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Overview

Introduction

Automatic Number Plate Recognition (ANPR) is a technology used to detect vehicle number plates from camera images.

ANPR systems use optical character recognition (OCR) to match the scanned number plate against a database to identify vehicles of interest (VOI). When a VOI is recognised, the system alerts the operator who can take appropriate action.

This document sets out:

- an overview of ANPR equipment;
- approved methods of deployment; and
- the procedures to be followed during the deployment of ANPR.

Note: This manual applies to Police constables and authorised officers, hereafter referred to collectively as Police.

ANPR equipment

Components

ANPR systems are made up of these components:

- a camera;
- a computer; and
- a monitor.

Software

ANPR systems use software which is not supported by the Police Information and Communication Technology (ICT) helpdesk. Instructions on software operation and support are included in the training given to ANPR operators.

Servicing

Instructions on software and hardware servicing are included in the ANPR operator manual.

ANPR vehicles

ANPR equipment must only be operated in purpose built ANPR vehicles in accordance with this Police Manual chapter. If it is operationally necessary to alter the vehicle or operate ANPR in any other manner, approval must be gained from the National Manager: Road Policing prior to any operational deployment. General Instruction D095 applies.

Training

ANPR equipment must only be operated by Police who have completed an approved training course. To ensure national consistency and quality of content and delivery, all training must:

- be approved by the National Manager: Road Policing;
- comply with the manufacturer's operating instructions; and
- comply with the quality assurance standards set by the Police Training Service Centre (TSC).

Roles and responsibilities

This table sets out the roles and responsibilities associated with ANPR equipment.

Role	Responsibilities
National Manager: Road Policing	<ul style="list-style-type: none"> • Must approve the ANPR training session content. • May approve (in writing) requests to operate ANPR in non-standard deployments or outside of these guidelines.
District commanders	<ul style="list-style-type: none"> • Must ensure Police are trained to operate ANPR equipment prior to authorising operational deployment.
Officer in charge of ANPR operations	Must ensure all operational deployments of ANPR have a: <ul style="list-style-type: none"> • trained ANPR operator; • site supervisor; • safety officer; and • site plan.
ANPR operator	<ul style="list-style-type: none"> • Must have completed an ANPR training session. • Must have read and understood the ANPR operator manual.
Site supervisor	<ul style="list-style-type: none"> • Is the constable in charge of Police during ANPR deployments. • Must ensure Police operate in accordance with this chapter. • May also be the safety officer.
Safety officer	<ul style="list-style-type: none"> • Has overall responsibility for Police and public safety during ANPR deployments.
ANPR vehicle	<ul style="list-style-type: none"> • Must not be altered except by prior written approval from the National Manager: Road Policing. • Must be used as a category D vehicle. Not to be used to transport or hold prisoners.
Support vehicles	<ul style="list-style-type: none"> • These must be category A marked patrol vehicles. They should be operated by <u>gold classified drivers</u>.
ANPR Intercept Team	<ul style="list-style-type: none"> • Must have completed an approved ANPR training session.

ANPR operations

Approved deployment models

See: [Annex A](#).

Pre-deployment procedures

All deployment types

Follow these steps for all deployment types.

Step	Action
1	Ensure minimum Police and resources are available to conduct an <u>approved deployment</u> .
2	Conduct a briefing on Police roles and responsibilities.
3	Ensure the ANPR equipment (incl. batteries) is ready to operate.
4	Ensure the ANPR operator obtains an up-to-date VOI database.

5	<p>Ensure the ANPR camera is set-up correctly:</p> <ul style="list-style-type: none"> • For mobile carpark deployments, the vehicle's camera angles may be adjusted prior to arriving at the deployment location. • For static deployments, set up the ANPR vehicle ensuring it is legally and safely parked. The vehicle's position must not disrupt the normal flow of traffic.
6	Inform the Communication Centre (Comms) of the nature and location of the ANPR deployment.

Limited scale deployments

Follow these steps for limited scale deployments.

Step	Action
1	For mobile deployments, ensure the ANPR vehicle driver does not monitor the ANPR equipment while driving.
2	The ANPR operator must ensure the intercept vehicles and Police are in position and ready prior to commencing a carpark deployment.

Checkpoints

Follow these steps for checkpoints.

Step	Action
1	Prepare a deployment plan including a <u>site plan</u> .
2	Ensure adequate signage and cones are available.
3	The ANPR operator must ensure the intercept vehicles and checkpoint Police are in position and ready prior to commencing a deployment.

Non-standard deployments

Follow these steps for non-standard deployments.

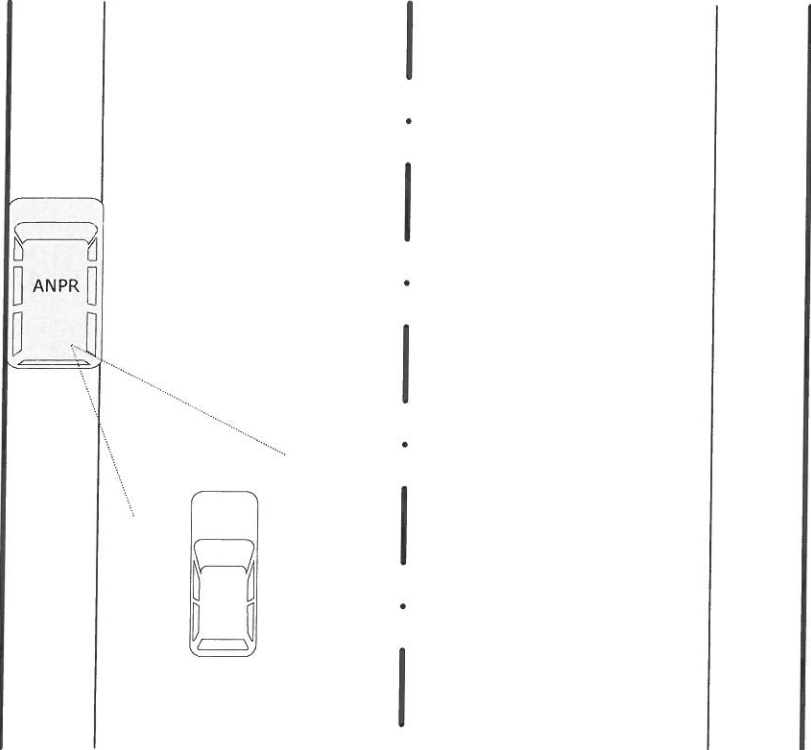
Step	Action
1	For mobile interceptions, prepare a deployment plan (including risk mitigation strategies) and submit it to the District Road Policing Manager for written approval, prior to the deployment.
2	For mobile interception, the ANPR operator must ensure the intercept vehicles are in position and ready prior to commencing a deployment.
3	For covert or any other type of non-standard deployment, prepare a deployment plan (including risk mitigation strategies) and submit it to the National Manager: Road Policing for written approval, prior to the deployment.

ANPR deployment site plan examples

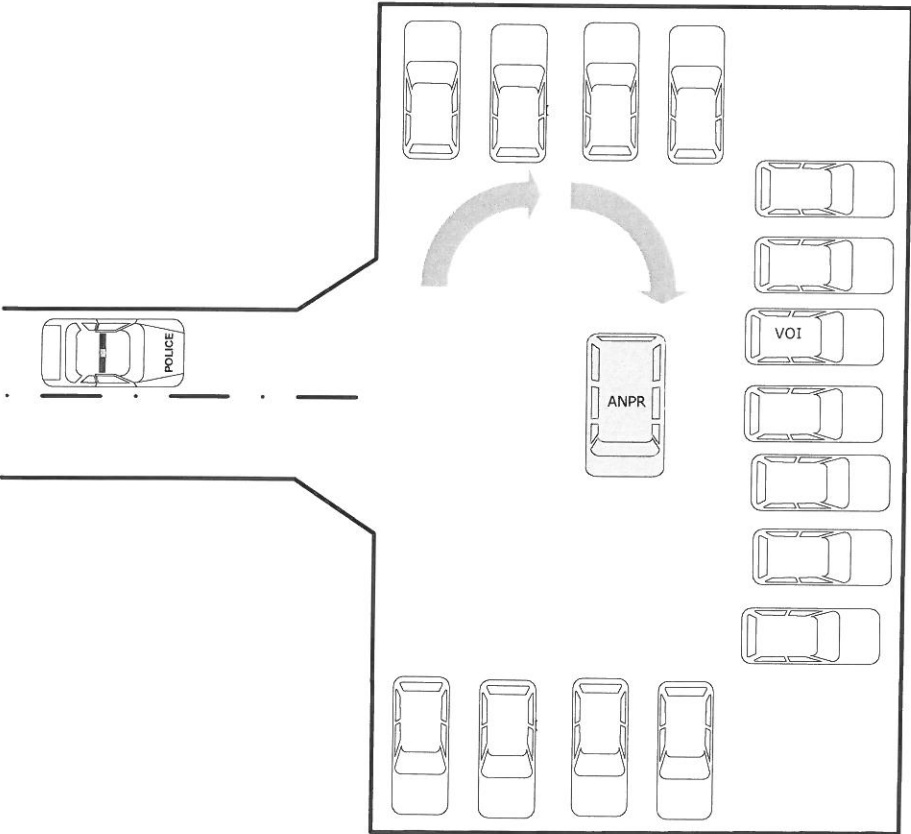
Generic examples

- These are generic examples to assist the officer in charge of an ANPR operation with the preparation of site plans. For TAG checkpoints refer to Alcohol and Drug Impaired Driving.

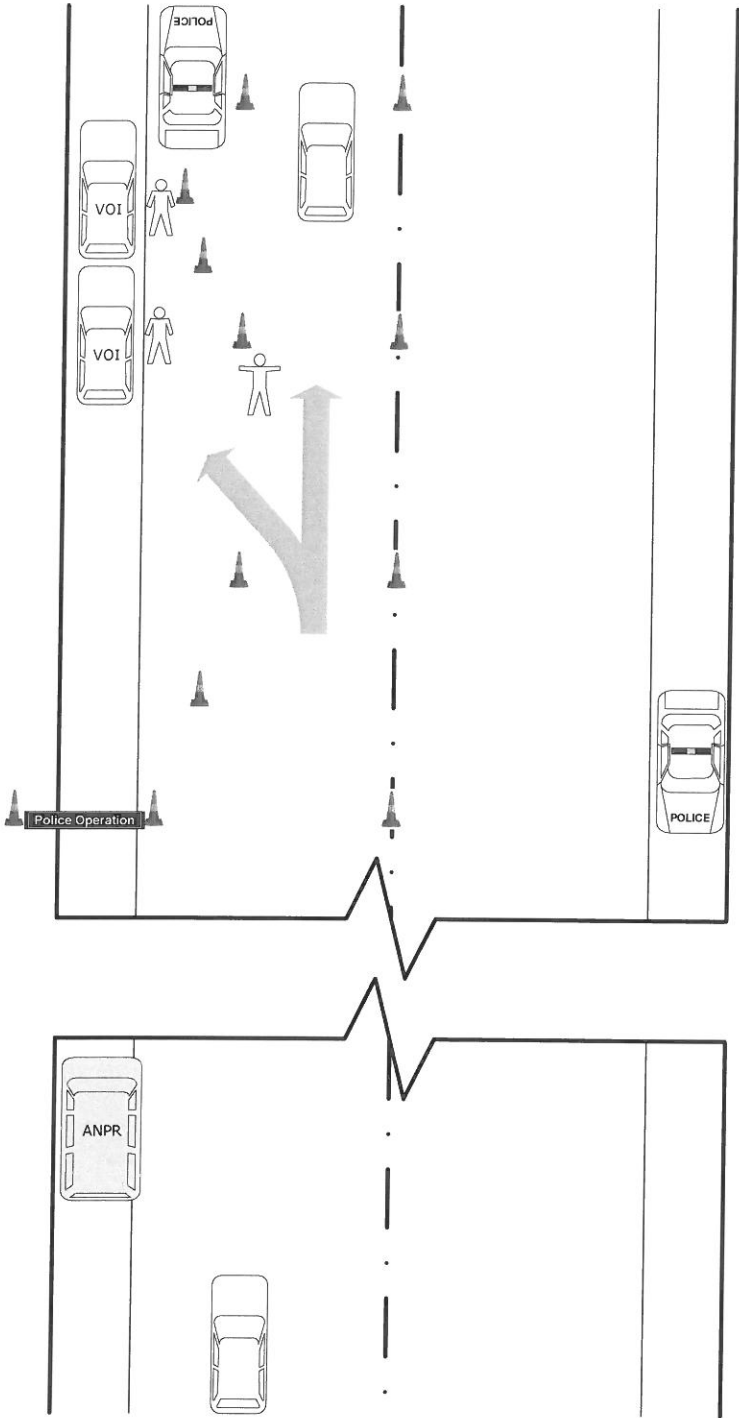
Information gathering



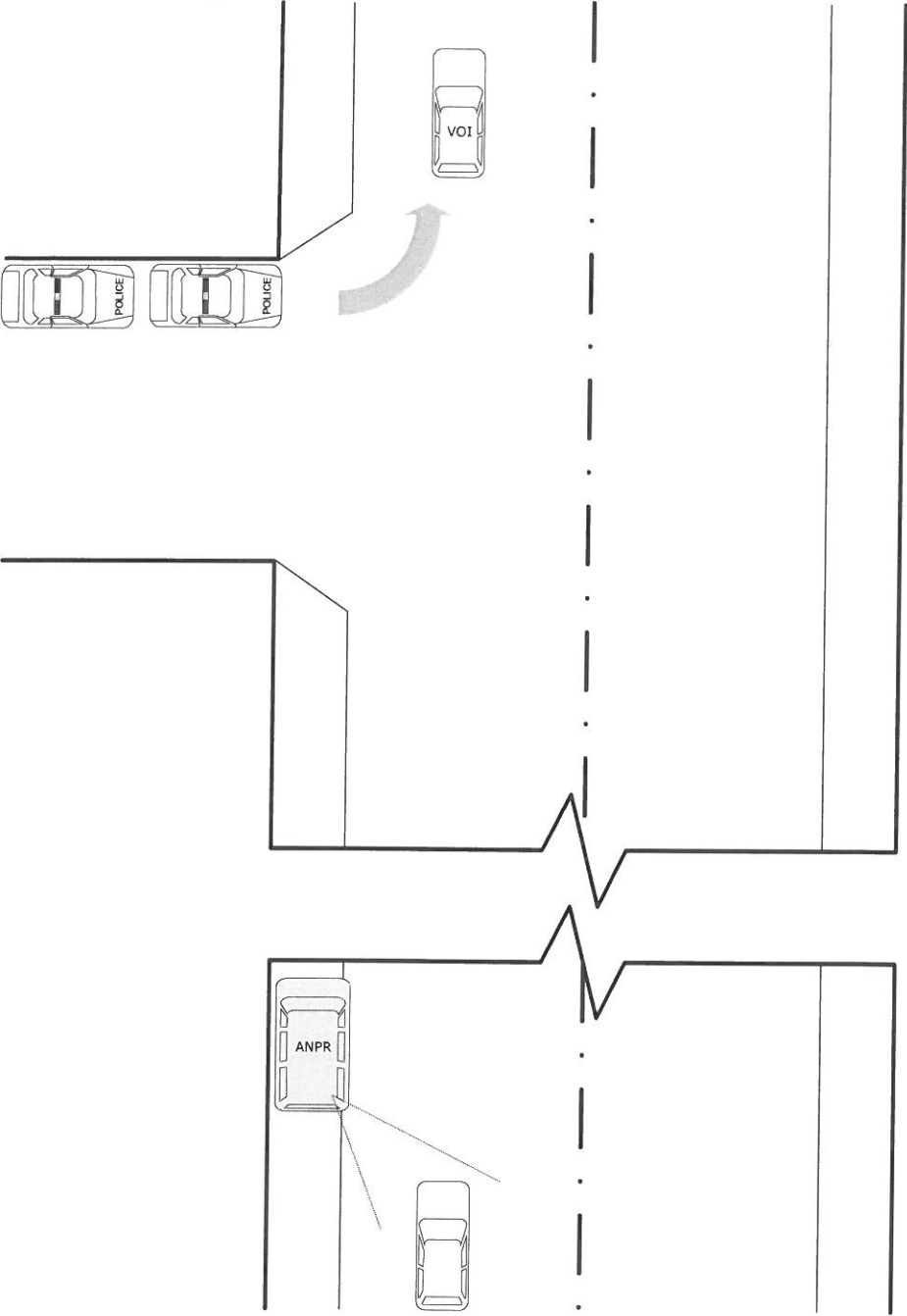
Carpark deployment



ANPR checkpoint



Mobile interception



Selecting a location

Points to consider

When selecting a location for all deployment types consider the Police Manual chapter Perimeter control. For ANPR checkpoints also consider this table.

Consider	Rationale
The <u>deployment model</u>	Not all deployment models are suitable for all locations.
Intelligence	The intelligence tasking and co-ordination process will identify suitable ANPR deployment locations.
Traffic volumes	To maximise the potential of ANPR, higher volumes of traffic are recommended. Only a small percentage of vehicles are VOIs.
Intercept risks	Avoid locations which offer escape routes. Areas with side roads or potential for offenders to do u-turns increase intercept risks.
Officer/public safety	Avoid areas where drivers have little reaction time prior to arriving at a checkpoint, or there is a risk of nose-to-tail crashes if traffic begins to queue. Avoid areas with poor overhead lights at night.
Hazard creation	Avoid areas where the intercept team creates a hazard by distracting drivers who are travelling at high speeds (such as motorways). Avoid areas where the ANPR vehicle cannot legally or safely park.
Service disruption	Avoid checkpoints that disrupt the flow of emergency service vehicles, e.g. near Police or fire stations. When operating with a TAG team ensure the ANPR intercept team operates behind the TAG team.
Sufficient room for the intercept team and vehicles	The intercept team needs enough space to safely process VOIs, including room to tow impounded vehicles.
Local knowledge	Police will know areas where successful operations have been conducted in the past.

ANPR checkpoint procedure

Radio procedures

Follow these steps (not necessarily in the order shown here).

Step	Action
1	Ensure Comms are aware of the nature and location of the ANPR deployment and at least one member of the intercept team monitors the main radio channel.
2	Ensure support vehicle radios remain on the main radio channel so that communication is on the main channel if a pursuit is initiated. For further information refer to <u>Radio Protocols</u> .
3	Use a closed simplex channel for communication between the ANPR operator and intercept team. This channel should be kept free to allow the ANPR operators to broadcast the VOI alert type and description.

Note: The intercept team should only communicate to acknowledge the VOI alert or when they are all busy and do not require further alerts to be broadcast.

ANPR equipment setup

Refer to the ANPR Operator Manual.

ANPR checkpoint setup

Follow the [site plan](#) and for positions of the ANPR vehicle, support vehicles, signage and cones.

VOI alert - ANPR operators

ANPR operators must follow the procedure in figure 1 below when a VOI is detected.

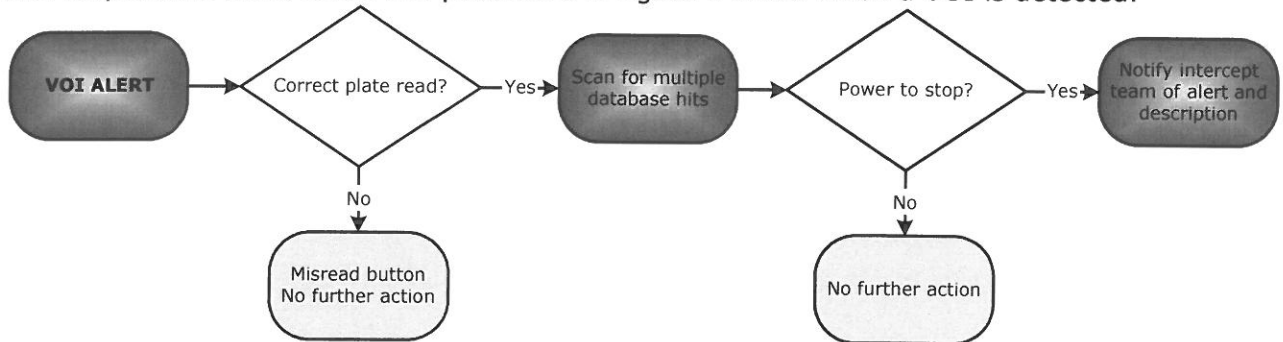


Figure 1: ANPR operators decision chart

Plate misreads

The ANPR OCR software may occasionally misread similar shaped characters such as a '1' as an 'I', or an 'O' as a 'Q'. The ANPR operator must compare the photograph of the captured plate with the OCR definition to determine if the plate has been read correctly.

Multiple VOI alerts

The ANPR software does not prioritise VOI alerts in order of seriousness, where a detected vehicle has multiple VOI entries. Prior to informing an intercept team of VOI activity, all VOI alerts for the detected vehicle must be assessed and prioritised. The ANPR operator must ensure that the VOI information passed to the intercept team accurately reflects all information held on the detected vehicle. This enables the intercept team to assess the threat level and plan accordingly.

Power to stop

New Zealand legislation provides Police with various powers to stop vehicles. However, Police do not have a blanket power to stop any vehicle except for the purpose of a [compulsory breath test](#). As a general rule:

- For alerts relating the [Land Transport Act 1998](#) offences, section [114](#) applies.
- For alerts relating to the [Crimes Act 1961](#) offences, sections [314B](#) and [317A](#) apply.

Some VOI alerts such as 'other' will require the ANPR officer to check the alert text to determine if a power to stop exists. For more information refer to:

- [New Zealand Bill of Rights Act 1990](#)
- [Traffic patrol techniques](#)
- [Perimeter control](#).

VOI alert - intercept team

Once notified of the alert type and vehicle description, the intercept team can prepare to stop the vehicle. Depending on the alert type consider:

- the statutory obligations pursuant to the power to stop under the Crimes Act;
- the risk the driver may fail to stop; and
- the risk the driver or passengers may flee on foot.

For more information on stopping vehicles refer to: [Traffic patrol techniques](#).

If a vehicle fails to stop, follow the [Pursuits](#) and [Urgent duty](#) driving policies. Intercept staff should be aware that a VOI, failing to stop on request, does not automatically provide sufficient grounds to initiate a pursuit.

Approaching the driver

For information on approaching the driver of a vehicle refer to: Traffic patrol techniques.

Acting on the alert

Remember that some VOIs may no longer be of interest to Police but are yet to be expired in NIA. This must be considered when dealing with the driver.

For information on actions to be taken when acting on the alert refer to the appropriate Police Manual chapter. The main chapters are listed below:

- Alcohol and Drug Impaired Driving
- Arrest and detention
- Driver licensing
- Impounding vehicles
- Issuing non-operation orders
- Motor vehicle offences
- Motor vehicle registration and licensing
- Noise enforcement
- Offence notices
- Offences against Justice.

Following the stop

If it is necessary to do so, update or expire the alert to reflect the current status of the vehicle. Ensure that intelligence notings are submitted in a timely manner.

Access to and retention of ANPR data

VOI data entered into ANPR

Police VOI data consists of vehicle registration numbers which have been entered into the NIA over a preceding period of 18 months. As the data is derived from NIA it must be treated the same as NIA data in accordance with the policies and rules set out in the NIA manual.

District intelligence units and operational groups are authorised to create additional ANPR databases to allow targeted policing of specific problems or for their own investigative purposes.

VOI data from other Government agencies may also be utilised in the ANPR system. This must only be data from agencies that have a written agreement with Police to share data for the purposes of ANPR deployments.

Data obtained from ANPR deployments

The data obtained from ANPR deployments consists of:

- a list of registrations captured by the ANPR camera;
- an image of a registration plate; and
- an image of part or all of the vehicle (depending on how the camera is set up).

At the end of every shift, the ANPR operator must:

- upload data from the ANPR system to a secure USB flash drive; and
- on return to their police station, transfer the data to the ANPR database or delete it from the system.

All collected ANPR data must only be stored on the specialist ANPR database.

Conditions of use

The underlying principle governing the proper use of the ANPR database is it must be used for Police business purposes only. Refer to the information on Police computers section in the Security of Information manual chapter.

Removal of ANPR data from database

All data obtained from ANPR deployments automatically drops off the ANPR database after six months. Any data older than six months may be preserved on the authorisation of the Commissioner.

Privacy Act implications

ANPR data may be used to track the movements of a person of interest (POI) who may be using a VOI. Linking VOIs to POIs for this purpose constitutes personal information; therefore Principle 2 of the Privacy Act 1993 applies.

ANPR data from the database must not be circulated or disclosed to any other Government or third-party organisation or person without the express authorisation from the Commissioner, or another officer delegated by the Commissioner to give such authorisation.

Examples of proper use of the ANPR database

ANPR data may be used as an investigative tool for the purposes listed in this table. The table also provides examples of proper use.

Purpose	Example of proper use
Locate lost or stolen vehicles	A vehicle is reported stolen. The owner provides a description and registration number to police. A constable then checks the ANPR database to determine the vehicle's movements and assist in its location and recovery.
Identify the movement(s) of a vehicle used in the commission of a crime	A constable attends a robbery where a witness has made note of the suspect's vehicle registration number. The constable checks the ANPR database to determine the movements of that vehicle on the day of the robbery.
Research an alibi	As part of a criminal investigation, a suspect says that he was driving a vehicle in another location when the offence took place. Upon gaining the registration details of that vehicle, the investigating officer checks the ANPR database to help determine whether the suspect's alibi is credible.
Identify vehicles in a particular location or a particular time to assist in identifying suspects, victims, or witnesses	A constable becomes aware that a person may be running an illegal drug enterprise in a suburban street. The constable checks the ANPR database of the street near the location of the suspect's home when preparing an affidavit for a search warrant.

Examples of improper use of the ANPR database

If ANPR data is not being used in connection with unlawful activity, then the use is improper as it would amount to a "fishing expedition". Using data in the absence of a law enforcement purpose would also constitute a breach of the [Privacy Act 1983](#).

ANPR data should not be used...	Example of improper use
in situations where Police attend peaceful protests or meetings where members of the public are exercising their right to freedom of expression	A constable is supervising a peaceful public meeting. They use the ANPR camera to record the registration numbers of all the vehicles travelling to the venue. They know the vehicles are unlikely to be VOIs but plan to check the captured number plates in NIA to determine the names and addresses of the meeting attendees.
to monitor the movements of a person in the absence of any suspected unlawful activity	A constable observes a person they would like to meet socially driving a vehicle and makes a note of the vehicle's registration plate. The constable checks the ANPR database to determine the vehicle's movements in the hope of being able to meet that person.
for the purposes of political, commercial, or financial gain	In addition to being a Police employee, a constable owns a business with their partner. The constable learns that a representative of a rival company is in the local area. They know the details of the vehicle the representative is driving and check the ANPR database to monitor the movements of that vehicle.

If a Police employee is uncertain whether ANPR data is being used legitimately, they must discuss the matter with their supervisor.

Annex A: ANPR operations - approved deployment models

Deployment name	Description	Minimum resources	Additional requirements
Limited scale deployments			
Information gathering	Mobile or static ANPR vehicle only deployed to record VOIs. Location: Carparks, arterial routes and potential deployment sites. Purpose: Information collection and planning for future deployments.	ANPR operator and vehicle.	Nil.
Carpark deployment	Mobile ANPR vehicle deployed to report stationary VOIs to an intercept officer. Location: Carparks and stationary vehicle gatherings. Purpose: Observe or intercept stationary VOIs.	ANPR operator and vehicle, intercept officer and support vehicle.	Nil.
Checkpoints			
ANPR Checkpoint	Static ANPR vehicle deployed to report mobile VOI activity to a static intercept team. Location: Areas where static checkpoints can be established. Purpose: Intercept mobile VOIs.	ANPR operator and vehicle, intercept officer and support vehicle.	Site plan, cones, and signage.
ANPR/TAG checkpoint	Static ANPR vehicle deployed to report mobile VOI activity to an intercept team adjacent to a TAG checkpoint. Location: With TAG checkpoints. Purpose: Intercept mobile VOIs and drink/drugged drivers.	ANPR operator and vehicle, intercept officer and support vehicle.	Co-ordinated site plan, TAG cones, and signage.
Multiple direction checkpoint	Two static ANPR vehicles deployed to report mobile VOI activity to a static intercept team from both directions. Location: Areas where static checkpoints can be established. Purpose: Intercept mobile VOIs from two directions	Two ANPR operators and vehicles, two intercept officers, and two support vehicles.	Site plan, cones, and signage.
Non-standard deployments			
Mobile Interception	Static ANPR vehicle deployed to report mobile VOI activity to a mobile intercept team. Location: Areas where static checkpoints cannot reasonably be established. Purpose: Intercept mobile VOIs.	ANPR operator and vehicle, intercept officer, and support vehicle.	Site plan, pursuit mitigation plan, and written approval from District Road Policing Manager, prior to deployment
Covert deployment	Activities and resources as approved by the National Manager: Road Policing on a case-by-case basis.		Written approval prior to deployment.