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Aviation
Security

Aviation Security

Ensuring Australia's aviation security is effective, risk based and responsive to changes in the threat environment

Issues Paper Themes

- > Enhancing approaches to Safety Management Systems
- > Balancing an appropriate level of security with smooth transit of passengers
- > Harmonising international security measures and informing travellers to assist them with complying with Australia's security requirements
- > The threat environment and the need to balance new measures with likely threats
- > Balancing the needs of metropolitan centres with the needs of regional airports
- > Determining if security should be extended to non-jet aircraft and charter operations
- > Assessing new passenger screening technologies in relation to the changing nature of the threat and projected growth in passenger numbers
- > Asking whether current laws should be simplified
- > Reviewing Australia's standards for air cargo security against the highest international standards
- > Looking at measures to strengthen identification and background checking

What the submissions said

Of the submissions received in response to the Issues Paper, approximately 75 dealt with aviation security. The Department of Infrastructure, Transport, Regional Development and Local Government (Infrastructure) conducted a detailed analysis into the substance of the issues raised in these submissions. In addition to this, the Department has received over 200 submissions on screening issues through the current Review of Aviation Security Screening.

The aviation security issues canvassed in these submissions focused on the justification, cost and consistent application of security measures. In addressing the bulk of the issues raised, this chapter discusses aviation security under six headings. These are:

- Aviation threat and security risk context (i.e. the importance of aviation security and current security environment);
- Security system challenges;
- Protection of aviation infrastructure and aircraft (i.e. current models and proposed changes);
- Alternative models for passenger and baggage screening at Australian airports (i.e. how should screening evolve to meet the changing threat and growing passenger numbers);
- The cost of passenger and baggage screening; and
- Securing the supply chain into the future (i.e. managing the security of air cargo).

The policy context

Civil aviation has long been a target for attacks by terrorists and other major criminal groups. This history entered a new phase with the attacks on the United States on September 11, 2001.

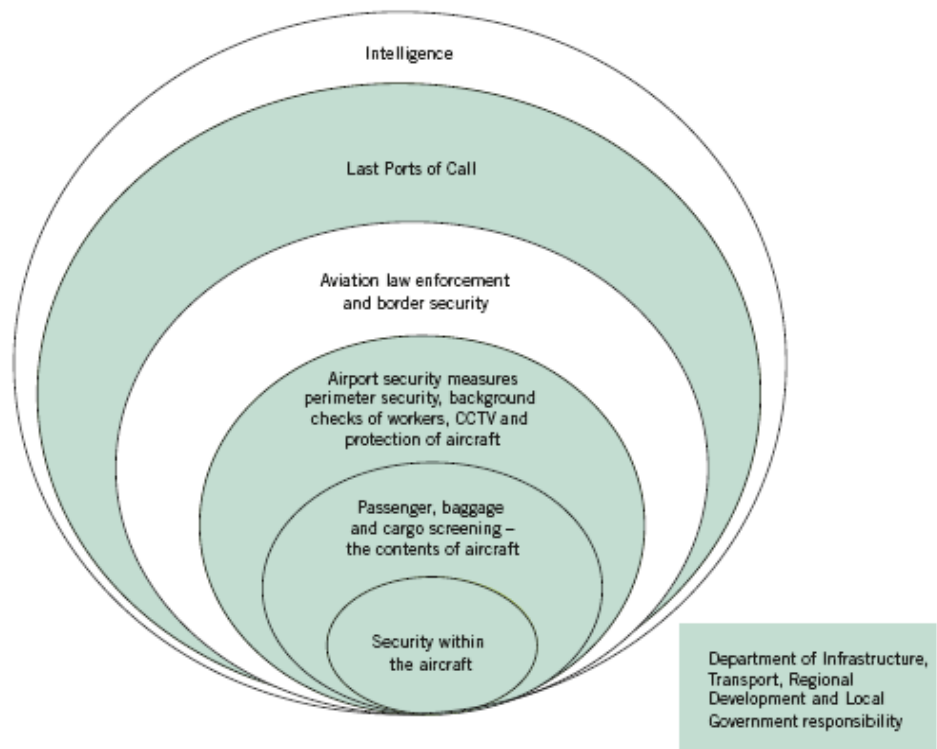
Since then, over \$1.2 billion has been committed to fund additional aviation security measures in Australia. The security outcome sought by the Australian Government is an aviation sector which is more secure against the threat of terrorism and other unlawful acts. In seeking to achieve this, there is a need to ensure facilitation requirements for passengers are addressed.

Australia's aviation security regime is based on intelligence and an assessment of the risk of a terrorist attack, to ensure the security measures in place are commensurate with the threat. The outcome of this approach is a safe and secure aviation industry with very few incidents since these measures were introduced.

It combines multiple layers of preventative security (represented in figure 2.1), and covers 187 airports, over 250 airlines, 90,000 industry employees and more than 950 Regulated Air Cargo Agents.


Aviation security measures are part of the broader national security environment protecting infrastructure critical to Australia's economic well-being. The introduction of a new National Counter Terrorism Alert System on 30 September 2008 allows the consideration of location specific alerts, rather than the 'one size fits all' previously required of the aviation industry.

Figure 2.1 Layered aviation security system



Due to ongoing changes and expansion of Australian aviation, the Government realises there is a need to reform the current security regime to meet the evolving threat and changing risk profile of the aviation industry.

To maintain Australia's first class aviation security system, a number of new policies may need to be considered. Based on the enduring yet changing nature of the threat and an increase in passenger numbers, there is a compelling need for new and improved ways of securing the system



potentially requiring some targeted investment. The Government recognises it is important for Australia's aviation security system to meet the standards of other developed economies with similar risk profiles and not become, in relative terms, more vulnerable.

Aviation threat and security risk context

Current security environment

The international and domestic security environment is dominated by the threat of terrorism from trans-national terrorist groups associated with, or inspired by, various Jihadist groups. These groups are committed to their cause and are knowledgeable about aviation security. They have the intent and capability to mount catastrophic attacks on transportation systems and critical infrastructure, and have stated an interest in attacking Australia and Australian interests. To increase the chance of a successful attack, trans-national terrorist groups identify and exploit preventative security vulnerabilities.

In choosing a target, trans-national terrorist groups aim to fulfil their objective of:

- inflicting their crimes on a large number of casualties;
- impacting the economic stability of their target;
- generating public anxiety; and
- furthering their cause by generating mainstream media interest and imagery.

Other considerations are:

- accessibility and vulnerability of a given target; and
- symbolism of the attack.

Although the threat is predominantly from trans-national terrorist groups, the Government realises the travelling public must also be protected from other criminal acts (unlawful interference) including anti-social behaviour, hoaxes and acts by acutely disaffected individuals, possibly endangering either passengers or aircraft.

On 29 May 2003, an individual attempted to hijack a Qantas flight from Melbourne to Launceston using wooden stakes concealed inside the lining of his jacket. He also reportedly carried aerosol cans and lighters, allegedly with the intention of using them as makeshift flamethrowers. Cabin crew members who prevented him from accessing the flight deck suffered severe injuries. It was later reported the individual suffered from a mental illness.

On 8 February 2008, a woman was arrested in New Zealand after allegedly attempting to hijack a flight from Blenheim to Christchurch, New Zealand. The woman, armed with a knife, accessed the cockpit and wounded the pilots and a passenger who tried to restrain her. She reportedly demanded to be flown to Australia and claimed to have a bomb, subsequently determined to be a hoax. The aircraft landed at Christchurch airport where police arrested the woman. A second knife was found concealed in her shoe.

As highlighted by the Rt Hon Sir John Wheeler DL in his 2005 review of Australian aviation security, this industry sector is also exploited by criminal groups. These groups can exploit vulnerabilities in security and these may, in turn, be used by terrorists. Strong protective security arrangements and effective policing are important policy considerations for government and industry in countering this threat.



Known events

Both successful and disrupted attacks against airlines and airports in the United States, Europe and Asia demonstrate the attraction of civil aviation to terrorists. In the past, key targets have focused on passenger aircraft and airports.

Previous experiences

Terrorists have used a number of methods of attack, which require different approaches to security are taken to counter these threats.

Terrorists continue to be interested in hijacking passenger aircraft and crashing them into iconic targets. This threat has been substantially, but not totally, mitigated by the introduction of passenger and baggage screening and hardened cockpit doors.

Other forms of terrorist attacks cannot be overlooked. The use of automatic weapons and stand-off attacks using long-range high-powered weapons may be used by terrorist and insurgent groups in conflict zones or countries where this type of weaponry is readily available. Improvised explosive devices have been commonly used as they are relatively cheap and effective. Terrorists are also likely to maintain interest in other forms of attack such as chemical, biological, radiological and nuclear weapons; as well as cyber terrorism and sabotage of critical equipment.

Criminal activity

The Australian Government remains committed to reducing criminal activity at airports. While criminal activity does not generally threaten life or infrastructure, criminals will exploit vulnerabilities in security regimes for their own ends. Criminal activity can also reveal vulnerabilities which are open to exploitation by terrorists.

Terrorist attacks may also be made possible by trusted insiders. A 'trusted insider' is someone working within an organisation having access to security arrangements, including physical facilities, controlled areas and/or information technology systems. Insiders – whether they are willingly recruited, coerced or deceived – may be used with any method of attack to improve the chance of success.

Identifying and prioritising vulnerabilities

Vulnerabilities in security systems occur where risks have not been identified, or where measures to prevent attacks are poorly implemented, or do not exist. The key to managing Australia's security regime is to continually review, identify, and revise the system to minimise vulnerabilities, especially as Australia is unlikely to have specific warning of a terrorist attack.

It is not possible or practical to remove all vulnerabilities in a system. To attempt to do this would impose unacceptable costs on our way of life, our transport system and the Australian economy – providing a 'win' to terrorists regardless of attack.

The preferred approach is to focus preventative security resources on areas of greatest risk of attack, based on an assessment of this risk, which is informed by strategic intelligence and on-the-ground evidence. Even though Australia's preventative security regime rates very highly by world standards, the Government will not rest on this record, but is continually looking for improvements to the system to ensure all travellers in Australia can continue to enjoy a safe and secure air travel experience. These measures require detailed planning and implementation.



Last ports of call

Even though Australia's security regime has had very few incidents since security measures were introduced, Australia's connections with the rest of the world make it difficult to guarantee security in all circumstances, particularly if international terrorists were able to attack aircraft flying to Australia, or target foreign airports with a high number of Australian passengers.

Currently flights from over 50 international airlines, departing from 48 international last ports of call arrive at Australian airports (illustrated in Figure 2.2) each day. Security standards can vary widely across these foreign airports. The Australian Government takes these factors into account when considering new security policies to enhance the security of approximately 23 million passengers flying to and from Australia each year.

The growth in international traffic, combined with the introduction of new generation aircraft able to fly further and carry larger numbers of passengers means more passengers will be coming from more distant airports and countries to Australia. Notwithstanding current global economic conditions, a worldwide trend of increased personal wealth, particularly in Asia, means over time additional airlines, more routes and new airports will become viable.

Airlines link us to the rest of the world and Australia does not place harsh restrictions on international flights. Australia welcomes tourists and business people from around the world, and Australians are also travelling more than ever before.

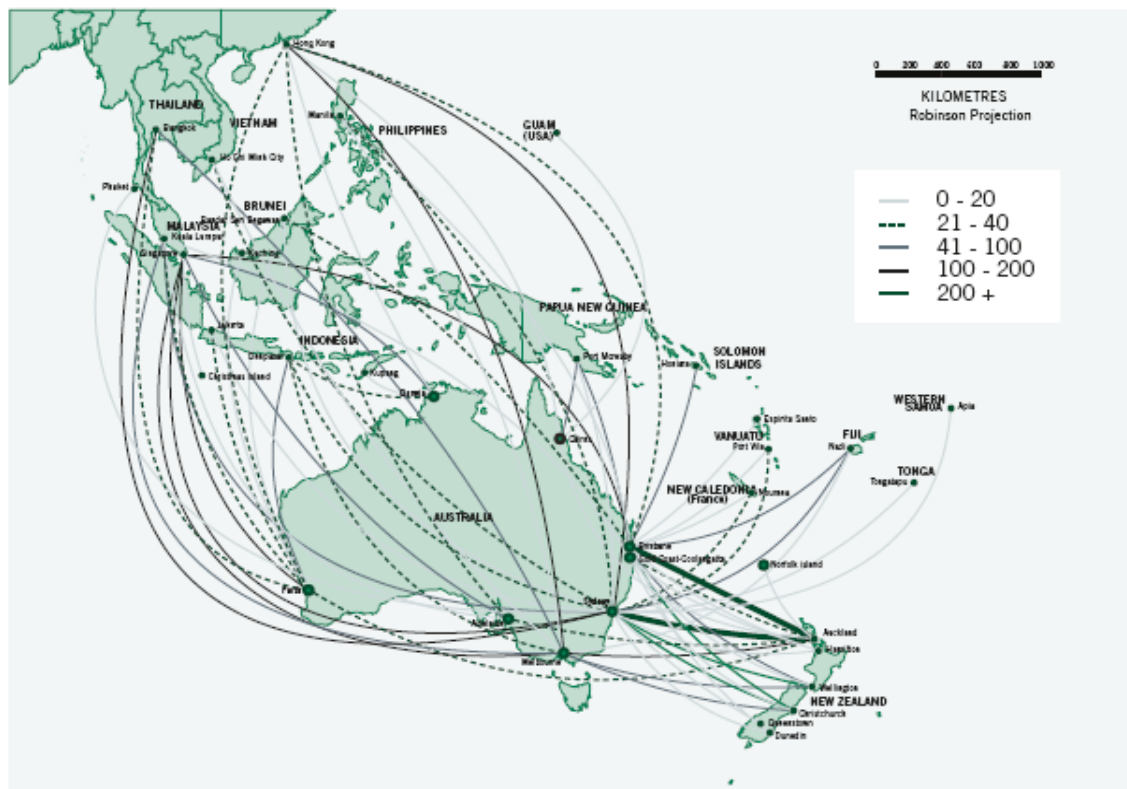
The Australian Government will enhance cooperation with last ports of call countries as it looks at enhancing security at offshore airports. This includes the implementation of a comprehensive foreign airports visits program. Australian Government regulators will visit foreign airports to discuss measures to enhance security at those airports. At the same time, the program will offer reciprocal arrangements to foreign government security regulators for them to review Australia's security arrangements.

The Australian Government is mindful of the sovereignty of host governments, as it looks at enhancing security at offshore airports.

The Australian Government remains committed to working with the International Civil Aviation Organization (ICAO), APEC and our regional partners to improve aviation security standards. This is in addition to working with ICAO and foreign governments to explore options to implement a transparent system of international security audits for aviation, including making aspects of system performance more widely available.

Figure 2.2 Last Port of Call for regular public transport into Australia:
Flights for the month of April 2008 (Lines do not reflect flight paths)

Source: BITRE



The policy framework

Current policy and legislative settings

As a result of the September 11, 2001 attacks, the Government strengthened Australia's aviation security regime. Some measures were reviewed and new measures were introduced. The resulting arrangements extended security to 140 regional airports and led to the introduction of domestic and international checked baggage screening and stronger physical security, and to the identification of staff working in secure areas of airports and onboard aircraft.

The current legal framework for Australian aviation security

In Australia, the security of civil aviation is covered by laws providing a preventative, intelligence led, risk based and outcomes focused aviation security system. The origin of the Australian Government's role in the regulation of aviation security rests with the 1944 Convention on International Civil Aviation (Chicago Convention).

The *Aviation Transport Security Act 2004* and *Aviation Transport Security Regulations 2005* describe Australia's legal framework for aviation security, except for the carriage of munitions, which is covered under the *Air Navigation Act 1920*.

This is in addition to Commonwealth laws covering other elements of aviation security such as the *Air Navigation Act 1920*, *Air Services Act 1995*, *Australian Federal Police Act 1979*, *Australian Security Intelligence Organisation Act 1979*, *Civil Aviation Act 1988*, *Crimes Act 1914*, *Customs Act 1901*, *Defence Act 1903* and *Migration Act 1958*.

Included with the range of Commonwealth laws for aviation security is the National Aviation Security Program (NASP), which describes how Australia safeguards civil aviation operations against acts of unlawful interference. This Program refers to elements covering the practical aspects of aviation security including the legislative framework, allocation of responsibilities, communication and coordination of arrangements within government, and between government, industry and the public, as well as security equipment and personnel. This Program complements the security regime covered by the Act and Regulations, and is in accordance with ICAO, Annex 17, Chapter 3.1.1.

In addition to the Chicago Convention, Australia is a party to a series of international instruments relating to unlawful acts against civil aviation.

The practical application of these laws means the aviation industry has to meet the following requirements:

- organisations operating in aviation (i.e. regulated aviation industry participants) are required to draft a Transport Security Program (TSP) for approval by the Department (via the Office of Transport Security). These plans outline the organisation's security measures to manage and maintain security, and respond to security incidents.
- all staff working in secure areas of the airport and onboard aircraft must successfully complete a number of background checks and wear an Aviation Security Identification Card (ASIC). The intent of this identity card is to reduce the vulnerability from 'trusted insiders' who may assist terrorists or other criminals in attacking Australians and our aviation industry (i.e. facilitate unlawful interference with aviation).
- screening of Regular Public Transport (RPT) passengers and carry-on baggage, including X-ray of baggage, walk through metal detection equipment, random and continuous explosive trace detection (ETD) and physical searches as required. New technologies are now being trialled in some locations to examine new screening capabilities which may achieve the same security outcome with less passenger inconvenience;
- airports must conduct checked baggage screening of RPT aircraft, requiring random and continuous testing of checked baggage using explosive trace detection equipment and 100 per cent testing of checked baggage using X-ray equipment with explosive detection systems capability from 1 December 2008 for all RPT services in Australia;
- airports must have appropriate air cargo security measures in place, including explosive trace detection equipment at designated airport cargo terminals, and security training regimes for Regulated Air Cargo Agents;

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- passengers need to understand and meet the restriction of the amount of liquids, aerosols and gels in carry-on baggage on international flights to and from Australia;
 - people and goods entering the airside of airports are subjected to a comprehensive airside inspection regime;
 - airlines must have installed hardened cockpit doors in aircraft with a seating capacity of 30 or more seats, where these planes are used for RPT or open charter operations; and
 - a Unified Policing Model must be supported at major airports. This includes Airport Police Commanders; community policing; Joint Airport Investigation Teams; Joint Airport Intelligence Groups; a Counter Terrorist First Response capability; and upgrades to closed circuit television capabilities.

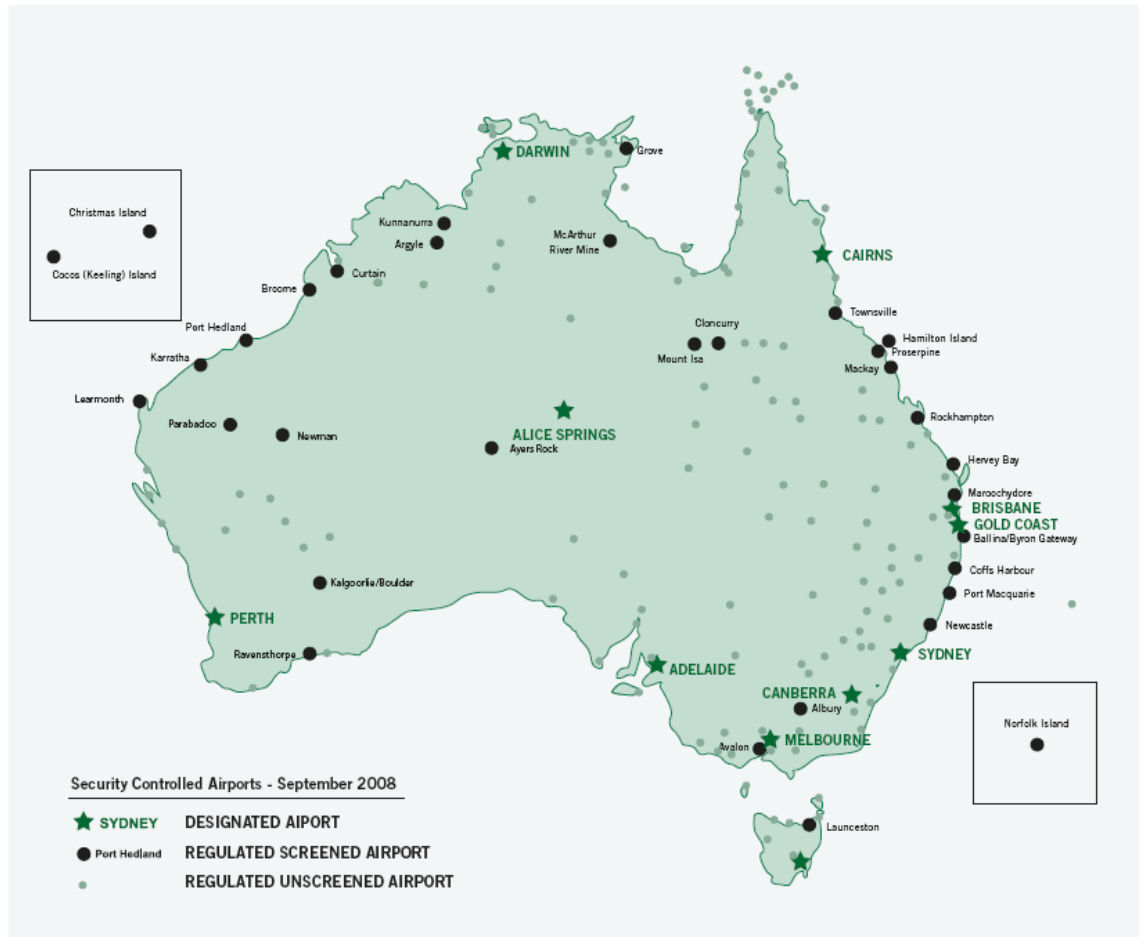
The *Aviation Transport Security Act 2004* came into force in March 2005. Submissions to the Issues Paper highlighted some complexities and inefficiencies with the legal arrangements under this Act. Recommendations included a request for the Australian Government to re-examine the Act and associated Regulations with a view to streamlining these laws and clarifying the industry's aviation security responsibilities and obligations.

Key Challenges

As illustrated in Figure 2.3, there are currently three types of 'security controlled' airports in Australia:

- 1) 11 major 'designated' airports, formerly known as Counter Terrorist First Response (CTFR) airports;
- 2) regional 'screened' airports which are required to have screening operations due to the type of aircraft they support; and
- 3) other regional airports which do not have screening but which have other security measures in place

Figure 2.3 Security controlled airports: September 2008




The Australian aviation security regime faces major pressures reflecting the expected growth and evolution of the global aviation industry, and the continuing evolution of the threat to aircraft, infrastructure and passengers. Australia's aviation security policy is, and will continue to be driven by, a range of competing factors, including four major policy drivers:

- intelligence driven assessments of the nature and level of threats;
- assessments of risk and vulnerability – including security risk;
- changing aviation industry structures and technology; and
- developments in the international aviation security environment – including the requirements of international organisations.

Recent changes in the threat environment and evolution of vulnerabilities have had the greatest impact on aviation security policies. For example, the introduction of new measures to deal with the threat of liquid explosives restrict the amount of Liquids, Aerosols and Gels (LAGs) passengers can now take onboard international flights departing from Australia. These changes were influenced by developments in Europe and North America.

The extension of Checked Baggage Screening (CBS) to regional screened airports, following the introduction of CBS at the 11 major domestic airports in August 2007 has also raised challenges.



The Government expects continued growth and change in the aviation industry structure and aviation technology affecting aviation security policy, border security policy and service delivery in Australia and overseas in the coming years.

It is believed these changes will be driven by the following trends in the domestic and international aviation industry:

- shifting travel patterns and the emergence of new international routes and hubs;
- increased tourism, both inbound and outbound, and increased growth in existing routes, both domestic and international; and
- diversification of aviation products with low-cost carriers largely servicing tourists and premium carriers primarily servicing business travellers.

Airlines are aware of many of these challenges, with increases in domestic demand prompting the introduction of smaller jet-powered aircraft, such as the Embraer 170. Qantas's decision to retire the 36-seat turbo-prop powered Dash 8 Q100 aircraft, while increasing the number of 72-seat Dash 8 Q400 aircraft further reflects this growth.

Growth and changes in the aviation industry, together with an evolving terrorist threat are placing more pressures on aviation security. There is a need to reconsider some of the current policy settings to make sure they remain appropriate to this changing environment.

Currently checked-baggage and passenger screening is only required for jet aircraft, and requirements for hardened cockpit doors only apply to 30 seat and above aircraft used for RPT and not to cargo aircraft.

The distinctions between private and commercially-operated aircraft and between passenger and cargo aircraft are becoming less clear, leading to the proposition the same onboard security measures should be applied to all of these aircraft.

The opening of non-capital city routes and the introduction of new generation, and larger aircraft have challenged the circumstances where screening should apply, who should manage the screening, and how to manage the costs to achieve an appropriate and consistent level of security across the Australian aviation network.


The capacity of airport infrastructure to accommodate an increasing volume of people has placed pressure on aviation security screening processes, which, in turn, affects the smooth movement of passengers through airport terminals. The growth in budget airlines both domestically and overseas has resulted in the expansion of services to secondary locations close to major cities, as well as the introduction of non-traditional routes. For the private sector, this requires a major investment in both infrastructure and security staff.

A survey of airport screening employers - conducted in December 2007 by the Australian Government Department of Education, Employment and Workplace Relations, in partnership with the Department of Infrastructure, Transport, Regional Development and Local Government - aimed to provide quantitative evidence of the extent and nature of recruitment difficulties in the aviation security sector, in addition to identifying their causes.

The main findings from the survey indicated employers in airport screening are increasingly unlikely to be able to meet all their labour requirements from traditional sources. The findings suggest industry needs to address issues regarding skill level/experience of applicants as well as employer expectations, and develop retention and recruitment strategies to overcome these challenges. This is discussed in more detail in Chapter 6.

The Government is currently finalising the development and implementation of an Aviation Security Training Program to address these issues.

Australian Government agencies are under pressure to provide traditional border security and policing services at locations favoured by emerging low-cost, long-haul carriers. The implication for



both the private sector and the Government is costs at secondary international airports are likely to remain high for some time. This is in comparison with established airports benefiting from larger volumes of passengers creating economies of scale.

The Government is committed to addressing these challenges. The Government believes the Australian regulatory regime must be based on a genuine partnership with industry and demonstrate world's best practice, to cope with future change.

Protection of aviation infrastructure and aircraft

While aviation security has evolved over several decades, the speed of change dramatically increased in the period following the September 11, 2001 attacks. The regime currently in place has proved effective in countering the threat of terrorist attack. However the post-2001 expansion of security measures was certainly not smooth, and resulted in the creation of a series of anomalies, which need to be addressed if our aviation security regime is to remain robust.

Current policy settings for aircraft requiring passenger screening

The early development of aviation security measures was driven by concern for the protection of jet-powered aircraft used for regular public transport operations. This decision was based on evidence these aircraft were the preferred target for terrorists. This resulted in passenger and baggage screening becoming mandatory for jet-powered aircraft, but not for turbo prop-driven aircraft providing regular public transport services.

A number of stakeholder submissions identified a range of perceived anomalies in the current security regime, such as the different security requirements for turbo prop-powered aircraft as opposed to jet-powered aircraft, and certain charter aircraft services are not subject to screening at all.

The Government will consider these perceived anomalies and will re-examine the underlying policy settings with a view to developing a consistent and transparent policy solution. Industry stakeholders also raised concerns regarding current policy settings, which they do not believe provide a competitively neutral regulatory environment.

Since the focus on RPT jet aircraft commenced, the Australian aircraft fleet has changed markedly with the introduction of smaller jets and larger turbo prop-powered aircraft. Current policy settings require screening of passengers on 50-seat jet turbine-powered aircraft but do not require screening of passengers on significantly larger 72-seat turbo prop-powered aircraft.


While some industry participants argue the lesser speed of a turbo prop aircraft would make it a less effective weapon than a jet, the critical factor is the combination of the speed and weight of the aircraft. Latest generation, high-capacity turbo prop-driven aircraft have more in common with smaller jet turbine-powered aircraft than the older and smaller turbo prop aircraft.

The Australian Government will explore options to implement a regime where the decision to screen, or not screen, an aircraft is independent of the method of aircraft propulsion.

The Government will take into account a number of factors to determine the type of aircraft to be screened, including the aircraft weight and speed, fuel load, passenger numbers, and kinetic energy at time of impact.

A more transparent trigger for the screening of aircraft may be the maximum take-off weight. Using this measure would provide a transparent and consistent trigger point for industry, and address the perceived anomaly identified in stakeholder submissions. Therefore, the Government is assessing whether this is the most logical trigger point on which to base the decision to implement aviation security screening.

However, the Government recognises the adoption of maximum take-off weight as the trigger for passenger screening could have ramifications for a number of Australia's regional and remote



airports, where passenger screening is not currently required. This could result in significant start-up and operational costs for these operators. The Government has charged the Department of Infrastructure with assessing the possible impact of such costs, before considering any such change.

Another anomaly the Government is looking to address is the dramatic growth in charter operations, which do not currently require screening under the current regulations, even for large jets. The Government will re-examine the policy drivers relating to the screening of charter aircraft and is seeking further public comment as to whether the screening requirements envisaged for regular public transport aircraft should be extended to charter flights.

The Australian Government will review existing security policy and legislative arrangements stipulating when passenger and aircraft screening is to occur.

Terminal security/front-of-house

An ongoing challenge for the Government and aviation industry is to identify and mitigate the risks associated with mass casualty attacks at airports. The Aviation White Paper will consider initiatives for front-of-house, including a focus on infrastructure design, technology, human factors, enhanced operational activity and better communication with stakeholders.

In consultation with industry, the Government will address front-of-house mitigation strategies, based on four key themes:

- infrastructure design incorporating security;
- enhanced operational measures;
- staff training in front-of-house matters; and
- enhanced stakeholder engagement.

Incorporating security in the design of transport infrastructure is often costly and difficult to address and requires a consistent approach over a long period. The opportunity to incorporate or retrofit security measures into existing infrastructure at relatively low cost needs to be further explored.


Front-of-house technology can assist with monitoring people and has potential for preliminary, but limited, scanning of prohibited items. The pace and scale of passenger movements, combined with the limitations of front-of-house scanning technology, meaning human factors are critical to the provision of preventative security covering the front-of-house area. Human factors covers both the operators' capabilities and training, and a capability to identify and analyse suspicious behaviour. The strengths and weaknesses of the available technologies need to be understood for their appropriate integration into the preventative security regime.

A major mitigation factor in addressing front-of-house vulnerabilities will be enhanced operational activity focused on the resolution of suspicious activity. This activity should be summarised in transport security plans and involve both industry and law enforcement agencies. Public areas at major airports are places of significant operational focus for the Australian Federal Police (AFP) in applying counter terrorism deterrence strategies and the broader unified policing model functionality.

The Government is looking for public input on front-of-house issues to inform future policy recommendations.

Identity and background checking

Over 100,000 individuals require unsupervised access to the secure areas of Australian airports. It has been a challenge identifying individuals of concern who are seeking to work in trusted positions in these areas. The introduction of the ASIC scheme, which commenced in 1998, was designed to alleviate vulnerabilities in the use of 'trusted insiders' who may assist terrorists or other criminals



with acts of unlawful interference against aviation.

The regime commenced with a relatively simple criminal history background check conducted once every five years. The regime has been significantly strengthened over the last three years, including enhancements to:

- the eligibility criteria applied;
- the frequency of checks; and
- the security features on the card itself.

While the ASIC background checking regime is acknowledged as an important layer of security, it can be further improved.

A comprehensive review of the ASIC background checking regime has recently been completed. The results of the review are currently being considered and options for implementation are being discussed with industry.

Technology

The Australian Government is committed to examining and evaluating new and emerging technologies to meet Australia's aviation security needs, and meet the changing nature of threats. Over the next five years, the Government's priorities in relation to the implementation of aviation security arrangements using new technologies will include examination of:

- new ways to screen passengers, luggage and cargo; and
- new ways to secure airport perimeters, manage staff accessing airports, and monitor people in and around airports.

In addition, Australian agencies are working with other countries at sharing best practice technology and 'human factor' performance information. Partnerships have been established with a number of Australian Government agencies, research establishments and members of the aviation industry to look at screening point design, the relationship between human factors and technology, broader preventative security initiatives and the interdependencies between passenger facilitation and security outcomes.

The Government recognises the development of technology in isolation is not the total solution for security problems. Of critical importance are the type of technologies developed, and how they are deployed. Additionally it is recognised the overall system of technologies, people, processes and organisation needs to be well aligned to get the greatest benefit from the introduction of new technologies.


Future directions in the development and application of technology will need to be integrated with identified and emerging threats, and vulnerabilities to aviation. Examination of new security technologies will be conducted within the context of an evolving threat environment, including how terrorists may be using some of these new technologies.

The Department of Infrastructure is actively considering the implications of introducing new technologies into Australia's aviation security environment and intends mandating technology performance specifications and certification requirements for passenger, baggage and cargo screening.

The Government is working closely with other countries to promote emerging security technologies – including in the future application of biometrics.

Detailed discussion papers on current and emerging technologies have been issued to aviation industry participants through the Review of Aviation Security Screening, drawing together expertise and experiences from around the world and sharing this with the Australian industry.

Following a range of tests conducted in controlled laboratories earlier in 2008, operational trials



have been undertaken at Adelaide, Melbourne and Sydney Airports. These technologies are designed to detect weapons, explosives and prohibited items. Some are also designed to detect explosives in liquids, aerosols and gels. The trials are designed to find out which, if any, of the advanced screening technologies are most appropriate for use in Australia.

Prior to further Government consideration of the application of these developments, further public input is sought on the following policy options:

- the relative security benefit of new technologies for passenger screening, noting the potential for some of these technologies to be invasive or costly;
- the viability of using biometrics in Australian airports for aviation industry employees; and
- the implications of maintaining national technology performance specifications across all screened airports, regardless of location or traffic levels.

Known traveller

Some submissions indicated support for a domestic 'Known Traveller' program, arguing the need for increased collaboration between government and industry in developing measures to streamline security screening. However, no specific programs were put forward.

By way of an example, a program operating in the United States is the 'CLEAR Program' operated by a private company. The program provides passengers the opportunity to join for an annual fee including a basic background check. Members are still screened to the same standard as all passengers however in an expedited manner through dedicated queues and other systems.

The Australian Government will not relax minimum aviation security standards unless there is advice from the security agencies indicating a diminished threat to aviation, nor will it create a lower screening requirement for particular classes of passengers. No matter how comprehensive the background check on an individual program member, the Government believes there is still a need for security screening in accordance with Australia's security laws to maintain the safety and security of the travelling public.

The Government believes there are no regulatory impediments to a private operator introducing a domestic 'Known Traveller' program in the Australian market. Such a program could be administered by airlines, airports or another third party, and could be run in conjunction with existing frequent flyer or business traveller programs. Organisations considering taking this step would need to make sure they meet the Government's existing security screening requirements at airports, and may need to expand the use of current screening resources.


Prohibited Items

ICAO recently completed a review of Prohibited Items. The Government's intention is to act on the ICAO recommendations to implement a Prohibited Items regime in line with internationally-agreed standards, while taking into account specific threats to Australia. Consultations for the Review of Aviation Security Screening have supported this approach, especially the removal of low-risk items not contributing to the security outcome.

Alternative service delivery models for passenger and baggage screening

The screening of passengers and baggage is just one of the layers in Australia's preventative aviation security regime. With the long-term projected growth in passenger numbers expected to average four per cent per year to 2025-26, this expansion will create an increasing burden on both aviation security and the regulatory framework.

In response to the rising pressure on the screening system, the Government called for a Review of Aviation Security Screening at Australian airports. The review examined the factors affecting



security screening including the current regulatory regime, national consistency, passenger experience, workforce recruitment, retention and training, screening point design, and the role of various technologies in the screening process.

One of the issues identified in the review is the difficulty in employing, retaining and up-skilling staff, with some Australian airports employing screeners through 'fly in/fly out' operations. The labour market problems reflect a lack of investment in staff, the fragmentation of organisations employing screeners and the wide dispersion of employment opportunities. The Government recognises there is a need to improve the ability of the aviation security screening system to attract and retain staff to meet current and future aviation growth.

A number of other issues have been identified by industry in response to the Issues Paper and these are:

- inconsistencies between different airports and different screening authorities in the passenger screening process and security outcomes;
- inefficiencies in procurement of advanced screening technologies; and
- the current passenger screening model may be negatively affecting the performance of screening, which means it cannot operate at its optimum level.

A further issue raised with the Government has been whether the current screening model is the best for coping with the long-term challenges facing the aviation industry. These challenges do not only include future new risks to aviation security, but also the need for technology upgrades to enhance the smooth transition of passengers crossing our border. This is especially important given passenger concerns about screening delays and queues.

The Government will examine the Screening Review report and consider alternative screening model options ranging from:

- strengthening the current framework;
- a single screening authority (run as a private commercial enterprise);
- a single screening authority for regional screened airports; and
- a single screening authority (run as a government business enterprise).

Initial outcomes from the Screening Review indicate there is no overseas model logically fitting the Australian context.

The outcomes of the Screening Review will be used to inform the Government's policies on the regulation and delivery of aviation security screening.


The cost of passenger and baggage screening

The Government has received a number of submissions seeking a different charging system for aviation security.

Passenger and baggage screening at Australian airports is currently based on 'location-specific' pricing. The cost of screening at a given airport is passed on to the airlines using the screening services, which is, in turn, passed on to passengers. Screening charges should not be confused with the Passenger Movement Charge (PMC).

The PMC is a tax levied on international passengers departing from Australian airports and is usually collected by the international airline as part of the ticketing/airfares process. The PMC is remitted to the Australian Customs Service by the airline following the departure of the aircraft from Australia.

The Government increased the PMC from 1 July 2008 by \$9, from \$38 to \$47 per passenger. This increase is estimated to raise \$459.3 million over four years. The increase will contribute to



offsetting the cost of a range of aviation security initiatives. The PMC also offsets the costs of processing international passengers at international airports and maritime ports, and issuing short term visas overseas. All PMC receipts are paid into consolidated revenue and not hypothecated to any specific government department or agency. As such, there is no reconciliation of costed activities against the revenue raised by the PMC.

There are substantial economies of scale in the provision of screening services, meaning passengers at regional airports pay higher screening costs than passengers at metropolitan airports. This is supported by data collected on behalf of the Department of Infrastructure.

Concerns regarding the cost of aviation security requirements were raised in a number of submissions, with some respondents articulating the need for different security standards at different airports due to cost impacts. In particular, smaller regional airports have claimed the cost of security requirements is inequitable. Regional and remote airports also argue the current pricing structure makes it harder to attract passengers to regional Australia and to attract airlines to use regional airports as hubs. Some submissions have argued 'network' pricing should be instituted for aviation screening to share security costs more evenly across the industry.

However, some submissions have advocated against 'network' pricing, arguing this would damage competition, reduce efficiency and could become unsustainable in the event of an aviation downturn.

The Government is considering all of these issues and is seeking further public comment on the pricing of aviation security measures to assist with a review of the current charging arrangements.

Securing the supply chain

Air cargo is a critically important part of Australia's international and domestic trade. In 2007-08 the value of air cargo was approximately \$28 billion; approximately 80 per cent of Australian domestic air cargo is carried on passenger aircraft.

Currently there are 950 Regulated Air Cargo Agents (RACAs) spread across 1,720 sites Australia-wide dealing with international and domestic air cargo. Research indicates there may be over 10,000 Accredited Air Cargo Agents (AACAs) ranging from multi-national operators to sole proprietor businesses. Since January 2008, 2,143 employees (with a security function) have been trained under the Regulated Air Cargo Agent Security Training Framework.

The Government intends to further strengthen the existing layers of security for air cargo. This will be achieved with the application of technology, the identification of employees and by regulating businesses operating in the air cargo supply chain.

Current policy settings

As with Australia's overall approach to aviation security, air cargo security is protected by multiple layers of preventative security measures, based on an assessment of the risk and the nature of the threat. Each layer is designed to address the unique vulnerabilities of the air cargo supply chain and not disproportionately affect the economic viability of the air freight and related industries.

Australia's security regime uses a combination of examination methods at various points along the air cargo supply chain. Some cargo types, in certain circumstances, can be examined using technologies such as ETD and/or X-ray. Where examination using technology is not feasible, other security measures are in place.

A critical aspect of Australia's air cargo protection is the Regulated Air Cargo Agents and Accredited Air Cargo Agents schemes. These agents are required to have transport security programs in place. All businesses providing air cargo services will be required to apply appropriate security measures along the complete supply chain.



International issues

Australia's multi-layered approach to cargo security compares well with countries such as Canada, the US, the United Kingdom and the model under the European Commission. Australia also meets ICAO requirements.

A critical factor facing Australian participants in air cargo is the US Transport Security Administration requirement for a system of 100 per cent screening of cargo transported on passenger planes by 2010. Should the US pursue this requirement, 100 per cent cargo screening may need to be applied for cargo going to North America.

Supply chain technology

Currently it is not possible to effectively examine 100 per cent of all air cargo using ETD or X-ray technology without significant disruption to the air cargo supply chain.

At present air cargo security examination cannot be performed in the same way as air passengers and their baggage. Each require different processes and technologies and involve looking for different objects in a vastly different environment.

The Department of Infrastructure has recently completed a series of air cargo X-ray trials to determine the suitability of X-ray for the detection of explosive devices concealed in air cargo, and to assess the impact of introducing such technology into the operations of a range of air cargo industry business processes.

The Australian Government is considering the establishment of consolidated research and development partnerships with international partners to develop and promote more effective technologies for the examination of air cargo to meet future challenges in this area.

Australia is among world leading countries in trialling air cargo X-ray equipment. The results of the trial, coupled with information from international partners and industry will inform future application of explosive detection technologies in the air cargo supply chain.

Ongoing work continues with industry and international partners to determine where and how technology-based examination processes and other interventions can best be introduced within the air cargo supply chain. The Government is seeking further public comment on these issues.


Businesses operating in the supply chain.

It is important all businesses operating in the air cargo supply chain apply appropriate security measures to increase the protection of aircraft from terrorist acts and other unlawful interference by establishing a more secure supply chain from the point of consignee to the aircraft. The Government is seeking public input on a series of supply chain issues including:

- whether the RACA scheme in its current form is the most appropriate model for the future in terms of its requirements on business and the security outcome;
- the need to continue to build the AACA scheme and its application to businesses operating in the supply chain;
- the need to build a robust 'known shipper' scheme, to establish a low risk status for certain cargo and enable unknown or higher risk cargo to be the focus of more intensive examination processes; and
- continue to work with international partners to establish harmonised and mutually recognised air cargo security regimes.

People working in the supply chain

The Department of Infrastructure and industry have developed security competency standards and supporting training materials for the air cargo sector – the RACA Security Training Framework. The



Framework provides the foundation for security outcomes to be assessed against competency standards and gives businesses the ability to determine the level of security competency required for each role within the organisation.

Quality assurance standards have been developed and a quality assurance system is in place to monitor and maintain the suitability of organisations accredited as RACA training and assessment organizations, including an assessment of the quality of the overall training framework. The Government considers greater security awareness and consistent security education delivered to appropriate people working in the air cargo environment would benefit the system as a whole.

The Government is seeking public input to the potential to introduce a system of business and individual identity verification, or background checking regime (and subsequent disqualification criteria) for the air cargo sector.

Aviation security – the way forward

Recent policy reviews

Security is constantly reviewed and our preventative security measures are evaluated on a regular basis. The most recent reviews include:

- the Australian National Audit Office has considered aviation security in 1998 and 2003;
- the Senate Rural and Regional Affairs and Transport Committee considered aviation security legislative instruments reporting twice in 2003 and again in 2007; and
- the Joint Committee on Public Accounts and Audit reviewed aviation security issues in 2004 and 2006.

In addition, the Australian Government commissioned the Rt Hon Sir John Wheeler DL to undertake a comprehensive review of Australian aviation security in 2005.

Since November 2007, the Australian Government's focus has been to enhance aviation security arrangements. To achieve this, the Government is conducting a number of reviews including the identity checking regime, the efficiency and effectiveness of screening, and the aviation training program.

The following current reviews will address some of the issues identified in submissions to the Issues Paper. The outcomes from these reviews will be used to inform the Government in its consideration of the White Paper.

Review of Aviation Security Screening

Growing industry concerns about the sustainability of the current screening system prompted a major review of Australian security screening at airports. This review was undertaken by the Department, with input from an expert Advisory Group of senior industry figures.

An efficient and effective screening system is essential, given approximately 65 million passengers are screened annually in Australia.

Priority issues for the Review included:

- refining the purpose of screening;
- examining the need for national consistency;
- examining the range of technology factors in screening;
- researching optimal screening point design;
- assessing human factors – from passenger facilitation to screener vocation;

- reviewing the regulatory framework; and
- examining overall efficiency and effectiveness of the current regime.
- Training Package 2008.

CASE STUDY: Surveys of Aviation Screening

The outcome sought from the Review of Aviation Security Screening is to improve screening processes. Two research activities conducted to date provide some insight into the current effectiveness of the regime. The first demonstrated:

- 74 per cent of travellers felt their screening experience was in line with their expectations and 21 per cent considered the experience to be better than expected.
- only four per cent of respondents expressed dissatisfaction with the overall experience or staff; and
- a very small percentage of respondents said they had to make a complaint about screening in the past.

The travelling public understands screening is necessary. Their experience of security screening is also relatively consistent. While regular travellers are generally comfortable with the screening process, many people find delays frustrating, and screening can create a more anxious experience for a small number of infrequent travellers. There is scope to improve passenger education and awareness of security screening processes.

(2008 Colmar Brunton Social Research, *Screening Review Passenger Survey*)

A second activity observed people passing through 26 screening points at 14 airports around Australia.

- 90 per cent of these people were cleared on their first pass through a metal detector.
- Additional screening was required for the remainder:
 - 9.5 per cent were cleared on the second pass (usually by taking off belts, shoes, emptying pockets and re-screening through the walk-through metal detector); and
 - a third pass was required for 0.5 per cent of people, which sometimes required the use of a hand-held detector and/or a frisk search.

These figures were reflected in the figures for carry-on baggage, with 93 per cent of carry-on items cleared on the first pass, and only seven per cent of items requiring further attention by a screener. Noting there are approximately 65 million passengers screened per year in Australia, it is apparent many passengers moving through Australia's screening points may be inadequately prepared for screening.

(2008 Office of Transport Security, Domestic Observation Program for the Review of Aviation Security Screening)

The Government is committed to a modern screening regime, supported by the latest technology and a world-class training regime, to meet the objective of improving the consistency of passenger screening across Australia. It is also the Government's priority to improve passengers' experience of airport screening, while maintaining the integrity of Australia's aviation security measures. The review will guide the Government's policies outlined in the White Paper with regard to screening and associated aviation security measures.

Aviation Security Identification Card (ASIC) Review

A comprehensive review of the ASIC scheme was recently completed. This review highlighted significant vulnerabilities in the robustness and timeliness of background and proof of identity checks, name-based criminal history checks, and the management of visitors in the secure zones of Australian airports.

The review benefited from close consultation with industry and its recommendations include:

- increasing the frequency of criminal history checks, from a point in time every two years to annual checks;
- separating background checks and physical access control, with all aspects of the background checking process being centralised in government;
- phasing out use of the ASIC as evidence of a background check, with verification by the Australian Government's background checking agency, AusCheck, and access governed under new regulatory arrangements; and
- providing individuals with the option of applying for a one-, three-, or five-year qualification, instead of the current two-year ASIC validity period.

The recommendations contained in this review will be being considered by the Government in the near future.

National Aviation Security Training Program

The Government recognises Australia's approach to aviation security training has, over time, fallen behind global best practice.

A robust aviation security regime relies on the use of appropriate technology, sound processes and a motivated and skilled workforce. Since 2001, the Government and industry have made significant investments in screening technology and in aviation security processes and regulation. The Wheeler Review recognised the reliance on people for most aviation security measures and highlighted the need to focus on the development of an appropriately skilled and motivated workforce, especially for screening.

Drawing on extensive consultation with industry, the Government will progress with the National Aviation Security Training Program, to achieve stronger aviation security outcomes nationally.


One of the results of this training program will be a benefit for regular travellers (who have complained of variations in security between airports) from an improved and more consistent experience. Another beneficiary is the aviation industry, which is demanding clarity and increased flexibility in security-related training regulations and procedures, and will benefit from a better and more consistent understanding of aviation security training requirements.

The program will also assist in fulfilling Australia's obligations to develop and implement a national aviation security training regime under Annex 17 of the Chicago Convention. It will also address aviation security training needs identified in reports by the Joint Committee on Public Accounts and Audit, the Australian National Audit Office and the Wheeler Review.

Airport policing

Policing is one of the key layers of security at Australian airports. Policing capabilities include: counter-terrorist first response – both on the ground and in the air; the ability to gather criminal and security intelligence; investigation of general and organised crime; and aviation security incident management.

In his review of aviation security and policing at Australia's airports from 2005, Sir John Wheeler made 17 recommendations dealing with a range of issues, including policing roles and responsibilities at airports.



The Wheeler Review recommended a new unified policing structure be implemented at airports. The Government's response to this recommendation was to introduce the Unified Policing Model. Following the Wheeler Review, over \$600 million has been committed to policing functions at the 11 designated CTRF airports³.

The Unified Policing Model complements other aviation policing measures implemented since 2001. This includes the Air Security Officer program, which provides armed personnel on Australian commercial flights within Australia and on selected international sectors. It also adds to the Regional Rapid Deployment Teams who provide a CTRF capability to Australian regional airports.

The purpose of the Unified Policing Model is to deliver a sustainable, efficient and effective law enforcement capability focused on deterring and responding to acts of terrorism, delivering uniform policing capability and facilitating the investigation of serious, organised and systemic crime within the aviation domain. The Unified Policing Model has been structured primarily to allow the implementation of a counter terrorism strategy to deter, detect and prevent terrorist activity targeting Australian aviation interests at major airports. Operational activity related to public assurance, including traditional community policing outcomes, support this intent by providing a secure and stable environment to deter extremist and criminal elements.

Implementation of aviation security measures is primarily the responsibility of industry; however the AFP has a vital operational role in the deterrence, detection and prevention of an act of terrorism at major airports. The AFP also provides the first response to any incident requiring a law enforcement response. It is this partnership between the aviation industry and the AFP at major airports, and with jurisdictional Police Services at other airports ensuring a systemic approach to aviation law enforcement in Australia.

Conclusion


The Australian aviation security system must be flexible and adaptable to new and emerging threats while supporting passenger facilitation and industry growth. The Australian Government remains committed to a high quality aviation security system benchmarked against relevant international partners.

Australia will continue to work with ICAO, APEC and regional industry organisations in an effort to improve the current regime. The Government remains committed to an intelligence-led, risk-based and outcomes focused aviation security regime to ensure a safe and secure aviation system.

The Government seeks to improve security screening at airports to ensure it is focused on real security risks, consistently and efficiently applied, coherent for operators and the travelling public, and most of all to ensure the safety of passengers, aircraft, airports and staff. To achieve this, the Government proposes to:

- give priority to the implementation of accepted recommendations from the current Review of Aviation Security Screening;
- reform current passenger, carry-on and checked baggage screening arrangements to reflect international best practice;
- provide better information to the travelling public about screening processes;
- introduce new screening technologies and techniques where appropriate to improve passenger facilitation and security outcomes, with due regard to privacy;

³ The 11 CTRF airports are Adelaide, Alice Springs, Brisbane, Cairns, Canberra, Coolangatta, Darwin, Hobart, Melbourne, Perth and Sydney. These airports are equipped as major international gateway airports, although Alice Springs, Canberra and Hobart do not currently have regular scheduled international services.

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- implement improved performance measurement to ensure the aviation security outcome is being achieved efficiently and effectively across Australia;
 - in partnership with industry, develop better guidance for handling complaints, screening people with special needs, and other aspects of the screening process; and
 - reform the Prohibited Items regime within the *Aviation Transport Security Act 2004* to reflect international standards, while taking into account specific threats to Australia.

With reference to the findings of the 2005 review of Australian aviation security by the Rt Hon Sir John Wheeler DL the Australian Government proposes to:

- actively review aviation security legislation to ensure we maximise security and minimise bureaucracy;
- implement recommendations of the comprehensive ASIC review completed in 2008;
- address remaining vulnerabilities in the air cargo supply chain; and
- establish appropriate aviation security arrangements for the growing aviation charter industry in light of the current threat and risk environment and competition considerations.

In response to the evolving domestic and international aviation challenges and taking into account emerging risks and threats to Australian aviation interests the Government proposes to:

- ensure regulatory arrangements to trigger passenger screening address the nature and level of threats and remain competitively neutral;
- respond to the concerns of some remote and regional destinations by ensuring full cost impacts have been considered prior to implementing new aviation security arrangements;
- enhance security awareness and improve national consistency and performance in aviation security through the new National Aviation Security Training Program; and
- in collaboration with foreign Governments, establish a comprehensive airport assessment program for our region.