THE CHIEF CONSTABLE OF NORTH YORKSHIRE

Automatic Number Plate Recognition (ANPR)

FINAL

Internal audit report: 10.17/18

9 February 2018

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Debrief held6 February 2018Internal audit teamDaniel Harris, Head of Internal Audit
Angela Ward, Senior Manager
Philip Church, Client ManagerResponses received9 February 2018Dulcie Hakin, Lead Auditor

Chief Inspector

ANPR Data, Access and Technical Manager

Project Manager

Distribution Assistant Chief Constable

Chief Inspector

ANPR Data, Access and Technical Manager

Project Manager

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1 EXECUTIVE SUMMARY

1.1 Background

As part of the 2017/18 approved internal audit plan we have undertaken an audit of Automatic Number Plate Recognition on behalf of the Chief Constable of North Yorkshire to confirm if the Force is complying with National ANPR Standards for Policing (NASP), the national guidance for ANPR that all forces must comply with.

The NASP comes in three parts and covers data standards, infrastructure standards and data and access management standards. We have carried out our review with reference to these three documents.

The Force's ANPR systems are currently installed by an external company, QRO, and data collected from these devices are initially managed by the Force's ANPR Hub. On installation, the performance of ANPR devices should be measured to ensure that capture rates and read rates from the devices meet the requirements detailed in NASP. After installation, performance should be reviewed at least annually.

The decision of where to install ANPR systems is made at ANPR Deployable Camera meetings where bids for ANPR systems are submitted for approval, these take place every two months and are chaired by the Authorising Officer, this is currently a Detective Superintendent.

The National Police Chiefs' Council (NPCC) guidelines currently state that ANPR capture records must be deleted no later than two years after their initial capture date. The General Data Protection Regulation (GDPR) that is being introduced in May 2018 will require changes to this retention period and therefore current ANPR guidance. The National ANPR Centre will carry out audits of data held at each Law Enforcement Agency (LEA) to ensure they are complying with updated GDPR legislation, we did not cover the impact of GDPR or the Force's plans for GDPR changes in this audit.

1.2 Conclusion

The strategic threats and operational need for ANPR deployment had been fully considered for our sample and the capture records were compliant with NPCC guidelines. However, our review found that Individual Privacy Impact Assessments were not being completed, provisions for audits on access control were not detailed in the Force's policy documents, and due to delays in moving processes in-house, initial and annual assessments of performance of ANPR devices had not been carried out.

We have agreed **three medium** and two low priority management actions in relation to these findings. Further details of our findings and actions can be found in section two of this report.

Internal audit opinion:

Taking account of the issues identified, the Chief Constable of North Yorkshire can take **reasonable assurance** that the controls to manage this area are suitably designed and consistently applied.

However, we have identified issues that that need to be addressed in order to ensure that the control framework is effective in managing this area.



1.3 Key findings

The key findings from this review are as follows:

- The ANPR Policy and ANPR Procedure documents were reviewed in line with NASP, we found they sufficiently
 covered contents of NASP.
- For the deployed ANPR devices we tested that were approved at ANPR Re-Deployable Camera meetings there
 was an ANPR Re-Deployable Camera Request for Deployment document that detailed the need for ANPR at the
 location, types of crimes that would be targeted and community reassurance from the installation of the device.
- ANPR capture records held on the Cleartone system which are automatically deleted after two years, so the
 Force is compliant with NPCC guidelines that state capture records must be deleted no later than two years after
 their capture.
- When staff perform a search on capture records that have been held on the system for more than 90 days since their capture, the system automatically prompts them to enter an authoriser and reason for the search.

We have agreed five management actions in relation to the following seven findings:

- Some of the ANPR deployments in our sample had been approved outside of ANPR Deployable Camera meetings and they were not always documented in the minutes following.
- The reviews of deployed ANPR devices were not always carried out in the review timeframe assigned on approval.
- There was an overarching Privacy Impact Assessment (PIA) in place for the Force, however it had not been reviewed since September 2015.
- There was not an individual PIA for each ANPR system currently deployed, despite NASP stating that a PIA is required for all planned ANPR infrastructure.
- The standalone ANPR Data Storage, Access and Management document had an out of date list of functions with access to ANPR data and was unclear of how access control audits would be carried out and what evidence needed to be retained for these audits. Discussions during our review also found that these audits were not actually being carried out.
- For internal requests for searches on capture data that have been on the system for more than 90 days, evidence of approval of these searches were not retained for the sample we tested. It also became apparent during our audit that staff were not aware of who could authorise searches on capture records.
- When ANPR devices were re-deployed, performance standards were not being tested. There were also no regular performance checks for devices that had been deployed for 12 months or more.

1.4 Additional information to support our conclusion

The following table highlights the number and categories of management actions made. The detailed findings section lists the specific actions agreed with management to implement.

Area	Contr		Non		Agreed actions					
	design effect			pliance controls*	Low	Medium	High			
ANPR	1	(9)	6	(9)	2	3	0			
Total					2	3	0			

^{*} Shows the number of controls not adequately designed or not complied with. The number in brackets represents the total number of controls reviewed in this area.

^{*} Our review identified seven findings, these have been addressed in five management actions.

2 DETAILED FINDINGS

Categorisati	on of internal audit findings
Priority	Definition
Low	There is scope for enhancing control or improving efficiency and quality.
Medium	Timely management attention is necessary. This is an internal control risk management issue that could lead to: Financial losses which could affect the effective function of a department, loss of controls or process being audited or possible regulatory scrutiny/reputational damage, negative publicity in local or regional media.
High	Immediate management attention is necessary. This is a serious internal control or risk management issue that may lead to: Substantial losses, violation of corporate strategies, policies or values, regulatory scrutiny, reputational damage, negative publicity in national or international media or adverse regulatory impact, such as loss of operating licences or material fines.

This report has been prepared by exception. Therefore, we have included in this section, only those areas of weakness in control or examples of lapses in control identified from our testing and not the outcome of all internal audit testing undertaken.

Ref	Control	Adequate control design (yes/no)	Controls complied with (yes/no)	Audit findings and implications	Priority	Action for management
Area	: ANPR					
1	Bids for deployment / re-deployment of an ANPR at a specific location are presented at ANPR Re-	Yes	No	We obtained a sample of 10 ANPRs currently in deployment and carried out testing to confirm if a strategic assessment had been carried out as part of the camera bid. Our testing found the following:	Low	A single spreadsheet will be implemented to provide an audit trail for all the Force's ANPR devices.
	Deployable Camera meetings with a strategic assessment of the location.			There was an ANPR Re-Deployable Camera Request for Deployment document in place for nine of the bids. In these cases the need for ANPR at that specific location had been detailed, including types of crime that would be targeted, community reassurance had also been		This spreadsheet will include details such as the location of the device, re-deployment date, review date, date the bid was submitted and approved,
	NASP states that strategic assessment should take account of the following factors:			considered. Eight of the documents had all been approved at the ANPR Re-Deployable Camera meeting.		if the bid was submitted outside of ANPR Camera meetings and links to any relevant documentation.
				One had been approved outside of the meeting by the Authorising Officer, however it had not been mentioned in the ANPR Re-		

Ref	Control	Adequate control design (yes/no)	Controls complied with (yes/no)	Audit finding	gs and impl	lications				Priority	Action for management
	 National Security and Counter Terrorism; Serious, Organised and Major Crime; Local Crime; and Community Confidence and Reassurance, Crime Prevention and Reduction. 			For the obeen submeetings review the documer. If there is no documentation appropriately. There is also meeting are in the control of	ther ANPR, omitted and a s, but was mais ANPR Read and the to its saudit trail of a proved.	approval of AN nave been comp members of the le cameras are	relating to orge Authorising (meeting. We amera Requesting). IPR bids, there oleted, or the land ANPR Re-Dein deployment	anised crim Officer outsi were unable st for Deploy e is a risk th oid may not	ne had de of the e to yment ne correct be		Responsible Officer: ANPR Data, Access and Technical Manager Implementation Date: April 2018
				Risk of bid of completed of and ANPR	documentation authorised devices being their eximple.	on not being d correctly g used that		on of ANPR	2		
2	There is an overarching North Yorkshire Police ANPR Infrastructure Development Privacy	y Yes	No		e Developme	an overarching ent Privacy Impa he following:			NPR	Low	The overarching IPA document will be reviewed to ensure it is up-to-date and it will be signed off appropriate

f	Control	Adequate control design (yes/no)	Controls complied with (yes/no)	Audit findin	gs and impl	ications 			Prior	rity	Action for management
	Impact Assessment in			Section A - D	Description of	f proposed ANI	PR Developm	ent.			Responsible Officer:
	place.			This included an outline of why ANPR is used and what success criteria would be used,							Chief Inspector
				This had been September 2 questions an ANPR use in had been con Assessment Section C - F This section these risks. There was no first complete.	en completed 2015. The ass d part two was North Yorks nsulted, both Privacy Risks detailed a ta	ble of privacy rate this document be 2015.	two parts: parts of the propose reasons for de externally, in the same same solution and solution and been received regulary.	t one was screed development, the completions and resurreviewed sincerly there is a	reening nent of and who on of the ults of ce it was		Implementation Date: April 2018
		may be out of date, privacy risks may not be identified and included in the risk table Risk Exposure Root causes									
					Privacy risks may not be identified, therefore solutions will not be put in place.			act documen had not beer			
					Financial	Reputational	Operational	Legal	Rating		
				Probable	Negligible	Significant	Minor	Minor	3:13		

Ref	Control	Adequate control design (yes/no)	Controls complied with (yes/no)	Audit findings and implications	Priority	Action for management
3	Individual Privacy impact assessments had not been carried out for individual ANPRs at separate locations. NASP states that 'A Privacy Impact Assessment (PIA), which will include consultations with relevant stakeholders, is required for all planned new infrastructure.'	No		The overarching North Yorkshire Police ANPR Infrastructure Development Privacy Impact Assessment document states that re-deployable cameras will be used 'based on evidence and consideration of privacy before each deployment'. We confirmed the Force had a draft 'Template for ANPR Infrastructure Development Privacy Impact Assessment' document, this was due to be used for all future individual ANPR bids that go through the ANPR Re-Deployable Camera meetings to support in compliance with data protection, human rights obligations and privacy expectations when developing new ANPR infrastructure. Sections included in the document were the same as the three sections included in the overarching document. We confirmed in the ANPR Re-Deployable Camera meeting minutes for 10th June 2016 that the Authorising Officer advised he was currently reviewing the ANPR Privacy Impact Assessment document and that a PIA was required for every ANPR deployment, however there was a change in Authorising Officer after this and it was not followed up. As part of our testing of a sample of 10 ANPR devices currently in deployment, we reviewed the strategic assessments for each bid to see if the assessments considered privacy impact. Our testing found that that privacy impact was not considered as part of the Request for Deployment documents for any of the ANPRs in our sample. We also reviewed the ANPR re-deployable camera meeting minutes where each bid was assessed and approved at to see if privacy was discussed at these meetings. Our testing found that although the minutes did state that review of re-deployable camera locations included a discussion of privacy impact, there was however no further detail on privacy impact of cameras detailed in the minutes. By not having individual privacy assessments for each ANPR deployment, NYP are not complying with National ANPR Standards. There is a risk that relevant stakeholders are not being consulted with and the impact on and expectations of individual privacy is not being considered when plann		An individual IPA document will be used for all future ANPR bids. Responsible Officer: Chief Inspector Implementation Date: Immediately We will carry out an exercise to complete a privacy impact assessment retrospectively for all ANPR devices currently deployed. Responsible Officer: Chief Inspector Implementation Date: April 2018

Ref	Control	Adequate control design (yes/no)	Controls complied with (yes/no)	Audit finding	gs and impl	lications				Priority	Action for management
				F	Risk Exposure			oot causes			
				National AN Relevant standard windividual pi	National ANPR Standards.			s are not beir or each ANPI			
				Probability	Financial	Reputational	Operational Legal Rating				
				Probable	Negligible	Significant	Minor	Significant	3:13	l	
4	There is a stand-alone document available on an NYP sub-site for ANPR Data Storage, Access and Management. This document details how ANPR data is stored, accessed and authorisation of access to data, and details of who manages ANPR data.			Management We confirme The ANPR D opening mee document wa access to AN Use of ANPR data, with lini intelligence a Provisions fo Requirement 3, however it carried out, c assist with th	t document. If the document the document that t	e standalone A ment did state the and Technical functions with out of date. It is hin the Force. R Procedure do information above tool and as a fe	Manager information in therefore und becament detail out the use of technical tool. The property of the NAS is the technical tool. The property of the NAS is the technical tool and the NAS is the technical tool. The property of the NAS is the technical tool and the NAS is the technical tool and	s determined rmed us during to ANPR data elear who should the use of ANPR as an	by role. Ing Ing Ing Ing Ing Ing Ing Ing Ing In	Medium	Staff will be reminded of the process to retain evidence of approval for all ANPR searches on data over 90 days, including those who have authority to approve searches. The Force's ANPR documents will be updated to detail provisions for access control audits. Audits of access to ANPR data will be carried out by the ANPR Data, Access and Technical Manager. We will undertake a brief exercise to ensure that no one currently has access to the Cleartone system that
				F	Risk Exposi	ure	Ro	ot causes			shouldn't.

Ref Control	Adequate control design (yes/no)	Controls complied with (yes/no)	Audit finding	gs and imp	lications				Priority	Action for management
			to ANPR da	ita. n ANPR cap	nave access oture records ed.	Documentat and does no provisions. Evidence of being retained unaware of authorisation	authorisation ed. Staff are who has	on is not		Responsible Officer: ANPR Data Access and Technical Manager Chief Inspector Implementation Date:
			Probability Probable	Financial Nil	Reputational Minor	Operational Negligible	Legal Minor	Rating 5:8		February 2018 We will then carry out a fully comprehensive exercise to review which roles should
										have access to the national system once ANPR data is moved over (beginning of May)
										Responsible Officer: ANPR Data Access and Technical Manager
										Chief Inspector
										•
										Implementation Date: May 2018

Ref	Control	Adequate control design (yes/no)	Controls complied with (yes/no)	Audit findings and implications	Priority	Action for management
5	Staff / officers have access to ANPR data according to their job role. There are two levels of access depending on role, one allows access to data up to 90 days, one allows access to data over 90 days, however to access this data the officer / staff must enter the officer that has authorised their access to this data, and the reason for accessing this data. The system is set up so that if a search is carried out over the 90-day limit by anyone, it automatically asks for details of the authoriser and the reason for the search, no matter what the access levels are for the individual carrying out the search.	Yes	No	We carried out testing on a sample of ten instances where ANPR data search had been completed for data over 90 days old. In all instances the individual that carried out the search had detailed the authoriser and the reason for the search. Nine of the searches were part of a crime investigation. One of the searches was carried out following an intelligence development. We requested evidence of this approval to confirm that it was provided. Our review found the following: There was an ANPR Data Request form or an Application for the use of ANPR Data in Evidence form completed for seven of the searches these were all requests from other forces or national requests for data. For one of the searches, the person that authorised the search confirmed the reason for the search, however there was no evidence provided of the original approval. For one of the searches, the member of staff that carried out the search was on long term sick so could not provide evidence of the search, and the person that authorised the search did not respond to our request for evidence during the audit. If evidence is not retained of appropriate approval for searches on ANPR data over 90 days there is a risk that appropriate approval was not actually provided and the staff / officer has searched data without the correct authorisation. When evidence was requested of authorisation, one of the staff that had carried out a search informed the ANPR Data, Access and Technical Manager that they were unaware that authorisation was required from anyone other than the officer requesting the search. If staff are unaware of who can authorise ANPR data searches, there is a risk that staff are approving searches who do not have the authority to do so.		Refer to management action 4

Ref	Control	Adequate control design (yes/no)	Controls complied with (yes/no)	Audit finding	gs and impl	ications				Priority	Action for management
6	Deployed / re-deployed ANPR devices are installed by a contractor, QRO. When they are installed, QRO carry out compliance checks of capture rates and read rates in line with NASP performance standards. NASP Part 2 states the following: 'Compliance with the 'read' rate for a NRD should be reviewed at least annually with a sample of not less than 250 consecutive reads, for every lane covered by the NRD. Provisions for performance evaluation must be defined in LEA policy and procedures.'	Yes	No	see whether device when been on site been tested at the devices who provided by the devices who provided by the devices who provided by the percentage appears to be for ongoing procedure shadeployed. The ANPR Prinstallation and supporting in images in accidiscussions was accordance with support Engin The Force is	a performan it was first d for over 12 r annually. Dund that a performant they have a down to ge of data case the 'counterformance and thereafter agery and ecordance with staff four with policy. Theer and get	ring with	eck had been cooloyed, and for ed to see if the eck had been ployed, however our and last two back office far NASP. This redure, however echniques. To tance when a ce of NRD would for all NRD so for any that however our and elay in the est application in the stance when a ce of NRD would be for any that however our and the est application is the National AN	mpleted for or devices the performant of carried out over the read to vehicle reacility (bof) to method used of this is a proper this is a proper this is a proper that provided do not provide the performant of	on four of data gistration or check d by QRO ocedure ruth video' irst ssed on e ide l wed in uiting a vorking.	Medium	(Note - The Force is currently awaiting the approval of the recruitment of a Support Engineer.) Once the Support Engineer role has been filled and training provided, all ANPR Performance testing will be completed in-house in accordance with NASP and the Force's ANPR Policy. Responsible Officer: ANPR Data, Access and Technical Manager Implementation Date: September 2018

Ref	Control	Adequate control design (yes/no)	Controls complied with (yes/no)	Audit findings and implications	Priority	Action for management
7	There is an ANPR Re-Deployable Camera meeting every two months which the Force's Authorising Officer (AO) chairs. At this meeting, bids for deployment of ANPR devices are assessed and approved / not approved. Each ANPR device has a review date, where the device is reviewed to see if it has met its requirements of its original deployment or not, and if it's use should be continued or not.	Yes	No	For our sample of currently deployed ANPR devices, we reviewed ANPR re-deployable camera meeting minutes to test if they were reviewed regularly, in accordance with review dates. There is a spreadsheet submitted for review at each meeting which detailed cameras, by location, showing installation date and review date, a written summary update on its performance and the number of reads and alarms in a two-month period. Our testing found of the sample of 10 ANPR devices found the following Six had been reviewed on their appropriate review dates. One deployment was not due for review yet at the time of our audit. One ANPR was deployed as part of a police Operation, it was deployed in January 2017 and was not reviewed until August 2017 (seven months) there was no record of how often this should have been reviewed. One ANPR was deployed in January 2017 and was due to be reviewed after six months, however it was not reviewed until October 2017 (nine months). One was deployed in March 2017 and was due to be reviewed after four months, however it was not reviewed until October 2017 (seven months). If ANPRs are not reviewed on the correct date, there is a risk that they may not be performing as expected and will not be removed in a timely manner, resulting in a potential ineffective use of resources as these cameras cannot be used for another bid until they are removed.		Refer to management action 1

APPENDIX A: SCOPE

The scope below is a copy of the original document issued.

Scope of the review

The scope was planned to provide assurance on the controls and mitigations in place relating to the following area:

Objectives of the area under review

The National ANPR Standards for Policing (NASP) guidance detail the standards that are required to be met for the development and use of ANPR systems. Our review will confirm the re-deployment of ANPR systems is consistent with NASP guidance and key accountability and responsibilities have been established.

When planning the audit, the following areas for consideration and limitations were agreed:

Areas for consideration:

Our review considered the following areas in relation to the infrastructure for the re-deployment of ANPR systems:

- There was a policy / procedure in place that provided a framework for the management, deployment and use of ANPR and it reflected the national standards.
- A strategic assessment had been undertaken to identify strategic threats necessitating ANPR deployment at a specific location to detect, deter and disrupt criminality.
- Privacy impact assessments were conducted for all assets to ensure the rights of individual privacy were considered and balanced against the need to protect the public from harm.
- There was a policy in place detailing the requirements for data management and access control including provisions for audit.
- Records were retained for the appropriate periods as set out by NPCC guidelines and Information Commissioner's office. The deletion of records was appropriately approved.
- Access to data was appropriately restricted and reasons for access were recorded.
- Compliance with performance standards detailed with the NASP guidance were undertaken for the re-deployment of any ANPR device.
- The re-deployment of ANPR devices was appropriate, considered and approved.
- Appropriate governance arrangements were in place to consider the performance and re-deployment of ANPR devices.

Limitations to the scope of the audit assignment:

- Our review only focused on the re-deployment of ANPR devices. We did not consider any other ANPR projects.
- We did not consider the impact of GDPR on ANPR data or if the Force had appropriate plans in place to address this.
- We did not review the procurement of ANPR devices or if value for money had been achieved.
- Testing was completed on a sample basis so we did confirm all ANPR infrastructures had been undertaken in accordance with National ANPR Standards for Policing (NASP).
- We did not verify the calibration of equipment for accuracy.
- Our work does not provide absolute assurance that material errors, loss or fraud do not exist.

APPENDIX B: FURTHER INFORMATION

Persons interviewed during the audit:

- ANPR Data, Access and Technical Manager
- Chief Inspector
- Project Manager

Documentation reviewed during the audit:

- ANPR Policy
- ANPR Procedure
- ANPR Infrastructure Development Privacy Impact Assessment
- ANPR Re-Deployable Camera Request for Deployment documents
- ANPR re-deployable camera meeting minutes
- ANPR Data Storage, Access and Management document
- ANPR Data Request forms
- Application for the use of ANPR Data in Evidence forms
- Guidance on ANPR Performance Assessment and Optimisation (Home Office)
- National ANPR Standards for Policing (Home Office)

FOR FURTHER INFORMATION CONTACT

Dan Harris, Head of Internal Audit

Tel: 07792 948767

Daniel.Harris@rsmuk.com

Angela Ward, Senior Manager

Tel: 07966 091471

Angela.Ward@rsmuk.com

Philip Church, Client Manager

Tel: 07528 970082

Philip.Church@rsmuk.com