

Attachment A

Submission to the Queensland Government Parliamentary Travelsafe Committee

Inquiry into Automatic Number Plate Recognition Technology

Table of Contents

Executive Summary	4
Introduction.....	6
The Structure and Operation of CrimTrac	7
1. The CrimTrac Inter-Governmental Agreement	8
2. CrimTrac Strategic Plan 2007 - 2010.....	8
3. CrimTrac Governance Arrangements	9
4. Board Members.....	9
5. CrimTrac's Financial Arrangements.....	9
CrimTrac's Information Systems	11
1. National Automated Fingerprint Identification System (NAFIS).....	11
2. National Criminal Investigation DNA Database (NCIDD).....	12
4. Australian National Child Offender Register (ANCOR).....	14
5. National Police Reference System (NPRS)	14
6. CrimTrac Legacy Systems	15
6.1. National Names Index (NNI).....	15
6.2. National Firearms Licensing and Registration System (NFLRS)	16
6.3. Telephone Directory Search (TDS)	16
6.4. National Vehicles of Interest (NVOI)	16
CrimTrac's ANPR Programme	17
1. Background	17
1.1. ANPR Workshop Recommendations	18
1.2. Delivery Strategies and Principles / Programme Approach	18
1.3. High Level Programme Capability	19
1.4. Strategic Programme Objectives / Scope	19
1.5. Expected Programme Benefits.....	20
2. Report of the Parliamentary Joint Committee on the Australian Crime Commission	21
3. Federal Labor's position on ANPR.....	21
4. ANPR Scoping Study Project.....	22
4.1. Scoping Study Project Approach.....	22
4.2. Products.....	23
4.3. Milestones.....	24
4.4. ANPR Future State.....	25
5. The Case for a National ANPR Approach.....	27
5.1. National Strategic Alignment	28
5.2. Sharing of Data, Systems and Infrastructure	29
5.3. Cross-Jurisdictional Cooperation and Enforcement.....	29

5.4. National Standards	29
5.5. National procurement	30
5.6. Crime and Road Safety Statistics	30
Responses to Travelsafe Committee Inquiry Terms of Reference	32
1. The efficacy of ANPR technology for road safety applications	32
2. Potential Costs and Benefits	33
3. Whether ANPR-enabled intercept teams should be used for traffic enforcement in Queensland, including examination of existing applications	34
4. Other opportunities and considerations for its use by Queensland Government agencies to promote road safety	34
Bibliography	35
Annexure A – Scoping Study Workflow	36
Annexure B – Media Releases:	37
Queensland Police – Friday, 16 Nov 2007	37
NSW Police - Thursday, 22 Nov 2007 09:10am	37
NSW Police – Thursday, 22 November 2007 03:46pm	38
Queensland Police – Tuesday 4 Dec 2007	38
NSW Police – Thursday, 13 Dec 2007 01:19pm	39
Notes:	40

Executive Summary

CrimTrac is an Executive Agency within the Commonwealth Government. CrimTrac's primary role is to take a leadership role in generating national approaches to information sharing solutions to support the effective operation of law enforcement agencies across borders for a safer Australia.

CrimTrac has been very successful in working with whole-of-government agencies to develop solutions that operate within diverse technical environments and comply with privacy and legislative requirements.

CrimTrac currently provides four key electronic law enforcement information and investigative systems. These four systems¹ operate at the national level² and have provided significant inter-jurisdictional benefits and have enhanced Australian public safety. These operating systems allow the fight against crime to be taken Australia wide.

These four national operating systems were required to be delivered by the agency under the Inter-Governmental Agreement which established CrimTrac. This agreement further requires the agency to examine emerging information sharing requirements for law enforcement agencies. During early 2006, CrimTrac recognised Automatic Number Plate Recognition (ANPR) technology as one such emerging technology that could have wide ranging benefits for Australian law enforcement which includes road transport agencies.

CrimTrac brought together key stakeholders to examine the potential of ANPR within law enforcement and has subsequently commenced for the Commonwealth, and funded under proceeds of crime, a detailed Scoping Study. The agency will deliver its final report to the Ministerial Council for Police and Emergency Management – Police during late 2008. The Scoping Study will report on how to implement a nationally integrated ANPR framework. The report will also include a detailed cost benefit analysis and a Privacy Impact Assessment on the implementation options recommended.

In response to the Travelsafe Committee of Inquiry into ANPR and its specific terms of reference, CrimTrac has provided an overview of the benefits of nationally integrated systems that it administers. In addition, the approach to examining a national ANPR model has also been provided to inform the committee.

In the context of examining the potential recommendations arising from the ANPR Scoping Study and the benefits of a national ANPR approach, the agency fully supports the implementation of ANPR technology within Queensland. The agency considers that although quantifiable and tangible benefits of ANPR use have not been fully assessed at this point by the scoping study, there is sufficient evidence to state that by implementing ANPR technology, there would be efficiencies and benefits gained for both road safety applications and for use by law enforcement agencies more broadly.

CrimTrac acknowledges that the terms of reference for the inquiry are specific to road safety in Queensland. The agency however notes broader public safety benefits can be achieved through enabling a suitably configured ANPR application to be applied to criminal investigation

¹ National Criminal Investigation DNA Database (NCIDD); National Automated Fingerprint Identification System (NAFIS); Australian National Child Offender Register (ANCOR) and National Police Reference System (NPRS).

² The NPRS is currently operating inter-jurisdictionally across four States and full national implementation is expected by late 2008.

and intelligence related activities in the law enforcement domain. These benefits were recently recognised by the bipartisan Joint Parliamentary Committee on the Australian Crime Commission which recommended that the Commonwealth, state and territory governments implement a national number plate recognition system.

Introduction

CrimTrac is an Executive Agency within the Commonwealth Government in the Attorney General's Portfolio. The agency was established on 1 July 2000, with the aim to '*enhance Australian law enforcement with an emphasis on information-based policing facilitated through rapid access to detailed, current and accurate police information*'.

The broad objectives of CrimTrac are to enhance Australian policing through:

- a) The provision of high quality information services that:
 - i. meet the needs of the Australian policing community; and
 - ii. establish best practice service models in relation to the provision of information to support policing; and
 - iii. are project-oriented and cost-benefit driven to achieve outcomes; and
- b) Support for the Jurisdictions in the implementation and use of CrimTrac services; and
- c) Providing controlled access to appropriate information by duly accredited third parties.

CrimTrac's primary role is to provide national information sharing solutions to support the effective operation of police services and law enforcement agencies across borders. CrimTrac brokers a wide variety of information to assist the functions of participating law enforcement agencies. Over recent years, the solutions developed and provided by CrimTrac have seen a broader uptake among regulatory and traditional policing law enforcement agencies. In part this has been achieved through the recognition and recognised value of the services that CrimTrac provides and is part of a whole-of-government approach.

CrimTrac was established "to allow police forces across Australia to share information to solve crimes and catch criminals"
[Former Prime Minister John Howard, announcing the 'A Safer and Stronger Australia Policy' 1998]

Whilst CrimTrac holds information and implements solutions that allow the sharing of that information, the agency does not perform investigative or intelligence related law enforcement activities from the information it holds. The information that is held by CrimTrac is primarily owned by a respective law enforcement agency and not the Commonwealth. The provisioning of this information is reliant on the continued collaboration and cooperation between CrimTrac and participating agencies.

The exchange of information to create a safer Australia is critical. So too is the need to ensure that any information whether about an individual or otherwise is accurate, protected and shared in strict accordance with Australian Law. CrimTrac is well positioned to be able to meet these requirements.

The Structure and Operation of CrimTrac

CrimTrac contributes to Australian law enforcement by developing, delivering and maintaining modern high-quality electronic law enforcement information and investigative tools. The agency achieves this by nurturing a cooperative, collaborative partnership with all police services and the broader law enforcement community as stakeholders.

With a focus on national information sharing, CrimTrac expects that the information and investigative tools it develops and manages will achieve the following outcomes for Australian law enforcement agencies:

- Enhanced law enforcement arising from rapid access to detailed, current and accurate information;
- Continuous improvement of information sharing capability;
- Strengthened relationships and partnerships at local, national and international levels;
- Emerging information requirements are considered and met as appropriate;
- Greater national consistency in information and communications technology, business processes and information management is achieved;
- Opportunities for new information sharing and technical development are evaluated and developed;
- An agreed framework for collaboration on national information systems development is implemented; and
- CrimTrac contribution to greater harmonisation of legislation, policies and procedures to facilitate national information.

The benefits for law enforcement agencies utilising the suite of electronic information systems that CrimTrac develops cannot be understated. Benefits to these agencies and the Australian community more generally include but are not limited to:

- Enhanced decision making and awareness;
- Reduced investigation times;
- Faster suspect identification;
- Efficiency in resource allocation / utilisation;
- Increasing cost effectiveness;
- Reducing crime;
- Increasing road safety;
- Whole-of-government collaboration; and
- Attainment of strategic objectives.

CrimTrac delivers services as outlined in the Inter-Governmental Agreement which is detailed in the next section. In addition to these services, CrimTrac also provides national police record checking services to accredited agencies to assist in pre-employment probity checking. During 2007 – 2008, it is estimated that 2.6 million checks will be undertaken on behalf of 55 accredited organisations.

1. The CrimTrac Inter-Governmental Agreement

CrimTrac was established under an Inter-Governmental Agreement (IGA) between the federal Minister for Justice and Customs and all State and Territory police ministers. The IGA under recital D, required CrimTrac to deliver four new systems to enable effective information sharing for police on a national basis. These systems are:

1. a National Automated Fingerprint Identification System (NAFIS);
2. a National Criminal Investigation DNA Database (NCIDD);
3. a National Child Sex Offender System (ANCOR); and
4. a National Police Reference System (NPRS).

The first three of these systems are now well established and the fourth (NPRS) has undergone a successful trial and is being rolled out nationally.

CrimTrac is now directing more attention to Recital E of the IGA which requires CrimTrac 'to provide the means by which other law enforcement information sharing requirements across jurisdictions can be considered and met as appropriate'. CrimTrac's Automated Number Recognition Scoping Study is a major initiative looking towards an emerging information sharing requirement to enhance policing and law enforcement more generally.

2. CrimTrac Strategic Plan 2007 - 2010

The CrimTrac Strategic Plan 2007 – 2010, requires CrimTrac to take a leadership role in generating national approaches to information sharing solutions for law enforcement agencies for a safer Australia. CrimTrac is also responsible for identifying and investigating emerging information technologies and opportunities that would be beneficial to law enforcement agencies.

CrimTrac's new strategic plan and vision statement were endorsed by the Australasian Police Minister's Council³ in November 2006.

"CrimTrac will take a leadership role in generating national approaches to information sharing solutions for law enforcement agencies, for a safer Australia"
CrimTrac Vision Statement

The new strategic plan and vision statement now accurately reflects the broader role CrimTrac facilitates in generating national approaches. Importantly, the agency has now been given a mandate to transition to an agency with a significant role in shaping nationally coordinated approaches to information sharing within the law enforcement domain.

³ The Australasian Police Ministers Council is now formally known as the Ministerial Council for Police and Emergency Management - Police.

3. *CrimTrac Governance Arrangements*

The CrimTrac CEO is accountable to both the federal Minister for Home Affairs and to the CrimTrac Board of Management (the board). The board, established through the IGA is accountable to the Ministerial Council for Police and Emergency Management – Police (MCPEMP). MCPEMP is supported by a Senior Officers Group which reviews policy and funding issues proposed by the board before consideration by the Council.

The board and the CEO are also supported by a Strategic Issues Group (SIG). The SIG was established to strengthen the agency – police relationship by providing strategic advice and coordinating jurisdictional police service involvement.

The board is responsible for the overall efficient and effective management of CrimTrac. The CEO reports regularly to the board on the agency's performance. The board consists of voting and non-voting members. Four of the five voting members are appointed by the Ministerial Council while the fifth is appointed by the Australian Government.

4. *Board Members*

Current members of the CrimTrac board are as follows:

Voting Members

1. Chief Commissioner Christine Nixon APM, Victoria Police (chair)
2. Commissioner Bob Atkinson APM, Queensland Police
3. Commissioner Paul White APM, Northern Territory Police
4. Chief Police Officer Mike Phelan, Australian Capital Territory Policing
5. Mr Miles Jordana, Deputy Secretary, National Security and Criminal Justice Group, Commonwealth Attorney-General's Department

Non – Voting Members

1. Mr Will Laurie (Financial Advisor)
2. Professor Sheryle Moon (Information Technology advisor)

5. *CrimTrac's Financial Arrangements*

In 1998, the Australian Government committed capital funding of \$50 million to CrimTrac for the establishment of national policing information systems. This funding has been fully expended on delivering recital D deliverables under the IGA. Since 2004 – 5, CrimTrac has been funded from fee for service arrangements, mostly from revenue from its National Criminal History Record Checking Service.

CrimTrac's current financial independence from State and Territory funding allows the agency to progress national projects, and develop national systems for the benefits of Australia's law enforcement agencies. In order to maintain this position and to ensure that CrimTrac can meet its obligations under the IGA and comply with the requirements of the *Financial Management and Accountability Act 1997 (Cth)*, a review of CrimTrac's funding arrangements is underway.

New initiatives such as the Automated Number Plate Recognition (ANPR) Scoping Study are primarily financed through separate funding bids to the Commonwealth. The scoping study was

financed after the former Minister for Justice and Customs approved a CrimTrac funding submission against the *Commonwealth Proceeds of Crime Act 2000*.

It is important to note that future development and implementation of initiatives such as a national ANPR framework will involve the development of a detailed funding model involving State and Territory governments. Overall funding may involve contributions from the Commonwealth and State / Territory governments through New Policy Proposal funding submissions.

CrimTrac's Information Systems

The four principal information systems administered by CrimTrac as defined under the inter-governmental agreement operate at the national level. One of the main aims of CrimTrac in developing these systems is to overcome the business and technical challenges associated with integrating information from different jurisdictional systems. An associated challenge is to facilitate resolution of issues that arise due to the diverse legal and policy frameworks within jurisdictions, to develop and support services which meet the growing needs of Australian law enforcement.

CrimTrac has been very successful in working with stakeholders to harmonise these varying frameworks and platforms enabling the effective exchange of information at a national level in support of enhancing Australian public safety. In a globalised world and a society in which there is free movement of persons, generating national approaches to information sharing is paramount to law enforcement agency effectiveness.

"CrimTrac has been very successful in working with stakeholders...to enable the effective exchange of information at a national level in support of enhancing Australian public safety."

As technologies evolve and the law enforcement environment becomes increasingly complex, identifying and developing solutions that leverage technology and consolidate law enforcement responses is paramount.

The following sections provide an overview of the principal information systems currently operated by CrimTrac and the national benefits that these systems have afforded law enforcement agencies.

1. National Automated Fingerprint Identification System (NAFIS)

CrimTrac's National Automated Fingerprint Identification System (NAFIS) comprises a state of the art database and data matching subsystem providing police services⁴ with the ability to manage fingerprint records and resolve major and minor crime nationally. The NAFIS is regarded by police jurisdictions as highly effective in providing the necessary finger and palm print matching service needed to solve crimes.

All police agencies in Australia use the NAFIS. It is the single national automated fingerprint system available to police agencies within Australia and operates on a 24/7 basis. New advances with the technology also provide for 'lights out' processing which allows police agencies using a Livescan⁵ device to send data from the device to NAFIS where it is searched, matched and a result returned without additional human (expert) intervention.

⁴ NAFIS also supports searches of prints for the Department of Immigration and Australian Fisheries Management Authority.

⁵ Livescan technology replaces ink and roller method of collecting fingerprints with an electronic capture and data submission process and ensures high quality control at the point of fingerprint capture.

The NAFIS contains fingerprints, palm prints and basic demographic information obtained from an individual by the various police services and is commonly referred to as tenprint data. Records are maintained on NAFIS by the jurisdiction where the data originated and is deleted by the jurisdiction when required by legislation. Also contained within the NAFIS are fingerprint and palm print images collected from scenes of crime, relating to both solved and unsolved matters.

The following statistics for the NAFIS assist in understanding the scope and benefit of this national system:

- There are approximately 3.8 million tenprint records relating to 2.9 million individuals currently stored on NAFIS.
- There are approximately 980,000 prints from unsolved crimes scenes.
- Approximately 360,000 person to person searches are conducted on NAFIS each year.
- Approximately 7.6 million palm records are held on NAFIS and is now recognised as the largest palm database in the world.

For the period between January and October 2007, there were:

- Approximately 33,000 person to crime scene identifications; and
- Approximately 191,100 person record identifications.

Importantly for policing jurisdictions, the value of NAFIS becomes more apparent where there is a cross-jurisdictional match for tenprint data. Between January and November 2007, there were:

- 2,232 cross jurisdictional crime scene matches where the ten print records were owned by another jurisdiction; and
- 289 of these matches related to major crime⁶.

This is an important statistic as it demonstrates that nearly 7% of crime scene matches related to cross jurisdictional offences and matches would not have occurred had NAFIS not been in place.

2. National Criminal Investigation DNA Database (NCIDD)

CrimTrac's National Criminal Investigation DNA Database (NCIDD) contains deoxyribonucleic acid (DNA) profiles from all jurisdictions. It was developed to accept, store and match DNA profiles from police jurisdictions to assist police in establishing identity quickly and reliably. The capability is provided under strict access and disclosure safeguards.

The database provides Australian police and forensic scientists with a powerful investigative tool which automatically crosses jurisdictional boundaries.

The database contains DNA profile information collected from crime scenes and from convicted offenders, suspects, missing persons and unknown deceased persons. Additionally, it may also be utilised in comparing voluntary DNA samples with profiles on the database. It enables police and forensic scientists to:

- continually and automatically compare DNA profiles from crime scenes with profiles of convicted offenders throughout Australia, identifying potential suspects where matches occur;

⁶ Major crime is defined as homicide, armed robbery, aggravated burglary, sex offences, large drug offences and large frauds.

- compare DNA profiles from convicted offenders, and where legislation allows, suspects, with profiles from unsolved crime scenes for which they may not previously have been suspects;
- match DNA profiles from two or more crime scenes, thereby linking seemingly unrelated police investigations; and
- Eliminate crime scene suspects through DNA analysis.

CrimTrac's national DNA database allows the fight against crime to be taken Australia-wide.

Consistent with the new vision statement for CrimTrac, the development of this national database had to overcome a complex legislative environment to enable NCIDD to be a truly effective national tool in the fight against crime. As such, CrimTrac co-hosted meetings with the Commonwealth Attorney General's department and senior legal and police representatives from each jurisdiction to discuss barriers to implementation. Through these discussions a number of recommendations were made to the Australasian Police Ministers Council. The council subsequently endorsed seven recommendations which resulted in:

1. April 2006 the Standing Committee of Attorneys-General agreed to amend the law to clarify NCIDD is an amalgamation of existing Commonwealth and State databases;
2. Legislative changes were made enabling national sharing of DNA information; and
3. June 2007, all jurisdictions either signed or confirmed an intention to participate in a single Ministerial Arrangement for the exchange of DNA data and related information via the National DNA database.

"CrimTrac's national DNA database allows the fight against crime to be taken Australia-wide."

Through coordinated legislative change and ministerial agreements, national inter-jurisdictional matching of DNA data has been enabled. The success of a national approach and the benefits of inter-jurisdictional capability have been well documented in the media through successes gained from this approach. Some statistics relevant to these benefits are outlined as follows:

- Between March and October 2007, as jurisdictions entered into matching profiles through NCIDD, the national usage rate has increased from 19% to 89% in a little over 7 months;
- It is envisaged that almost complete national usage will be achieved on NCIDD by early 2008;
- The expansion of use between March and October 2007 produced 6,020 inter-jurisdictional links⁷.

NCIDD has demonstrated that jurisdictions do not have to share borders to achieve a large crime scene to crime scene link number. In examining Queensland inter-jurisdictions crime scene links, NCIDD has produced 836 links to October 2007. This includes 118 links with Western Australia crime scenes and 362 with Victoria, despite the vast distance between states.

⁷ The inter-jurisdictional links can include links from duplicated samples and links from resolved cases. It is estimated that approximately 10% of these links will result in policing outcomes.

Wider benefits and potential uses of NCIDD as a national database are further being explored by CrimTrac and the jurisdictions for applications such as:

- Identifying missing persons;
- Familial matching; and
- Disaster Victim Identification.

CrimTrac's NCIDD has created significant benefits and efficiencies for Australian law enforcement and the pursuit of further opportunities will assist in creating a safer Australia.

4. Australian National Child Offender Register (ANCOR)

The Australian National Child Offender Register (ANCOR) is a web-based system designed to enable police to achieve a nationally consistent approach to child sex offender registration. The system also supports the national case management of such offenders. It allows the sharing and transfer of information by authorised officers between police jurisdictions.

Information is exchanged between authorised staff of participating police agencies. Only the police agencies managing the registered person can amend or update a record. The system has been progressively developed to meet user requirements and all police jurisdictions are now using the system. As of the 27th of November 2007, there were a total of 8,359 registered offenders on the national database.

ANCOR also enables police to automatically pass travel alert information between jurisdictions and the Australian Federal Police for registered persons travelling overseas.

5. National Police Reference System (NPRS)

The National Police Reference System (NPRS) is a major development programme to enhance law enforcement in Australia by implementing the 'provision of rapid access to national operational policing data'.

Over time, NPRS will provide a single integrated suite of capabilities for police jurisdictions to share 'factual' operational policing information and services on:

- Persons;
- Objects (Vehicles and Firearms);
- Locations;
- Events; and
- Reference material.

The first stage of NPRS Programme involves the delivery of a category of information about 'persons'. The 'persons' category of NPRS is designed to provide police with information about the person in order to assist the police identify if they are:

- A threat to police safety;
- A threat to themselves or others;
- Of interest to police; or
- Wanted by police.

This 'persons' category of NPRS makes available an extended set of national information identified as necessary to support local police. The current application holds eleven categories of involvements which were agreed to by all police jurisdictions. In addition, a photograph of an offender is included if available.

The NPRS has been operating since March 2005 and there are currently approximately 14,000 users of NPRS. It is expected by August 2008, all policing jurisdictions will be contributing richer data to NPRS, and it is anticipated that the user base may grow to approximately 45,000 police across Australia.

Prior to Ministerial approval to proceed with the system nationally, a three month pilot was conducted for NPRS encompassing several jurisdictions and approximately 970 users. Results from the trial identified a number of outcomes that supported the benefits of the provision of rapid access to national operational policing data. These benefits included:

- Improved identification of suspects and previously unknown people of interest, through the provision of personal identity information;
- Increased operational police confidence through improved knowledge management and better access to information; and
- Increased efficiency in operational responses through the use of NPRS.

Following the trial a large number of supporting testimonials were provided in support of the NPRS system as a valuable national tool for policing. Provided are two short examples.

"A great system with huge potential – it just needs all states to come on board" - Western Australia Police Analyst

"You only need to look at the information that is held to realise the future impact of this type of national information is going to offer"
– Victoria Police Sergeant

6. CrimTrac Legacy Systems

6.1. National Names Index (NNI)

The main function of the National Name Index (NNI) system is to provide a general name check facility to support the day-to-day policing functions when persons of interest come to the attention of the Police.

The Police Reference System (PRS) is accessible to:

- Police Jurisdictions
- Authorised External Entities

The NNI contains personal identifying reference information only about persons of interest to Police Australia-wide and is scheduled to be decommissioned in the future following enhancements to NPRS.

6.2. National Firearms Licensing and Registration System (NFLRS)

The purpose of the NFLRS is to provide a single register of all weapons registered in Australia including details and identification numbers. As well as a single database of all licensed persons, reliably identified by their name and other details; and allows Jurisdictions the ability to search the entire national database for firearms and or persons of interest.

6.3. Telephone Directory Search (TDS)

The CrimTrac Agency manages a number of advanced information systems and accesses telecommunication information on behalf of law enforcement agencies across Australia. Access to this information is made available via commercial arrangements with proprietary owners of this information and does not include covert access to telecommunications data from carriers.

6.4. National Vehicles of Interest (NVOI)

The National Vehicles of Interest online application has been built to allow Jurisdictions the ability to register and enquire on both local and interstate vehicles of Interest.

Jurisdictions can make enquiries on:

- Stolen, Suspect, Wanted and recovered vehicles,
- Any vehicle components that make up a whole or part of a vehicle,
- National vehicle registration and description information (via NEVDIS application); and,
- National drivers Licence holder information (via the NEVDIS application)

The NVOI system will be decommissioned in the future once the vehicle component of the NPRS system has been undertaken.

CrimTrac's ANPR Programme

CrimTrac is currently undertaking a scoping study on automated number plate recognition (ANPR) technology. The ANPR scoping study will identify a strategic approach to the integration of ANPR technology across Australia, exposing the necessary infrastructure and associated cost benefits analysis. The scoping study also includes a privacy impact assessment to ensure an appropriate balance is struck between the rights of individuals and the rights of the community.

CrimTrac's ANPR scoping study is a whole-of-government initiative. An ANPR Programme⁸ has been initiated within CrimTrac to manage the portfolio of projects, including the ANPR Scoping Study, which will enable this national approach to be developed and implemented.

The ANPR Programme has a high level Sponsoring Group responsible for the Scoping Study investment and decision making⁹. The ANPR Sponsoring Group is chaired by the former NSW Police Commissioner, Mr Ken Moroney AO, APM and includes representatives from:

1. All policing jurisdictions;
2. Australian Federal Police (national);
3. Australian Crime Commission;
4. Department of Infrastructure, Transport, Regional Development and Local Government;
5. Commonwealth Attorney-General's Department;
6. Australian Customs Service;
7. Austroads (representing State and Territory road transport agencies); and
8. Department of Prime Minister and Cabinet, National Security Division.

The whole-of-government representation ensures that all stakeholder requirements are taken into consideration. In addition, specific liaison officers have been appointed with all State and Territory road transport and infrastructure departments.

1. Background

The acknowledgement of ANPR as an emerging technology resulted in CrimTrac facilitating a workshop in October 2006. The workshop recognised the significant contribution that ANPR could provide to law enforcement, road transport and regulatory agencies.

The workshop was attended by the following agencies:

- United Kingdom, Sussex Police
- CrimTrac
- All policing agencies
- NSW Roads and Traffic Authority
- Australian Crime Commission

⁸ CrimTrac administers Projects utilising PRINCE2™ methodology and Programmes using Managing Successful Programmes (MSP™) methodology.

⁹ Representation by Sponsoring Group members is in accordance with respective agency and government policies.

- Austroads (NEVDIS)

1.1. ANPR Workshop Recommendations

The workshop, in considering the strategic potential of ANPR for use by law enforcement and road transport agencies, made a number of high level recommendations. In summary, these recommendations were to:

- i) Appoint a national (federal) ANPR coordinator and State coordinators in each jurisdiction.
- ii) Develop a national strategy for ANPR implementation with appropriate governance arrangements.
- iii) Develop an ANPR Scoping Study Report encompassing key elements:
 - (a) Conduct a meta-analysis (environment scan) of all evaluations and experience to date;
 - (b) Conduct a review of the legislative framework;
 - (c) Undertake a national stocktake of ANPR infrastructure;
 - (d) Develop a gap analysis;
 - (e) Develop an options paper for the proposed model of operation of a national system;
 - (f) Develop a national procurement strategy; and
 - (g) Develop an underpinning financial proposal for a funding model to implement the ANPR national infrastructure.

Following the workshop, CrimTrac accepted the recommendations and commenced a ANPR Scoping Study. The agency in recognising that the scoping study project was only one component of a substantially larger number of projects to achieve a national approach, commenced an ANPR Programme to achieve all the objectives.

1.2. Delivery Strategies and Principles / Programme Approach

This body of work will be managed using the MSP™ framework. A programme schedule will be developed providing the overall sequence and timetable for the programme from which critical paths are derived. In order to effectively realise the earliest benefits realisation, the programme schedule will be divided into 'tranches' (groups of projects). Each tranche will reflect a step change in capability and benefit realisation.

The Sponsoring Group will review the programme at the end of each tranche to assess the overall progress of the programme and validate the continuation of the programme.

Applying this programme management framework, the following principles will underpin the approach being adopted to achieve the implementation of a national ANPR framework:

- i) CrimTrac will be appointed as the lead agency for design, approval and implementation of the national framework.
- ii) CrimTrac will develop a projected timeline for implementation.
- iii) A collective and cooperative approach will be adopted between stakeholders

- iv) The Programme will focus on attempting to leverage off existing infrastructure and related initiatives.
- v) The Commonwealth would have responsibility to lead the development of the framework for ICT capacity and capability for the national ANPR model.
- vi) The Programme will conduct a detailed cost benefit analysis which will inform funding options for implementation of a national ANPR framework. The funding options will be developed for consideration by the Commonwealth and State / Territory governments.
- vii) The Programme will seek to leverage off proven successful models for the delivery of nationally oriented law enforcement information services.

1.3. High Level Programme Capability

The overarching high level system capability that the programme will deliver, where practicable and possible, within the national ANPR framework includes:

- i) System integration with other ANPR users and potential users.
- ii) Comprehensive and integrated functionality which meets the agreed needs of all stakeholders, including:
 - (a) Reference datasets;
 - (b) Networking records;
 - (c) Data matching capacity;
 - (d) The provision of real time data
 - (e) Utilisation of accurate and current data sets;
 - (f) Rapid access to live time data;
 - (g) Comprehensive search, retrieval and storage of data
- iii) Appropriate security architecture (including comprehensive audit functionality) is employed to protect data from misuse and alteration.

1.4. Strategic Programme Objectives / Scope

The high level vision statement for the CrimTrac ANPR Programme can be defined as:

“To implement a nationally integrated Automated Number Plate Recognition framework, utilising common standards and information sharing parameters to enable Australian law enforcement and road transport agencies to enhance community safety through the prevention and detection of crime and to improve road safety in Australia.”

The high level strategic programme objectives which will enhance community safety, can be stated as:

- Implement a national secure ANPR system administered by CrimTrac.

- Enhance organisational effectiveness facilitated through rapid access to detailed, current and accurate ANPR information.
- Strengthen relationships and improve information sharing among law enforcement and road transport agencies at a national level.
- Implement nationally consistent agreed ANPR information and communications technology, business processes and information management protocols.
- Develop common standards for technology and institute a national procurement strategy incorporating a national panel of vendors.
- Develop high level governance and policy regarding the use of the national ANPR system.

At this stage, these high level objectives also represent initial broad parameters for the scope of the programme.

1.5. Expected Programme Benefits

Aligned to the programme scope and strategic objectives / capability to be delivered will be a range of benefits. These benefits are illustrated in Figure 1 below at a high level. The figure presents themes for key benefits' with aggregated examples representative of each theme.

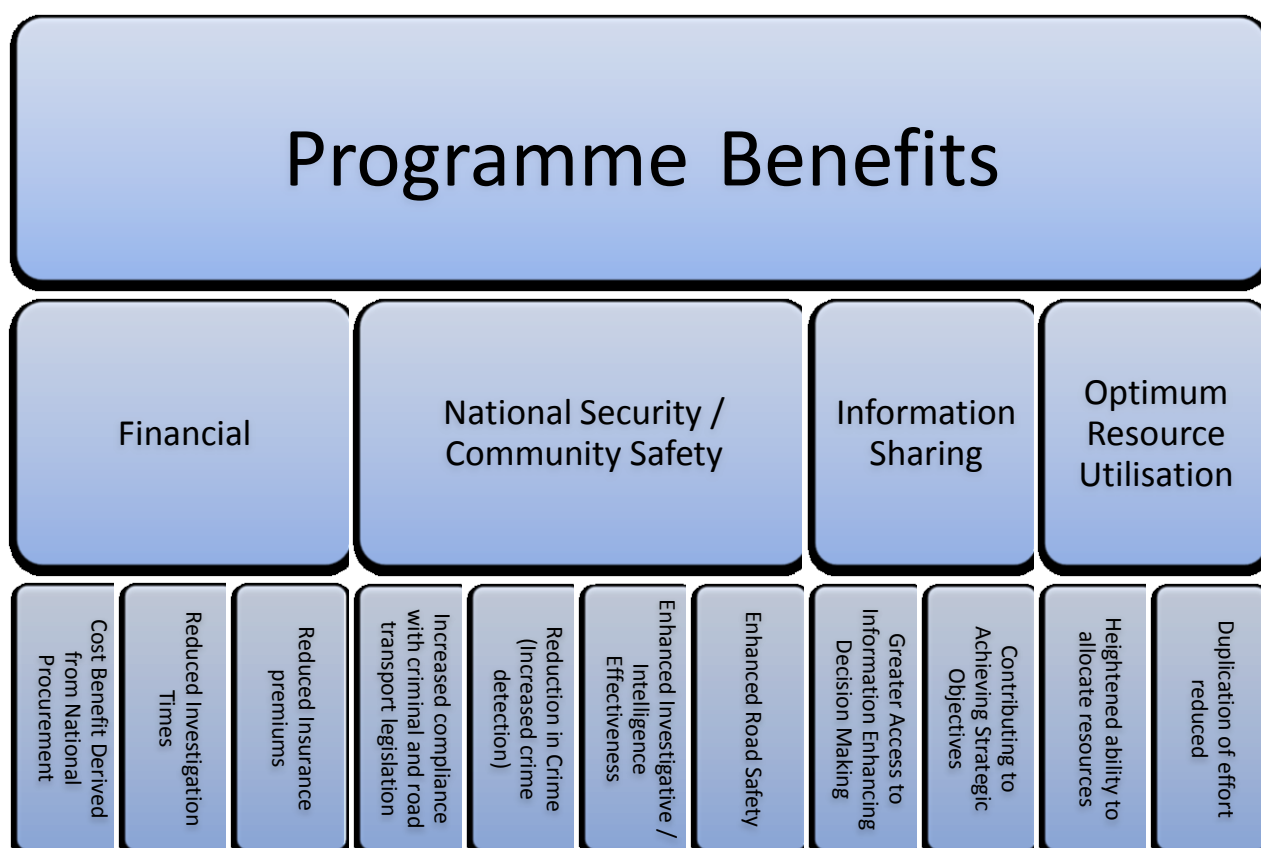


Figure 1: Programme Benefits.

Programme Benefits will be refined throughout the identification and definition stages of the Programme.

2. Report of the Parliamentary Joint Committee on the Australian Crime Commission

Between December 2006 and August 2007, the Parliamentary Joint Committee on the Australian Crime Commission (ACC) conducted an inquiry into the future impact of serious and organised crime on Australian society. The inquiry received 25 written submissions and conducted seven public hearings.

The committee's report made 22 recommendations arising from the inquiry's findings. "Due to the broad nature of the enquiry, it was difficult to examine any one area in great detail. Rather, this inquiry served to bring to the surface several issues that are currently or may in the future pose a challenge to the effectiveness of law enforcement agencies' efforts to address serious and organised crime in Australia. The committee urges all governments in Australia to give consideration to these findings" (Parliamentary Joint Committee on the Australian Crime Commission, September 2007, p. 3).

During September 2007, the Parliamentary Joint Committee released its report on this inquiry. The committee heard evidence in relation to submissions calling for the establishment of a national automatic number plate recognition system. Evidence was taken during submissions that a national ANPR system would 'revolutionise' policing across Australia, provide significant benefits to crime prevention, reduction and investigation. Intelligence and organised crime investigations would benefit from this approach and there would be benefits in the national security and border protection domains.

Following consideration of the submissions and evidence tendered the committee made the following recommendation:

"The committee recommends that the Commonwealth, state and territory governments implement a national number plate recognition system."
(Recommendation 19)

3. Federal Labor's position on ANPR

Prior to the recent federal election, the Police Federation of Australia (PFA) wrote to the major political parties to ascertain each parties position the PFA's 'Law and Order in Australia: Policies for the Future' document. During November 2007, the Federal Labor party responded to the PFA's policy paper. The PFA's policy Proposal number 5 related to automatic number plate recognition and states:

"The PFA seeks a commitment to funding (to be determined by a scoping exercise to be conducted through CrimTrac) for development and establishment of a national Automated Number Plate Recognition (ANPR) system."

The Federal Labor party responded to the PFA during November 2007. The response stated that [Federal] “Labor supports the establishment of a national Automated Number Plate Recognition System.

Labor will conduct a scoping exercise with CrimTrac participation to map out its implementation and will consult with state and territory governments concerning the proposal.” (Federal Labor Party, 2007)

“[Federal] Labor supports the establishment of a national Automated Number Plate Recognition system.”

4. ANPR Scoping Study Project

The ANPR Scoping Study is an initiative under the CrimTrac Strategic Plan 2007 – 2010. The CrimTrac board in considering the priorities for CrimTrac endorsed ANPR as one of five key priorities for CrimTrac during 2008. ANPR is an emerging opportunity for law enforcement agencies and the scoping study aligns to key activities CrimTrac is required to undertake as defined by Recital E of the inter-governmental agreement.

Following from the outcomes of the workshop, CrimTrac took the lead in developing the way forward. In May 2007, the Minister for Justice and Customs endorsed a CrimTrac funding application for \$2.23m under the *Commonwealth Proceeds of Crime Act 2000*. The funding mandates that CrimTrac will undertake a Scoping Study to identify a strategic national approach to the use of Automated Number Plate Recognition (ANPR) technology in Australia.

The first project within the ANPR Programme is the ANPR Scoping Study. This project commenced in June 2007 and will be complete by November 2008, with the final report to be presented in late 2008 to the Ministerial Council for Police and Emergency Management – Police (MCPEMP).

The principles of the ANPR Scoping Study align to the CrimTrac Vision statement through identifying the national approach to the use of ANPR. To derive a benefit from the Scoping Study, various design and implementation phases are required, including a funding submission. Benefits realised relate not only to law enforcement agencies but also, road safety and regulatory agencies.

4.1. Scoping Study Project Approach

The ANPR Scoping Study project will require extensive stakeholder engagement to deliver high quality deliverables. The project approach is listed below.

- Conduct a stocktake of the current ANPR infrastructure and ANPR activities available in Australia.
- Engage stakeholders to conduct extensive business requirements (with respect to e.g. national security, criminal, and road safety) gathering.
- Analysis of these requirements.
- Develop a high level technical options paper.

- Identify what is the best value for money ANPR national strategy and associated infrastructure.
- Conduct a gap analysis.
- Conduct a comprehensive privacy impact assessment.
- Conduct a comprehensive legal impact assessment.
- Conduct an environmental analysis including international uses of ANPR, legal, political and business impacts of the project.
- Develop a final report.

In further developing the scoping study project approach, a suite of project products were identified. Twelve products were identified which require substantial investment in terms of engagement with stakeholders, analysis, design and reporting. The component products of the scoping study have been formulated into a Product Workflow which is attached as [Annexure A](#). The workflow represents the way in which products inter-relate and are dependent upon its predecessor for completion.

The scoping study will produce a final report including details of the agreed set of high level business requirements. The report will outline a number of potential options. The agreed final scoping study recommendations and decisions will be undertaken through the whole-of-government governance structure in place within the ANPR Programme.

4.2. Products

The suite of products within the scoping study project are more fully listed in Table 1 as below and each product is described in terms of its relationship to the overall project:

Product	Description
Stakeholder Engagement Strategy	<i>The stakeholder engagement strategy provides an understanding of all stakeholders who may be impacted by or who will impact on the scoping study project. The strategy assists in informing the ANPR Programme on strategic engagement for stakeholders.</i>
Environmental Scan	<i>To examine how ANPR technology is used across the world and how it can be used strategically in Australia. Collate and present empirical evidence in relation to the benefits of ANPR use. This analysis will help determine the gap between current and future required state which will be performed in the Gap Analysis product.</i>
Stocktake	<i>To define the current and expected uses of ANPR technology in operation in Australia. To define current ICT infrastructure. This analysis will help determine the gap between current and future required state which will be performed in the Gap Analysis product.</i>
Business Requirements	<i>To determine the high level business requirements for all major stakeholders</i>

Product	Description
Gap Analysis	<i>To define the gap between current technology and uses of ANPR in Australia with “best practice” (based on business requirements) to ensure the options recommended cater for these requirements. This product will be used as a key communication tool.</i>
Legislative Review	<i>A summary of the contractor assessment of the legal Impact of the recommended solutions and any major alternatives within jurisdictions. This includes impact of current legislation on ANPR and the impact of any proposed legislative changes by ANPR on the affected jurisdictions (State, Territory and Commonwealth).</i>
Options Paper	<i>Explore and assess options for implementing a national ANPR system to determine the best solution to be implemented in Australia that will meet business requirements and provide value for money.</i>
Privacy Impact Assessment	<i>An assessment of the privacy impact of the recommended solutions and any major alternatives in all jurisdictions (State, Territory and Commonwealth) to ensure decision makers are aware of the privacy issues affecting any options recommended.</i>
National Procurement Strategy	<i>To recommend a strategy for the national procurement of ANPR technologies by stakeholders as part of the national framework. This is to ensure alignment of technology used across Australia to allow the sharing of information across states and to achieve cost efficiencies.</i>
Cost Benefit Analysis	<i>To present a detailed cost-benefit analysis of the options formulated in the final report.</i>

Table 1: Scoping Study Products and Descriptions

The two remaining products (not detailed) relate to the production of the final report. These include ‘Report Top and Tails’ (compilation and production of final report) and ‘Approvals’ (required to formally approve the final report).

4.3. Milestones

With the final Scoping Study report due to be delivered to the Ministerial Council for Police and Emergency Management – Police during late 2008, project milestones have been set for each product to ensure the delivery of the final report.

4.4. ANPR Future State

CrimTrac's ANPR Scoping Study aims to identify a strategic national approach to integrating ANPR technology. Following the acceptance of the Scoping Study and funding being obtained, the ANPR Programme would continue with more detailed design and implementation activities to achieve the national ANPR approach. This future state of ANPR in Australia will be supported by a central ANPR application administered by CrimTrac which would be accessible to relevant stakeholders.

To achieve the future state of ANPR within Australia under CrimTrac's ANPR Programme, there will be step changes in capability delivered. These step changes will occur at a national and state / territory level and encompass enabling, legislative and technical elements. An overview of these elements and key activities proposed to achieve a comprehensive national ANPR future state is as follows:

Enabling:

- Securing a single ministerial level agreement on participation and contribution to a national ANPR strategic approach.
- Formalising the national procurement approach, incorporating working with vendors to refine technology to suit the Australian environment; selecting ANPR vendors to a national panel; securing operational support and maintenance contracts as a component of the national procurement approach.
- Formalising a national policy on the use, storage, access, collection, audit, security and dissemination of ANPR data.
- Incorporating ANPR use and programme requirements into strategic planning and policy development across national whole-of-government approaches. For example, enabling a national common standard for vehicular number plates.

Legislative:

- Enabling national model legislation that allows for the collection, storage and use of ANPR derived data.
- Implementing specific State / Territory legislative changes that overcome ANPR dis-benefits and / or removes legislative barriers to a national approach.

Technical:

- Setting national technical base standards for ANPR technology, for mobile (including vehicular) and fixed site applications.
- Converting a percentage of speed / red light cameras to being multi-functional ANPR enabled.
- Establishing new ANPR sites as identified during the Gap Analysis.
- Create the technical infrastructure for all participating agencies and corporations to contribute ANPR data through a secure national communications network.
- Re-configure a number of existing ANPR and non-ANPR sites to ensure that live data transmission is achieved.
- Establishing the communications capacity within CrimTrac to process and store the required volume of data associated with a national ANPR system including establishing disaster recovery (business continuity) capacity.

- Develop the CrimTrac ANPR application which enables the brokering and exchange of ANPR derived data.

The ANPR application that would be developed in accordance with the agreed set of high level business requirements would allow the national sharing of ANPR data amongst law enforcement agencies whilst complying with Commonwealth, State and Territory, privacy and legislative requirements.

Commonwealth, state and territory agencies as owners of the data (including road transport and law enforcement agencies) would be both consumers of national ANPR data and contributors of data. Nationally, existing camera enforcement applications, such as Safe-T-Cam, red light and speed cameras could be upgraded where necessary to being multifunctional ANPR-enabled, providing constant live streaming of ANPR data including images to the centrally managed CrimTrac ANPR application.

National connectivity would be achieved through secure digital networks for fixed site ANPR enabled cameras. Law enforcement agencies would also utilise mobile ANPR enabled units which include vehicular mounted or re-deployable stationary units. These units would achieve instantaneous live data transmission through secure communications, for example through GSM / GPRS or 3G technology and would also incorporate GPS technology.

Global (national) and local 'hotlists' would operate to alert law enforcement agencies of alerts based on pre-defined criteria. Alert notification and management will be able to be configured by the requesting agency to operate either within an agency (either narrowly or broadly), within a State or nationally. This user defined functionality for alert management assists to enhance agency performance whilst maintaining the right balance between global and confidential alerts, allowing sensitive operations to receive the data required to facilitate law enforcement outcomes.

Regardless of whether an agency has a confidential or global alert on a vehicle, all vehicles passing through a fixed, re-deployable or mobile ANPR camera will have the data recorded and available for interrogation by authorised users. Specific notifications for alerts are configured to maintain confidentiality (if required) and to ensure appropriate response and notification management. This allows law enforcement agencies to undertake particular targeted operations whilst maintaining operational integrity; however the data collected will be available to all users. Whilst the data is available to all users, alert notification will only be made to users based on their 'profile' and information relating to alert 'hotlists' will be appropriately protected.

The CrimTrac ANPR application will have the ability to data-match a vehicle's registration number identified through ANPR processing, against a number of data sets. This data matching will allow law enforcement agencies to be notified of alerts where a vehicle has been detected and matched against a number of criteria which for example may include:

1. unregistered vehicles;
2. unlicensed drivers¹⁰ linked to a particular vehicle;
3. owners of vehicles who are wanted for arrest on warrant;
4. stolen motor plates and or vehicles;
5. number plates that do not match a vehicle¹¹, although valid and not reported as stolen;

¹⁰ Unlicensed drivers include drivers who have never held a licence, are suspended or disqualified.

6. number plates for which no records exist; and
7. particular vehicles of interest to law enforcement agencies.

The national CrimTrac ANPR application would not include a processing centre for infringement notices generated by a law enforcement agency. The scope of managing and processing infringements will remain with agencies at the State / Territory level.

Applying intelligent search functionality, agencies will be able to search against:

- vehicle movements between certain times;
- vehicle movements between fixed points;
- vehicle movements within a 'geo-fenced' boundary;
- specific vehicles of interest;
- partial or full number plate combinations;
- vehicle make and model;
- vehicular pattern 'time-series' analysis; and
- pattern analysis across alert types. (e.g. speeding / unregistered / unlicensed / stolen vehicle).

The intelligent search functionality will allow for more detailed analysis and assist participating agencies to appropriately direct resources in pro-active measures rather than purely re-active where appropriate.

The national approach will allow for wide ranging operational benefits to participating law enforcement agencies. Nationally, Australian public safety and national security will be enhanced through agencies increased effectiveness in crime prevention and reduction; enhanced road safety and intelligence gathering in support of agency objectives.

5. The Case for a National ANPR Approach

A national ANPR capability has the potential to link existing and future fixed and mobile ANPR enabled cameras to a national system, providing national, instantaneous valuable information. The data held within the national database would be available to law enforcement agencies and road transport and regulatory authorities in support of criminal investigations and road safety initiatives.

It is anticipated that a national approach to the use of ANPR technology will provide significant benefits for all Australians', as police forces and other stakeholders identify and track potential vehicles of interest within and across state borders.

The timing of CrimTrac's ANPR Programme is critical as early deployment would mean the cost of integration can be kept to a minimum before the scale of implementation by state, territories and private sector users (e.g. tollways) is so advanced as to prohibit transition to a national approach. Importantly, CrimTrac would advocate the position to policy and decision makers within agencies that when considering the implementation or upgrade of existing road safety camera infrastructure, that consideration be given to ensuring that the camera technology

¹¹ Emerging ANPR technology can also incorporate vehicle make and model recognition which can then allow the comparison of a number plate to a registration database alerting law enforcement to non-matches.

adopted is ANPR capable. This position would also ensure that new or emerging road safety enforcement / monitoring networks are digitised and capable of being incorporated into a national ANPR infrastructure at some point in the future.

It is CrimTrac's experience that during implementation phases, jurisdictions and agencies will have different uptake timings towards integrating and contributing data to national approaches. Policy decisions taken at a time prior to implementing national systems by a jurisdiction or agency to not contribute to that system do not preclude future integration into national approaches.

5.1. National Strategic Alignment

The identification of 'change drivers' provides a clear understanding for confirming the case or mandate for a national ANPR approach. Change drivers have been identified through assessment of strategic plans, organisational priorities, ministerial statements, commissions of inquiry and high level agreements that apply to stakeholders of the ANPR Programme¹².

These 'change drivers' as identified across these strategic documents are represented in Figure 1 as below:

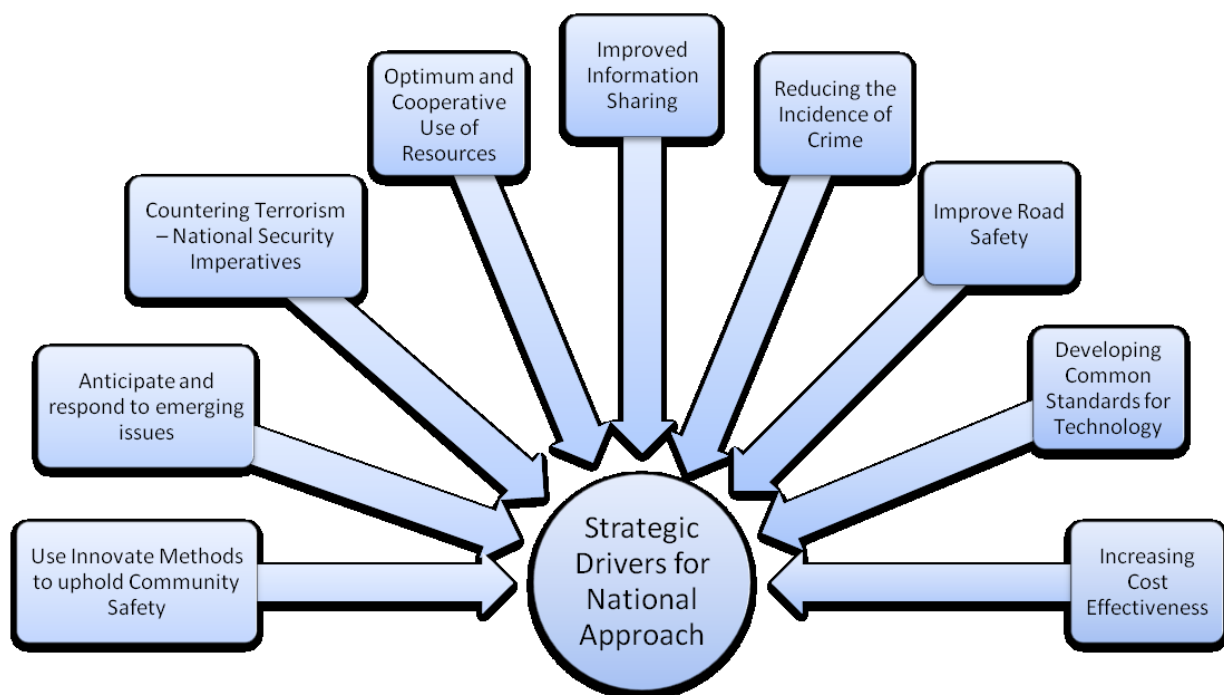


Figure 1: Change Drivers from National Strategic Plans

CrimTrac's ANPR Programme meets this suite of strategic change drivers and adopts a whole-of-government approach towards identifying the options for strategic national ANPR framework.

¹² (CrimTrac, 2007) (Australian Police Ministers Council, 2005) (Australian Transport Council, 2008) (Parliamentary Joint Committee on the Australian Crime Commission, September 2007) (National Transport Commission)

5.2. Sharing of Data, Systems and Infrastructure

At its most basic level a national ANPR system offers the ability to identify vehicles from one state or territory that are photographed in another, for every site where ANPR is used. Figures from the NSW Roads and Traffic Authority indicate that around:

- 41%, or 140,000, of heavy vehicle (Safe-T-Cam) alerts are from interstate and therefore unrecognised on an annual basis.
- This equates to approximately 24,755 unenforced incidents, based on intra-state enforcement rates.

If we include other common types of ANPR-based vehicle identification such as for red-light cameras, single point and point to point speed cameras, for unregistered or stolen vehicles and for invalid number plates, this extrapolates out to a significant number of vehicles avoiding enforcement action.

The second value of a national hotlist is the ability to leverage off specialised interstate and national databases for creating more complex and comprehensive hotlists. Jurisdictions already combine vehicle and licensing databases for ANPR purposes, and this can be done on a national basis to include vehicles and persons of interest, warrants with guaranteed extradition and warnings about the vehicle or the owner. More complex alerts could also be generated specific to agencies requirements. The national ANPR application would also provide valuable information that helps to inform law enforcement officers about potential threats and enhances operational safety.

The third value is for investigative work, intelligence gathering and road use analysis. These require the pooling of information and may require real-time access to ANPR data across the nation. Investigative work would likely use ANPR data to generate lists of vehicles of interest related to particular incidents. Intelligence analysis would likely use tools such as pattern matching to identify suspect behaviour. Road use analysis would use aggregated and de-identified data to examine road use patterns for planning purposes.

In all cases there are significant privacy concerns, and these escalate with each level of use. CrimTrac's scoping study will include a privacy impact assessment and the uses identified are yet to be subjected to that assessment.

5.3. Cross-Jurisdictional Cooperation and Enforcement

Australia faces unique geographical and federated issues in law enforcement. Crime that is committed in multiple jurisdictions poses particular problems for investigation and enforcement. Investigation of serious crime committed in one jurisdiction faces obstacles when suspects move interstate. ANPR is not a complete solution for these issues, but its capacity to passively locate vehicles and individuals (associated with a vehicle) can play a significant role in assisting with the location of suspects and analysis of cross-border travel patterns.

5.4. National Standards

A requirement of a national system is that the various state and territory systems can share data and that ANPR equipment produces a minimum set of data outputs to enable matching against hotlists and other processing. It follows that there is an opportunity to cooperate nationally on minimum standards for ANPR equipment and systems sharing data for ANPR purposes. However, national standards might be able to be extended to such things as how heavy vehicle monitoring stations are configured and optimum locations for ANPR cameras. Equipment testing and the development of minimum specifications for equipment and interoperability may also be

desirable, though this is yet to be determined, and falls under the next heading, national procurement.

5.5. National procurement

A national procurement strategy is being developed as part of the Crimtrac ANPR scoping study. This will identify strategic aims and processes rather than develop a full procurement strategy, which would commence should the recommendations of the Scoping Study be adopted and funding gained.

However, there are some obvious benefits of a national procurement approach in terms of negotiating with vendors on price and specifications, especially given the relatively small market for ANPR technology in Australia compared to other countries and regions that may not face the same cultural, geographical and federated environments. It would be desirable as part of a national procurement approach to test products nationally and set genuine national standards. This in turn may allow Australia a greater role in influencing international standards and specifications, hopefully reducing the cost of ANPR technology.

5.6. Crime and Road Safety Statistics

Earlier in this submission, evidence was presented on the inter-jurisdictional benefits of national technical law enforcement systems administered by CrimTrac. Importantly, the inter-jurisdictional assessment of crime provides a clear picture of criminality that transcends state / territory borders. The NAFIS statistics demonstrated seven percent (7%) of all crime scene matches were cross jurisdictional matches, whilst NCIDD produced over 6,000 inter-jurisdictional links during 2007.

In the 12 months to September 2007, there were 66,960 vehicles stolen¹³ in Australia with over 13,900 passenger and light commercial vehicles not recovered. (National Motor Vehicle Theft Reduction Council, 2007) Opportunistic and organised car theft continues to be a particular area of concern for law enforcement agencies and was estimated in 1997 to cost the Australian community nearly \$1 billion annually. (Australian Institute of Criminology, 1997)

A national ANPR approach will be of significant benefit to countering vehicle theft, as opportunities arise for law enforcement to interdict more stolen vehicles and deploy resources based on pattern and time-series analysis. In addition there is likely to be a greater impact on the interstate movement of stolen vehicles through increased detection and prosecution of offenders.

The effectiveness of ANPR enabled systems, configured appropriately, is that there is continuous checking of vehicle registrations regardless of whether there are also prescribed enforcement actions also being undertaken such as red light or speed identification. The usefulness of this is demonstrated in a vehicle mounted capacity where ANPR cameras passively scan the registrations of passing motor vehicles (both stationary and moving) at a rate of up to 4-5,000 vehicles in an 8 hour period. In contrast, a law enforcement officer in a vehicle without the benefit of an automated ANPR system is likely to conduct minimal (est: 0 – 20) registration checks in a similar 8 hour period.

It has been recorded that there is a high incidence of unlicensed driving and crashes involving these drivers, who make a significant contribution to Australia's road casualty statistics. The former Federal Office of Road Safety found in Australia during 1992 and 1994 that 9% of all

¹³ A vehicle includes passenger / light commercial vehicles and motor cycles.

persons killed in road traffic accidents involved unlicensed motorists. Unlicensed drivers represent over 5% of the drivers involved in fatal crashes. (Federal Office of Road Safety, 1997)

In other studies, it has been found that there is a growing body of evidence linking unlicensed driving with other high-risk behaviours including drink driving and speeding. This research also found that over one-third of unlicensed drivers reported to having been pulled over by police however did not have their licences checked. (Watson, 2003) In addition to the high incidence of unlicensed drivers involved in fatal motor vehicle crashes, it is also estimated that about 10% of all drivers are driving uninsured and unregistered vehicles. (Pedestrian Council of Australia, 2002). The United Kingdom has similar statistics in relation to the level of unregistered vehicles.

Normal intervention and prosecution of unlicensed drivers and unregistered vehicles is a difficult task for law enforcement agencies however, utilising appropriately configured ANPR systems will

“The use of automated enforcement technologies [such as ANPR] can improve the effectiveness, accuracy and efficiency of police traffic enforcement activities by increasing the actual and perceived chance of traffic violations being detected without increasing the number of police resources required.”

(Young & Regan, April 2007)

assist law enforcement in detecting and prosecuting these drivers.

The cost to the Australian community for road crashes is estimated annually at \$15 billion dollars. Across all road crashes, the average cost per crash was \$24,000. The average cost of a fatal crash was \$1.7 million; serious injury crash \$408,000 and minor injury crash \$14,000; and property damage only crash was \$6,000. (Bureau of Transport Economics, 2000) The use of ANPR technology to assist law enforcement in detecting unlicensed drivers and unregistered vehicles should contribute to a reduction in road crashes and cost to the community.

The broader benefits to crime prevention and reduction are subject to ongoing assessment by the CrimTrac Scoping Study project team, however it is widely accepted that ANPR will be a valuable tool for Australian law enforcement agencies. Studies of the United Kingdom application have found that an officer dedicated to ANPR had 10 times the arrest rate of an ordinary constable. (Home Office, 2002)

Police efficiency would be improved, not only as reported in the detection of traffic violations (Young & Regan, 2007), but in the wider investigation of criminal offences. Investigation times for routine and complex matters can be significantly reduced by utilising information gathered from analysing national ANPR data.

Examples of police seeking public assistance to locate vehicles occur when there is a threat to life or it is in the public interest to quickly locate potential offenders. The decision to involve the public is not taken lightly however occur frequently. An examination of recent media releases for this type of request over November and December 2007 against NSW and QLD police have revealed a number of incidents of this type of request. The media releases are detailed at [Annexure B](#). A national ANPR system would have the capability to quickly locate these vehicles should they move through an ANPR enabled camera thereby removing the potential for public intervention and enhancing public safety.

Responses to Travelsafe Committee Inquiry Terms of Reference

The CrimTrac Agency submits the following responses to the specific Terms of Reference for the Travelsafe Committee of Inquiry into ANPR technology. CrimTrac notes the information contained within the body of this submission should also be read in conjunction with specific responses as below. In addition, comment is made that more detailed information is not readily available from CrimTrac's ANPR Scoping Study as analysis and consultation is continuing and specific reports relating to each of the scoping study products are yet to be produced.

CrimTrac recognises the very broad application and potential benefits that appropriately configured ANPR systems would bring to law enforcement agencies in Australia. Whilst acknowledging the focus of the committee's inquiry is at the road safety level, recommendations should be considered for ANPR use in Queensland that would enhance public safety and recognise the benefits of a national approach.

CrimTrac would seek for all jurisdictions to implement ANPR capability which appropriately considers the benefits that a national ANPR system would derive for law enforcement and public safety. The agency in acknowledging the committee's terms of reference for the inquiry relate directly to road safety, the following submissions are made:

1. The efficacy of ANPR technology for road safety applications

CrimTrac submits that the use of ANPR technology within Australia will bring significant benefits and efficiencies for road safety applications. The scale of efficiency will directly relate to the strategies adopted in any implementation phase and the way in which operating systems are configured to reference data sets (data matching).

In order to achieve maximum efficiency for road safety applications, all Queensland Government departments that play a role in enforcing road safety should have access to any proposed ANPR system. This necessarily includes the Queensland Police, Department of Main Roads and the Department of Transport.

As reported in section [5.6 – Crime and Road Safety Statistics](#), ANPR configured systems could be strategically used to engender greater compliance with tackling road safety issues such as:

1. Speeding
2. Disobeying red lights
3. Unlicensed drivers
4. Unregistered and uninsured vehicles
5. Monitoring heavy vehicle movements

In adopting ANPR technology, a digital network is required. The adoption of a digital network provides efficiencies over an analogue network (wet film) through a reduction in the man hours required to access potential infringement images and through the operating hours available to digital cameras.

To achieve maximum efficiency in using ANPR technology for both law enforcement and for use in road safety applications, it is submitted that the full range of ANPR enabled technology be adopted for use by Queensland government agencies. These include:

1. Fixed site ANPR cameras;

2. Mobile (re-deployable) ANPR cameras; and
3. In vehicle cameras.

These cameras should be networked together into one operating system and be able to data match against multiple data sets.

CrimTrac would submit that an appropriately configured ANPR system would not only provide efficiencies for road safety applications, but law enforcement more broadly in the administration of criminal justice. The proposed national ANPR system administered by CrimTrac would meet these needs.

2. Potential Costs and Benefits

CrimTrac submits that the costs of enabling an ANPR system would include, but not limited to the establishment and procurement costs associated with:

1. Installing, commissioning and maintaining a digital ANPR information communications network;
2. Procuring, installing and maintaining a network of ANPR cameras that have dual or multi functionality e.g. speed and red light applications;
3. Procuring, installing and maintaining potential ANPR gantries for specific sites
4. Converting and updating existing camera and processing capability to enable capture of ANPR data;
5. Integrating ANPR operating systems with other data sources to optimise law enforcement benefits and applications (data matching);
6. Developing, installing, commissioning and maintaining an integrated networked ANPR technical system;
7. Procuring, installing and maintaining in car ANPR technology networked to the operating database;
8. Training and personnel costs; and
9. Operating costs.

The national procurement strategy being developed as part of CrimTrac's ANPR Scoping Study, when implemented (post funding), would bring significant cost and technical benefits to Australian law enforcement agencies. The procurement strategy would include the refinement and testing of various technologies to suit the Australian environment and provide for a national panel of accredited providers of ANPR technology to a set national technical standard. Procuring from this national panel would bring cost benefits due to increased buying power.

CrimTrac's proposed future national ANPR application would again reduce costs to law enforcement agencies as the system would integrate national data and meet each agencies business requirements. Developing a single national ANPR database would avoid duplication of effort and provide ongoing cost efficiencies and provide for significant benefits to participating law enforcement agencies.

A detailed cost benefit analysis of the national ANPR system will be available as part of the final ANPR Scoping Study report due to be submitted to MCPPEM-P and the ATC towards the end of 2008.

The potential benefits of implementing an integrated ANPR system either nationally or locally are articulated on [page 20](#) of this report.

3. Whether ANPR-enabled intercept teams should be used for traffic enforcement in Queensland, including examination of existing applications

The United Kingdom (UK) experience in approaching law enforcement activity for integrated ANPR systems has adopted the use of ANPR enabled intercept teams. Results of studies of this approach have found that it has been particularly efficient in regards to law enforcement and road safety initiatives (Home Office, 2002).

The UK model utilises a series of individual ANPR systems, some of which are linked to the National ANPR Data Centre (NADC). As part of Project Spectrum within the UK, the UK Home Office supplied an ANPR enabled van and back office facility¹⁴ to all 43 forces in England and Wales. The spectrum vans can be linked to a national network however the vans predominately operate with only 'local hotlists' to match data and are the mainstay of most forces' ANPR intercept teams (UK Association of Chiefs of Police Officers, 2006).

As noted the mainstay of UK ANPR operations rely on Spectrum vans and consequently, rely on intercept teams to action 'alerts' generated from number plate matches against a local hotlist. The operational response by UK forces to effectively action the alerts generated through the deployment of the Spectrum ANPR vans was to dedicate resources typically comprising of 5 – 6 officers, an ANPR operator and a prisoner handling team (North Wales Police, 2004). The resourcing was required to adequately process the number of alerts generated from the vans and were in part funded through cost-recovery from fines issued.

It is important to note that ANPR-enabled intercept teams generally have high levels of productivity when operating in the above scenario of having a static van and action alerts immediately. Intercept teams however, are not usually applied in scenarios involving in-vehicle or fixed site ANPR technology.

The scalability of a national ANPR solution as being examined by CrimTrac for implementation within Australia will produce a different level of capability than that experienced in the UK. The full potential of a national ANPR solution will rely upon the extent to which it is adopted by the states. Any decision as to whether to adopt or implement ANPR-enabled intercept teams would be subject to the level of productivity being sought and the mix of ANPR technology being applied to fixed sites, mobile and in-vehicle scenarios.

CrimTrac offers no position on this issue, other than to note that this would be a policy issue for the Queensland government and respective departments on how best to administer ANPR and deploy resources.

4. Other opportunities and considerations for its use by Queensland Government agencies to promote road safety

CrimTrac notes that with the adoption of an appropriately configured ANPR system, there would be opportunities to appropriately market the capability which would promote road safety and deter potential unsafe and illegal road user behaviour.

¹⁴ A 'back office facility' is where images are processed to recognise the number plate of a vehicle and matched to a 'local' hotlist to generate alerts.

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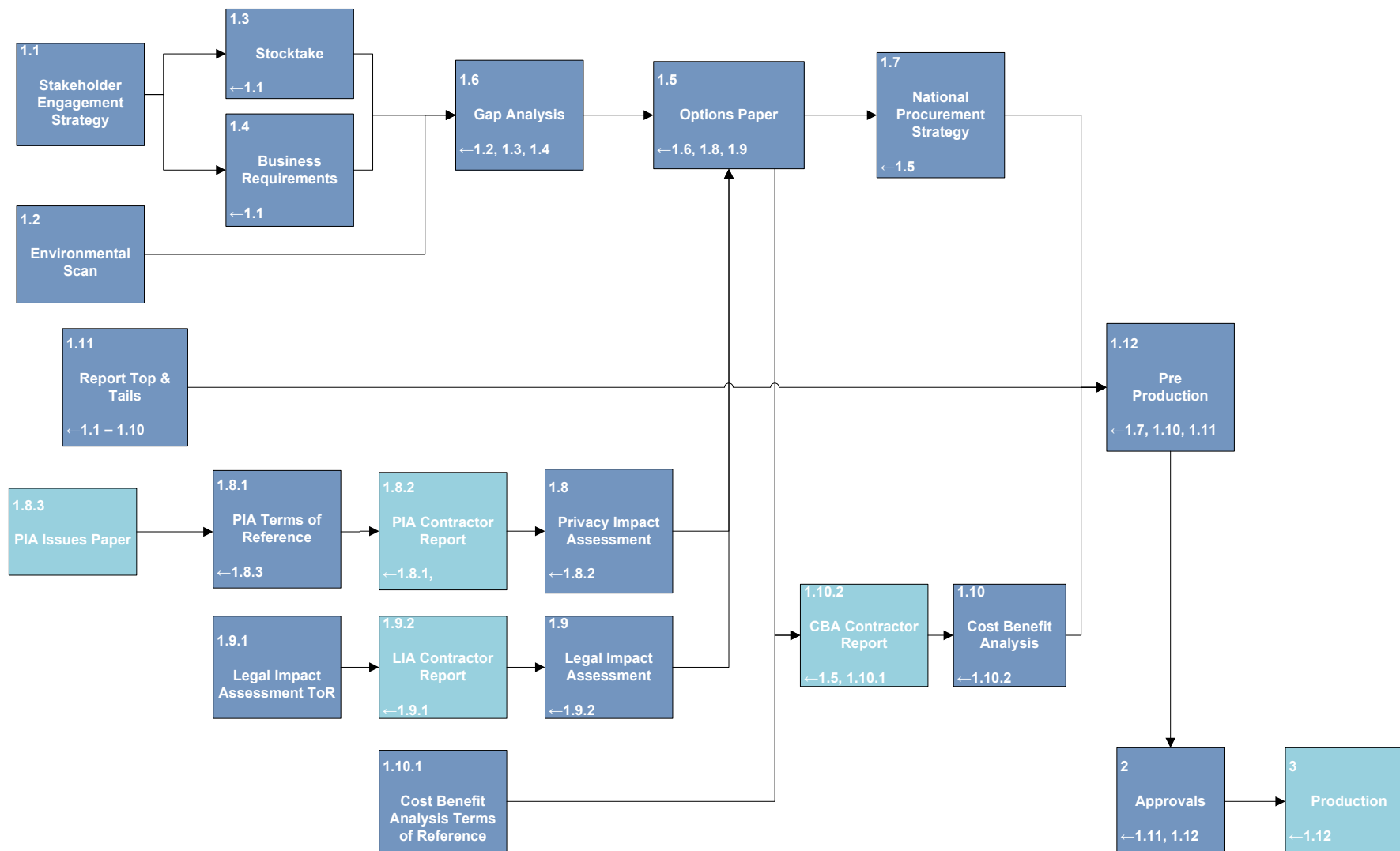
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Annexure A – Scoping Study Workflow



Annexure B – Media Releases:

Queensland Police – Friday, 16 Nov 2007

Appeal for public assistance

Police are concerned for the welfare of a 30-year-old Aspley man and seek public assistance to help locate him.

The man was last seen leaving a residence in Playfield Street, Chermside around 9pm yesterday.

He has access to a maroon 1994 model Mitsubishi Magna, registration **527 HTQ** (as per attached likeness) and is believed to still be in the south-eastern Queensland area.

The vehicle is reported to have damage down one side.

He is described as being of Caucasian appearance, approximately 185cm tall, of proportionate build weighing about 90kg, with brown hair and brown/hazel eyes.

When last seen the man was wearing casual clothing best described as a 'baggy' t-shirt, long shorts, and thongs.

It is assumed he would be wearing a similar style of clothing.

Anyone with information which could assist police with their investigations should contact Crime Stoppers on 1800 333 000 or Boondall police on 3364 3455.

NSW Police - Thursday, 22 Nov 2007 09:10am

Appeal for public assistance

Police are seeking the public's help to find a man and eight-year-old girl following the stabbing death of a woman at Randwick last night.

Darmadji Darmadji, 35, is believed to be travelling with his daughter Yvonne in either a white 1997 model Toyota Camry station wagon with NSW registration **MC 320** or a white 1988 model SAAB with NSW registration **AFD – 36W**.

Police have concerns for the welfare of the child and believe Mr Darmadji might have information that could assist the investigation into the death of the 31-year-old woman.

Officers from Eastern Beaches Local Area Command found her body inside an Avoca Street unit at Randwick about 8pm yesterday.

Mr Darmadji is of Asian appearance, dark-coloured hair, with a thin build. Yvonne is also of Asian appearance, aged eight, with long black hair.

Anyone who sees the pair or either vehicle should immediately contact Triple zero.

NSW Police – Thursday, 22 November 2007 03:46pm

Appeal for assistance - missing man, Fairfield

Police are appealing for information about the location of a man missing from Fairfield overnight.

About 9.30pm yesterday police were called to York Street, Fairfield after reports of a stabbing. A 32-year-old woman was taken to Liverpool Hospital in a critical condition.

Police are concerned for the welfare of Mr Suran Mercael. Mr Mercael was last seen leaving York Street in a purple Ford Festiva with registration **JUY 864** (NSW). Police believe he may be able to assist with their enquiries.

Mr Marcael is described as 36-years-old, 160-165cm tall with a medium build and of Mediterranean/Middle Eastern appearance with black hair and brown eyes.

Anyone with information about Mr Marcael's whereabouts is urged not to approach him but to contact Fairfield Police on 8788 5199 or Crime Stoppers on 1800 333 000.

EDITORS NOTE: An image of Mr Marcael is available by contacting the Police Media Unit on (02)8263 6100.

Queensland Police – Tuesday 4 Dec 2007

Appeal for information in relation to theft, Gold Coast

Police have released a photo of two men they wish to speak with in relation to the theft of two trolley loads of merchandise from Target at the Southport Park shopping centre about 3pm on September 30.

Police have released a photo of two men they wish to speak with in relation to the theft of two trolley loads of merchandise from Target at the Southport Park shopping centre about 3pm on September 30.

The two men were seen leaving the shopping centre in a stolen red or maroon 1988 Holden Commodore station wagon, Queensland registration **563INK**. A woman and a new born baby were also seen in the stolen vehicle.

Police believe the vehicle is linked to a ram raid which occurred at the IGA Supermarket, Olsen Avenue, Molendinar about 1.45am on July 23.

Police have not located the stolen red or maroon Holden Commodore station wagon.

Anyone with any information to offer police about the two men is urged to contact Surfers Paradise Criminal Investigation Branch on 5570 7841 or Crime Stoppers on 1800 333 000.

NSW Police – Thursday, 13 Dec 2007 01:19pm

Footage released; Detectives appeal for information about shooting – Leichhardt

Detectives investigating a shooting at Leichhardt, in Sydney's inner-west, last month have today released footage of several men who they believe can assist with their inquiries.

Images of two vehicles police are trying to locate have also been released and detectives are appealing for help from members of the public.

A group of three men had been inside a Norton Street restaurant, when another five men arrived shortly after 2pm on Thursday 15 November.

The men spoke with each other briefly before a brawl erupted, with chairs being used by different members of the group as weapons. The altercation stopped after one of the men produced a firearm. All eight men then left the restaurant.

As five of the men drove along Norton Street in two vehicles — a black Mercedes and black Mazda 6 sedan — numerous shots fired by the three men on foot struck their cars.

Two vehicles parked nearby also sustained damage from bullets fired during the incident.

The three men then got into a white four-door dual cab utility with aluminium tray-back, which had been parked in Henderson Street, before driving from the scene.

As a result of extensive inquiries conducted by patrolling police, a black Mercedes Benz was located three hours later in Chester Street, Annandale. The vehicle was seized to undergo a forensic examination.

Strike Force Durra was established to investigate the incident and comprises detectives from the State Crime Command Gangs Squad and Leichhardt Local Area Command.

Detectives are appealing for help to identify the eight men involved in the brawl and shooting.

Investigators are also seeking assistance from members of the public to locate a reported stolen black Mazda 6 sedan, with NSW registration **ASH 01E**. Members of the community who see the vehicle are urged not to approach it but to contact police via Triple Zero (000).

Also, anyone who has further information on the white four-door dual cab utility with aluminium tray-back, or the identity of its occupants, is urged to contact detectives.

Information about the shooting can be provided anonymously by contacting Strike Force Durra detectives via Crime Stoppers on 1800 333 000.

EDITOR'S NOTE: Footage will be provided to Network Ten later this morning for feeding to other television channels. Still images of the men, as well as the two vehicles police are trying to locate, are available via email from the Police Media Unit on (02) 8263 6100 or State Crime Command media officer Wendy Valois on (02) 8835 8339 or 0425 214 090.

Notes:
