<td>National ACPO ANPR Standards (2008)</td>
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<td>NADC</td>
<td>National ANPR Data Centre</td>
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<td>National Policing Improvement Agency</td>
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<td>NUG</td>
<td>National User Group</td>
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<td>Police National Computer</td>
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<td>PoFA</td>
<td>Protection of Freedoms Act 2012</td>
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<td>REACT(ion)</td>
<td>Cancellation of an ACT report</td>
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<td>RMADS</td>
<td>Risk Management and Accreditation Document Set</td>
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<td>SOCA</td>
<td>Serious Organised Crime Agency</td>
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<tr>
<td>SORN</td>
<td>Statutory Off Road Notification</td>
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<tr>
<td>VIS</td>
<td>Vehicle Information System</td>
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<tr>
<td>VRM</td>
<td>Vehicle Registration Mark</td>
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