Processing and Risk Assessing Incoming International Air Passengers

Australian Customs and Border Protection Service

Canberra ACT
25 June 2012

Dear Mr President
Dear Mr Speaker

The Australian National Audit Office has undertaken an independent performance audit in the Australian Customs and Border Protection Service with the authority contained in the *Auditor-General Act 1997*. I present the report of this audit and the accompanying brochure to the Parliament. The report is titled *Processing and Risk Assessing Incoming International Air Passengers*.

Following its presentation and receipt, the report will be placed on the Australian National Audit Office's Homepage—http://www.anao.gov.au.

Yours sincerely

Ian McPhee
Auditor-General

The Honourable the President of the Senate
The Honourable the Speaker of the House of Representatives
Parliament House
Canberra ACT

AUDITING FOR AUSTRALIA

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Abbreviations

AFP	Australian Federal Police
APCP	Airport Planners Community of Practice
APT	Automated Profiling Tool
BAGS	Baggage Action General Statistics
CAPS	Customs and Border Protection Airport Planning System
CSCA	Country Signing Certificate Authority
DIAC	Department of Immigration and Citizenship
DSC	Document Signing Certificate
ECP	Entry Control Point
EPAC	Enhanced Passenger Assessment and Clearance
IAT	Integrated Analysis Tool
ICAO	International Civil Aviation Organization
IPC	Incoming Passenger Card
PACE	Passenger Analysis Clearance and Evaluation
PAU	Passenger Analysis Unit
PBS	Portfolio Budget Statements
PKI	Public Key Infrastructure
PNR	Passenger Name Record
PTM	Passenger Targeting Model

Summary and Recommendations

Summary

Introduction

1.   The Australian Customs and Border Protection Service (Customs and Border Protection) plays a primary role in preventing the illegal movement of people and harmful goods across Australia's borders. The agency is required to process passengers entering and departing Australia by air or sea, and identify persons of interest consistent with immigration, health, family law, law enforcement, revenue collection, community protection and national security requirements.

2.   Customs and Border Protection undertakes 'end-to-end' passenger and crew processing to support legitimate travel and the interventions needed to prevent the illegal movement of people and the goods they bring across the border. End-to-end processing for incoming passengers involves:

- pre-arrival risk assessments based on advance passenger data, information and intelligence to identify potential persons of interest;

- pre-arrival passenger information to support the passenger's 'positive entry and exit experience';

- interventions at the Entry Control Point (ECP)[1] for identity verification, legislative entry processing and to activate secondary assessment of persons of interest;

- assessment of passengers on arrival, including through detector dogs and real-time assessments and response by Customs and Border Protection officers; and

- secondary interventions for the further assessment of persons of interest, including through questioning, baggage examination and personal search by Customs and Border Protection and referrals to other agencies.[2]

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[1]   The Entry Control Point, also known as the primary line, is the point at which incoming passengers present their passport and incoming passenger card to a Customs and Border Protection officer, who conducts the primary immigration clearance function on behalf of the Department of Immigration and Citizenship.

[2]   Attorney-General's Portfolio Budget Statements 2011–12, p. 115.

3.   Customs and Border Protection's budget for Program 1.1: Passenger Facilitation in 2011–12 is $235.9 million, covering the inwards and outwards movements of air and sea passengers and crew.[3] The number of incoming international air passengers arriving at Australian airports grew from 11 314 569 in 2006–07 to 13 938 152 in 2010–11. Tourism Australia forecasts continuing growth in these numbers, to approximately 17 million incoming air passengers in 2014–15.

4.   Future increases in passenger numbers are acknowledged by the Government as a given factor. Accordingly, there is a Variable Funding Agreement in place between Customs and Border Protection and the Department of Finance and Deregulation, which allows for regular adjustments to the funding provided for passenger processing to deal with the increased workload.

5.   As set out in the 2011 Federal Budget, over the next four years, commencing in 2011–12, Customs and Border Protection will also realise savings from efficiencies in the primary processing function at airports totalling $34 million. Achieving these savings entails a reduction of 77 Full Time Equivalent staff (FTEs) in 2011–12, which is a reduction of approximately five per cent from 2010–11, and a further 10 FTEs over the subsequent three years.

Automated border clearance through SmartGate

6.   SmartGate is an automated border clearance system which gives eligible passengers and crew arriving into Australia's eight international airports[4] the option to self-process through passport control at the ECP. Eligible passengers are Australian and New Zealand nationals holding ePassports[5] who are over 16 years of age. Of the total number of air passenger arrivals in 2010–11, Australian and New Zealand passport holders made up 8.4 million, or 57.1 per cent.

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[3]   ibid., p. 115.

[4]   The eight international airports are Adelaide, Brisbane, Cairns, Darwin, Gold Coast, Melbourne, Perth and Sydney.

[5]   An ePassport is a machine readable passport containing a contactless Radio Frequency Identification microchip on which data is stored and protected by Public Key Infrastructure. Australian ePassports were first issued on 24 October 2005.

7.   SmartGate uses the electronic information in the ePassport and facial recognition technology to perform the Customs and Border Protection and Department of Immigration and Citizenship checks normally undertaken by a Customs and Border Protection officer at the manual ECP. The system was developed by Customs and Border Protection as a response to projected increased traveller numbers, and in recognition that this increase could not be managed by commensurate increases in manual ECPs due to space constraints at airports.

8.   In the 2005 Budget, $74.6 million was allocated to Customs and Border Protection over four years, under the *Development of Biometrics for Border Control* initiative, for the phased implementation of SmartGate. A Lapsing Program Review was conducted in 2008, and the SmartGate program was allocated ongoing operating funding in the 2009 Budget of $4.3–4.4 million annually out to 2012–13. Funding for SmartGate is partially offset by a biometric efficiency dividend, which returns savings to government from the efficiencies generated by automated processing.[6]

9.   SmartGate was implemented in stages. The first airport at which SmartGate was implemented was Brisbane, in August 2007. Implementation was completed with the roll-out of SmartGate at Darwin airport in May 2011.

Pre-arrival risk assessment

10.   The Government's 2010 Counter-Terrorism White Paper noted that the physical border is increasingly becoming a secondary layer for risk assessment and intervention. This means that checking and screening commences well before people, cargo, vessels and aircraft cross Australia's physical border. The White Paper stated that Australia's approach to border management is intelligence-led and risk-based, to ensure that interventions are focused on high-risk movements of people or goods, while low-risk movements are facilitated smoothly.[7] The guiding principles endorsed by the Government for border management include:

- working ahead of the border to identify and manage risks;

- focusing on intelligence; and

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[6]   Biometric efficiency dividend reductions are subtracted from funding increases provided to Customs and Border Protection for workload growth under the Variable Funding Agreement mentioned in paragraph 4.

[7]   Department of the Prime Minister and Cabinet, *Counter-Terrorism White Paper*, Canberra 2010, pp. 1–3.

- increasing the use of early intervention and screening, making processes at the border quicker and smoother.

11. Customs and Border Protection manages movements across the Australian border through a layered approach within the border continuum, where the border is divided into four components: overseas; the maritime zone; the physical border; and domestic pre-departure and post-arrival activities within Australia.[8] Customs and Border Protection's *Annual Plan 2011–12* lists strategies that map to the different layers in the border continuum. In the overseas layer, working ahead of the border involves analysing advance passenger information to identify high-risk passengers prior to arrival.[9]

12. During 2011–12, Customs and Border Protection progressed the implementation of two phases of an Enhanced Passenger Assessment and Clearance (EPAC) project. EPAC 1, which was completed in February 2012, aims to improve the management of alerts[10] through a new Alert Management System. EPAC 2, due to be completed in two stages in June and December 2012, will deliver enhanced capabilities to collect, store and analyse advance passenger information.

13. Concurrent with the implementation of EPAC 1 and 2, Customs and Border Protection is in the process of implementing a new Passenger Targeting Model (PTM) to improve the intelligence-led, risk-based layered approach to managing border risks, and to maximise the benefits of the new capabilities being delivered under the EPAC project. Customs and Border Protection also conducted a major internal review of traveller risk assessment in August-September 2011. These changes represent a major and complex program of business process transformation in Customs and Border Protection's approach to passenger risk assessment.

Primary and secondary interventions

14. At the border, Customs and Border Protection makes primary interventions at the ECP to verify identity, respond to risk assessments and

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[8]   Customs and Border Protection, *Annual Report 2010–11*, p. 3.

[9]   Customs and Border Protection, *Annual Plan 2011–12*, p. 6.

[10]   An alert is a flag against a traveller or travel document in Customs and Border Protection's Passenger Analysis Clearance and Evaluation (PACE) system indicating that the person or document has been identified as being of interest and may be subject to intervention.

activate secondary assessment of persons of interest. Customs and Border Protection also identifies persons of interest through the real-time risk assessment of passengers conducted by its officers in the airport, and through the deployment of detector dogs.

15. Secondary interventions at the border include questioning, baggage examination and search of persons of interest and related follow-on activities. These include formal interviews, and referrals within Customs and Border Protection and to other agencies such as the Australian Federal Police (AFP).

Audit objective, scope and criteria

16. The objective of the audit was to assess the effectiveness of Customs and Border Protection's risk-based management of end-to-end processing of incoming international air passengers in achieving border security and passenger facilitation outcomes.

17. This audit completes a planned program of audit work in passenger processing. A previous audit report, No. 10 2009–10 *Processing of Incoming International Air Passengers*[11], assessed Customs and Border Protection's manual processing of incoming international air passengers at the primary line. Consequently, the scope of the current audit was aligned to the three areas not covered previously: automated passenger processing through SmartGate; pre-arrival risk assessment; and secondary intervention outcomes.

18. The audit addressed whether:

- Customs and Border Protection's pre-arrival risk assessment effectively facilitates low-risk passenger movements and supports appropriate interventions for high-risk passenger movements;

- the SmartGate automated primary clearance facility is achieving its objectives of enabling Customs to process more travellers securely and simply; enhancing border security; and improving identity verification; and

- Customs and Border Protection effectively manages secondary examination interventions for passengers, including referrals to other agencies, on a risk basis.

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[11]   Australian National Audit Office, *Processing of Incoming International Air Passengers*, Audit Report No. 10, ANAO, Canberra, tabled on 16 November 2009.

Overall conclusion

19.   Customs and Border Protection is operating in a growing and increasingly complex passenger environment. It is also performing its passenger processing role within increasing resource constraints, reflecting Government decisions made in the 2011 Budget. A risk-based approach to identifying potential persons of interest among incoming passengers is essential to the efficient targeting of resources to appropriate interventions with high-risk passengers, while minimising interventions with low-risk passengers.

20.   Almost 14 million international passengers arrived at Australian airports in 2010–11. Customs and Border Protection screened 99 per cent of those passengers before their arrival against alerts for persons of interests within the Passenger Analysis Clearance and Evaluation (PACE) system database. Customs and Border Protection also conducts pre-arrival risk assessments of selected passengers through profiling and risk indicator analysis.

21.   Overall, the ANAO concluded that Customs and Border Protection is managing the clearance of incoming international air passengers effectively, in terms of meeting its 2011–12 performance target of clearing 92 per cent of passengers through the Entry Control Point within 30 minutes of their joining the inwards queue. However, Customs and Border Protection's risk-based approach to passenger clearance has structural weaknesses, gaps and overlaps. The gaps in pre-arrival risk assessment coverage reduce assurance that the identification of high risk passengers is being consistently achieved, and that low-risk passengers are not subject to unnecessary intervention. In addition, while the SmartGate automated border clearance facility works well and passenger usage is increasing, its potential contribution to passenger processing efficiency has not been realised and can be improved.

22.   In particular, pre-arrival risk assessment and the development and review of profiles are not guided by a risk prioritisation model. Selection of passengers for pre-arrival risk assessment may be based on data and/or resource availability, and some passengers are being risk assessed several times while others may not be subject to pre-arrival assessment. Limited performance information from operational outcomes means that the effectiveness and efficiency of Customs and Border Protection's pre-arrival risk assessment profiles cannot be accurately assessed. Customs and Border Protection is aware of the weaknesses in its current pre-arrival risk assessment

process and is in the process of addressing these through the analytical capabilities that will be provided by the Enhanced Passenger Assessment and Clearance project and the major organisational changes in progress under a new Passenger Targeting Model.

23. Automated border processing through SmartGate is assisting Customs and Border Protection to achieve its passenger facilitation target, but there is considerable room for improvement in exploiting the efficiencies available through SmartGate. Passenger clearances through SmartGate and savings through the biometric efficiency dividend, while increasing annually, are well below forecasts advised to government in 2009. In particular, the percentage of arriving passengers clearing through SmartGate slowly increased in 2010–11, but has accelerated in 2011–12.[12] Management of SmartGate has been the responsibility of individual airports, with variable results in terms of encouraging and achieving passenger usage. A national strategy for SmartGate, drawing on the effective practices adopted by the better performing airports, and setting out targets for passenger clearance, would assist Customs and Border Protection to improve SmartGate's performance.

24. The ANAO has made three recommendations directed towards improving Customs and Border Protection's management of incoming international air passenger processing and risk assessment.

Key findings

Incoming passenger processing

25. The key performance indicator (KPI) for Customs and Border Protection's Passenger Facilitation program objective set out in the 2011–12 Portfolio Budget Statements (PBS) is the percentage of passengers processed within 30 minutes of joining the inwards queue. This is referred to operationally as the facilitation rate. In 2010–11, the performance standard for this KPI was 95 per cent of passengers processed within 30 minutes. As part of the efficiency measure in the 2011 Budget, and in recognition of the likely impact of reduced staffing numbers on passenger processing operations, the Government agreed that the facilitation rate for 2011–12 would be 92 per cent.

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[12] The trend in the SmartGate clearance rate is shown in Figure S1. The clearance rate stood at 46 per cent of eligible passengers in March 2012, compared with 37 per cent in June 2011.

26.   Customs and Border Protection has consistently achieved its passenger facilitation rate performance target. It has also implemented broadly nationally consistent planning systems and processes, particularly the Customs and Border Protection Airport Planning System (CAPS) tool, which enable the effective management of resources while also balancing risk and workload. Governance arrangements supporting passenger facilitation and recent initiatives are improving communication between the international airports and central office and this is a positive development. Customs and Border Protection's Passenger Facilitation program performs well in terms of the PBS target and is underpinned by sound planning processes and governance structures.

SmartGate performance

27.   The objectives for SmartGate agreed by the Government in 2005 were to ensure:

•   more efficient processing of increasing passenger numbers; and

•   secure identity verification that will improve border protection.

28.   Customs and Border Protection implemented SmartGate effectively between 2007 and 2010. SmartGate is being used by an increasing number of arriving passengers, and very high satisfaction rates continue to be recorded by passengers in monthly surveys.

29.   In 2010–11, 1.81 million passengers successfully used SmartGate. However, this figure is well below the 4.16 million passengers forecast for 2010–11 in estimates provided to government when the SmartGate program was renewed in the 2009 Budget. Annual funding reductions through the biometric efficiency dividend are a function of SmartGate usage and are therefore similarly well behind forecasted returns—$2.67 million returned in 2010–11 against the 2009 forecast for 2010–11 of $6.12 million.

30.   The trend in the national SmartGate clearance rate is shown in Figure S1. The rate increased only marginally in 2010–11, from 33 per cent of eligible arriving passengers clearing SmartGate in July 2010 to 37 per cent in June 2011. This coincided with a period when Customs and Border Protection's Executive was receiving incorrect SmartGate performance information, which overstated the clearance rate by up to 25 per cent. In 2011–12, the improvement in the clearance rate has accelerated, reaching 46 per cent in March 2012. The two largest volume airports—Sydney and Melbourne—were among the poorest performers in 2010–11 but are now part of the improving trend.

Figure S 1

SmartGate national clearance rate
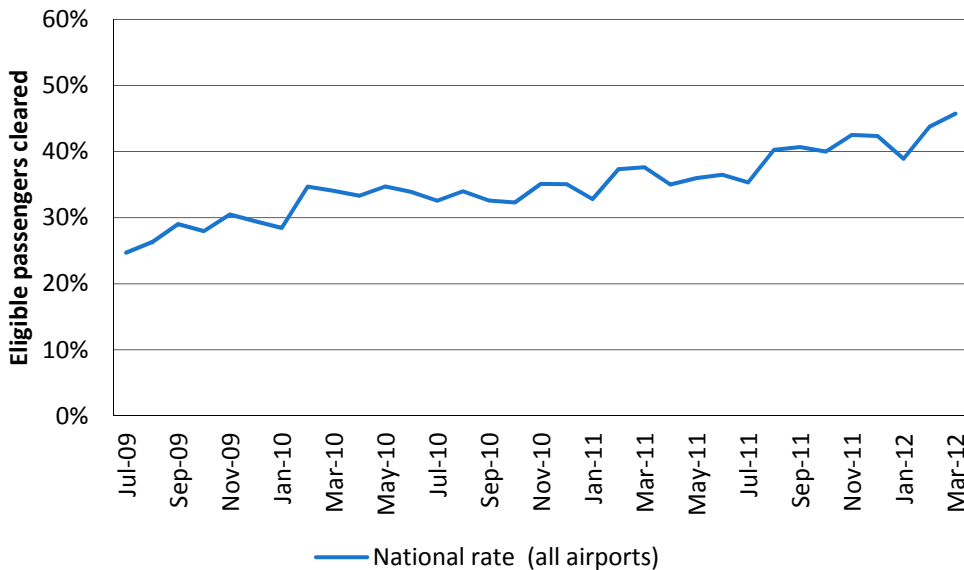
Source: Customs and Border Protection

31.   With regard to the objective of improving border protection through secure identity verification, achievement of this objective is not able to be assessed. SmartGate introduced a technically superior process for identity verification than was available at the manual ECP, but the introduction of new ePassport readers at the ECP during 2011–12 has removed this gap for ePassport authentication and narrowed it for facial recognition. No data is available to assess either SmartGate's facial recognition performance compared with the manual ECPs, or its contribution in detecting fraudulent passports.[13]

Improving SmartGate

32.   The implementation phase of SmartGate concluded in July 2010, and SmartGate was placed on a business-as-usual footing consistent with normal corporate management practice. However, SmartGate has since lacked national direction in improving passenger clearance performance. Management of SmartGate has largely been the responsibility of individual airports. There has

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[13]   A parallel performance audit of the Department of Foreign Affairs and Trade's management of ePassports addresses issues of ePassport security. See ANAO Report No.33 2011–12, *Management of ePassports*, tabled on 22 May 2012.

been no overall clearance rate target and no documented national strategy or plan for achieving SmartGate's objectives. Customs and Border Protection advised the ANAO in March 2012 that a high-level SmartGate strategy has been drafted and would be finalised by mid-2012. Performance targets for SmartGate presentation and clearance rates have been included in the Portfolio Budget Statements for 2012–13.

33. The willingness of incoming passengers to use SmartGate, and their ability to do so correctly, is influenced by a range of behavioural and environmental factors, particularly educational information, signage, wayfinding and marshalling. Individual airports have primary responsibility for SmartGate and this has led to a variety of treatments and approaches to signage, wayfinding and marshalling across the airports. There are examples of individual airport practices and strategies positively influencing SmartGate presentation and clearance rates. It would be beneficial for Customs and Border Protection to identify and promulgate such practices nationally.

34. There is a gap between the rates of SmartGate presentation and clearance, sitting consistently at around eight percentage points. The difference in the rates represents those passengers who present to SmartGate but are 'rejected' and referred to the manual ECP. Reducing the number of unnecessary referrals converts directly into increased clearances. Over half these referrals are caused by face recognition failure, of which a significant proportion are false failures. Many of these are caused by the way passengers present themselves to the cameras at the SmartGate. The presence of a Customs and Border Protection marshal at the gate has been demonstrated to reduce these instances. In addition, the face matching threshold score set in SmartGate can be lowered to be more tolerant of these behavioural factors. However, lowering the threshold also increases the risk that a passenger who is not the person on the ePassport presented will be falsely accepted. Customs and Border Protection testing indicates that marginally lowering the matching threshold can potentially reduce the false failure rate by 25 per cent, without significantly increasing the rate of false acceptance. There would therefore be merit in Customs and Border Protection considering this option, balanced against the relevant risks involved.

35. Referrals are also caused by system errors and anomalies. Quickly identifying and correcting these is essential to ensuring that their impact on the referral rate and on passenger confidence in SmartGate is minimised. There are instances where this has not happened. SmartGate does not produce regular exception reporting to highlight system errors and anomalies, and there would

be benefit in Customs and Border Protection enhancing its monitoring and diagnostic tools to improve early identification of errors and anomalies in SmartGate data.

Pre-arrival risk assessment of passengers

36. Customs and Border Protection's pre-arrival risk assessment capabilities and activities are currently distributed at the national and local airport level. Nationally, the primary capability resides in the Passenger Analysis Unit (PAU), which analyses advance passenger information to identify persons of interest and generate alerts to trigger appropriate interventions with such persons when they arrive. Locally, Passenger Operations at each airport have the ability to generate intelligence-based profiles using an Automated Profiling Tool (APT), and incoming passenger details are automatically matched against these profiles and evaluated to generate alerts. Customs and Border Protection's current approach to pre-arrival risk assessment embodies a number of structural weaknesses that detract from a risk-based approach.

37. The PAU possesses the strongest risk analysis capability, drawing on its access to Passenger Name Record data, and assesses approximately 45 per cent of incoming passengers. Passengers are also screened against a range of APT profiles targeting particular risk factors, but matches from APT profiles are not usually evaluated in depth. There is no national policy or guidance framework for APT profile creation or pre-flight screening conducted by airport operations. Coverage and quality of this activity varies between airports. At the time the audit was undertaken, airport operations areas lacked the capacity to develop high quality profiles on a consistent basis and to conduct more than cursory profile match evaluation. These functions are in the process of being transferred to the PAU, under the Passenger Targeting Model (PTM).

38. The risk basis of the pre-arrival assessment of passengers is affected by capability limitations. The PAU makes assessment decisions based on the risk of a flight, meaning that a high-risk passenger on a low-risk flight may not be assessed. Other risk assessments, including through pre-flight screening, are influenced by resource availability. There is duplication between the various levels of risk assessment activity—the same passenger may be assessed several times.

39. Furthermore, there is no risk-based priority model to guide the allocation of pre-arrival risk assessment resources and the development and

review of profiles. Illicit drugs, as the highest of the ten border risks, is well covered by profiles, but other border risks receive less coverage. This means that there is a lack of assurance that Customs and Border Protection's risk assessment efforts are aligned to its risk framework or are directed to the right risks.

40.   Performance information for pre-arrival risk assessment is extremely limited. There are gaps in Customs and Border Protection's ability to link actual operational outcomes to the pre-arrival assessment products that triggered the relevant passenger intervention. Accordingly, it is difficult to assess the effectiveness and efficiency of Customs and Border Protection's pre-arrival risk functions as a whole, and to evaluate the effectiveness of particular profiles. This reduces assurance that the identification of high-risk passengers through pre-arrival risk assessment is being consistently achieved, and that low-risk passengers are not subject to unnecessary intervention.

Improving passenger risk assessment

41.   Customs and Border Protection recognised in 2010 the need for a new approach to passenger targeting to address the gaps in its risk-based passenger assessment activities, and to better exploit the potential benefits from the additional capabilities being delivered in phases 1 and 2 of the EPAC project. Progress in the first half of 2011 in implementing the PTM was slow. The Review of Traveller Risk Assessment, commissioned by the CEO in August 2011, gave prominence to the key gaps and challenges, and prompted immediate organisational and functional changes. Some of those changes created new intra-agency boundaries, and Customs and Border Protection needs to take care that governance arrangements under the PTM provide for necessary cooperation across those boundaries.

42.   The implementation of the recommendations of the Review of Traveller Risk Assessment, the completion of EPAC 2 and the PTM are in progress. Assessing that progress was beyond the scope of the audit. However, in order to deliver improved passenger risk assessment through those change processes, priority should be given to:

- improving performance measurement of passenger risk assessment activities;

- better prioritisation of effort according to risk through the proposed Risk Priority Model; and

- developing appropriate internal governance structures to provide for cooperation across intra-agency boundaries.

Secondary intervention outcomes

43. A functioning feedback loop into the risk assessment process from secondary intervention outcomes is critical to ensuring that:

- risk indicators, and the risk analysis that they support, are accurate and relevant; and

- profiles are effectively and efficiently targeting risk.

44. Reporting of secondary intervention outcomes is available through Customs and Border Protection's Baggage Action General Statistics (BAGS) system, which records all secondary examination activity relating to incoming and outgoing travellers. The BAGS system is Customs and Border Protection's only universal and systematic capability producing data on intervention outcomes. It is the source of statistics on detection outcomes, by airport and by selection type, that are included in high-level internal management information reports.

45. The BAGS system is unable to link detection outcomes with the pre-arrival risk assessments that triggered the relevant passenger intervention. This means that existing performance reports on pre-arrival risk assessment, drawing on BAGS data, have very little qualitative content and do not provide a reliable basis for assessing the effectiveness of Customs and Border protection's pre-arrival risk assessment activity.

46. The ANAO, in conjunction with Customs and Border Protection, tested and showed the potential of cross-database data analysis to produce more reliable data on detection outcomes from pre-arrival risk assessment effort. This analysis required substantial manual effort to extract and query data, and will therefore require further cost-benefit consideration, but it potentially provides Customs and Border Protection with a stronger basis for assessing the performance of individual APT profiles.

47. Customs and Border Protection and the AFP have closely intersecting roles at Australia's international airports. The relationship between the two agencies at airports is sound and effective. Both agencies, at airports and central offices, gave consistent and positive feedback to the ANAO about their relationship. The only significant issue observed was the AFP's acceptance of referrals of suspected internal drug couriers, which requires the AFP to accept

Customs and Border Protection grounds for suspicion in such cases. In 2010–11, the AFP declined 27 per cent of such referrals. The 'transfer of suspicion' issue is being actively managed by Customs and Border Protection and the AFP. In the longer term, the potential introduction of body scanners, currently being trialled, and the resultant provision of objective evidence is likely to improve this process.

Summary of agency responses

48. A copy of the proposed report was provided to Customs and Border Protection for formal comment. Relevant extracts of the proposed report were also provided to the AFP for formal comment. Customs and Border Protection provided the following summary response:

> Customs and Border Protection welcomes the ANAO's report on 'Processing and Risk Assessing Incoming International Air Passengers'.

> Australia was one of the first countries to implement an automated border management system, using the security features and biometric information inherent in the ePassport. The report acknowledges that Customs and Border Protection implemented SmartGate effectively, and it is now being used by an increasing number of arriving passengers, with very high levels of satisfaction. Customs and Border Protection agrees with the ANAO's recommendations that SmartGate presentation and clearance rates can be improved. New targets have been included in the 2012–13 Portfolio Budget Statements for SmartGate presentation and clearance rates. Improvements to SmartGate reporting are being implemented, and a strategic plan for SmartGate is under development. Customs and Border Protection received $7.9m funding through the 2012–13 Budget to increase SmartGate capacity, which will assist in achieving higher presentation targets.

> Customs and Border Protection continues to focus significant effort on improving its intelligence led, risk based approach to border protection and welcomes ANAO's confirmation that the direction currently being taken to improve the pre-arrival risk assessment process will address weaknesses in the current approach. Customs and Border Protection agrees with the priority areas identified in the recommendation and is ensuring that these receive significant focus during the change process.

49. The AFP provided the following summary response:

> The draft report extract provides a positive picture of the AFP and the ACBPS. It contains no recommendations for changes to how the AFP conducts its operations. The AFP notes that two issues were highlighted as being of

concern by both the AFP and ACPBS—presumptive drug testing and referral of internal couriers.

We note that in relation to presumptive drug testing, ACPBS has commissioned an independent review of its presumptive drug testing processes and procedures and has undertaken remedial action. The AFP has no comment regarding the current presumptive testing regime.

Paragraph 7.39 notes that the number of referrals is decreasing over time (342 in 2008–09 to 140 in 2010–11), but the proportion of referrals declined by the AFP has been roughly consistent (Figure 7.3). The AFP notes that without an increase in technical detection capability, the current trend in terms of AFP acceptance of referrals will continue.

In relation to referral of internal couriers (paragraph 7.40), the AFP is supportive of attempts to increase accountability for referral decisions and to clarify reasons for decisions by ACPBS. The AFP supports the provision of more joint information sessions so staff, particularly those new to the Aviation environment from both organisations, have a contemporary understanding of this issue. It is hoped through these training sessions the AFP's reasons behind rejecting referrals will be better understood.

Recommendations

Recommendation No. 1

Para 3.72

To guide and invigorate a coordinated national approach to improving SmartGate's presentation and clearance rates, the ANAO recommends that Customs and Border Protection:

- develop a strategic plan for SmartGate, containing clear objectives, priorities, strategies and performance targets; and

- identify, and promulgate nationally as appropriate, better practices for SmartGate.

Customs and Border Protection response: *Agreed.*

Recommendation No. 2

Para 4.47

To better identify and reduce the impact of system process errors on SmartGate clearances and referrals, the ANAO recommends that Customs and Border Protection enhance its monitoring and diagnostic tools for identifying exceptions and anomalies in SmartGate data.

Customs and Border Protection response: *Agreed.*

Recommendation No. 3

Para 6.38

To improve assurance that passenger risk assessment is achieving effective border security outcomes, the ANAO recommends that Customs and Border Protection gives priority, in implementing the Passenger Targeting Model, to:

- developing stronger systems for performance reporting and measurement of the effectiveness of its pre-arrival risk assessment activities;

- better prioritising the allocation of passenger risk assessment and intervention resources through a risk priority model; and

- reviewing the internal governance arrangements to provide for appropriate coverage of national and local interests.

Customs and Border Protection response: *Agreed.*

Audit Findings

1. Background and Context

This chapter provides an overview of key border management principles and the passenger processing environment. It also summarises relevant previous audit coverage, outlines the audit objective and criteria and describes how the ANAO undertook the audit.

Introduction

1.1 Customs and Border Protection has a multi-faceted role at the border. It is responsible for the protection of the safety, security and commercial interests of Australians through border protection designed to support legitimate trade and travel, and to ensure collection of border-related revenue and trade statistics. Customs and Border Protection works with other border agencies to process passengers at each point of interaction.[14]

1.2 The Australian Government's National Security Statement in December 2008 identified border security as a national security issue. Subsequently, the border management agencies, led by Customs and Border Protection, collaborated to develop strategic border management planning. The guiding principles for border management include:

- working ahead of the border to identify and manage risks;

- focusing on intelligence;

- increasing the use of early intervention and screening, making processes at the border quicker and smoother; and

- taking a flexible, scalable and integrated approach to intervention.

1.3 Movements across the Australian border are managed through a layered approach within the border continuum, where the border is divided into four components: overseas; the maritime zone; the physical border; and domestic pre-departure and post-arrival activities within Australia.[15]

1.4 The 2010 Counter-Terrorism White Paper noted that the physical border is increasingly becoming a secondary layer for risk assessment and intervention, meaning that checking and screening commences well before

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[14] Attorney-General's Portfolio Budget Statements 2011–12, p. 105.

[15] Customs and Border Protection, *Annual Report 2010–11*, p. 3.

people, cargo, vessels and aircraft cross Australia's physical border. The White Paper stated that Australia's approach to border management is intelligence-led and risk-based, to ensure that interventions are focused on high-risk movements of people or goods, while low-risk movements are facilitated smoothly.[16]

1.5 These principles and approach are reflected in Customs and Border Protection's corporate documents, particularly its *Annual Plan 2011–12*, its Annual Reports and its forward-looking planning framework document for passenger processing, *Enhanced Passenger and Crew Processing Response 2015*.[17] The strategies contained in the *Annual Plan 2011–12* map to the different layers in the border continuum. In the overseas layer, working ahead of the border involves analysing advance passenger information to identify high-risk passengers prior to arrival.

1.6 The different stages of passenger arrival and clearance are illustrated in Figure 1.1. At the border, Customs and Border Protection makes primary interventions at the Entry Control Point (ECP, also known as the primary line) to verify identity, respond to risk assessments and activate secondary assessments of persons of interest. Customs and Border Protection also identifies persons of interest through the real-time risk assessment of passengers conducted by its officers in the airport, and through the deployment of detector dogs.

1.7 Secondary interventions at the border include questioning, baggage examination and searching of persons of interest and related follow-on activities, including formal interviews, and referrals within Customs and Border Protection and to other agencies such as the Australian Federal Police (AFP).[18]

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[16]   Department of the Prime Minister and Cabinet, *Counter-Terrorism White Paper*, Canberra 2010, pp. 1–3.

[17]   This document was published in October 2009 as a response to the Customs and Border Protection *Strategic Outlook 2015* for the end-to-end passenger and crew processing environment.

[18]   Customs and Border Protection, *Annual Plan 2011–12*, p. 12.

Figure 1.1

Processing of Inbound International Air Passengers
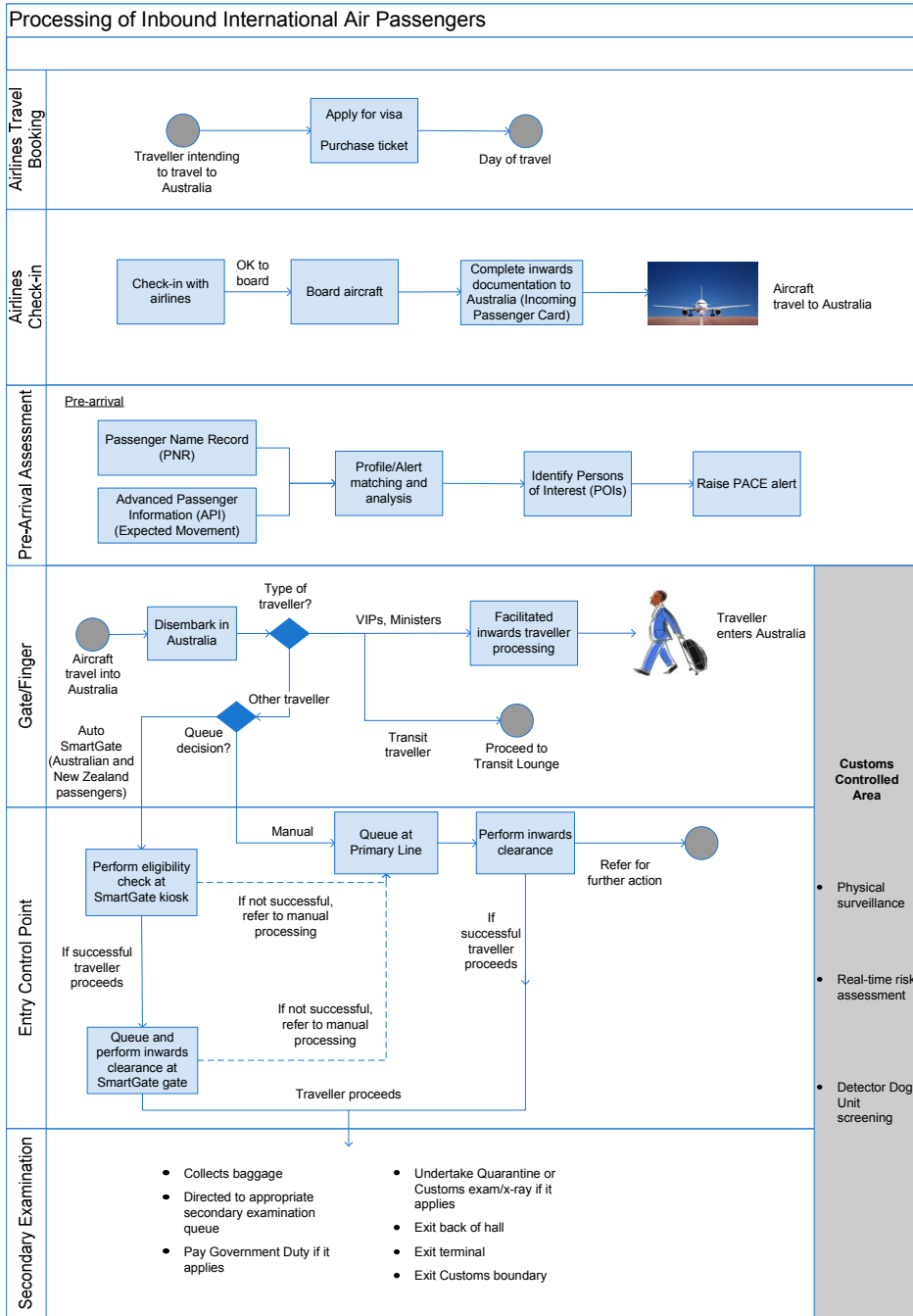
Source: ANAO from Customs and Border Protection documentation.

The passenger processing environment

1.8   Customs and Border Protection is operating in an environment of growth in both passengers and goods. The volume of transactions at the border is likely to increase significantly in the coming years, with international passenger movements projected to grow from around 28 million in 2010–2011 to 40 million by 2020.[19] In terms of incoming passenger movements, in 2006–07 there were 11 314 569 international air passengers arriving at Australian airports; during 2010–11 that figure had grown to 13 938 152 passengers (Figure 1.2). Maintaining agreed performance standards for passenger processing in this environment will require increases in port infrastructure capacity and the passenger processing capacity of Customs and Border Protection and other border management agencies.

Figure 1.2

Growth in international incoming passengers

Number of incoming international air passengers only - historical data

Number of incoming international air and sea passengers - Tourism Australia forecast
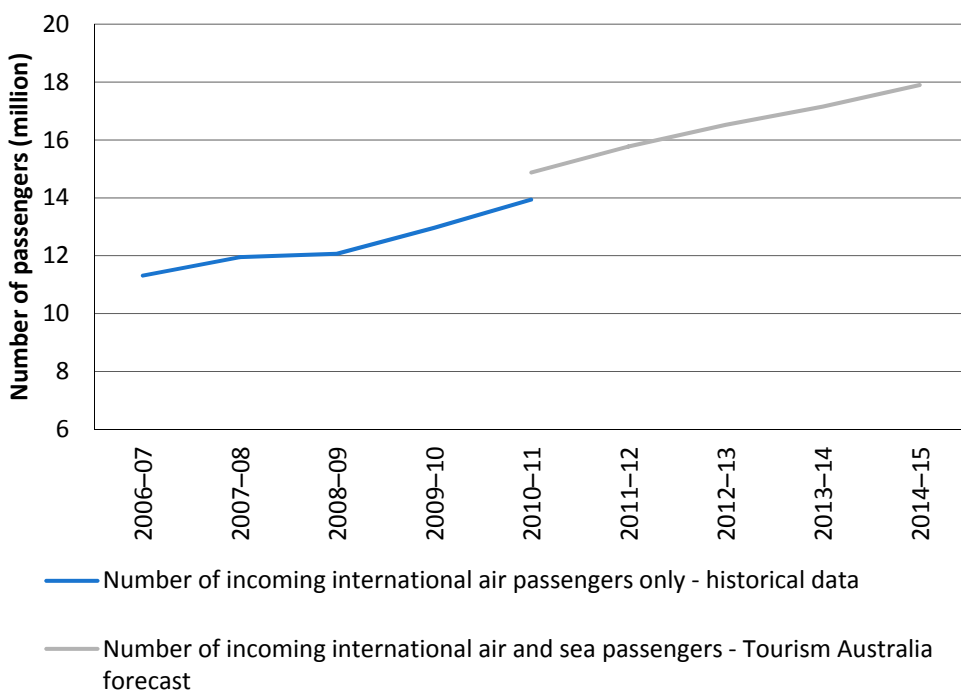
Source: ANAO analysis from Customs and Border Protection data.

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[19]   Customs and Border Protection, *Annual Report 2010–11*, p. xi.

1.9 An important strategy for efficiently processing increasing passenger numbers is the SmartGate automated border clearance system. SmartGate was installed progressively at Australia's international airports between 2007 and 2011, and gives eligible passengers[20] and crew arriving into Australia's international airports the option to self-process through passport control at the ECP. SmartGate uses the electronic information in the ePassport and facial recognition technology to perform the Customs and Border Protection and Department of Immigration and Citizenship checks normally undertaken by a Customs and Border Protection officer at the manual ECP.

1.10 Eligibility for SmartGate is currently restricted to Australian and New Zealand passport holders over 16 years of age. Australian and New Zealand passport holders made up 8.4 million, or 57.1 per cent, of incoming passengers and crew in 2010–11. Of these arrivals, 1.81 million cleared SmartGate. The extension of SmartGate eligibility to other nationalities was part of the original planning for SmartGate's implementation, but has not yet occurred.

1.11 In addition to the challenge of managing increasing passenger numbers, the air travel environment has become more complex with the growth in low-cost carriers.[21] There are several issues associated with low-cost carriers, which impact upon Customs and Border Protection's passenger processing operations, including that low-cost carriers:

- tend not to give much warning in regard to changes in their flight schedules, which can affect Customs and Border Protection's planning and resource allocation;

- do not always make their Passenger Name Record (PNR) data available to Customs and Border Protection, which inhibits pre-arrival risk assessment;

- do not always provide accurate information about the number of passengers on a given flight—there can be a 10–20 per cent variation on the figure given;

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[20] Eligible passengers are Australian and New Zealand holders of ePassports over 16 years of age.

[21] Low-cost carriers offer lower fares by eliminating some traditional passenger services. As noted in the National Passenger Facilitation Committee's Strategic Outlook (July 2009), the low-cost carrier typically has a single passenger class, unreserved seating, reduced checked baggage allowance, flights operating to secondary airports and during off peak periods and an emphasis on direct sales (primarily via the internet).

- may not hand out Incoming Passenger Cards (IPCs) to passengers during the flight, delaying the processing of passengers, as it takes time for people to realise that they need to find the IPCs and fill them out;

- may not provide airline representatives at the airport, meaning that it can be hard for Customs and Border Protection to get updated flight information and that passengers direct inquiries and requests for assistance to Customs and Border Protection officers.

Perth and Gold Coast airports have been particularly affected by the growth in low-cost carriers, but most airports have experienced the above issues.

1.12 Another complicating factor has been the increasing number of code-share agreements between airlines. Code-sharing allows for flights operated by one carrier, which offers the flight for sale under its own code and associated flight number, to be marketed by another carrier under its own, different code and flight number. This can create anomalies in the recording of passenger movement data in Customs and Border Protection's IT systems.

Previous ANAO coverage

1.13 In November 2009, ANAO Audit Report No. 10 2009–10, *Processing of Incoming International Air Passengers*, was tabled.[22] The objective of the audit was to assess Customs and Border Protection's manual processing of incoming international air passengers at the primary line. In particular, the audit assessed the extent to which:

(a) systems and controls effectively support the referral of incoming air passengers who pose a risk and those carrying prohibited items;

(b) air passengers presenting an immigration risk are processed appropriately; and

(c) Customs and Border Protection has arrangements in place to effectively promote co-operation and information sharing between Customs and Border Protection and the Department of Immigration and Citizenship.

The audit recommendations and Customs and Border Protection's response are summarised in Table 1.1.

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[22] Australian National Audit Office, *Processing of Incoming International Air Passengers*, Audit Report No. 10, ANAO, Canberra, tabled on 16 November 2009.

Table 1.1

Implementation of recommendations from ANAO report: *Processing of Incoming International Air Passengers*

Recommendation number	Subject	Customs and Border Protection's response (2009)	Customs and Border Protection's reported progress (2011)
1	Improve assurance, measuring and reporting of functions performed by officers in the primary line.	Agreed with qualification	In progress, using new Primary Line Activity Guidelines and Assessment Tools (pilot in November 2011)
2	Review and update the Passengers Division's disaster recovery plan.	Agreed	Implemented
3	Review and tighten IT incident response processes for the primary line functions.	Agreed	Implemented
4	Update, monitor and report against the KPIs in the MOU with DIAC for the Provision of Clearance Services	Agreed	Implemented

Source: Audit Report No. 10 2009–10, *Processing of Incoming International Air Passengers*, and Customs and Border Protection Audit Committee, 5 December 2011.

Audit objective, criteria and methodology

1.14   The objective of the audit was to assess the effectiveness of Customs and Border Protection's risk-based management of end-to-end processing of incoming international air passengers in achieving border security and passenger facilitation outcomes. The audit addressed whether:

- Customs and Border Protection's pre-arrival risk assessment effectively facilitates low-risk passenger movements and supports appropriate interventions for high-risk passenger movements;

- the SmartGate automated primary clearance facility is achieving its objectives of enabling Customs to process more travellers securely and simply; enhancing border security; and improving identity verification; and

- Customs and Border Protection effectively manages secondary examination interventions for passengers, including referrals to other agencies, on a risk basis.

1.15 This audit completes a planned program of audit work in passenger processing. The scope of the current audit was aligned to the three areas not covered in ANAO Report No. 10 2009–10, *Processing of Incoming International Air Passengers*: automated passenger processing through SmartGate; pre-arrival risk assessment; and secondary intervention outcomes. The audit includes a case-study of secondary intervention outcomes through an examination of Customs and Border Protection's referral relationship with the AFP.

Audit methodology

1.16 The audit team undertook fieldwork within Customs and Border Protection's national office and at six of the eight international airports: Adelaide, Brisbane, Gold Coast, Melbourne, Perth and Sydney. The audit methodology included:

- interviews with Customs and Border Protection staff in Canberra and at the international airports visited;

- observation of passenger processing operations, including SmartGate and secondary examinations, at the international airports visited;

- examination and review of Customs and Border Protection files;

- definition, capture and analysis of data from SmartGate and from the key IT systems supporting passenger processing; and

- interviews with AFP staff in Canberra and at the international airports visited.

The audit was conducted in accordance with the ANAO auditing standards at a cost of $381 000.

Report structure

In addition to this introductory chapter, the report includes six chapters as outlined in Table 1.2.

Table 1.2

Report structure

Chapter One **Background and Context**	Introduction The passenger processing environment Previous audit coverage Audit objective, criteria and methodology Overall conclusion Key findings Summary of agency response
Chapter Two **Incoming Passenger Processing**	Introduction Governance arrangements Operational planning Program performance Conclusion
Chapter Three **SmartGate's Performance**	Introduction SmartGate's objectives SmartGate performance in identity verification SmartGate performance in efficiently processing increasing passenger numbers SmartGate's strategic direction Conclusion
Chapter Four **Improving SmartGate**	Introduction Encouraging SmartGate usage Managing the SmartGate referral rate Conclusion
Chapter Five **Pre-arrival Risk Assessment of Passengers**	Introduction How alerts work Passenger Analysis Unit Airport Operation pre-arrival profiling and assessment Conclusion
Chapter Six **Improving Passenger Risk Assessment**	The Passenger Targeting Model Review of Traveller Risk Assessment Key areas of focus for business improvement Conclusion
Chapter Seven **Secondary Intervention Outcomes**	Introduction Performance reporting of intervention outcomes Referral arrangements with the Australian Federal Police State of the Customs and Border Protection–AFP relationship Conclusion

2. Incoming Passenger Processing

This chapter describes the passenger clearance process and assesses Customs and Border Protection's governance and operational planning arrangements for incoming passenger processing, and whether the agency is meeting performance standards.

Introduction

2.1 Customs and Border Protection has one outcome: the protection of the safety, security and commercial interests of Australians through border protection designed to support legitimate trade and travel and ensure collection of border revenue and trade statistics.

2.2 Within this outcome, which is set out in the Portfolio Budget Statements, there are five programs. Program 1.1 relates to passenger facilitation and its objective is:

> End-to-end passenger and crew processing that supports legitimate travel and the interventions needed to prevent illegal movement of people and the goods they bring across the border.[23]

2.3 In 2011–12, Program 1.1: Passenger Facilitation has two key performance indicators (KPIs). The first is the percentage of passengers processed within 30 minutes of joining the inwards queue. The second is the number of arriving international air passenger referrals to the Department of Immigration and Citizenship (DIAC) and the Department of Health and Ageing. There is no performance target for the second KPI—actual results are given in Customs and Border Protection's Annual Report. The audit did not examine the referrals covered by this KPI.[24]

Passenger clearance process

2.4 Airline reservation data is received by Customs and Border Protection 72 hours prior to the scheduled arrival of a passenger in Australia. Once a passenger checks in with the airline, Customs and Border Protection receives initial traveller data (additional Passenger Name Record (PNR) and Advance

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[23] Attorney-General's Portfolio Budget Statements 2011–12, p. 114.

[24] For 2012–13, four additional KPIs for Program 1.1 have been included in the Portfolio Budget Statements. Three of these relate to presentation and clearance targets for SmartGate and one to traveller satisfaction with primary line services. See Attorney-General's Portfolio Budget Statements 2012–13, p. 113.

Passenger Processing (APP) data), and uses these data for screening and risk analysis, assisted by profiling, to identify persons of interest. This process continues once the passenger has boarded the flight and is in transit to Australia. Passengers identified as a person of interest may become the subject of an alert, which is triggered on their arrival.

2.5   On arrival, Customs and Border Protection undertakes the primary clearance function on behalf of DIAC. This involves checking compliance of travel documentation and providing immigration clearance, or referring certain travellers to DIAC. If an alert is triggered, Customs and Border Protection will confirm that the alert matches the passenger and may initiate intervention actions in response. There may also be referrals to the Department of Health and Ageing. Passengers have two options in proceeding through primary clearance: the manual Entry Control Point (ECP), where a Customs and Border Protection officer processes passengers, or automatic processing through SmartGate, for those who are Australian or New Zealand ePassport holders aged over 16. SmartGate is examined in detail in Chapters 3 and 4.

2.6   After passing through the manual ECP or SmartGate, the passenger enters the baggage hall to collect their bags. They are then funnelled to a secondary marshalling point, where a marshal confirms that the passenger has undergone primary clearance and directs passengers to Customs and Border Protection or the Australian Quarantine and Inspection Service for further assessment if necessary. Further assessment may involve a variety of secondary interventions, such as questioning, baggage examination and searches. The marshal also collects and checks the passenger's Incoming Passenger Card (IPC) at this point. Following this, the passenger exits the examination hall and leaves the Customs and Border Protection controlled area.

2.7   The Customs and Border Protection controlled area encompasses the gate lounges and concourses, the arrivals and baggage halls either side of the ECP, and the secondary examination area. Customs and Border Protection can conduct physical surveillance, interventions based on real-time risk assessment, and Detector Dog Unit screening at any point within this area.

Governance arrangements

2.8   The key governance body within Customs and Border Protection dedicated to the oversight of passenger processing operations comprises the executive members of the Passengers Division, who meet monthly under the

title of the Passengers Executive. Chaired at Division Head level by the National Director Passengers, the Passengers Executive includes in its membership the National Manager Airport Operations North, National Manager Airport Operations South[25] and National Manager Passenger Policy and Practice.

2.9 A Passenger and Crew Processing Projects Steering Committee (the Steering Committee), also chaired by the National Director Passengers, meets monthly to focus on the progress of specific projects. It includes in its membership key internal stakeholders in passenger processing, including the National Directors of Intelligence and Targeting, Enforcement and Investigations and Strategy, Risk and Coordination, and the Chief Financial Officer. The Steering Committee is supported by a Passenger and Crew Processing Projects Expert Reference Group, which also meets monthly. It reports as a standing item on the agenda of the Steering Committee and its minutes are also reported as an agenda item.

2.10 The Steering Committee reports to Customs and Border Protection's Operations Committee, which comprises the two Deputy CEOs and all National Directors and the Chief Financial Officer. The Operations Committee meets monthly, with standing agenda items for each program element, including passenger facilitation.

2.11 These Canberra-based committees provide an appropriate central structure and hierarchy for consideration and decision on policy and operational issues affecting passenger processing.

2.12 Coordination of passenger processing issues nationally is provided through inclusion of the National Managers Airport Operations North and South in the regular meetings of the Passengers Executive. The Passengers Division's leadership group, which includes the National Director, all National Managers, Directors and Airport Heads, meets biannually to discuss strategic priorities and emerging issues from an operational perspective. The National Managers of Airport Operations North and South meet annually at an Airport Operations Conference with their individual airport management teams to focus on strategic priorities and emerging issues.

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[25] The National Manager Airport Operations North is based at Sydney airport and is responsible for Sydney, Brisbane, Gold Coast, Darwin and Cairns airports. The National Manager Airport Operations South is based at Melbourne airport and is responsible for Melbourne, Adelaide and Perth airports.

2.13   The National Managers North and South are each supported by an experienced Director of Strategy and Support, who provides a conduit between the National Managers and the passenger operations managers at the airports under their supervision. The two National Managers are in regular contact and cooperate to produce a detailed 'Airport Operations Effectiveness Strategy' report. The report is an annual review of operational effectiveness at the eight international airports, and has been produced since 2006–07. The report highlights key issues identified through the analysis of data relating to Customs and Border Protection activities at the international airports and makes recommendations for action where appropriate.

2.14   Traditionally, airport managers would see their airports as unique operational environments requiring local approaches and solutions. Increasingly, however, Customs and Border Protection has encouraged a more national perspective through the 'Airport Operations Effectiveness Strategy', the common use of tools like the Customs and Border Protection Airport Planning System (CAPS) (see paragraphs 2.23–2.25), the sharing of local Airport Planning Meeting minutes and the leadership of the National Managers Airport Operations North and South. Improvements implemented by the National Managers include the establishment of an Airport Planners Community of Practice (APCP), to promote, develop and support the strategic and operational planning activities by the international airports to underpin whole-of-airport planning and staff deployment.

2.15   APCP is the core forum for planning staff to contribute ideas to planning processes and provides a networked environment that produces integrated learning opportunities through the sharing of ideas and best practices across Airport Operations. The APCP meets quarterly via video conference, and has one face-to-face meeting a year.

2.16   An example of shared better practice between airports is Perth airport's prohibited imports postcard initiative. In an effort to reduce the number of prohibited imports, Perth airport developed an educational postcard highlighting that commonly seized goods such as BB guns, laser pointers and electric shock devices imported without a permit may be confiscated, and that passengers arriving with these dangerous goods risk being fined or sent to jail. The postcards were issued to passengers, with a particular emphasis on passengers on outbound flights to destinations where these goods are most commonly sold or available.

2.17   Seizure statistics indicate that the postcard initiative has had a positive impact on the numbers of these type of goods being brought in by passengers. There were 2640 seizures of minor prohibited imports at Perth airport between February 2010 and May 2010. Following the launch of the postcards on 10 November 2010, total seizures for the same period in 2011 reduced by half, to 1235. The 'Airport Operations Effectiveness Strategy' notes that the postcard initiative has now commenced in other airports and that its success will be monitored.

2.18   These structures and initiatives are positive examples of progress towards national cooperation and promulgation of better practice between airports. However, a greater focus on the identification and promulgation of better practice between airports is required in relation to the uptake of SmartGate. This is examined in Chapter 4.

2.19   The national approach to passenger processing has also delivered flexibility in the deployment of staff between international airports. For the Commonwealth Heads of Government Meeting held in Perth during October 2011, Customs and Border Protection deployed staff from other airports to assist Perth airport operations with the increased workload.

Operational planning

2.20   Within the steadily growing volume of passengers, there are seasonal and daily peaks and troughs, and spikes associated with special events, such as a major political, cultural or sporting event. In its passenger processing operations, Customs and Border Protection has to manage the workload impacts of these peaks and troughs while maintaining its risk-based approach to border security.

2.21   Customs and Border Protection's airport operations administration at each international airport has a broadly consistent approach to resource planning, with the exception of some local variations for smaller airports. The Airport Planning Model shown at Figure 2.1 represents the broad theoretical approach which informs the planning process at Australia's airports. The Model enhances Airport Operations' ability to prioritise resource deployment towards areas of highest risk. It also provides a framework for continuous assessment and review of passenger risk identification as well as intelligence and targeting activities.

Figure 2.1

Airport Planning Model

Source: Customs and Border Protection.

2.22   The Airport Planning Meeting, as shown in the 'Analyse Risk' phase of the cycle, is a critical forum for deciding and communicating targeting and resource priorities. Meetings occur at each airport on a monthly basis, normally chaired by the airport planner. The meetings are attended by stakeholders including duty managers, team leaders, intelligence and targeting, the Detector Dog Unit and the AFP. During the meetings, potential intelligence and targeting profiles and priorities for the next operational period are considered. Meeting minutes are disseminated to all other airports via the National Planners Network and the Airport Planners Community of Practice.

2.23   Following the Airport Planning Meeting, agreed operational priorities are entered into CAPS. CAPS was implemented in Australian airports in August 2009. It supports whole-of-airport planning and enables airport resources to be allocated according to expected workload and risk.

2.24   A range of data can be entered into CAPS, including human resources system data, flight schedule information, passenger loading information, flight arrival and departure times, as well as profile and tasking information (including taskings to and from Customs and Border Protection's Passenger

Analysis Unit (PAU) and Detector Dog Unit). From this information, CAPS produces a series of reports which help in planning the deployment of staff and allocation of resources. Airports can also set parameters to change the timing and level of resourcing, allowing for the specific operational needs of each airport.

2.25 CAPS produces a Daily Airport Plan, which matches operational priorities to specific flights and origins. Broken into 30 minute periods, the Plan shows how many passengers will present at the ECP, the officers needed to process these passengers to meet the passenger facilitation rate target and how many officers that Customs and Border Protection will be under or over that number.[26] Planners use this estimate to adjust taskings accordingly, re-allocating officers to the primary line if the number is 'under'. If the number is 'over', this frees officers for other functions, for example, real-time risk assessment or marshalling, or for training. The Daily Airport Plan is used consistently as a tool across all airports. The planning processes outlined above also feed into the pre-arrival risk assessment screening process, which is examined in Chapter 5.

2.26 There are minor variations between airports at this detailed planning stage, depending on the size, timings and duration of the inwards and outwards peak, which can overlap, and which vary between airports.

2.27 The ANAO's observations at the six international airports it visited was that CAPS is a robust tool which is effective in assisting Customs and Border Protection to manage its resources, while also balancing risk and workload. All airports visited by the ANAO gave positive feedback about the functionality delivered by CAPS. The consistent achievement by Customs and Border Protection of its passenger facilitation rate performance target is indicative of the value of CAPS.

2.28 There are still some refinements that could be made to CAPS to potentially further improve its utility. CAPS is particularly suited to the larger airports such as Sydney. Smaller airports would benefit from greater flexibility in CAPS, so that they can better adjust figures to their particular requirements. For example, Adelaide airport operations noted that 15-minute planning intervals would be better suited to its purpose, instead of the existing 30 minute intervals.

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[26] CAPS is also used as the resource planning tool for processing outgoing passengers.

2.29   In its current state, CAPS is also unable to support a modelling tool. CAPS runs 'live', and cannot export data to other systems for modelling purposes. This means that airport planners cannot enter in data variations necessary to explore alternate planning scenarios. The ANAO suggests that Customs and Border Protection consider enhancing functionality in this area in the future development of CAPS.

Program performance

2.30   As noted at paragraph 2.3, the main KPI for passenger processing in 2011–12 is the percentage of passengers processed within 30 minutes of joining the inwards queue. This is referred to operationally as the facilitation rate. Prior to 2011–12, the facilitation rate target was set at 95 per cent of passengers processed within 30 minutes. As shown in Table 2.1, Customs and Border Protection has achieved the facilitation rate target since 2007–08.

Table 2.1

Customs and Border Protection's facilitation rate performance

Percentage of passengers processed within 30 minutes of joining the inwards queue		
Year	Target (per cent)	Actual (per cent)
2007–08	95	97.8
2008–09	95	97.4
2009–10	95	97.9
2010–11	95	96.8

Source: Attorney General's Portfolio Budget Statements 2007–08 to 2011–12, and Customs and Border Protection's Annual Reports 2007–08 to 2010–11.

2.31   In the 2011 Federal Budget, the Australian Government introduced a new policy measure, *Passenger facilitation at international airports–efficiencies*, saving $34.0 million over four years from the primary processing function at airports. Achieving these savings entails a reduction of 77 Full Time Equivalent staff (FTEs) in 2011–12, a reduction of approximately five per cent from 2010–11, and a further 10 FTEs over the subsequent three years, as shown in Table 2.2.

Table 2.2

New policy measure savings impact over four years

Year	Budget impact $'000	FTE impact
2011–12	7 714	77
2012–13	8 651	86
2013–14	8 729	86
2014–15	8 904	87

Source: Attorney-General's Portfolio Budget Statements 2011–12 and Customs and Border Protection.

2.32   In 2011–12, the reduction of 77 FTE will be spread across the eight international airports as shown in Table 2.3. To December 2011, Customs and Border Protection had achieved a reduction of 50.7 FTE, and expects to achieve the full year reduction by 30 June 2012.

Table 2.3

FTE reduction during 2011–12 by airport

Adelaide	Brisbane	Cairns	Darwin	Gold Coast	Melbourne	Perth	Sydney	Total
2.4	12.8	2.5	2.8	2.3	16.2	9	29	77

Source: Customs and Border Protection.

2.33   As part of the efficiency measure, and in recognition of the likely impact of reduced staffing numbers on passenger processing operations, the Government agreed that the passenger facilitation rate for 2011–12 would be reduced to 92 per cent. At the end of December 2011, Customs and Border Protection had achieved a facilitation rate for the first half of 2011–12 of 93.4 per cent.

Conclusion

2.34   Customs and Border Protection is operating in a growing and increasingly complex passenger environment. It is also performing its role within increasing resource constraints, reflecting Government decisions made in the 2011 Budget. Overall, the ANAO considers that Customs and Border Protection has a well governed passenger facilitation program, featuring effective central and national consultative structures and increasing communication between the international airports and the central office. Customs and Border Protection has also implemented broadly nationally consistent planning systems and processes, particularly the CAPS tool, which

enable the effective management of resources while also balancing risk and workload. The effectiveness of these governance and planning arrangements is reflected in the performance of Customs and Border Protection's passenger facilitation program in consistently achieving its facilitation rate target, and being on track to again meet its target in 2011–12.

3. SmartGate's Performance

This chapter examines the implementation and funding of SmartGate, and assesses SmartGate's performance against its objectives.

Introduction

3.1 The SmartGate automated border clearance system was developed by Customs and Border Protection as a response to projected increased traveller numbers, and in recognition that this increase could not be managed by commensurate increases in manual ECPs due to space constraints at airports.

3.2 Clearance through SmartGate is a two-step process. An arriving Australian or New Zealand passenger first scans their ePassport at a SmartGate kiosk and answers a set of standard declarations. The kiosk checks the passenger's eligibility for automated clearance through SmartGate. If the passenger is eligible, a ticket is issued and they proceed to the SmartGate, where in-built cameras take their photograph and facial recognition technology is used to confirm their identity by matching this to the digitised image of the passenger stored in their ePassport. If successful, the passenger retrieves their ticket and, when the gate opens, proceeds to the baggage hall. Once they have collected their baggage, they go to the secondary Customs and Border Protection marshal point and hand their SmartGate ticket and Incoming Passenger Card (IPC) to the Customs and Border Protection officer. Passengers rejected at either the kiosk or the SmartGate are referred to the manual ECP for clearance.[27]

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[27] If a passenger is deemed non-eligible, SmartGate does not disclose the non-eligibility reason to the passenger, but simply displays a message directing the passenger to the manual ECP.

Figure 3.1

SmartGate kiosk and gate

Source: Customs and Border Protection.

Implementation of SmartGate

3.3   The implementation of SmartGate was divided into several stages, overseen by a project board comprising representatives from Customs and Border Protection's executive, program, operational and ICT areas. It also included representation from the Department of Immigration and Citizenship (DIAC). The staged approach was adopted to ensure that operations at each airport were bedded-in and stable before moving to the next. Table 3.1 shows the timing of SmartGate's implementation at each airport.

Table 3.1

Smart Gate implementation and configuration by airport

Airport	Date implemented	Kiosks (as at 31 March 2012)	Gates (as at 31 March 2012)
Brisbane	August 2007	8	5
Cairns	January 2008	3	2
Melbourne	September 2008	14	5
Adelaide	December 2008	6	2
Perth	March 2009	10	4
Sydney	July 2009	16	7

Airport	Date implemented	Kiosks (as at 31 March 2012)	Gates (as at 31 March 2012)
Gold Coast	April 2010	3	3
Darwin	May 2011	2	2
Total		**62**	**30**

Source: Customs and Border Protection.

3.4   In 2010, Customs and Border Protection engaged consultants to undertake an End of Program Review of the SmartGate program's implementation, and to qualitatively and quantitatively review the overall performance of the program. The Review reported that SmartGate was perceived as a success by all of the stakeholders interviewed, and that the capability was operating as expected and intended. The full SmartGate capability was delivered within the allocated budget and scope and, excluding Darwin, within 12 months of the originally intended delivery timeframe. In addition, the report found that the original business case was still aligned to the strategic objectives of the Passengers Division and the broader agency, and the majority of benefits identified during the development of the funding submission and business case had been realised.

3.5   Customs and Border Protection conducts monthly traveller satisfaction surveys, surveying an average of 1000 passengers across the eight international airports in relation to their satisfaction with Customs and Border Protection service and queue times. An additional 440 passengers (on average) passing through SmartGate are added to this survey and questioned about their satisfaction with the SmartGate process. In 2010–11, these surveys showed that overall passenger satisfaction with the SmartGate process averaged 99 per cent.

3.6   The ANAO team saw SmartGate operating at six of the eight international airports and observed that it is a robust facility, which operates effectively to clear eligible passengers who use it correctly.

Trans-Tasman trial

3.7   New Zealand uses the same technology for an outwards SmartGate servicing passengers departing from Auckland, Wellington and Christchurch. The Australian and New Zealand Governments have agreed to explore SmartGate as a means to streamline trans-Tasman travel. Integration of the Australian and New Zealand SmartGate systems was subject to a feasibility study followed by a trans-Tasman trial, which commenced in July 2011. Under

the trial, passengers departing Auckland and Christchurch and arriving at the Gold Coast are able to complete part of the Australian arrivals process as they leave New Zealand. Passengers exercising this option use the outwards SmartGate kiosk in New Zealand and, on arrival at the Gold Coast, bypass the kiosk and go straight to the gate to complete their identity check. The trial will be completed in June 2012 and the results will guide ongoing improvements to the trans-Tasman integration of SmartGate.

SmartGate funding

3.8 In the 2005 Budget, $74.6 million was allocated to Customs and Border Protection over four years, under the *Development of Biometrics for Border Control* initiative, for the phased implementation of SmartGate. A Lapsing Program Review was conducted in 2008, and SmartGate was allocated ongoing operating funding in the 2009 Budget of $4.3–4.4 million annually out to 2012–13.

Biometric efficiency dividend

3.9 Funding for SmartGate is partially offset by a biometric efficiency dividend, which returns to government savings from the efficiencies generated by automated processing. The biometric efficiency dividend is incorporated within a workload growth formula that compensates Customs and Border Protection for the growth in international passenger volumes under a formal agreement with the Department of Finance and Deregulation.[28]

3.10 The workload growth formula estimates the marginal change in passenger numbers on a three year rolling average, and calculates the additional funding required by Customs and Border Protection to manage passenger increases on the basis of an agreed marginal cost per passenger. The cost per passenger was established at $3.58 for the base year of 2003–04 and stands at $3.88 in 2011–12.

3.11 The biometric efficiency dividend from SmartGate is subtracted from the additional funding that Customs and Border Protection receives under the workload growth formula. The efficiency dividend is calculated on the number of passengers clearing SmartGate in the year, at an agreed cost per passenger

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[28] *Passenger Processing Variable Funding Agreement between the Department of Finance and Administration and the Australian Customs Service*, effective from 1 January 2005.

of $1.4714 in 2010–11. Biometric efficiency dividends, therefore, are in direct relationship with the number of passengers clearing SmartGate.

3.12   Table 3.2 shows the uptake and funding reductions from efficiencies forecast to government when SmartGate was approved in 2005–06 and when it was renewed in 2008–09, compared with actual performance. As discussed at paragraph 3.35, Customs and Border Protection forecasts of SmartGate uptake have been overly optimistic. The End of Program Review report estimated that Customs and Border Protection was two years behind schedule in achieving the revised forecast biometric efficiency returns.

Table 3.2

SmartGate usage and savings forecasts and performance

Year	2005–06 forecast		2008–09 Lapsing Program Review revised forecast		Actual performance	
	Passengers clearing (million)	Reduced funding ($ million)	Passengers clearing (million)	Reduced funding ($ million)	Passengers clearing (million)	Reduced funding ($ million)
2007–08	2.61	3.78	0.21	0.30	0.21	0.30
2008–09	5.42	7.81	0.53	0.76	0.29	0.48
2009–10	8.14	11.91	1.80	2.63	1.16	1.70
2010–11	10.84	15.95	4.16	6.12	1.81	2.67
2011–12	13.56	20.13	7.05	10.46	1.86*	
2012–13	16.64	24.92	10.44	15.63		

Source: Customs and Border Protection.

Note: * Year to date total as at 31 March 2012. The number of passengers clearing SmartGate for 2011–12 is forecast to total 2.53 million.

3.13   As required by the Passenger Processing Variable Funding Agreement, the workload growth formula and variable funding model were reviewed, initially in November 2008 and again in December 2010. Both reviews concluded that the existing methodology to calculate the biometric efficiency dividend was sound and should be retained. However, the reviews noted that the cost per passenger amounts underpinning the workload growth formula and the biometric efficiency dividend derive from a 2003–04 base, and recommended that they be recalculated.

3.14   A renegotiation of the variable funding agreement and the biometric efficiency dividend has been deferred twice by agreement between the Department of Finance and Deregulation and Customs and Border Protection.

Given the age of the established cost per passenger amounts underpinning the workload growth formula and the biometric efficiency dividend, these amounts are increasingly unlikely to accurately represent current passenger processing conditions. This suggests that renegotiation of the passenger processing variable funding agreement and the biometric efficiency dividend should not be deferred indefinitely.

SmartGate's objectives

3.15 The *Development of Biometrics for Border Control* initiative agreed by the Government in 2005 gave two high-level objectives for SmartGate: firstly, to ensure more efficient processing of increasing passenger numbers; and secondly, to ensure secure identity verification that will improve border protection. The description of these objectives has been varied and expanded in a number of documents associated with SmartGate's development including:

- the original SmartGate Business Case;

- the submission to government supporting the *Development of Biometrics for Border Control* initiative, March 2005;

- the Lapsing Program Review, 2008;

- the Business as Usual Transition Plan, June 2008;

- the submission to government supporting the continuation of the lapsing program, 2009; and

- Customs and Border Protection's Annual Reports and website

3.16 The variations in these documents on the objective of more efficient passenger processing differ only slightly and are generally consistent with the high-level objective. The second objective, to ensure secure identity verification that will improve border protection, is sometimes stated as to *maintain* identity verification and border processing and security[29], rather than to *improve* border protection. Customs and Border Protection advised the ANAO that maintaining current standards of border protection requires constant improvements to its technologies, business practices, risk assessment

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[29]   In, for example, the SmartGate Business Case and the Lapsing Program Review.

approaches and intervention strategies in order to keep up with the evolution of crime. Nevertheless, the two terms are not obviously interchangeable.

3.17   Furthermore, some Customs and Border Protection documents, including its website, use the term 'benefits' rather than 'objectives', which is also a potential source of confusion. Customs and Border Protection's descriptions of SmartGate's objectives also include in several documents, and on its website, the statement that SmartGate will enable Customs Officers to focus on high-risk travellers.

3.18   To avoid confusion and ensure a clear focus on the desired program outcome, it is important that program objectives are expressed in standard terms consistent with the relevant policy decision. The ANAO suggests that Customs and Border Protection settles on a standard form of words for SmartGate's objectives and uses these consistently in its corporate documents and publications. The following sections assess Customs and Border Protection's performance in achieving the two objectives for SmartGate referred to in paragraph 3.15, commencing with identity verification.

SmartGate performance in identity verification

3.19   The intended improvement to border protection through secure identity verification delivered by SmartGate resides largely in the automation of two processes:

(a)   authenticating that an ePassport presented is a valid travel document; and

(b)   confirming through facial recognition technology that the passenger is the *bona fide* holder of the ePassport presented.

ePassport authentication

3.20   The International Civil Aviation Organization (ICAO) is the international body with responsibility for setting global travel document standards. In order to facilitate the international travel of its citizens, Australia seeks to comply with ICAO standards in the design and features of the Australia ePassport. With respect to ePassport authentication, the electronic data stored on the Radio Frequency Identification (RFID) chip in an Australian ePassport is limited to the Machine Readable Zone that is printed on the biographical data page. The RFID chip also includes a security object to assist in authenticating the ePassport, which contains:

- the Document Signing Certificate (DSC) public key for the ePassport;

- document signer information;

- a unique 'hash'[30] for each data item stored on the chip; and

- in the current 'N series' ePassports, a private key and a public key for verification by active authentication.

3.21 The authentication of ePassports is described within Document 9303 administered and published by ICAO. Document 9303 provides the standards that are used when a country issuing ePassports creates the Public Key Infrastructure (PKI) certificates that are to be used by receiving countries to validate those ePassports.

3.22 There is a hierarchy of certificates used in the ePassport certificate chain: the Country Signing Certificate Authority (CSCA), and the DSC. Document 9303 requires that an issuing country creates one CSCA for the sole purpose of issuing certificates for its ePassports. The CSCA issues DSCs that are used to sign the data on the ePassport chip. The DSC (public key) is used by SmartGate when it reads the ePassport to test its authenticity. This check includes checking the digital signature and that it links to the CSCA.

3.23 In addition to these checks, the 'hash' values for each data element stored on the RFID chip in the ePassport are recalculated to ensure that the data on the chip has not been altered since it was written by the issuing authority. These checks are known as passive authentication.[31] When SmartGate was introduced, this authentication capability was exclusive to it and was not available at the manual ECP.

3.24 In 2011–12, Customs and Border Protection progressively replaced the document readers at the manual ECP that had been in operation since 2004. Those readers were able to scan the Machine Readable Zone of a passport to check whether the biographical/identity data had been physically tampered with or substituted, and examine security features in passports activated under different light frequencies. They could not, however, scan or check digital data stored in ePassports. This capability was available in more sophisticated

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[30] A 'hash' is normally a unique and compact numerical representation of a piece of data, in this case, of each data item stored on the ePassport chip.

[31] ANAO Report No.33 2011–12, *Management of ePassports*, tabled on 22 May 2012, addresses issues of ePassport security in detail.

document readers at a Primary Support Point, located behind the primary line and staffed by Customs and Border Protection and DIAC officers, but was only activated by a referral from the ECP.

3.25 The new ePassport document reader, which is being rolled out to airports during 2011–12, can read and check the authentication data stored in ePassports at the manual ECP, including the digital document certificate. This gives the manual ECPs the same passive authentication capability as SmartGate. As such, it represents an advance on that capability by being able to read all ePassports, regardless of nationality, and check for digital document certificates for those countries where Customs and Border Protection has been supplied with the relevant DSCAs and DSCs. SmartGate's ePassport authentication checks remain restricted to those holders of Australian and New Zealand ePassports who choose to self-process through SmartGate.

Facial recognition

3.26 The process of biometric face matching by SmartGate commences at the kiosk where the passenger's digital image on the chip in their ePassport is read, and a template created. At the gate, a video image taken of the passenger's face creates a live template. An algorithm captures the defining facial features from the two templates and compares these using mathematical values to create a score, which determines whether there is a match or not. If the score is below a set matching threshold, the match is not made. This is categorised as a face recognition failure, the gate does not open and the passenger is referred to the manual ECP.

3.27 When it was introduced, SmartGate's facial recognition was technically superior to manual ECP processing because primary line officers at the manual ECPs could not access the passenger's image stored on the chip in the ePassport. The new ePassport reader gives the primary line officer that ability. Moreover, the new reader shows the primary line officer the digital image from the ePassport side-by-side with the physical photo from the identity page of the passport, allowing the officer to compare these images with each other and with the face of the passenger standing in front of them. Because the digital image cannot be substituted without compromising the chip, this capability effectively removes the prospect of a photo substitution being successful for an ePassport, as the mismatch between the two images will be apparent.

3.28 Arguably, SmartGate retains an advantage in facial recognition over manual processing in that it removes the human element in the facial match assessment in favour of a standard and consistently applied technical matching process. However, no performance data is available to assess SmartGate's facial recognition performance compared with manual ECPs. SmartGate still produces a very small percentage of false acceptances, and a slightly larger percentage of false rejections in its facial matching results. These false results, and the matching threshold that influences them, are examined in the context of SmartGate referrals at paragraphs 4.29–4.31.

3.29 Beyond the comparison in technical capacity, the actual performance of SmartGate in detecting fraudulent passports cannot be assessed as no relevant performance data is available. If SmartGate detects a problem with an ePassport and is unable to authenticate it, the passenger is referred to the manual ECP. Each referral is coded to a particular cause but these causes are identified only by a high level descriptor, such as 'travel document failure' or 'document certificate error', and are not further broken down into sub-categories. An instance where a fraudulent ePassport has been detected and rejected by SmartGate cannot be statistically delineated from other rejections grouped under the same referral cause.

3.30 Furthermore, detection of an ePassport as fraudulent, after it has been referred by SmartGate, will not be confirmed until it has been further referred by the primary line officer to the Primary Support Point for investigation by DIAC officers. There is no regular reporting back into Customs and Border Protection systems of Primary Support Point referral outcomes, nor is there a linkage in reporting back to any initial referral from SmartGate.

3.31 Secure identity verification to improve border protection is one of the two government-endorsed objectives for SmartGate, but measuring SmartGate's performance in achieving this objective is extremely difficult because of the above reporting limitations. Customs and Border Protection advised the ANAO in March 2012 that work was underway with DIAC to improve notification of fraudulent passport detections as a consequence of a referral from Customs and Border Protection. This initiative would potentially improve Customs and Border Protection's ability to assess the overall success of its clearance processes in detecting fraudulent ePassports.

3.32 In summary, SmartGate introduced a technically superior process for identity verification than was available at the manual ECP, albeit restricted to a limited population of Australian and New Zealand passport holders who

choose to self-process through SmartGate. The introduction of new ePassport readers has removed this gap for ePassport authentication and narrowed it for facial recognition. This is a positive move in terms of achieving consistent travel document validation and passenger identification standards for primary line clearance.

SmartGate performance in efficiently processing increasing passenger numbers

Forecasts of SmartGate usage

3.33 The total number of air passenger arrivals (passengers and air crew) in 2010–11 was 14.7 million. Of these, Australian and New Zealand passport holders made up 8.4 million, or 57.1 per cent.

3.34 In the *Biometrics for Border Control* Budget submission in 2005–06, the efficiencies and savings offsets identified for SmartGate were based on forecasts of the number of passengers that SmartGate would clear annually. As shown in Table 3.2, the original forecast for 2010–11 was that 10.84 million passengers would clear SmartGate. The actual number of passengers who cleared SmartGate in 2010–11 was 1.81 million.

3.35 The Lapsing Program Review of SmartGate conducted by Customs and Border Protection in October 2008 acknowledged that the originally projected utilisation of SmartGate was 'overly optimistic', and noted in subsequent advice to government in the 2009–10 Budget process that the projection had not been realised due to the following factors:

- later than planned initial implementation at Brisbane airport due to an extended testing period to mitigate performance-related risks;

- later than planned implementation at Melbourne and Sydney airports due to difficulties in negotiating implementation dates that dovetailed with infrastructure expansion works and peak periods;

- slower than anticipated broadening of SmartGate to other countries issuing ePassports, beyond Australia and New Zealand; and

- delays in gaining approval for a public launch of SmartGate and implementation of marketing material such as an in-flight video for inbound aircraft.

3.36 The Lapsing Program Review included a revised forecast of SmartGate utilisation, taking the above factors into account. The revised forecast for

passengers clearing SmartGate by 2010–11 was 4.16 million. A comparison of the original and revised forecasts for SmartGate utilisation with actual performance is shown in Figure 3.2.

Figure 3.2

SmartGate utilisation: forecast versus actual
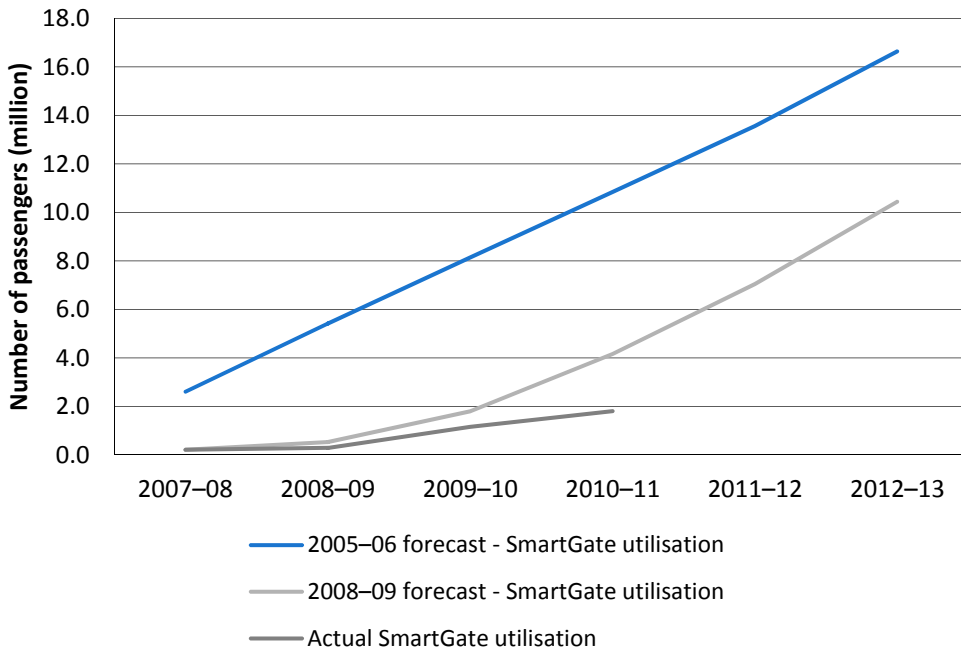
Source: ANAO analysis from Customs and Border Protection data.

3.37   Of the factors listed in paragraph 3.35, the later than planned implementation of SmartGate at Melbourne and Sydney airports had a significant initial effect on SmartGate take-up, given that these are the two biggest airports in terms of passenger arrivals. However, SmartGate was in operation at both airports by July 2009.

Extending SmartGate eligibility to other nationalities

3.38   One factor impacting on the inability to achieve projected SmartGate utilisation in the out years is that SmartGate eligibility has not been extended to other nationalities, and remains restricted to Australian and New Zealand ePassport holders. Planning for SmartGate always incorporated an intention to extend eligibility to other nationalities with ePassports. This assumption underpinned the utilisation and offsetting savings forecasts in both the 2005–06 Budget submission and the 2008 Lapsing Program Review.

3.39 Customs and Border Protection commenced work in July 2008 on a project to broaden the user base of SmartGate to other nationalities, focusing initially on the United Kingdom (UK), the United States of America (USA) and Singapore. However, the project was not completed and was placed on hold at the beginning of 2009. No detailed work was done on the issue between then and July 2011, when an internal discussion paper was prepared as a basis for gauging whether there was Executive support to progress the matter.

3.40 In February 2012, Customs and Border Protection's draft roadmap for a future border clearance model included provision for the phased extension of SmartGate eligibility to other nationalities, commencing with English-speaking nationalities, scheduled for 2012–13. This had not progressed to a firm proposal at that point, and will be assessed for feasibility in the context of the new strategic plan for SmartGate. Key issues to be considered in that assessment include cost, benefit, border risk, operational implementation issues and the relevant countries' ePassport issuing practices and controls.

3.41 The extension of SmartGate eligibility to other countries in stages means that the effect on usage rates will be incremental. Customs and Border Protection estimates that the extension of SmartGate to the UK, USA and Singapore would add 500 000 passengers per annum to the user base, of which a maximum of 400 000 might use SmartGate. While Customs and Border Protection considers that this is a very small proportion of overall passenger numbers, maintaining the restriction of SmartGate eligibility to Australian and New Zealand passport holders will continue to inhibit the take-up and potential efficiency benefits of SmartGate.

SmartGate performance targets and reporting

3.42 As noted in Chapter 2, the key performance indicator for incoming passenger facilitation in the PBS is the facilitation rate—the percentage of passengers processed within 30 minutes of joining the inwards queue. The performance target for this indicator in 2011–12 is 92 per cent.[32]

3.43 There are no specific SmartGate performance targets or measures in the 2011–12 PBS[33], but clearance of passengers through SmartGate contributes to

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[32] Attorney-General's Portfolio Budget Statements 2011–12, p. 116.

[33] Performance targets for SmartGate presentation and clearance rates have been included in the Attorney-General's Portfolio Budget Statements for 2012–13.

achieving the facilitation rate target. For example, performance data for January 2012 show that Customs and Border Protection achieved a national facilitation rate for manually processed passenger movements of 90.91 per cent. Passenger movements through SmartGate in that month showed an average facilitation rate of 99.03 per cent. When combined with the manual processing rate, this lifted the overall facilitation rate to 92.09 per cent, thereby achieving the PBS target.

3.44   In terms of SmartGate's efficiency, it has been estimated anecdotally that SmartGate can clear three times as many passengers as a manual ECP in an hour. Data analysis to more accurately determine this ratio is at an early stage within Customs and Border Protection and is complex. Data collected at Brisbane airport in January 2012 showed that SmartGate generally processes more movements an hour per officer than the manual ECP, and that this is most in evidence in the periods when the passenger load is at its peak.

3.45   In its Annual Reports for 2009–10 and 2010–11, Customs and Border Protection reported on the uptake of SmartGate with data on the number of travellers presenting at a SmartGate kiosk. The total number of travellers presenting at kiosks rose from 1 439 559 in 2009–10 to 2 159 977 in 2010–11, and the percentage of eligible travellers presenting rose from 36.54 per cent to 42.24 per cent.[34] However, presentation by a passenger at a SmartGate kiosk does not mean that the passenger will clear SmartGate, as they may be 'rejected' and referred to the manual ECP for a number of reasons. These reasons are examined in more detail in Chapter 4. During 2010–11, the percentage of passengers presenting at a SmartGate kiosk who successfully cleared the gate ranged between 80 and 86 per cent. The difference in the percentage of eligible passengers presenting at and clearing SmartGate is shown in Figure 3.3.

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[34]   Australian Customs and Border Protection Service, *Annual Report 2010–11*, p. 64.

Figure 3.3

**SmartGate presentation and clearance rates**
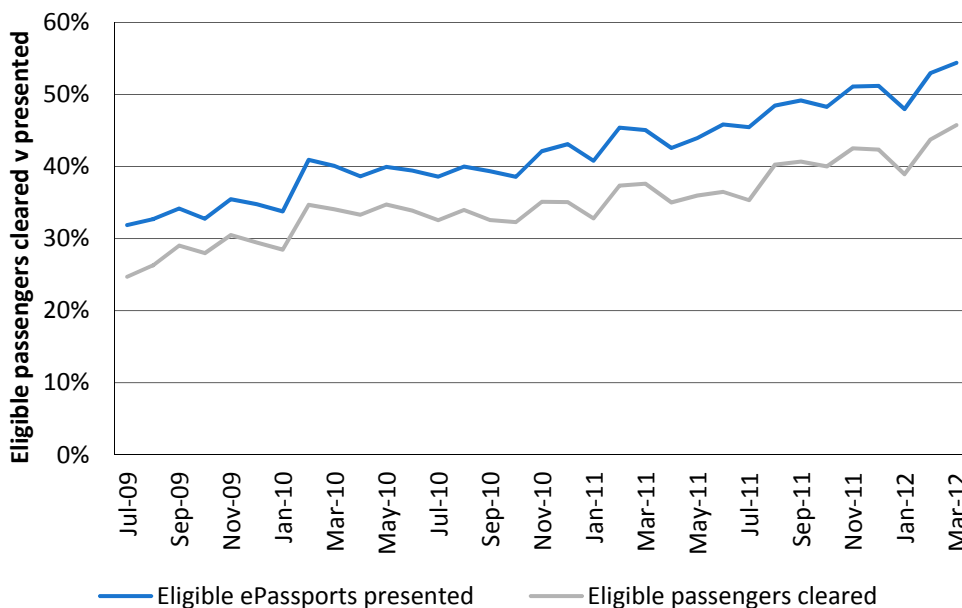
Source: Customs and Border Protection.

3.46   While the rate of passenger presentation at kiosks is indicative of the travelling public's willingness to use SmartGate, it is not a measure of SmartGate's performance in contributing to the efficient processing of passengers, given that passengers referred from SmartGate must re-enter the manual clearance process. Accordingly, in assessing SmartGate performance, the ANAO considered the rates of passenger clearance to be more significant.

SmartGate clearance performance

3.47   Figure 3.4 shows the percentage of eligible passengers successfully clearing SmartGate at each international airport. The clearance rate at each airport fluctuates between peaks and troughs. The timing of these peaks and troughs for each airport are generally the same, with the main troughs coinciding with school and other holiday periods. Because children under 18 years of age have not been eligible for clearance through SmartGate (eligibility was extended to 16 year olds in January 2012), family or other groups travelling with ineligible children tend not to use SmartGate, and more of those groups travel during holiday periods.

Figure 3.4

SmartGate clearance rate at individual airports
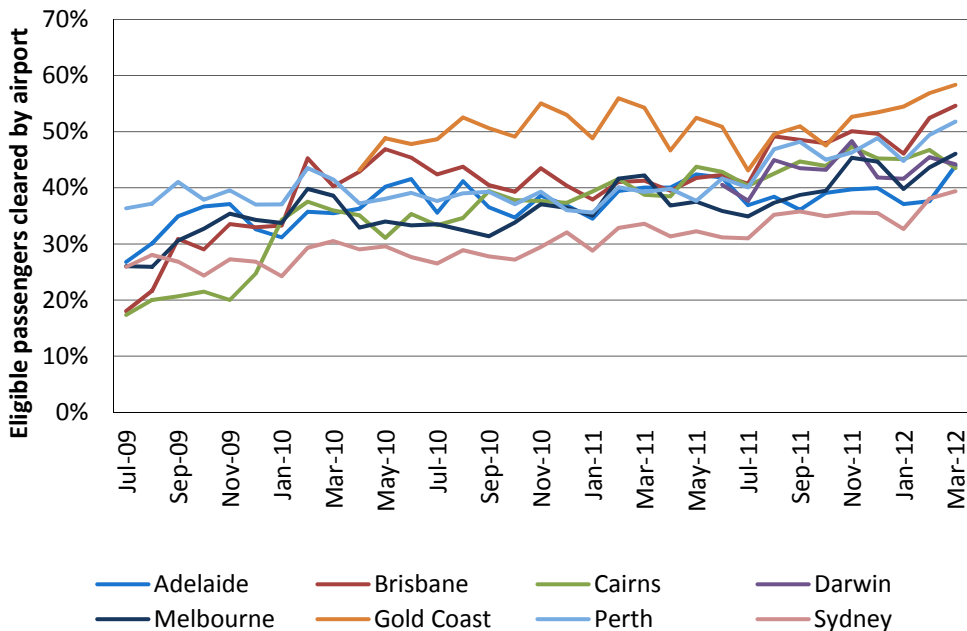
Source: Customs and Border Protection.

3.48   Figure 3.4 also shows the variation in performance between airports. The strongest performing airport in terms of SmartGate clearance is Gold Coast airport. However, as a small airport, its contribution to the national performance rate is relatively minor. Sydney's relatively poor performance as the largest airport has a larger influence on the national performance rate. Reasons for these variations include the influence of the physical layout of the arrivals hall, the demographic make-up of the inward passenger population and different approaches to encouraging SmartGate use in different airports.

3.49   Figure 3.3 shows that, nationally, the SmartGate clearance percentage increased marginally during 2010–11, from 33 per cent of eligible passengers clearing SmartGate in July 2010 to 37 per cent in June 2011. In 2011–12, the clearance rate accelerated and stood at 46 per cent in March 2012. While this recent trend is encouraging, Customs and Border Protection remains well behind achieving the funding reduction forecasts through the biometric efficiency dividend. As noted above, those forecasts were optimistic and based on an assumption that SmartGate eligibility would be extended to other nationalities.

3.50 In the absence of that larger pool of eligible passengers, it is reasonable to expect that Customs and Border Protection gives priority to maximising SmartGate usage by eligible Australian and New Zealand ePassport holders. This pool of eligible SmartGate passengers is increasing as Australia moves towards a situation where all Australian passports will be ePassports by October 2015. As at 31 January 2012, there were more than 8.8 million ePassports on issue, which constituted over 78 per cent of the 11.3 million passports in circulation.[35]

SmartGate's strategic direction

3.51 Despite delays in implementing SmartGate at some airports, the End of Program Review report concluded that the project had been implemented effectively. Conclusion of the implementation phase of SmartGate, and its transition to a business-as-usual state, entailed the discontinuation of the dedicated project management structure under a SmartGate Board, which had its final meeting on 30 July 2010. Specific project management arrangements exist for the new policy-funded trans-Tasman SmartGate integration trial but, in the business-as-usual environment, there has been no overall strategic or corporate plan focused on SmartGate.

3.52 The ANAO team was advised orally by Customs and Border Protection during fieldwork in August 2011 that the strategic priorities for SmartGate were, in order:

1. Maximising utilisation of SmartGate inwards processing;

2. Introducing a SmartGate outwards processing facility;

3. Completing the trans-Tasman trial and integrating Australian and New Zealand SmartGate;

4. Examining and extending SmartGate inwards processing to English language nationalities; and

5. Examining and extending SmartGate inwards processing to non-English language nationalities.

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[35] Australian National Audit Office, *Management of ePassports*, Audit Report No. 33, ANAO, Canberra, 2011–2012, pp. 31–32.

While these strategic priorities may be appropriate and be understood at executive management level, they are not documented, and the considerations on which they are based are not transparent.

3.53 Customs and Border Protection has not had a target percentage figure for SmartGate's clearances rate as a specific objective to work towards. The reduced funding forecast through the biometric efficiency dividend is not treated as a target by Customs and Border Protection, and has not been viewed in this way by the Department of Finance and Deregulation. It is difficult to frame a strategy to achieve a non-existent target, and Customs and Border Protection has had no overall strategy for maximising SmartGate usage and clearance.

3.54 The ANAO acknowledges that putting projects on a business-as-usual footing after implementation is generally sound corporate management practice. In the case of SmartGate, the significant lags behind the utilisation and return on investment forecasts suggest that continuation of a dedicated focus on SmartGate development would have been beneficial.

3.55 In March 2012, Customs and Border Protection advised the ANAO that a high-level SmartGate strategy had recently been drafted and would be finalised during 2012 following appropriate consultation with key stakeholders. The SmartGate strategy is expected to provide a basis for the ongoing governance and management of key projects and activities.

3.56 Customs and Border Protection also advised the ANAO that target clearance rates for SmartGate had been set. In the 2012–13 PBS, the KPIs for Program 1.1: Passenger Facilitation include the following targets for SmartGate:

- 65 per cent of eligible arriving travellers presenting to a SmartGate kiosk in 2012–13, increasing to 80 per cent in 2013–14;

- 29 per cent of total arriving travellers presenting to a SmartGate kiosk in 2012–13, increasing to 39 per cent in 2013–14; and

- 52 per cent of eligible travellers successfully clearing SmartGate in 2012–13, increasing to 64 per cent in 2013–14.[36]

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[36] Attorney-General's Portfolio Budget Statements 2012–13, p. 113.

Misleading performance information

3.57 A likely contributing factor to the lack of a dedicated SmartGate strategy post implementation is that it was not apparent to Customs and Border Protection management that one was needed. Throughout the period in 2010 and 2011 when the SmartGate clearance rate was only marginally improving, Customs and Border Protection management was receiving very positive performance information indicating that SmartGate presentation and clearance rates were steadily increasing. This information turned out to be false and misleading.

3.58 The SmartGate clearance rates shown in Figures 3.3 and 3.4 derive from recording the number of arriving passengers clearing SmartGate against the number of eligible passengers (those holding an ePassport) arriving on each flight. However, Customs and Border Protection's method of recording the number of eligible passengers contained a fault, which meant that no holders of Australian ePassports issued after the initial issue of 'N' series passports—from October 2009—were counted. Actual presentations to, and clearances through, SmartGate continued to be correctly recorded after this date, but were compared to a static population of eligible arrivals comprising only 'M series' and initial 'N' series ePassport holders.

3.59 The result was a false performance picture. As further 'N series' passports were issued, and passengers holding these ePassports used SmartGate, the error was compounded and the false performance picture was exacerbated. Figure 3.5 shows the increasing gap between reported and actual performance for the SmartGate clearance rate. There was a similar effect for the SmartGate presentation rate.

Figure 3.5

SmartGate clearance: false reported rate versus actual rate
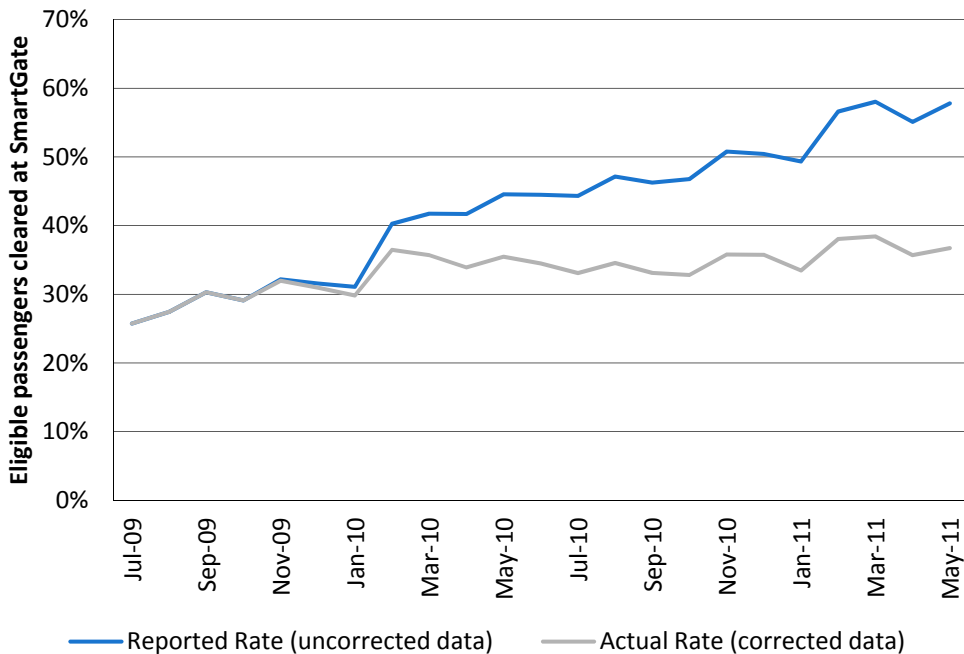
Source: Customs and Border Protection.

3.60 Increases in the SmartGate presentation rate were regularly highlighted in the SmartGate Implementation Project reports provided to monthly meetings of Customs and Border Protection's Operations Committee through 2010 and early 2011. The report in May 2011, dated 2 May, commented that 'Uptake continues to be strong with over 68 per cent of eligible passport holders choosing to self-process through SmartGate in March 2011.' However, in a revised version of that report, dated 6 May 2011, the figure of 68 per cent was changed to 42 per cent, accompanied by the following note:

> Eligible uptake figures have been revised in this report due to a PACE reporting anomaly, which has only recently been identified. Several most recent e-passport series have not been included as part of the eligible traveller calculation. As a result, the number of travellers eligible to use SmartGate has been understated and the percentage of total eligible travellers using SmartGate has been overstated by approximately 25 per cent.[37]

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[37] Australian Customs and Border Protection Service, *OC Monthly Project Report: SmartGate Implementation Project*, 6 May 2011.

3.61 It is a matter of concern that it took Customs and Border Protection over 18 months to discover an error that was significantly distorting its SmartGate performance measurement. This suggests inadequacies in SmartGate monitoring and governance arrangements. The error came to attention only when the percentage of eligible passengers presenting at the Gold Coast airport's SmartGate exceeded 100 per cent of eligible arrivals, a statistical impossibility. Up to that point, the central SmartGate team which generated the reporting had not checked the accuracy of the data, and accepted the increasingly positive story it was telling at face value.

3.62 Passenger operations management at each airport might have been expected to have a better feel for the actual flow of passengers through SmartGate, and be in a position to notice a disconnect between this and the official data, but there is no evidence that the performance figures were ever questioned from this source. Local airport operations staff did not have ready access to national information, and are likely to have considered the data produced by the central SmartGate team to be authoritative. This has since been redressed. Customs and Border Protection advised the ANAO in March 2012 that key performance information is now routinely distributed to airport management teams, and that central office and airport staff are now requested to validate the information in the reports, and to provide relevant commentary.

Consequences of false SmartGate performance data

3.63 Inaccurate performance reporting of this scale and longevity can have serious consequences. In December 2010, the Passengers Division submitted a bid proposal to Customs and Border Protection's Investment Review Committee[38] to expand SmartGate capacity at certain airports in 2011–12 at a cost of $3.534 million in capital expenditure and $0.327 million in operational expenditure in that year. The briefing paper supporting the bid advised the Committee that the growing trend in the uptake of SmartGate 'has maximised the current capacity at numerous airports'. The bid was approved.

3.64 The Passenger and Crew Processing Steering Committee was notified at its meeting on 14 September 2011 that the initial modelling that determined the number of SmartGate kiosks and gates for the 2011–12 expansion program

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[38] The Investment Review Committee commenced operation in March 2009. Its principal role is to consider investment proposals and make funding recommendations to the Executive Committee about the agency's investment budget. Its membership includes all National Directors.

was incorrect and that additional modelling was needed. Customs and Border Protection advised the ANAO in March 2012 that, given the continuing volume growth and increased usage of SmartGate, its view is that continued investment in SmartGate expansion is warranted.

3.65 Another consequence of the false reporting was the widespread perception within Customs and Border Protection that SmartGate was on track and performing successfully in terms of passenger uptake. Given the length of time that false performance information was being received, reported and disseminated, this perception became embedded. Once discovered, the error and its impact were not widely communicated within Customs and Border Protection. For example, in November 2011, the ANAO team visiting Brisbane airport were given SmartGate presentation figures by a local manager showing an 85 per cent presentation rate for October 2011, without any realisation that this figure was distorted by the same calculation error identified in May.

3.66 Notwithstanding the extent of the error and its correction, a perception persisted that strong growth in SmartGate uptake had been achieved. On both its visits to Sydney airport, on 7 June and 29–30 August 2011, the audit team was advised by local Customs and Border Protection management that SmartGate had become 'self-generating'. This sanguine view is at odds with the actual SmartGate clearance performance of Sydney airport, which averaged 30 per cent in 2010–11. While Sydney's clearance rate improved in 2011–12, reaching 39 per cent in March 2012, it remained the lowest clearance rate of Australia's eight international airports.

Conclusion

3.67 Customs and Border Protection implemented SmartGate effectively between 2007 and 2010. SmartGate is being used by an increasing number of arriving passengers, and very high satisfaction rates continue to be recorded by passengers in monthly surveys.

3.68 In 2010–11, 1.81 million passengers successfully used SmartGate. However, this figure is well below the 4.16 million passengers forecast for 2010–11 in estimates provided to government when the SmartGate program was renewed in the 2009 Budget. Annual funding reductions through the biometric efficiency dividend are a function of SmartGate usage and are therefore similarly well behind forecasted returns. A key assumption underlying SmartGate forecasts was that the facility would be extended to ePassport holders of other countries. This has not occurred and, while there is

tentative planning to extend eligibility to English-speaking nationalities in 2012–13, a formal project proposal to deliver this has not yet been approved.

3.69   In these circumstances, in order to fulfil SmartGate's objective of ensuring more efficient processing of the increasing volume of passengers, Customs and Border Protection needs to maximise SmartGate usage by the eligible passenger population—Australian and New Zealand ePassport holders over 16 years—particularly as Australia moves toward 100 per cent ePassport usage in 2015.

3.70   SmartGate passenger clearance performance varies between airports and is subject to the influence of local infrastructure conditions and passenger demographics. The national SmartGate clearance rate grew only slowly in 2010–11, from 33 per cent to 37 per cent. This coincided with the period when Customs and Border Protection management was misled by internal calculations of SmartGate performance, which contained a structural error that ultimately overstated presentation and clearance rates by 25 per cent. It was also significant for the national clearance figure that Sydney and Melbourne, as the two largest volume airports, were among the poorest performers. The national clearance rate accelerated in 2011–12, standing at 46 per cent in March 2012. This is an encouraging trend.

3.71   Since Customs and Border Protection completed the SmartGate implementation phase in July 2010, and placed SmartGate's management on a business-as-usual basis, the program lacked national direction. Apart from designated national projects, such as the trans-Tasman trial, management of SmartGate has largely been the responsibility of individual airports. There was no overall clearance rate target and no documented national strategy or plan for achieving SmartGate's objectives. The ANAO considers it timely for Customs and Border Protection to reinvigorate a coordinated national approach to maximising SmartGate utilisation. Steps in this direction were taken early in 2012 with moves to develop a national SmartGate strategy and the inclusion of SmartGate presentation and clearance targets in the 2012–13 Portfolio Budget Statements.

Recommendation No.1

3.72 To guide and invigorate a coordinated national approach to improving SmartGate's presentation and clearance rates, the ANAO recommends that Customs and Border Protection:

- develop a strategic plan for SmartGate, containing clear objectives, priorities, strategies and performance targets; and

- identify, and promulgate nationally, as appropriate, better practices for SmartGate.

Customs and Border Protection response: *Agreed*.

3.73 Customs and Border Protection agrees with this recommendation. New targets have been included in the 2012-13 Portfolio Budget Statements for SmartGate presentation and clearance rates and a strategic plan for SmartGate is under development.

4.   Improving SmartGate

This chapter examines options for increasing the use of SmartGate, including potential improvement in the rate of referrals and in the identification and correction of system errors.

Introduction

4.1   The SmartGate presentation rate for 2010–11 of 42.24 per cent means that 57 per cent of arriving eligible passengers were not choosing to use SmartGate. In practice, not all of this remainder is available for capture by SmartGate, as eligible passengers travelling in groups with ineligible children will not be directed to SmartGate.

4.2   Clearly, to improve the SmartGate clearance rate, more eligible passengers have to be attracted to using it. In addition to that, the experience of that first time use is also critical to those passengers becoming confident repeat users and 'word of mouth' promoters of SmartGate. An uncertain or failed first time use of SmartGate is less likely to deliver those benefits. The following sections examine strategies for improving the presentation and clearance rates of SmartGate.

Extension of eligibility to 16 and 17 year old passengers

4.3   Customs and Border Protection has been seeking ways to maximise the clearance of passengers through SmartGate. As noted in paragraph 3.47, the 18 years of age restriction for SmartGate eligibility particularly impacted on the ability of family groups to use SmartGate.[39] In January 2010, Customs and Border Protection commenced a trial to allow 16 and 17 year olds to use SmartGate. The trial reported in July 2010 and found two significant operational benefits from extending eligibility:

- most 16 and 17 year olds travel during peak school holiday periods when SmartGate usage is of most benefit in supporting passenger facilitation; and

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[39]   At the time that SmartGate was initially developed and tested, 18 was selected as the minimum age on the basis that it was the legal age of adulthood and there was no data available on the effectiveness of biometric facial matching for people under that age.

- it would enable groups that included 16 and 17 year olds with older eligible passengers to be encouraged by marshals to use SmartGate.

4.4   The report also found that biometric mismatch referral rates were higher for 16 and 17 year olds and that the older the passport, the higher the referral rate. Customs and Border Protection management requested more analysis of these findings. The follow-up report, presented in August 2011, found that, in fact, the difference between the biometric referral rates for 16 and 17 year olds and passengers over 18 was negligible (0.06 per cent). It also found that nearly 50 per cent of 16 and 17 year old passengers were using a newly issued passport, with only 20 per cent travelling with a passport four or more years old. Given this reassurance, the Passengers Executive agreed to extend SmartGate eligibility to 16 and 17 year olds, and this decision was implemented on 19 January 2012.

Encouraging SmartGate usage

4.5   The factors influencing a passenger's decision to use SmartGate are complex. Customs and Border Protection put significant effort into understanding these factors as part of the SmartGate design and implementation process, and continues to actively learn from experience and to trial and implement alternative approaches. Given the nature of human behaviour, there is no guaranteed cause and effect process involved in such initiatives. That said, there are factors influencing passenger behaviour that are within Customs and Border Protection's range of action, and these are assessed below.

Passenger education

4.6   During SmartGate's implementation phase, Customs and Border Protection ran a Public Information Campaign from November 2008 to June 2009, including print advertising, in-airport signage and advertising, brochures, aircraft video for inbound flights, web information and advertising, direct mail and flyers. Surveys conducted during the campaign showed that awareness of the SmartGate name increased over the campaign period, and that in-airport advertising and signage, word of mouth and the SmartGate flyer received in new ePassports all had an impact on traveller's awareness of SmartGate. There has not been a further dedicated SmartGate Public Information Campaign.

4.7   Information on SmartGate eligibility and how to use the facility is currently available from several sources. The Customs and Border Protection's

website includes fact sheets on how SmartGate works, who can use it and Frequently Asked Questions, as well as access to a clear and concise demonstration video. All new passports issued contain a leaflet titled 'This ePassport is the key to using SmartGate', which gives the same information as the 'How it works' page on the Customs and Border Protection website. However, neither of these information channels guarantees that an eligible passenger arriving in Australia will be aware of SmartGate or how to use it when they exit the aircraft and proceed to the arrivals hall.

4.8 As part of the SmartGate Public Information campaign, Customs and Border Protection secured the agreement of several international airlines, on a goodwill basis, to show a video on SmartGate on their inbound flights. A video presentation on an inbound aircraft has an advantage over the other communication methods in alerting all or most of the eligible passengers on a particular flight to the SmartGate clearance option immediately prior to their arrival. By 2012, however, the video was being shown only on some Qantas, JetStar and Air New Zealand flights to Australia.[40]

4.9 A SmartGate Communication Plan was prepared for 2009–10, covering communications and stakeholder engagement, but this Plan did not contain a schedule of actions and it has not been evaluated or updated. In light of the slow progress through 2010–11 with increasing the SmartGate clearance rate, it would be timely for Customs and Border Protection to review the state of its communication strategies and update its SmartGate Communication Plan, including assessing the costs and benefits of re-engaging with airlines as necessary to increase the proportion of incoming passengers who have the opportunity to view SmartGate information during their flight. In March 2012, Customs and Border Protection advised the ANAO that it would shortly commence work on a new Communication Plan.

Signage and wayfinding

4.10 A draft internal Instruction and Guideline on signage and wayfinding prepared during SmartGate's implementation noted that SmartGate specific signage would play an important part in directing and informing passengers who choose to self-process through SmartGate. Accordingly, Customs and Border Protection makes appropriate efforts to understand the messages that

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[40] Singapore Airlines and Malaysia Airlines feature SmartGate on their Destination Melbourne videos.

signage needs to give and how those messages are best delivered. During 2010, Customs and Border Protection engaged a human factors expert to assist in these considerations.

4.11 Signage at the kiosks and gates in the SmartGate precinct is generally consistent. Trials and improvements to signage are regularly made on the basis of experience. For example, signage was added at the gate advising passengers to remove their hats and sunglasses when they face the SmartGate camera, once this was identified as contributing to facial recognition failures. Footprints were stencilled onto carpets at the entry to the gate to show passengers where to stand when waiting, so that they would not interfere with the photo capture of the person in front of them.

4.12 Customs and Border Protection faces difficulties in achieving a standard national approach to SmartGate wayfinding due to the distinct physical layout of each arrivals hall and the need to engage with different private sector owners of the airports. These difficulties include positioning the SmartGate precinct in relation to the manual ECPs and providing visibility of and access to SmartGate at peak times when the arrivals hall is full.

4.13 Within the arrivals hall, there are separate avenues to the ECP marked for, respectively, foreign passport holders, Australian and New Zealand passport holders (with SmartGate beyond that), aircraft crew, and diplomatic and Asia-Pacific Economic Cooperation (APEC) forum passengers. These avenues are generally demarked by long, snaking lines of tensa barriers, and signage attached to those barriers can be difficult to distinguish from the visual clutter, and can be obscured by queuing passengers.

4.14 The best quality SmartGate wayfinding signage observed by the ANAO team was at Brisbane airport, which has relatively new overhead signage that is well-positioned and clearly visible (Figure 4.1). This signage was provided as part of a specific negotiation with the Brisbane airport owner. Gold Coast airport is in the process of trialling portals at the entrances to the Australian/New Zealand and foreign passport holders lines, as a more visible alternative to ground level signage.

Figure 4.1

SmartGate overhead signage at Brisbane airport

Source: ANAO.

Marshalling

4.15   Customs and Border Protection marshals have a major influence on a passenger's decision to use SmartGate. In a survey conducted during the implementation phase of SmartGate, the majority (32 per cent) of all travellers stated that their reason for using SmartGate was that a Customs and Border Protection officer encouraged them to do so. Marshals can also ensure that first-time users of SmartGate use the facility correctly.

4.16   First-time users can be uncertain of their eligibility to use SmartGate and of its correct use. Incorrect behaviours seen by the ANAO team during its observations of SmartGate included passengers:

- advancing to the gate without first operating the kiosk;

- scanning their passport incorrectly in the kiosk;

- not completing the touch screen instructions for answering questions at the kiosk; and

- failing to collect their SmartGate ticket from the kiosk before advancing to the gate.

4.17 At the gate itself, there are also a range of behaviours that can lead to rejection, particularly passengers incorrectly positioning themselves for the camera or having their face obscured. Once the gate is open, cleared passengers have five seconds to walk through before it closes—some passengers were observed to miss this window by being preoccupied with organising their hand luggage or conversing with fellow passengers.

4.18 The human resources allocated to SmartGate marshalling are a matter for passenger operations management at each airport. There is no specific allocation for marshalling within the Customs and Border Protection Airport Planning System (CAPS). Resources notionally allocated to a broad Primary Support function in CAPS, which covers marshalling, may be drawn on to make up temporary shortages in higher priority functions. A degree of flexibility is desirable. For example, it makes little sense to provide dedicated SmartGate marshals for incoming flights that have a very small number of eligible passengers on board.

4.19 Nevertheless, there are clear benefits for the SmartGate clearance rate in giving priority to SmartGate marshalling. Brisbane airport demonstrates this through its 'three marshal' strategy for SmartGate.[41] One marshal is positioned at the head of the Australia/New Zealand passport holder queue to actively identify and direct eligible passengers to SmartGate. A second marshal is located at the kiosks, to answer questions on how to the use the kiosk and assist anyone having difficulty. A third marshal is positioned at the gate, to advise passengers on queuing properly and presenting correctly to the camera.

4.20 This strategy maximises the benefits of marshalling at all three points and makes a major contribution to Brisbane's consistently superior SmartGate presentation and clearance rate. The value of the marshal assigned to assisting passengers at the gate itself is proved by Brisbane maintaining the lowest rate of face recognition failure referrals of all airports for 2009–10 and 2010–11. Reducing the referral rate directly improves the SmartGate clearance rate.

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[41] The formal name of this strategy is the 'Three India Strategy', as 'India' is Brisbane airport operations call sign for the SmartGate marshal.

4.21 Gold Coast is the other airport with a high SmartGate clearance rate. The smaller passenger volume and the compact arrivals hall—in which the SmartGate precinct is clearly visible to arriving passengers—means that Gold Coast can achieve a high presentation and clearance rate result with two marshals. Other airports with no specific SmartGate marshalling strategy, and where marshals are allocated on an ad hoc basis, are not achieving the same results.

Identifying and consolidating better practice

4.22 The variation in SmartGate clearance performance between airports is an indication that some airports manage SmartGate better than others. The variation is contributed to by differences in, and the limitations of, airport infrastructure and physical lay outs, but is not fully attributable to these. There is evidence that SmartGate clearance rates are responsive to initiatives at particular airports, clearly so in the priority given to SmartGate marshalling at Brisbane airport.

4.23 While Customs and Border Protection does apply continuous learning to its SmartGate capabilities, this is largely done on an individual airport basis, except for designated national projects. There is room for Customs and Border Protection to identify better practice approaches to SmartGate at airports, including signage, wayfinding and marshalling, and to consolidate and apply such better practices on a national basis, with reasonable allowance for local infrastructure requirements.

Managing the SmartGate referral rate

4.24 As shown in Figure 3.3, there is a gap between SmartGate presentations and SmartGate clearances, made up of passengers rejected by SmartGate and referred to the manual ECP. In December 2011, for example, 16.6 per cent of passengers presenting at SmartGate were referred.

4.25 The ANAO examined the causes of referral to see whether all were necessary and whether, in some categories, there are factors leading to mistaken or unnecessary referrals. Minimising mistaken and unnecessary referrals will directly assist the SmartGate clearance rate.

Causes of referral

4.26 The main causes for referral from SmartGate are shown in Figure 4.2. A number of these are necessary and appropriate, including where a passenger

makes a declaration at the kiosk which indicates their eligibility to enter Australia needs to be checked by a Customs and Border Protection officer, and where the passenger has triggered an alert at either the kiosk or the gate.

Figure 4.2

Causes of SmartGate referrals January to December 2011
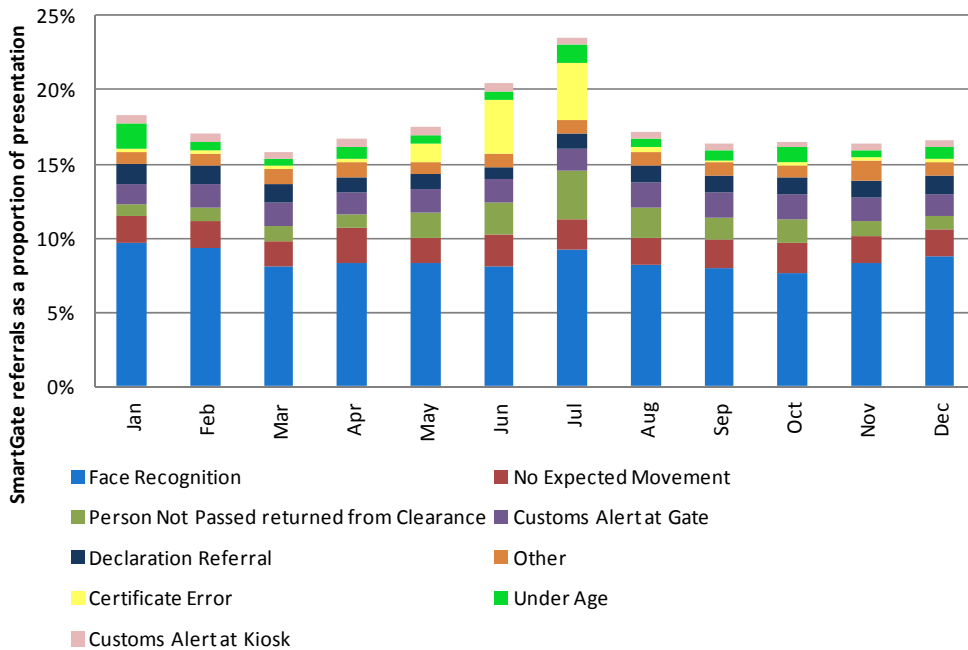
Source: Customs and Border Protection.

Face recognition failure

4.27   In December 2011, 8.6 per cent of passengers presenting at SmartGate were rejected and referred because of face recognition failure at the gate. This represents more than half of all referrals. Passengers are rejected primarily because their live image does not resemble closely enough the image stored on their ePassport. The main areas of variation between images are passengers presenting with or without glasses; with a different facial expression than their ePassport image (for example, smiling and non-smiling); having a different hair style, particularly where hair obscures their forehead or eyes; or tilting their head. Analysis conducted by Customs and Border Protection in 2008 showed that these factors made up 63 per cent of all factors responsible for face recognition failure.

4.28   Another factor causing a non-match is if the image stored on the ePassport is of poor quality. In its 2008 analysis, Customs and Border

Protection attributed 8.7 per cent of face recognition failures to a bad quality passport image, but considers this to be relatively small and within tolerable levels. Environmental factors, such as the quality of lighting, shadows and people appearing in the background, can also interfere and cause a non-match.

4.29   Whether these factors produce a non-match in a particular case is influenced by the matching threshold set in SmartGate. This is the point at which the biometric system is configured to accept a person as matching their ePassport image. The setting for the matching threshold influences the rate of false accepts (when the system accepts someone as matching their ePassport photo when it should not have) and false rejects (when the system rejects someone who should have been let through).

4.30   Customs and Border Protection established a desired False Accept Rate and False Reject Rate during implementation of SmartGate to ensure that border security was maintained. The End of Program Review report measured performance against these rates in 2010 and found that the False Accept Rate was well within target. The False Reject Rate, however, was well above its target. There is therefore some room for improvement in reducing the False Reject Rate and increasing the SmartGate clearance rate commensurately.

4.31   Customs and Border Protection's SmartGate team conducted testing in 2008 which indicated that resetting the matching threshold at a slightly lower level could reduce the False Reject Rate while increasing the False Accept Rate to a level that is still well within the target performance range. This option was presented to Customs and Border Protection management in 2008, but was not formally advanced for decision and was not taken up.

4.32   Improvement in the False Reject Rate may occur as more sophisticated facial recognition software is released and incorporated in SmartGate[42], and as passengers become more familiar with SmartGate. However, the face recognition failure referral rate is not noticeably improving: in 2011, it remained reasonably stable, in a band between 7.6 and 9.6 per cent, and edged back up to the mid-point of this band at the end of the year. Given that small adjustments to the matching threshold could reduce the number of false face recognition failures by 25 per cent, the ANAO suggests that Customs and

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[42]   The facial recognition algorithm has been upgraded three times since SmartGate's introduction to improve its reliability and performance.

Border Protection review and reconsider this option, balanced against the relevant risks involved.

Document certificate error

4.33 Figure 4.2 shows a spike in the total referral percentage from May to July 2011, caused by a significant increase in referrals due to 'certificate error'.[43] Paragraphs 3.20–3.22 explained how ePassports are authenticated as valid travel documents through use of certificates, including a Country Signing Certificate Authority (CSCA). In May 2011, the Department of Foreign Affairs and Trade changed the cryptography for the CSCA. Due to SmartGate's method of interaction with the CSCA, this meant that SmartGate was temporarily unable to verify the certificates for ePassports issued after the change. Consequently, passengers holding those ePassports were rejected at the kiosk and referred to the manual ECP. Customs and Border Protection identified this as the cause of the increased 'certificate error' referrals in June 2011, and implemented a fix on 19 July 2011.

Monitoring errors and referral causes

4.34 While SmartGate produces a rich stream of operational transaction data, it has no standard performance reporting function, including exception reporting. Data analysis therefore has to be specifically initiated and is time-consuming. In the case of the certificate error described above, the increase in referrals for this reason in May 2011 was noted but not investigated until the trend was confirmed during June. By the time the error was corrected in July, some 19 000 passengers who might otherwise have cleared SmartGate had been rejected and referred at the kiosk.

4.35 Another recent example of an error that was not identified for some time was the inability of passengers arriving on two Royal Brunei Airlines flights into Melbourne to clear SmartGate. The ANAO team witnessed this occurring during its visit to Melbourne airport on 18 October 2011 and sought an explanation. Further inquiries by Customs and Border Protection revealed that not a single passenger on those flights had been able to clear SmartGate since the services commenced on 30 March 2011.

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[43] Note that 'certificate error' in this context is the terminology that Customs and Border Protection uses to classify this type of SmartGate referral, and does not imply any failure in the compliance of the certificates with ICAO standards.

4.36 The reason for this was the way the flight numbers were coded into the flight schedule—as BI051 and BI053—in Customs and Border Protection's Passenger Analysis Clearance and Evaluation (PACE) system. The expected movement records received for those flights coded them, without the zero, as BI51 and BI53. In manual processing at the ECP, such a minor and explicable variation between the PACE flight schedule and the expected movement record can be recognised and discounted. However, SmartGate checks all the details in the expected movement record against PACE and must achieve a 100 per cent match to process the passenger.

4.37 As a result of this coding error, 19 167 SmartGate-eligible passengers arriving on the Royal Brunei flights in Melbourne between March and October 2011 were rendered ineligible. Once the error was corrected by removing the zero in the PACE flight schedule, 54 per cent of eligible passengers arriving on Royal Brunei flight BI53 on 29 October 2011 successfully cleared SmartGate.

4.38 It is noteworthy that the consistent occurrence of zero passengers clearing SmartGate from these flights over a seven month period was not identified as a pattern, either by Melbourne airport operations or by the SmartGate team in Canberra. In the former case, the large volume of incoming flights at that time of day combined with the rotation of different shifts and personnel around the various passenger processing functions would make it difficult to identify this problem at the operational level. In the latter case, the SmartGate team does not continuously analyse SmartGate data and, as noted above, there is no standard exception reporting to highlight anomalies. Once a specific data query was initiated, the pattern was readily revealed.

4.39 These examples of errors and anomalies, together with the failure to identify and correct the misleading performance data discussed in Chapter 3, indicate that Customs and Border Protection can improve its monitoring of SmartGate clearance and referral data. Each error that causes a passenger to be rejected by SmartGate when they should have been cleared impacts both on the clearance rate and the passenger's confidence in and willingness to use SmartGate. Failure to promptly identify and correct such errors compounds that impact.

4.40 In March 2012, Customs and Border Protection advised the ANAO that it was planning to assign resources to determine SmartGate reporting and monitoring requirements, and to develop appropriate tools to effectively capture, store and deliver accurate and timely management information.

Conclusion

4.41   The willingness of incoming passengers to use SmartGate, and their ability to do so correctly, is influenced by a range of behavioural and environmental factors, particularly educational information, signage, wayfinding and marshalling.

4.42   With respect to the first of these factors, there is room for Customs and Border Protection to revisit its SmartGate Communication Plan and to assess the costs and benefits of re-engaging with international carriers to provide more consistency in the presentation of in-flight information on SmartGate to arriving passengers.

4.43   As noted in Chapter 3, management of SmartGate following its implementation phase has largely been the responsibility of individual airports. This has led to a variety of treatments and approaches to signage, wayfinding and marshalling across the airports. While the physical infrastructure of airports, particularly in the arrivals halls, can constrain options in these areas, some airports have practices and strategies in place for signage, wayfinding and marshalling which positively influence SmartGate presentation and clearance rates. The ANAO suggests that Customs and Border Protection identify and promulgate such practices as better practices nationally.

4.44   There is a gap between SmartGate presentation and clearance rates, which represents those passengers who present to SmartGate but are rejected and referred to the manual ECP. Reducing the number of unnecessary referrals converts directly into increased clearances. Over half the referrals from SmartGate are caused by face recognition failure, of which a significant proportion are false failures. Many of these are caused by the way passengers present themselves to the cameras at the SmartGate. The presence of a marshal at the gate helps to reduce these instances, as demonstrated at Brisbane airport.

4.45   In addition, the matching threshold score set in SmartGate can be lowered to be more tolerant of these behavioural factors. However, lowering the threshold also increases the risk that a passenger who is not the person on the ePassport presented will be falsely accepted. Given that lowering the matching threshold can potentially reduce the false failure rate by 25 per cent, without significantly increasing the rate of false acceptance, there is merit in Customs and Border Protection considering this option, balanced against the relevant risks involved.

4.46   Referrals are also caused by system errors and anomalies. Quickly identifying and correcting these is essential to ensuring that their impact on the referral rate and on passenger confidence in SmartGate is minimised. There are instances where this has not happened. While SmartGate generates sufficient operational transaction data to allow identification and correction of errors, it does not produce regular exception reporting to highlight system errors and anomalies. There would be benefit in Customs and Border Protection enhancing its monitoring and diagnostic tools to improve early identification of errors and anomalies in SmartGate data.

Recommendation No.2

4.47   To better identify and reduce the impact of system process errors on SmartGate clearances and referrals, the ANAO recommends that Customs and Border Protection enhance its monitoring and diagnostic tools for identifying exceptions and anomalies in SmartGate data.

Customs and Border Protection response: *Agreed*.

4.48   Customs and Border Protection agrees with this recommendation. Work has commenced on development of enhanced monitoring tools and improvements to SmartGate reporting are being implemented.

5.   Pre-arrival Risk Assessment of Passengers

This chapter assesses the effectiveness of Customs and Border Protection's pre-arrival passenger risk assessment activities, and the relationship of those activities to primary and secondary interventions at the airport.

Introduction

5.1   Customs and Border Protection's pre-arrival risk assessment functions are currently undergoing a major change process, involving improvements to existing capabilities, the implementation of new capabilities and major organisational changes to give effect to a new Passenger Targeting Model. These changes were ongoing during the course of the audit. Furthermore, the future state to which these changes are directed was subject to review—and emerged from that review more clearly defined—while the audit was in progress.

5.2   This chapter outlines the operational and administrative arrangements as they existed during audit fieldwork conducted from August to November 2011. Where developments after that period are referred to, they are noted accordingly.

5.3   Customs and Border Protection states that it screens 99 per cent of all passengers and crew prior to arrival to identify persons of interest.[44] This figure is based on the check that the agency makes of all expected movement records against its Passenger Analysis Clearance and Evaluation (PACE) alert database. Its pre-arrival risk assessment capabilities and activities are distributed at the national and local airport level. Nationally, the primary capability resides in the Passenger Analysis Unit (PAU), which analyses Passenger Name Record (PNR) data and Advance Passenger Information[45] to identify persons of interest and generate alerts to trigger appropriate interventions with such persons when they arrive. Locally, passenger operations at each airport have the ability to generate intelligence-based

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[44]   Customs and Border Protection, *Practice Statement No. PS 2008/38: Assessment of Travellers*, available from <http://www.customs.gov.au> [accessed 10 May 2011].

[45]   Advance Passenger Information is data received from DIAC's Advance Passenger Processing (APP) system, through which airlines check with DIAC whether an arriving passenger checking-in has a current valid authority to travel to and enter Australia

profiles, and incoming passenger details are automatically matched against these and evaluated to generate alerts.

5.4 The following sections explain how alerts work and then examine the approach and the performance of the PAU and local airport profiling in assessing passenger risks to border security.

How alerts work

5.5 Intervention action can be initiated by an arriving passenger triggering an alert on PACE, indicating that that passenger has been identified as a potential person of interest. Alerts can be raised by Customs and Border Protection, or by other Australian Government agencies designated as control authorities, such as the Australian Federal Police (AFP). The creation, authorisation, quality control and review of PACE alerts are governed by detailed Customs and Border Protection Instructions and Guidelines. Control authorities are required to adhere to these instructions and guidelines for alert management.[46]

5.6 PACE alerts raised within Customs and Border Protection are managed centrally by a dedicated Alerts Management Team. Phase one of the Enhanced Passenger Assessment and Clearance (EPAC) program, completed early in 2012 (outlined in Figure 5.1), focused on improving alerts creation and approval processes and functionality, including improvements to data management, name matching, reporting and quality assurance.

5.7 Triggering an alert does not necessarily mean that the passenger will be subject to intervention. The initial matching of the details of the PACE alert to the details of the passenger is an automated function, which is influenced by the amount of information in the alert and the matching threshold set in the name-matching software. While alerts require the inclusion of a minimum standard of identification details, the amount of information available varies. Matches may therefore be more or less exact (above a set threshold), and the accuracy of the match is assessed in every case by Customs and Border Protection officers at the airport.

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[46] In the course of the audit, the ANAO sighted internal AFP guidelines and forms applying Customs and Border Protection's Instructions and Guidelines to the AFP's use of PACE alerts, but an examination of the AFP's and other control authorities use of PACE alerts was outside the scope of the audit.

5.8 In June 2011, of the 34 777 alert matches triggered in that month for incoming passengers at Australian airports, 12.2 per cent (4235 passengers) were confirmed as a correct match to the person of interest and 87.8 per cent (30 542 passengers) were dismissed as non-matches. During airport visits, the ANAO team observed that non-matches are identified and dismissed quickly and, in most cases, the passenger involved would not be aware of any delay in clearing the primary line.

5.9 PACE alerts derive from intelligence and risk judgements which, by their nature, have various levels of certainty. Alert matches that are confirmed can relate to a variety of risks ranging from low to high importance, and from less to more certainty. PACE alerts reflect these levels of risk and certainty in both the type of alert that is raised, and in the nature of the intervention action called for. For example, at the low end of risk and certainty, an intervention may simply entail some additional questioning of a passenger to confirm their *bona fides* and the nature and purpose of their travel, and further action beyond that is at the discretion of officers at the airport depending on the passenger's response.

Figure 5.1

Enhanced Passenger Assessment and Clearance (EPAC) project[47]

EPAC 1
- Implemented in March 2012.
- $23.9 million over two years allocated in the 2007 Budget. Subsequent development funded from within existing resources.
- Creates a new Alert Management System to improve the management of alerts.
- Alert 'owners' are able to create, maintain and manage their own alerts, and their workgroups can view and maintain alerts in the owners absence.
- A searching and reporting capability allows business areas to monitor and assess the effectiveness of alert creation and maintenance.
- Devolution of alert creation and management allows the central Alerts Management Team to focus on quality assurance.

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47 Figure 5.1 refers to alerts and profiles. An alert is a flag against a traveller or travel document in Customs and Border Protection's Passenger Analysis Clearance and Evaluation (PACE) system indicating that the person or document has been identified as being of interest and may be subject to intervention. A profile comprises a set of characteristics, also known as criteria, that represent one or more indicators of risk, and enables passengers matching those characteristics to be identified by Customs and Border Protection prior to their arrival.

Source: ANAO.

Passenger Analysis Unit

5.10   The main function of the PAU is the pre-arrival assessment of passengers to identify potential persons of interest. The assessment is performed by analysing PNR data, Advance Passenger Information, historical traveller data and intelligence available to law enforcement agencies.

Passenger Name Record data

5.11   PNR data are collected by airlines and travel agents in relation to a passenger's travel arrangements, and combine information provided at reservation and check-in. The data include information about, for example, name and address, ticketing, check-in, seating, form of payment, travel itinerary and baggage.[48]

5.12   The *Customs Act 1901* requires airlines, when requested, to provide PNR data for all passengers before their arrival or departure. Initially, PNR data were 'pulled' by Customs and Border Protection by interrogating airline databases. In order to meet European Union (EU) requirements for data protection, new arrangements commenced in 2010 whereby airlines operating from the EU 'push' data to Customs and Border Protection. This is now the preferred method of accessing PNR data and is being extended to other international airlines operating flights into, and out of, Australia.

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[48]   Joint Standing Committee on Treaties, *Report 95: Agreement between Australia and the European Union on the Processing and Transfer of European Union-Sourced Passenger Name Record Data*, Parliament of Australia, Canberra, October 2008, p. 62.

5.13   Due to legal requirements applying to the collection, storage and use of PNR data, the PAU and the Advanced Analytics section are the only areas within Customs and Border Protection authorised to use PNR data operationally.

Advance Passenger Information

5.14   As previously noted, Advance Passenger Information is Customs and Border Protection's term for data received from DIAC's Advance Passenger Processing (APP) system, through which airlines check with DIAC whether an arriving passenger checking-in has a current valid authority to travel to and enter Australia. DIAC checks the passenger's data against Australia's passport, visa and alert lists and returns a message to the airline telling it whether the passenger is 'OK to board'.[49] These data include information about the passenger's identity for DIAC purposes, such as passport and visa details. APP data provided to Customs and Border Protection by DIAC is also loaded into PACE as an 'expected movement record', against which passengers are checked on arrival at the primary clearance point.

Passenger Analysis Unit assessment coverage

5.15   Australia's geographic location means that the PAU may have several hours to analyse PNR data to identify persons of interest before an international flight lands in Australia, depending on the departure port. It also has access to PNR data covering approximately 90 per cent of arriving passengers. The 10 per cent of PNR data that is not received is largely attributable to low-cost carriers, a number of which do not allocate resources to ensure reliable provision of PNR data.

5.16   Notwithstanding this lead time and data access, the PAU does not have the capacity to assess 100 per cent of arriving flights and passengers. In any given week, the PAU selects between 40 and 45 per cent of incoming flights for assessment. Its assessments cover approximately 45 per cent of incoming

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[49]   Department of Immigration and Citizenship, *Australian Immigration Fact Sheet 70 – Managing the Border*, available from <http://www.immi.gov.au/media/fact-sheets/70border.htm> [accessed 16 February 2012].

passengers.[50] This level of coverage is influenced by both capability limitations and prioritisation decisions.

Capability limitations

5.17   The PAU's capability limitations derive partly from the fact that PNR data is collected on a 'flight-by-flight' basis, is not integrated with Advance Passenger Information data and, under the 'pull' method, cannot be stored and can only be accessed for 24 hours. This means that PNR data analysis has to be conducted manually by PAU analysts through a series of time-consuming inquiries to assemble and assess risk indicators, and cannot easily access a passenger's travel history.

5.18   Furthermore, PNR data is collected using five different systems, only two of which support any form of automated analysis. One of the advantages of PNR data that is 'pushed' is that it can be stored and be accessible for future analysis. In November 2011, the PAU was receiving PNR on 27 per cent of arriving passengers via the 'push' method. It has adapted an existing Integrated Analysis Tool (IAT) to analyse 'pushed' PNR data, but the data warehouse and automated analytical tools required to fully exploit the data is still in the process of being implemented through the EPAC 2 program.

5.19   These capability limitations, and the time-consuming nature of the risk assessment task, add pressure to the PAU to focus on higher risk flights. The implications of this extend beyond capability limitations to systemic issues.

5.20   Firstly, a flight-based approach to passenger pre-arrival risk assessment is a transactional rather than a traveller-based approach. It excludes from PAU assessment a passenger who may in fact be considered a high risk, but who happens to be travelling on a flight considered to be low risk. Secondly, the PAU approach raises the question of how flights are prioritised for selection. The reality is that resources for any task are limited and the efficiency and effectiveness of their use depends on a sound prioritisation process. The ANAO examined the extent to which PAU prioritises its operations on a risk basis, so that it focuses on the right risks and is capturing in its assessments a high proportion of high-risk passengers.

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[50]   The flight coverage percentage is calculated from the PAU Flight Plan for 1–7 January 2012. The passenger coverage percentage is calculated from PAU assessments conducted for the month of October 2011. These calculations were sourced from Customs and Border Protection analysis.

PAU passenger assessment priorities

5.21 Pre-arrival risk assessment is applied at three levels within PAU, in the:

- selection of flights for PAU assessment coverage;

- profiles and criteria searches that PAU run over a selected flight to identify passengers for further analysis; and

- analysis of passenger information and intelligence for particular risk indicators which may highlight a passenger as a person of interest.

5.22 The PAU has a planning framework in which it identifies the flights that it will target for assessment coverage through a monthly flight plan. Airports are consulted on the plan, which gives them the opportunity to input local knowledge and experience and makes them aware, for their own operational planning processes, of which flights PAU will be covering. Furthermore, when a new carrier or flight is added, PAU tests the feasibility of covering that flight, in consultation with the relevant airport.

5.23 There is currently no formal mechanism for aligning PAU flight selections, and passenger selections and analysis within those flights, with Customs and Border Protection's identified border risks.[51] The ANAO was advised by the PAU that the border risk which broadly informs the PAU's flight selection is illicit drug importation. Flight selection decisions, and the selection of passengers for assessment using profiles, derive from risk indicators based on historical data and trends that are known by the PAU to have produced operational outcomes in the past.

5.24 The dependence on historical risk indicators and operational knowledge makes it difficult to evaluate and assess the relevance of a profile to the contemporary risk environment. Without relevant intelligence and advanced analytics capability as the drivers, the tendency is to continue to do what has always been done. Indeed, there are no set review periods for PAU profiles. There is an intention that profiles be reviewed regularly, but there are currently no standard criteria for such reviews.

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[51] There are 10 border risks, which are, in rating order from highest to lowest, illicit drugs and precursors; irregular movement of people (maritime); unlawful activity in maritime zones—inshore and onshore; unlawful activity in maritime zones; prohibited, restricted and regulated goods; tobacco smuggling; terrorism; revenue (general); irregular movement of people (air); and illegal movement of money. Six of these are directly relevant to inwards air passenger processing.

5.25   Customs and Border Protection is aware of the disconnect between PAU assessment selections and its risk framework. A Strategic Planning function was established in PAU in 2011, and is in the process of developing a Profile Effectiveness Framework to document and align existing PAU profiles with border risks, and identify any requirement for new profiles to address gaps.

5.26   A process for prioritising the PAU's assessment selections in accordance with Customs and Border protection's risk framework is critical to providing assurance that PAU resources are being used efficiently and effectively, and are directed to the right risks. The implementation of EPAC 2 will remedy many of the PAU's capability limitations, and give it powerful new tools to assemble for the first time a single view of a passenger. However, the PAU's existing targeting methodology and determination of priorities will have to change, and engage more dynamically with risk, if it is to exploit those capabilities and make the transition from a transaction to a traveller-based approach.

Measuring PAU performance

5.27   PAU's current pre-arrival risk assessments produce detection results. While its risk indicators are not well aligned to a contemporary risk framework, past indicators of illegal behaviour at the border can continue to be relevant. Furthermore, the knowledge and expertise of PAU analysts in finding and interpreting patterns and anomalies as indicators of risk is critical to the results achieved by the PAU.

5.28   In 2009, PNR data contributed to the identification of 35 drug traffickers and 24 people in possession of child pornography. In 2010–11, 11 of 35 detections of heroin and 5 of 18 detections of cocaine derived from PAU assessments. However, what these numbers represent in terms of performance—measured by the success rate against profiles and alerts, and the effort and expenditure that goes into these—is not readily assessable.

5.29   Between January and July 2011, the PAU generated an average of 387 alerts a month from pre-arrival risk assessment. Customs and Border Protection cannot accurately determine how many of these alerts resulted in detections because of gaps in its operational feedback loops and performance reporting capability. These gaps are examined in more detail in Chapter 7.

5.30   There are no performance targets for the PAU, so what might constitute successful or acceptable performance has not been defined. Performance

reporting is very limited. The limited performance reporting provided to the Operations Committee on the effectiveness of pre-arrival profiling is shown in Table 5.1.

Table 5.1

Significant detections made against profiles, September 2010 to August 2011

	Sep 2010 – Jan 2011	Feb 2011 –Apr 2011	May 2011 –Aug 2011
Percentage of significant detections[52] resulting from profiles	23.0	16.2	14.2

Source: Customs and Border Protection.

5.31   A formal Airport Notification[53] issued in May 2009 reminds airport operations of the requirement to notify the PAU of all significant detections, followed up by Significant Detection Advice (B513) notices. However, these data are not reliable indicators because attribution of the detection outcome to the profile which initiated that intervention is not standard. There is currently no link between a unique profile identifier and an alert, and between a unique alert identifier and a detection.

5.32   This lack of reliability is reflected in Table 5.1, the data in which is likely to have included some Automated Profiling Tool (APT) profiles created by airport operations (discussed below), as well as PAU profiles. Customs and Border Protection were not able to account for the decline in performance shown in Table 5.1, other than suggesting that the figures may be affected by incorrect attributions of detections. For example, to real-time risk assessment at airports rather than to profiling. Attribution can be an issue for PAU-generated alerts—while they are given high priority in airport operations daily planning and resource allocation, profiling results are subjective and the level of intervention accordingly involves the exercise of discretion by the relevant Customs and Border Protection officer, as explained in paragraph 5.9.

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[52]   Given the various types of illegal goods, Customs and Border Protection selects from 15 criteria to determine whether a detection is significant. These include specified threshold amounts for the particular illegal good concerned. For example, the significance threshold for border controlled drugs is more than 500 grams (net) in weight or more than 1500 tablets; for currency, it is above $A100 000; and so on for other goods. There are also qualitative criteria, such as use of an unusual method of concealment.

[53]   An Airport Notification is a document issued to airports by Passengers Division for advisory purposes, and sits below Instructions and Guidelines in the hierarchy of internal governance instruments.

5.33 The ANAO sought an update of the data in Table 5.1 from Customs and Border Protection and received the information shown in Table 5.2 for the four months from September to December 2011.

Table 5.2

Significant detections from PAU alerts, September–December 2011

	Sep 2011	Oct 2011	Nov 2011	Dec 2011
Percentage of significant detections resulting from interventions based on PAU alerts	43.0	21.5	23.5	43.0

Source: Customs and Border Protection.

5.34 The data in this table are slightly more reliable than Table 5.1 in that the significant detections counted are exclusively from interventions of PAU identified targets—results from APT profiles were able to be excluded. However, the problem with accurate attribution remains. The wide fluctuations between individual months, and the sizeable difference between the average for this four month period of 32.75 per cent and the earlier periods shown in Table 5.1, may also be indicative of problems with reliability. Both tables also give only a partial performance picture, as they may not incorporate the results of Customs and Border Protection referrals to other agencies, based on information reports derived from interventions.

5.35 The lack of performance targets and reliable performance measurement significantly impairs Customs and Border Protection's ability to identify and address non-performing and under-performing PAU profiles and alerts, and to improve the PAU's performance. Customs and Border Protection is aware of this deficiency and is seeking to remedy it in the business process changes associated with the implementation of EPAC 2, and the major structural reorganisation covered in Chapter 6.

Airport Operations pre-arrival profiling and assessment

5.36 The profiling capacity of Customs and Border Protection is influenced by the passenger data sources available to it and its capabilities for storing and analysing these. The PAU provides the central capacity for pre-arrival risk assessment using its access to PNR data. Local airport operations at each airport also contribute to pre-arrival risk assessment through their own

profiling and pre-arrival screening activities, drawing on expected movement record data (Advance Passenger Information data, see paragraph 5.14). Local profiles are created at airports using an Automated Profiling Tool (APT) within a suite of applications in the Integrated Analysis Tool (IAT).

APT profile coverage

5.37   While airport operations do not have access to PNR data, their APT profiles usefully exploit particular characteristics of expected movement record data, including that:

- an APT profile can be run over expected movement records for multiple flights, whereas PNR pull data is applicable to a single flight;

- expected movement record data is stored in a data warehouse, so historical movement data can be used to test proposed APT profiles before they are activated, whereas PNR push data has only recently become storable; and

- in circumstances where PNR data may not be available for a flight, pre-arrival risk assessment of passengers on that flight may still be undertaken using APT profiles.

5.38   In the same way as profiles applied to PNR data by the PAU identify a pool of higher risk passengers for more detailed assessment, APT profiles generate a pool of passengers matching the profile for further risk evaluation.

Variations between airports

5.39   The APT is a standardised application supported by a detailed user manual. However, there is no national guidance document or plan applying to APT profile creation and management, and no national governance framework. This leaves considerable room for variation in the way that APT is used at airports, particularly in profile governance, creation and review, and match evaluation.

5.40   APT profiles are generally created on the basis of intelligence reports produced by Intelligence and Targeting Division, which analyse seizure and other data to highlight sources of risk and trends or changes in the risk environment. The level of engagement by Intelligence and Targeting staff in profile creation varies between airports. At five of the airports, profiles are created and tested by airport operations officers, usually the Strategic Planner, with various levels of consultation with Intelligence and Targeting. In the other three airports—Sydney, Perth and Darwin—profiles are created and tested by

Intelligence and Targeting target development officers, with various levels of consultation with airport operations.

5.41 Table 5.3 shows the number of active APT profiles at airports as at mid–2011. The difference in numbers between airports is partly explicable by the different demographics and risk profiles of the flights arriving at each airport, but also reflects differences in profile management arrangements and approach at each airport, and the absence of a centralised governance framework.

Table 5.3

Number of active APT profiles by airport

	Adelaide	Brisbane	Cairns	Darwin	Gold Coast	Melbourne	Perth	Sydney
Number of active profiles	10	36	19	11	9	17	28	11

Source: Customs and Border Protection.

Match evaluation and resource-based profiling

5.42 While APT profile creation is initiated by a desire to address single or a cluster of risk indicators, the profile testing undertaken by airport operations emphasises the volume of matches that result and the impact on airport operations resources. If too many matches are produced in testing, profile criteria are adjusted to reduce this number. The volume and manageability of matches is also a key consideration in profile evaluation and review.

5.43 Airport operations areas have limited resource capacity and expertise to evaluate profile matches. As a result, a large number of profile matches are referred for assessment at the border, hence the emphasis on defining each profile's criteria to produce a manageable number of matches.

5.44 The number of matches produced by an APT profile is a legitimate parameter of profile quality, in terms of achieving precision in targeting a cohort of passengers that display defined risk characteristics. The better the profile, the less unnecessary matches it will produce, which in turn reduces the match evaluation effort and the number of unproductive interventions. However, there is a difference between reducing the number of matches as a function of improved profile quality and reducing the number of matches because of their resource management impact. If resource management

considerations drive the profile, the danger is that APT profiles become more resource-based than risk-based.

5.45 In this context, the ANAO notes that there have been no dedicated training courses in the use of APT since the training provided in the period following its rollout in September 2006, nor is there any best practice model available demonstrating the characteristics of a high quality APT profile. In the absence of training, skills are passed on from person to person at each airport. It is therefore uncertain whether the officers responsible for profile creation and testing at each airport possess the necessary expertise to ensure both individual profile quality and national consistency.

Pre-flight screening

5.46 In addition to the automated matching capability provided by APT profiles, local airport operations also have the ability to conduct, via IAT applications, pre-flight screening of expected movement records against Customs and Border Protection and law enforcement databases. The extent to which particular airports undertake such screening is at their discretion.

5.47 As noted previously, airports are aware in advance of which of their incoming flights will be selected by PAU for pre-arrival risk assessment. In some cases, airports use pre-flight screening for flights not covered by the PAU, and the activity is therefore complementary. This is a strategy adopted at Perth airport, which has a number of flights operated by low-cost carriers which are not able to be covered by the PAU due to the lack of PNR data.

5.48 In contrast, Adelaide airport operations conducts pre-flight screening of all its incoming flights, even though it is aware that some of these are covered by the PAU. Adelaide's motivation is that this allows it to screen passengers for different and more local risks than those which inform PAU's assessment selections. However, such screening represents duplication of effort, with passengers on flights covered by the PAU being screened twice. It is also a function of resource availability. As a small airport with few incoming flights, Adelaide has the resources to conduct 100 per cent pre-flight screening. This is an impossibility for larger airports within current resources.

5.49 Customs and Border Protection currently has no national policy or governance framework for pre-flight screening that would provide a nationally consistent approach to this activity. Moreover, the disconnect between its pre-arrival risk assessment operations and its border risk framework means that it has no basis for assessing whether duplication of

screening effort between airport operations and the PAU has value in risk terms.

APT profile performance measurement

5.50   There is currently no established methodology within Customs and Border Protection for assessing the effectiveness of APT profiles. Opinions as to what constitutes APT profile effectiveness vary between airports. At its broadest, effectiveness is associated with the performance of a profile in selecting a cohort of higher-risk passengers for secondary assessment, regardless of whether such assessments result in a detection. Using this interpretation, Brisbane assesses that 90 per cent of its 36 profiles are effective.

5.51   Other indicators of effectiveness include whether a profile-based intervention has generated an information report in Customs and Border Protection's National Intelligence System. Even if there is no detection, a National Intelligence System report is regarded by Melbourne airport operations as a positive outcome, due to the fact that it represents a contribution to intelligence. Referrals to DIAC in cases where passengers do not have authority to enter Australia are also considered as positive results from profiles.

5.52   While these by-products of profiles are beneficial, the ANAO considers that the emphasis in measuring profile effectiveness should be on detections. However, as with the PAU, performance measurement of profiles in terms of detections is not regularly undertaken and is hampered by gaps in reporting systems and problems with attribution.

Recent initiatives to measure profile effectiveness

5.53   Customs and Border Protection management is aware of the importance of measuring profile effectiveness as a basis for improving the efficiency and effectiveness of profile match and intervention activities. It has had some success in the cargo environment in adjusting profiles to produce less matches and examinations for the same or an increased number of finds. A lesser number of matches allows more time for quality analysis of the matches that are made.

5.54   There have been recent attempts to assess the effectiveness of APT profiles at two airports—Melbourne and Cairns—motivated by a concern for a more robust profile review process, which could better identify non-performing profiles. Given the gaps in Customs and Border Protection's systems for linking operational outcomes with profiles, both initiatives

required the disciplined use of feedback forms and manual analysis of these to assess results. In view of the workload involved, Melbourne was able to run this initiative for only one month during 2011, and noted that it was not an ongoing solution.

5.55 On the basis of its analysis, Melbourne airport operations instituted reviews of five of its 17 profiles. This is a positive outcome for Melbourne, but the initiative is not replicable, both because of its cost in resources and the fact that, without a national methodology, Melbourne's definition of a positive result from profiles will likely be different to other airports' definitions.

5.56 At the national level, Customs and Border Protection's Advanced Analytics section undertook an initial analysis in March 2011 of APT profile effectiveness. The analysis focused on illicit drug detections over the period 2006 to 2011, and applied the risk scoring approach used in cargo profiling to test if this approach was viable for profiling in the passengers environment. While this work has not been followed up in terms of establishing standardised performance measures or benchmarks, the analysis highlighted the following:

- of the 378 major drug detections between September 2006 and March 2011, 72 (19 per cent) of these detections hit at least one APT profile—the other 306 detections did not;

- APT profiles that were not associated with any significant drug detections generated over 620 000 profile matches and over 122 000 baggage examinations; and

- of the 118 active APT profiles at the time of the analysis, 70 per cent of which focus on illicit drugs, only two had achieved a significant drug result.

5.57 These findings suggest that, while APT profiles make a contribution to border security, there is considerable room for improvement in Customs and Border Protection's targeting of profiles in order to reduce matches and unnecessary interventions. The challenge is to translate risk indicators into profile criteria that capture the intended high-risk passenger targets within the minimum sized pool necessary to achieve this. This is highly complex. The most effective APT profile in terms of detection results found by the analysis was tightly focused on one risk indicator, and therefore functioned more like an alert, but this does not mean that all profiles need to take this form to be effective.

5.58 To improve the consistency and effectiveness of APT profiles, it would be beneficial for Customs and Border to continue detailed analysis of profile effectiveness, with a view to establishing more detailed guidance on profile quality, and standardised performance measures and benchmarks.

Conclusion

5.59 Customs and Border Protection's current approach to pre-arrival risk assessment embodies a number of structural weaknesses that detract from a risk-based approach and reduce assurance that the identification of high-risk passengers is being consistently achieved. These weaknesses are set out below.

5.60 Customs and Border Protection's pre-arrival risk assessment activities combine to screen almost all passengers arriving in Australia, but not in the same way or to the same depth. The PAU possesses the strongest pre-arrival risk analysis capability, drawing on its access to PNR data, and assesses approximately 45 per cent of incoming passengers. Incoming passengers are also screened against a range of APT profiles targeting particular risk factors, but matches from APT profiles are not usually evaluated in depth.

5.61 There is no national policy or guidance framework for APT profile creation or pre-flight screening conducted by airport operations. Coverage and quality of this activity varies between airports. Airport operations areas lack the capacity to develop high quality profiles on a consistent basis and conduct more than cursory profile match evaluation.

5.62 The risk basis of the pre-arrival assessment of passengers is affected by capability limitations. The PAU makes assessment decisions based on the risk of a flight, meaning that a high-risk passenger on a low-risk flight may not be assessed. Other risk assessments, including through pre-flight screening, are influenced by resource availability. There is duplication between the various levels of risk assessment activity—the same passenger may be assessed several times.

5.63 There is currently no risk-based priority model to guide the allocation of pre-arrival risk assessment resources and the development and review of profiles—although one is now under development—meaning that there is a lack of assurance that Customs risk assessment efforts are aligned to its risk framework or are directed to the right risks.

5.64 Performance information for pre-arrival risk assessment is extremely limited. There are gaps in Customs and Border Protection's ability to link

actual operational outcomes to the pre-arrival assessment products that triggered the relevant passenger intervention. Accordingly, it is difficult to assess the effectiveness and efficiency of Customs and Border Protection's pre-arrival risk functions as a whole, and to evaluate the effectiveness of particular profiles.

5.65 Customs and Border Protection is aware of the structural weaknesses in the current pre-arrival risk assessment process and is in the process of addressing them. The EPAC 2 program should provide stronger analytical capabilities. Efforts have been made, albeit ad hoc to date, to better assess the effectiveness of profiles. Major organisational change is in progress through a new Passenger Targeting Model, which will remove inconsistencies in the national approach to profiling by centralising profile management and match evaluation. These business process reform initiatives are examined in more detail in the following chapter.

6. Improving Passenger Risk Assessment

This chapter describes the major change processes affecting passenger risk assessment currently in progress in Customs and Border Protection, and identifies key areas of priority for improvement in the further implementation of these changes.

The Passenger Targeting Model

6.1   In late 2010, Customs and Border Protection developed a Passenger Targeting Model (PTM), in response to the critical factors identified as affecting future border security in its strategic outlook documents. These factors included increasing volumes of travellers, ongoing advances in travel complexity and increasing sophistication of criminal activities.

6.2   Customs and Border Protection was also concerned to ensure that its business processes for passenger risk assessment were appropriate to, and could maximise the benefits from, the new capabilities set to be delivered in the EPAC 1 and 2 programs.

6.3   The PTM aims to implement a business model that will integrate end-to-end passenger risk assessment and operational responses to passenger-related border security risks. The key benefits were identified as:

- improving the intelligence-led, risk-based, layered approach to managing border risk;

- maximising the capability to work ahead of the border;

- delivering a national approach to risk, ensuring that the understanding of variations in the operating environment is maintained;

- ensuring the maintenance of an evidence-based approach to risk assessment and interventions;

- improving confidence in the capability to identify and intervene with high-risk passengers;

- minimising unnecessary interventions;

- improving understanding and measurement of efficiency and effectiveness in managing border risk; and

- supporting border, law enforcement and intelligence agency partners to ensure that identification and response to high-risk passengers occurs at the most appropriate point in the passenger pathway.

Implementation of the PTM

6.4 The PTM organised passenger risk management into three layers—intelligence, targeting and response—and described 12 business activities within these layers, and the intersections between them, which would constitute a desired 'future state'.

6.5 The PTM project documents, including an Implementation Strategy and an Implementation Plan, were detailed and logically organised in outlining the three layers of the model and their elements. However, the documents were not clear on what changes were required to 'current state' activities to progress towards the defined future state. While the priority areas selected covered risk assessment and analysis functions that were acknowledged internally as being sub-optimal and highly variable between operational areas, the actual problems with these functions and the changes that needed to be made to fix them were not stated.

6.6 By August 2011, the draft PTM Implementation Strategy was still being finalised and had not received Executive clearance. In the meantime, implementation work continued on the EPAC 2 program. It was clear that EPAC 2 capabilities would have to be delivered into a changed business environment, and that a definition of what that would be was a practical requirement if its implementation was to be effective. In the audit team's preliminary discussions with EPAC implementation staff in June 2011, one major element of that changed environment had been formulated. It was intended that APT profile responsibilities would be removed from local airport operations and centralised in Canberra, with the PAU assuming responsibility for profile match evaluations.

6.7 In the event, Executive consideration of the PTM Implementation Strategy was held over pending completion of an internal review of traveller risk assessment. In announcing this review on 16 August 2011, Customs and Border Protection's CEO noted the various internal and whole-of-government initiatives underway (including the PTM and EPAC), and that he had asked

the National Director Intelligence and Targeting:

> to look at how we might pull together these various strands to optimise our passenger risk assessment capability. Part of this task will also include thinking through and providing advice about any accompanying organisational structure arrangements.[54]

Review of Traveller Risk Assessment

6.8 The Review of Traveller Risk Assessment (the Review) reported on 23 September 2011. The report's Executive Summary noted that changes in the passenger risk assessment environment affecting Customs and Border Protection included major information technology investments (EPAC 1 and 2), new streams of passenger (PNR) data and business process re-engineering (PTM). Accordingly, the stated aim of the Review was to:

- understand the collective impact of these initiatives over the next year or two;

- determine the remaining gap between these initiatives and an ideal state; and

- offer a roadmap to achieving an ideal state over a three to five year period.

6.9 In contrast to the PTM documents, the Review's conclusions were explicit in identifying the capability gaps in Customs and Border Protection's passenger risk assessment systems, as follows:

- there is a flight-by-flight based approach to the identification of risk rather than a passenger based approach that may leave significant gaps in coverage. For example, high risk travellers on a low risk flight may not be assessed against profiles or be subject to any additional analysis other than the alert list in PACE;

- targeting efforts may be based on the availability of data and workload volumes, not risk;

- there are limited processes for assessing the effectiveness of profiles;

- there is no agreed prioritisation model in place nationally;

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[54] M Carmody, 'CEO: Optimising Risk Assessment of Passengers', *Customs News*, 16 August 2011, p. 1.

- profiling output is not structured and prioritised, and therefore the match evaluation effort is not focused on risk;

- there is no line of sight from the development of risk indicator information, through to the response on the airport floor;

- there is no feedback loop from the airport to the risk indicator process to provide information on outcomes and effectiveness to improve end-to-end processes; and

- roles and responsibilities are not clearly defined and assigned across the end to end traveller risk assessment continuum.

6.10 While the Review noted that the initiatives already underway would address and resolve many of these gaps, it concluded that they would fall short of achieving the ideal state. It should be noted that the ideal state envisaged by the Review was not restricted to Customs and Border Protection, but also comprised elements of a whole-of-government approach to traveller risk assessment. The central feature of this approach would be a National Targeting Centre located in Customs and Border Protection, in which all border agencies would participate. Given that the National Targeting Centre concept, and other whole-of-government aspects of passenger risk assessment addressed by the Review, are at a very early stage of policy development, these proposals were not examined by the audit.[55]

6.11 The Review made 24 recommendations, 10 of which were directed to organisational change and the assignment of priority to key tasks considered necessary to fully resolve the identified gaps in Customs and Border Protection's passenger risk assessment capabilities. These recommendations were subject to formal consultation processes, prior to being approved by the Customs and Border Protection CEO in November 2011.

Implementation of the Review of Traveller Risk Assessment

6.12 A major organisational change resulting from the Review was the immediate establishment, following the CEO's decision, of a Passenger Targeting Branch in the Intelligence and Targeting Division, which took over

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[55] The list of capability gaps in paragraph 6.9 includes only those which the Review identified as applying specifically to Customs and Border Protection's operations (and therefore relevant to the audit), and does not include other gaps identified by the Review in the whole-of-government arena, nor in the sea passenger environment.

responsibility for the PAU, and supervision of PTM and EPAC 1 and 2 implementation, from Passengers Division. It was also confirmed that APT profile creation and management and profile match evaluation would be centralised in the new Branch.

6.13 The Passenger Targeting Branch's focus is on centralising and disciplining profile creation, improving profile quality, reducing the number of profile matches while generating better intervention outcomes, and moving to a passenger rather than a flight-based approach to pre-flight screening. The improved data storage and analysis capabilities provided by EPAC 2 will facilitate this activity.

6.14 Implementation of the Review's recommendations, and of the PTM and EPAC 2 in the light of its conclusions, are proceeding in 2012 under the management of the Passenger Targeting Branch. This commenced after audit fieldwork concluded early in November 2011, and implementation plans and progress were therefore not examined by the ANAO.

6.15 The audit team was advised in February 2012 that the new centralised profile governance arrangements are being implemented in stages. The first stage is using an existing centrally-managed process—improved targeting of suspected internal drug couriers under the auspices of the Internal Concealment Working Party—to bring relevant profile development, management and review under the direction of the Passenger Targeting Branch. Local airport APT profiles relating to internal drug couriers will be de-activated in the course of this transition.

6.16 Notwithstanding delays in implementation of the PTM during 2011, it is encouraging that Customs and Border Protection has invested significant effort in identifying deficiencies and priority areas for improvement in its passenger risk assessment systems, and is acting to remedy these deficiencies. The ANAO's examination and analysis of those systems during the fieldwork phase of the audit accords with the conclusions of the Review.

6.17 Clearly, significant work needs to be done, and this will take time. The Review's assumptions were that not all the business benefits arising from EPAC 2 will be fully realised by June 2012, which is the scheduled implementation deadline for that program, and that the PTM will be implemented by June 2013.

Key areas of focus for business improvement

6.18 In implementing its business process transformation program for passenger risk assessment, the ANAO considers that Customs and Border Protection should give close attention to three issues:

- measurement of effectiveness and performance;

- prioritisation of effort according to risk; and

- internal governance structures.

Performance measurement

6.19 The lack of reliable performance information linking pre-arrival risk assessment products (profiles and alerts) to actual operational outcomes is a critical deficiency in Customs and Border Protection's ability to evaluate the effectiveness of pre-arrival risk assessment in managing passenger risks to border security. It also inhibits Customs and Border Protection's ability to establish performance targets and performance benchmarks for areas like the PAU.

6.20 The Review of Traveller Risk Assessment commented that, without the means of measuring and validating risk assessment outcomes, the efficiency and effectiveness of Customs and Border Protection's passenger and crew profiling capability was almost impossible to accurately assess.

6.21 Customs and Border Protection has taken some initiatives in the past year, in the Advanced Analytics area and at individual airports, to better assess profile effectiveness. These efforts, while laudable, have been ad hoc and uncoordinated to date. The business transformation process represented by the PTM, in centralising and restructuring pre-arrival risk assessment functions in the Passenger Targeting Branch, offers a vehicle for a more coordinated approach to improving performance reporting and measurement.

6.22 The Review noted that the lack of connectivity between relevant IT systems, and the consequent absence of an effective feedback loop, made it difficult to determine what it called the 'line of sight' relationship between a particular risk and:

- the profiles and alerts that relate to that risk;

- the associated targeted referrals;

- passengers selected in real-time who are questioned but not examined; and

- the actual intervention outcomes.

6.23   The Review concluded that achieving 'line of sight' between these elements would only be achievable as a manual process and on a limited scale until such time as supporting IT systems were appropriately linked. In this context, a cross-database analysis undertaken by the ANAO in conjunction with Customs and Border Protection (see paragraphs 7.17–7.21) has demonstrated that it is possible to extract higher quality and more reliable data on profile performance from the three key systems—Baggage Action General Statistics (BAGS), PACE and IAT—using existing capabilities. This could form the basis of an enhanced performance measurement effort and a more robust feedback loop linking outcomes to passenger risk assessment.

Prioritisation of effort according to risk

6.24   As noted in Chapter 5, there is currently no formal mechanism for aligning PAU flight selections, and passenger selections and analysis within those flights, with Customs and Border Protection's identified border risks. The distributed nature of APT profile creation across eight international airports also makes it difficult for APT profiles to align to Customs and Border Protection's risk framework. It is clear that some pre-arrival screening activities at airports are undertaken on a resource rather than a risk basis.

6.25   The lack of a risk priority model also affects primary and secondary interventions at airports. The Review noted that local airport operations staff make workload judgements on intervention effort, and prioritise competing profile and alert responses, without having supporting information or guidance on the relative risk of the referred passenger. Furthermore, these judgements and prioritisation decisions may vary between airports.

6.26   These disconnects between the overarching risk framework and profiles and alerts, and the interventions generated by these, potentially leaves gaps in Customs and Border Protection's coverage of border security risks. Customs and Border Protection has recognised this weakness and has commenced work on developing a Risk Priority Model and a Profile Effectiveness Framework to assist in better aligning existing profiles with border risks and identifying any requirement for new profiles to address gaps. The Review saw this as an urgent requirement that should be fast-tracked in the PTM implementation process. The ANAO concurs.

Internal governance

6.27 As noted in Chapter 2, Customs and Border Protection maintains a well-governed passenger facilitation program, featuring effective central and national consultative structures. However, implementation of the Review of Traveller Risk Assessment and the PTM has introduced significant changes to existing functional structures. While there are clear potential benefits in these changes, Customs and Border Protection needs to be careful that positive features of the previous arrangements are not lost, and that necessary cooperation continues across new intra-agency boundaries. There are two key changes in this respect.

6.28 Firstly, the transfer of the PAU from the Passengers Division into the Passenger Targeting Branch within the Intelligence and Targeting Division, and the establishment of a national profile management and profile results evaluation capability in the PAU, creates a clear organisational division between pre-arrival risk assessment and assessment response by airport operations, which remains under the Passengers Division.

6.29 Pre-arrival passenger risk assessment will benefit from incorporation in the Intelligence and Targeting Division in terms of a closer linkage with intelligence analysis and the formal discipline of the intelligence cycle. That said, passenger processing outcomes remain the responsibility of Passengers Division, and these require that a careful balance be maintained between the potentially competing objectives of passenger facilitation and border security. A key component of the border security half of that balance—pre-arrival risk assessment—is now outside the control of the Passengers Division and located in an Intelligence and Targeting Division that has had limited exposure to passenger facilitation interests.

6.30 Furthermore, airport operations and Passengers Division retains responsibility for managing real-time risk assessment activity at airports, which interacts with pre-arrival risk assessment in complex ways, particularly in the attribution of operational outcomes to particular profiles and alerts as noted in paragraphs 5.31 and 5.32. As part of the whole-of-airport resource management approach, real-time risk assessment resourcing is also relevant to passenger facilitation outcomes.

6.31 In order to smooth these changes, the Heads of the two Divisions swapped positions at the end of 2011 as part of the reorganisation. That move delivered into each Division, at the highest level, a high degree of understanding of the other Division's operations and policy interests.

However, given the complexity of the interactions noted above, this needs to be supported by effective contacts and consultation mechanisms at the working level.

6.32 The second major organisational change is the removal of APT profiling and match evaluation from local airport operations and their centralisation in the Passenger Targeting Branch in Canberra. This move has a number of potentially positive benefits in terms of achieving national consistency in profile management, and should facilitate additional improvements to profile quality and performance.

6.33 However, one of the advantages of locally created profiles was that they could be designed to reflect passenger demographics of the particular airport. Centralised profile management should desirably allow for input by local airport operations into profile development and review processes, and for feedback to them, in order to recognise and incorporate important differences between airport demographics.

6.34 Initial planning for the centralisation of profiling in the Passenger Targeting Branch included provision for a Profile Governance Board with regional representation. This is a good example of the new governance arrangements that Customs and Border Protection needs to consider introducing to provide for cooperation across the new intra-agency boundaries created by the reorganisation.

Conclusion

6.35 Customs and Border Protection recognised in 2010 the need for a new approach to passenger targeting to address the gaps in its risk-based passenger assessment activities, and fully exploit the potential benefits from the additional capabilities being delivered in phases 1 and 2 of the EPAC program.

6.36 Progress in the first half of 2011 in implementing the PTM was slow, and PTM implementation documents were not clear on what exactly needed to change to deliver the model. By August 2011, the PTM implementation strategy had not been agreed. The Review of Traveller Assessment, commissioned by the CEO in August 2011, gave prominence to the key gaps and challenges, and prompted immediate organisational and functional changes.

6.37 The implementation of the recommendations of the review of Traveller Risk Assessment and EPAC 2 and the PTM is in progress. Assessing that

progress was beyond the scope of the audit. However, in order to deliver improved passenger risk assessment through those change processes, the ANAO considers that Customs and Border Protection should give priority to:

• improving its performance measurement of passenger risk assessment activities;

• better prioritisation of effort according to risk through the proposed Risk Priority Model; and

• appropriate internal governance structures to provide for cooperation across intra-agency boundaries.

Recommendation No.3

6.38 To improve assurance that passenger risk assessment is achieving effective border security outcomes, the ANAO recommends that Customs and Border Protection gives priority, in implementing the Passenger Targeting Model, to:

• developing stronger systems for performance reporting and measurement of the effectiveness of its pre-arrival risk assessment activities;

• better prioritising the allocation of passenger risk assessment and intervention resources though a risk priority model; and

• reviewing the internal governance arrangements to provide for appropriate coverage of national and local interests.

Customs and Border Protection response: *Agreed*.

6.39 Customs and Border Protection agrees with this recommendation. Customs and Border Protection continues to focus significant effort on improving its intelligence led, risk based approach to border protection and welcomes ANAO's confirmation that the direction currently being taken to improve the pre-arrival risk assessment process will address weaknesses in the current approach.

7. Secondary Intervention Outcomes

This chapter examines Customs and Border Protection's processes for reporting operational outcomes from secondary interventions of incoming passengers and assesses the effectiveness of these processes as performance feedback to the passenger risk assessment cycle. Customs and Border Protection's relationship with the AFP at airports, particularly in the management of referrals, is also discussed.

Introduction

7.1   Customs and Border Protection officers processing incoming air passengers have a unique opportunity and a range of legislative powers to question and search persons, their baggage and goods in order to locate prohibited and restricted goods. Where appropriate, Customs and Border Protection officers may exercise powers to question, examine, search, detain and arrest passengers, seize goods and copy documents. They may also use tools including detector dogs, x-ray, electronic examination, substance detection and trace detection.

7.2   The audit did not examine Customs and Border Protection actions and performance in using these powers and tools to carry out secondary interventions. This was because the focus of the audit was on assessing secondary interventions in terms of how operational outcomes from risk assessment processes form part of the risk assessment cycle. Furthermore, the Commonwealth Ombudsman conducted a detailed examination in 2010 of Customs and Border Protection's administration of coercive powers in passenger processing. The ANAO considered that another examination of these functions so soon afterwards would not add value.[56]

7.3   Secondary interventions of incoming passengers may be triggered by alerts derived from pre-arrival risk assessment, as examined in the previous sections of this paper. As noted in paragraphs 5.9 and 5.32, many alerts, by their nature, leave considerable discretion to airport operations officers in managing the alert and conducting an intervention with a passenger.

7.4   Secondary interventions may also be initiated by Customs and Border Protection officers as real-time risk assessments at the airport, based on one or

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[56]   Commonwealth Ombudsman, *Australian Customs and Border Protection Service: Administration of Coercive Powers in Passenger Processing*, Report No. 15/2010, Canberra, December 2010.

more of a range of risk indicators that are only available when a passenger presents at the border. These indicators include:

- information given in travel documents and Incoming Passenger Cards, including declarations;

- behaviour, physical appearance and body language;

- answers to questions;

- association with other possible persons of interest; and

- baggage and baggage contents.

7.5 Knowing what operational outcomes have been achieved from passenger interventions, and the cause of those interventions, is crucial feedback for evaluating the effectiveness of risk assessment, whether it is pre-arrival or real-time risk assessment. The ANAO examined Customs and Border Protection's processes for incorporating operational feedback into the risk assessment cycle.

Performance reporting of intervention outcomes

7.6 Meaningful reporting on the performance of passenger risk assessments in achieving detection outcomes depends on the availability and accessibility of sufficient, standardised and reliable data. Customs and Border Protection collects information on detections and seizures from secondary interventions through several processes.

Reporting processes

7.7 As noted in paragraph 5.31, a notification process ensures that all significant detections and any detections of border controlled drugs are reported immediately to the PAU. As a simple notification process, however, this does not have the capability to produce standardised performance information. A Significant Detection Advice (B513) notice is emailed to the Customs and Border Protection National Operations Centre within two hours of the detection. This process only captures significant detections, not all detections. National Intelligence System information reports are also required to be completed and submitted for all significant detections. Reports from both these reporting processes can be manually accessed to contribute to a performance story, but do not provide a systematic basis for performance measurement since they:

- do not produce a standardised and accessible set of data;

- do not capture the full range of detection outcomes; and

- are not required to, and may not, identify the cause of the intervention.

The Baggage Action General Statistics system

7.8 Systematic and universal reporting of secondary intervention outcomes is available through the Baggage Action General Statistics (BAGS) system. The purpose of BAGS is to maintain an accurate record of all examination activity relating to incoming and outgoing travellers in order to produce statistics for reporting and analysis purposes. A BAGS record is created whenever a passenger is selected by Customs and Border Protection for a secondary examination activity.

7.9 Each baggage examination counter in the secondary examination area at airports has a BAGS terminal, which allows data to be captured by the examining Customs and Border Protection officer while the baggage examination is in progress. The BAGS terminal has a passport reader facility—swiping the passenger's passport through the reader automatically accesses the passenger's movement information in the PACE system, creating the BAGS record and populating it with that information.

7.10 Data fields in BAGS include a Selection Category and a Selection Type, from which drop-down menus enable the examining officer to select the reason for a passenger's selection for examination. While this suggests that, in theory, BAGS records may be usable to link pre-arrival risk assessment profiles and alerts to operational outcomes, in practice, reliable attribution to a particular profile and alert is not supported by BAGS records, for the following reasons:

- the data fields in BAGS do not include a link between Selection Type and specific alerts and profiles—the inclusion of information identifying the actual profile is at the officer's discretion, and is not always included;

- passengers examined may have matched more than one profile or more than one alert, and there is no established protocol for attributing the examination in such cases;

- passengers examined may have matched a combination of profiles and alerts and also been selected through real-time risk assessment or drug detector dog activity, but BAGS will allow only one Selection Category to be chosen; and

- as many PAU alerts are indicative only, the amount of additional contact with the relevant passenger by officers at the airport may lead the baggage examination officer to attribute the selection to airport operations rather than to pre-arrival risk assessment.

7.11 Given these limitations, there is no certainty that BAGS records produce accurate data on the number of examinations that result from pre-arrival risk-based profiles and alerts versus those that result from real-time risk assessment at the airport. Furthermore, attribution of examinations to a specific profile or alert is not consistently indicated in BAGS records and, if it is recorded, it may not be accurate.

Current performance reports

7.12 The BAGS system is Customs and Border Protection's only universal and systematic capability producing data on intervention outcomes. It is used as the source of statistics on detection outcomes—by airport and by selection type—that are included in Passengers Division Monthly Performance Reports and consolidated in the annual 'Airport Operations Effectiveness Strategy' report. As shown above, however, performance reporting derived from BAGS has major qualitative limitations.

7.13 Customs and Border Protection's Operations Committee requested the reporting shown in Tables 5.1 and 5.2 on detections resulting from profiles, but these reports have similar limitations to BAGS reporting in their reliability, as discussed in paragraphs 5.31–5.35.

7.14 Customs and Border Protection also produces a quarterly statistical report on APT profiles derived from data in the Integrated Analysis Tool (IAT) system. This report gives information on the number of profile matches 'actioned', 'dismissed' and 'unactioned' for each APT profile. However, this is activity rather than performance data.

7.15 Furthermore, as 'actioned' in this context means only that a match was not dismissed, the IAT statistics do not show if the 'actioned' match resulted in a baggage examination. Not all actioned matches result in baggage examinations—questioning of the passenger may be sufficient to satisfy Customs and Border Protection as to their *bona fides* and allow them to be cleared without having their baggage examined.

7.16 In an effort to present a fuller picture, the quarterly statistical report includes a comparison between IAT (APT) profiles actioned and BAGS entries where IAT was the 'selection type' chosen. The BAGS number is always lower,

by up to 25 per cent. It is not possible to tell how much of this difference is the result of the passenger matches which do not go through to a baggage examination, as described above, or of misattribution of the 'selection type' in BAGS entries.

Cross-database analysis—a new approach

7.17   During the audit, using the ANAO's Information Technology audit capacity, the audit team investigated whether existing Customs and Border Protection databases could be interrogated in combination to overcome gaps in the individual databases, and generate more reliable statistics linking profiles to intervention outcomes.

7.18   Working together, the ANAO and Customs and Border Protection staff developed cross-database queries, linking records in the IAT, BAGS and PACE systems, and were able to establish an end-to-end data pathway from a profile match to the baggage examination and outcome resulting from that match. The cross-database analysis, covering the ten month period from January to October 2011, produced a reliable dataset for 121 active APT profiles across 12 fields, including numbers of profile matches, alerts, alert matches and baggage exams. This enabled the calculation of ratios of baggage examinations to alert matches, and of positive finds (detections) to baggage examinations. Detections included all detections made, from the most minor to the most significant.

7.19   Figure 7.1 shows the spread in the ratios of detections to examinations for APT profiles derived from the joint ANAO/Customs and Border Protection analysis. Forty-eight APT profiles, or 40 per cent of the total number of profiles covered by the analysis, produced no detections, and 38 profiles (31 per cent) produced a ratio of detections-to-examinations in the one to five per cent band. These data have to be interpreted cautiously, given that this was the first time that this methodology has been used, and there are therefore no established benchmarks with which to compare results.

Figure 7.1

APT profile performance: ratio of detections to examinations
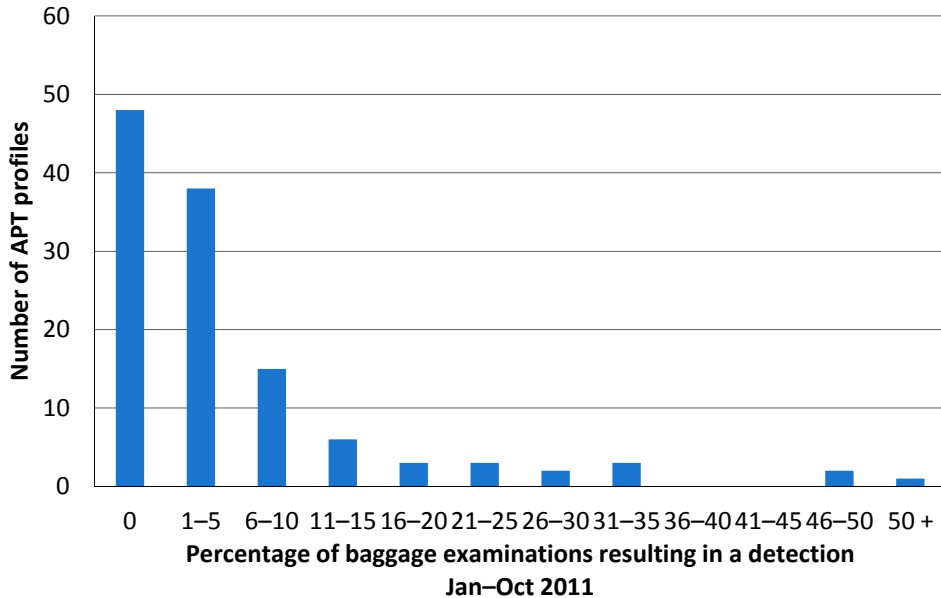
Source: ANAO and Customs and Border Protection analysis.

7.20 Assessing profile effectiveness is complex and needs to have regard to the risk that the profile is directed towards, and the number of matches and examinations it produces. For example, it should not be assumed that the 48 profiles that produced no detections are ineffective for that reason. Most of these profiles are tightly defined and produce only a small number of baggage examinations. The data analysis showed that the total number of baggage examinations generated by these 48 profiles was 441, an average of nine examinations per profile. The impost on the small number of passengers subject to those examinations may be reasonable when considered in the context of the seriousness of the risk being targeted by the profile.

7.21 The joint data analysis exercise was essentially a 'proof of concept' undertaking, and the methodology requires further formal testing and consideration of the costs and benefits before it can be implemented as a regular performance measurement activity. While the exercise involved substantial manual effort to extract and query data, it demonstrated that higher quality profile performance data can be extracted from Customs and Border Protection's existing systems.

Conclusion

7.22 A functioning feedback loop into the risk assessment process from secondary intervention outcomes is critical to ensuring that:

- risk indicators, and the risk analysis that they support, are accurate and relevant; and

- profiles are effectively and efficiently targeting risk.

7.23 As noted in Chapter 5, there is limited performance information on the effectiveness of pre-arrival risk assessment activity. The inability to link detection outcomes with the pre-arrival risk assessment product that triggered the relevant passenger intervention is a flaw in Customs and Border Protection's BAGS system, which means that existing performance reports on pre-arrival risk assessment, drawing on BAGS data, have very little qualitative content and do not provide a basis for assessing effectiveness.

7.24 The ANAO in conjunction with Customs and Border Protection tested and showed the potential of cross-database data analysis to produce more reliable data on detection outcomes from pre-arrival risk assessment effort. Collected regularly, such data would provide Customs and Border Protection with a stronger basis for assessing the performance of individual APT profiles, and for measuring its progress towards the objective of reducing the number of matches while maintaining or increasing the number of detection outcomes.

Referral arrangements with the Australian Federal Police

7.25 Customs and Border Protection and the AFP have complementary and intersecting roles at Australia's international airports. Under the *Customs Act 1901*, Customs and Border Protection has responsibility for managing the security and integrity of Australia's borders. It works closely with other government and international agencies to detect and deter unlawful movement of goods and people across the border. The AFP is the Australian Government's primary law enforcement agency with responsibility under the *Australian Federal Police Act 1979* for enforcing Commonwealth law. While both agencies have different responsibilities at the border, there are significant crossovers which require a cooperative approach.

7.26 Memoranda of Understanding (MOU) have been in place since 1990 covering the collaborative working relationships between the two agencies. The current MOU, signed in 2004, is a high-level principles-based document that sets out the framework in which the AFP and Customs and Border

Protection will work together on matters of mutual interest and responsibility. Both agencies recognise that they have complementary roles and that each has primary responsibility for certain issues. These roles and responsibilities are laid out in the individual annexes to the MOU, which cover issues such as serious drugs, border controlled drug precursors and counter-terrorism.

7.27   A main point of intersection between the agreed responsibilities of Customs and Border Protection and the AFP is the referral. At an airport, a referral is initiated when Customs and Border Protection discovers suspected illegal activity that it believes falls within the jurisdiction of the AFP. Customs and Border Protection contacts the AFP, which then assesses whether the issue is an AFP responsibility or not. Based on that judgement, the AFP will either accept the referral or reject it, and inform Customs and Border Protection of the decision.

7.28   Procedures for establishing responsibility for further investigation of detections and the recording of relevant actions, including referral to the AFP, are set out in detail in a Customs and Border Protection Instruction and Guideline on Post-Detection Procedures. The governance framework also includes staff instructions on the documentation to be used to record the referral of passengers who are suspected internal couriers to the AFP.

7.29   To work in an airport operations environment, officers must successfully complete the Customs Trainee Program. The Program syllabus introduces participants to the range of forms they will be required to complete, including for the transfer of evidence and substance referral. Once on the job, all Passenger Operations staff undertake the Passenger Assessment Training Course (PATC). The PATC covers post-detection procedures, procedures for further investigations, including referrals, maintaining continuity of evidence and recording and reporting actions.

State of the Customs and Border Protection–AFP relationship

7.30   During fieldwork, the ANAO team met with AFP management in Canberra and with local AFP commanders at the six international airports visited: Adelaide, Brisbane, Gold Coast, Melbourne, Perth and Sydney. Customs and Border Protection and the AFP, at both airports and central offices, gave positive feedback about their relationship. It was noted by both the AFP and Customs and Border Protection that the relationship is supported by a robust structure of consultative committees and meetings at airports.

Statements from AFP officers referred to the relationship as 'excellent', 'strong', 'comfortable', 'sound', 'very good' and 'working reasonably well'. Customs and Border Protection officers stated the relationship with the AFP at airports was 'good', 'sound' and 'very strong'.

7.31   In fieldwork discussions drawing out issues within the relationship, one recent occurrence in relation to presumptive drug testing (since addressed) was mentioned, and an ongoing issue was identified relating to referrals of internal couriers. The latter issue was raised at all airports, but AFP officers in every case emphasised that this was the only real issue of ongoing concern in the context of a positive relationship. Similarly, while Customs and Border Protection commented in internal reporting that occasional slow response times and delayed communication of non-acceptance of internal courier referrals can be a source of frustration, it is generally satisfied with the response from AFP relating to referral matters. The two issues raised are examined below.

Presumptive drug testing

7.32   On 13 March 2010, a foreign national seeking to enter Australia on a visitor visa was interviewed by Customs and Border Protection on arrival at Melbourne Airport and their baggage was searched. Based on 'presumptive testing' of the baggage, and certain packages within it that were marked as containing iced tea powder, the AFP was advised that Customs and Border Protection suspected that the packages contained a border controlled substance, amphetamine. The AFP arrested the person and they were charged with offences under the *Criminal Code Act 1995* and remanded in custody for five days. Further presumptive testing by the AFP, conducted while awaiting the results of detailed conclusive laboratory testing, indicated that the packages in question did not contain amphetamine or any other border controlled substance (subsequently confirmed by laboratory testing). The charges were discontinued and the person released from custody.

7.33   In response to this event, Customs and Border Protection commissioned an independent review of its presumptive drug testing processes and procedures. The review identified two gaps. The first was the lack of a developed training manual or detailed instruction relating to officers use of colour spot test kits. The second was the lack of a pro-forma document available for use to inform the AFP of the results of each test that may have been conducted (and any other relevant circumstances) in respect of any particular detected specimen.

7.34 The review made several recommendations to address these gaps. It commended senior Customs and Border Protection officers for early recognition of the need for action and for commencing work in the area before the review drew the matters to the agency's attention. Customs and Border Protection accepted all the review's recommendations, and a total of 13 measures have been implemented in response. Broadly, these relate to:

- updating or standardising policy and procedural guidelines;

- introducing training across airports; and

- introducing more rigorous business processes.

Referral of internal couriers

7.35 Under the provisions of the *Customs Act 1901*, when a Customs and Border Protection officer or police officer believes there are reasonable grounds to suspect that a person may be carrying an illegal substance concealed internally in their body, and these suspicions have not been allayed, the person may be detained for an internal examination. The person may consent to an internal examination or be taken before a Federal Judge for an order to have an internal examination conducted.

7.36 Customs and Border Protection officers refer persons suspected of internally concealing drugs to the AFP. The AFP is not obliged to accept the referral. Given that the evidence of an internal concealment is not clear cut, the AFP makes an independent judgement as to whether reasonable grounds for suspicion exist. As part of the referral process, Customs and Border Protection provides the AFP with a written statement of reasons for referral. In making its judgement, the AFP reviews the basis for Customs and Border Protection's suspicions by reading the statement of reasons and speaking to the referring officers, and would normally interview the person to provide them with a further opportunity to allay those suspicions. If the AFP officer forms a suspicion that the person is internally concealing drugs, the AFP will assume management of the detention of the person for an internal search. In operational terminology, acceptance of the referral means that there has been a 'transfer of suspicion' from Customs and Border Protection to the AFP.

7.37 If the person consents to an internal search or an order is given by a Federal Judge, the AFP officers (a minimum of two) take the person to a medical facility for an internal search, which uses medical diagnostic imaging tools such as an x-ray or CAT scan. If the internal search image indicates an internal concealment, the person is arrested and placed under AFP guard until

the concealment is retrieved. If at any time there is concern regarding the wellbeing of the person they are immediately referred for medical attention.

7.38　　There were 140 referrals of suspected internal couriers during 2010–11. Of these, 101 were accepted by the AFP, and 39 were declined. Figure 7.2 shows the breakdown of these figures by airport. The majority of referrals occur in Sydney and Melbourne, with smaller numbers in Perth and Brisbane.

Figure 7.2

Referral of suspected internal couriers by airport in 2010–11
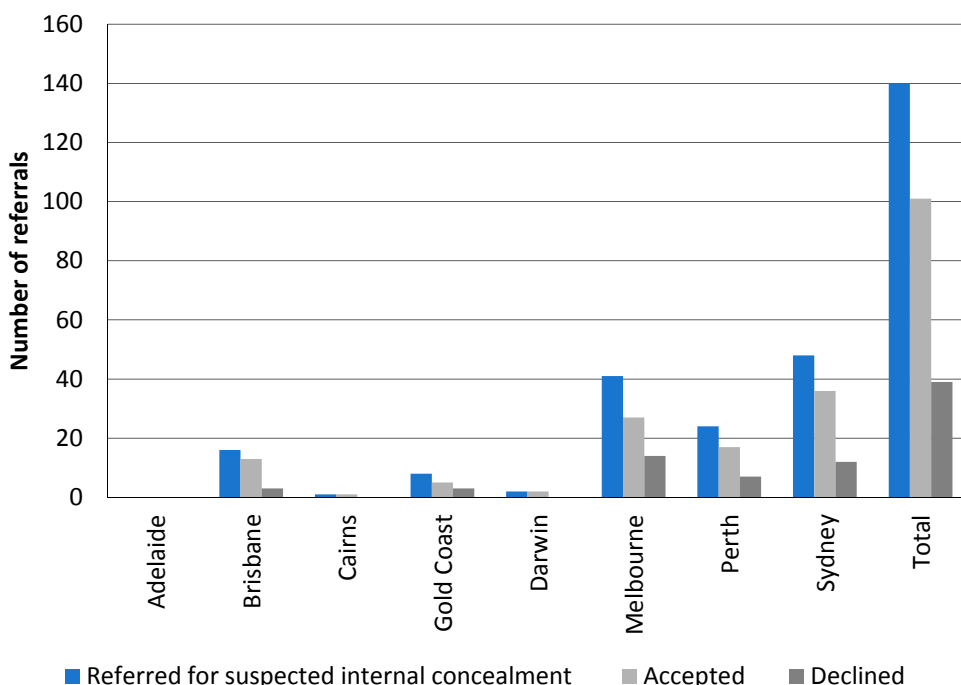
Source:　ANAO analysis of Customs and Border Protection data.

7.39　　Figure 7.3 illustrates the trend in referrals, and the proportion of those which have been accepted or declined, between 2008 and 2011. It shows that the total number of referrals has decreased over time, from 342 in 2008–09, to 140 in 2010–11. This is due to the impact of several dedicated operations and profiles targeting internal couriers that were running in 2008–09 and 2009–10, but which were subsequently de-activated when the *modus operandi* of the targets of those operations changed. Figure 7.3 also shows that the proportion of declined referrals has been reasonably consistent, at 23 per cent during 2008–09, and 27 per cent during 2009–10 and 2010–11.

Figure 7.3

Referrals of suspected internal couriers, 2008–09 to 2010–11
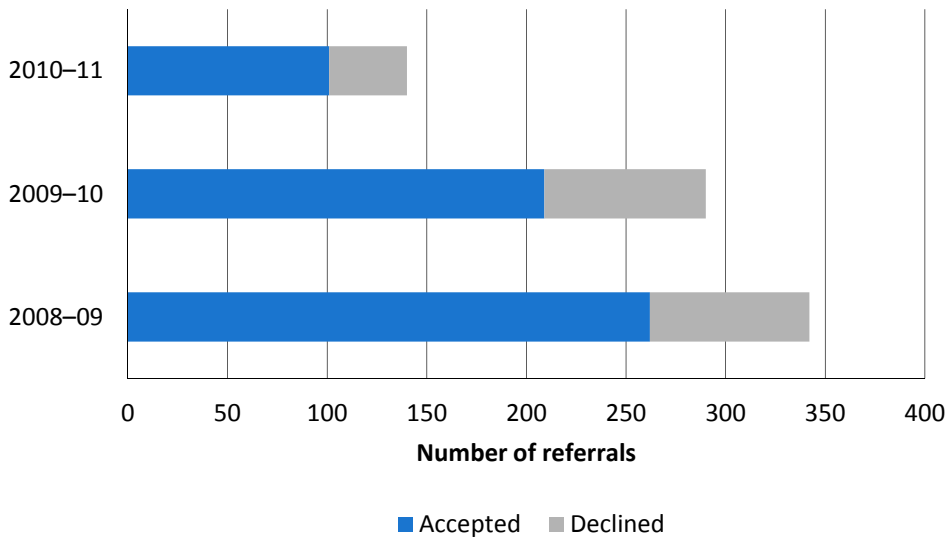
Source: ANAO analysis of Customs and Border Protection data.

7.40 In meetings with the AFP and Customs and Border Protection, both agencies noted that the process of transferring suspicion from Customs and Border Protection to the AFP can be difficult. On some occasions the AFP member attending the referral will examine the evidence and judge that, in their view, reasonable grounds do not exist. The different conclusions are generally a result of the two agencies making an assessment from different perspectives, and not fully understanding each other's processes for determining suspicion. This can lead to some frustration when referrals from Customs and Border Protection are not accepted by the AFP.

7.41 In an effort to improve this process, during 2007 Customs and Border Protection, in consultation with the AFP, introduced a form to document the referral of suspected internal couriers. When filling in the form, Customs and Border Protection officers are required to include as much relevant information as possible to ensure that the AFP has a detailed understanding of the reasons for suspicion. Once the AFP has determined whether it will accept or reject the referral, the AFP officer will sign the form and, if the referral has been rejected, fills out the declined internal referral feedback form. In the feedback form the AFP officer details the reasons for rejection, which assists Customs and Border Protection in refining future referrals. Comments from both agencies at

airports indicates that this form has provided better accountability for referral decisions and clearer understanding of the reasons for decisions.

7.42 At some airports, Customs and Border Protection and the AFP have run sessions for each other explaining their perspective and processes in relation to suspected internal couriers. The aim is to increase the level of understanding between the agencies and through this, improve the referral process.

Internal Concealment Working Group

7.43 In addition to local operational initiatives to improve the referral process for suspected internal couriers, Customs and Border Protection established an Internal Concealment Working Group (the working group) on 19 February 2010. The working group is a cross divisional and interagency group comprising representatives from Customs and Border Protection and the AFP. It was established to develop an enhanced business model for identifying and managing travellers suspected of internal drug concealment, and manage and oversee the trial of body scanner technology.

7.44 The body scanner works by producing a computer image of a person's internal body tissue, the skeleton and, where present, internal concealments including those within body cavities.[57] Similar internal body scanners are currently used by several international border agencies. Customs and Border Protection officers would use the images produced by the body scanner to support or dispel their suspicion that a passenger is internally concealing a suspicious substance.

7.45 The pilot deployment of one body scanner to an international airport commenced in April 2012 and will run for twelve months. The introduction of body scanners has the potential to improve the process of referral of suspected internal couriers because it will add an objective evidential component to a process of forming a reasonable suspicion that has previously been based on

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[57] The body scanner being used in the pilot is a transmission X-ray scanner that can produce an image of a person's internal cavities within a skeletal structure. These scanners produce images that appear similar to medical X-ray images but are produced with significantly lower radiation exposure. The scanner does not identify the subject's face or clearly show external body parts. The body scanner being used in the pilot is different in purpose and type to that trialled in Melbourne and Sydney during August and September 2011, which uses low-energy millimetre-waves for the purpose of detecting metal and non-metal items under clothing. That scanner produces images of a generic outline of a passenger, which appears like a stick figure and no images are stored or shared. <http://www.minister.infrastructure.gov.au/aa/releases/2011/August/AA138_2011.aspx> [accessed 6 June 2012].

subjective judgement. However, it will be some time before the pilot has concluded and decisions are made about implementing internal body scanners into all international airports. Given this time lag, it will be important for Customs and Border Protection and the AFP to continue their active management of internal concealment referrals. The ANAO suggests that both agencies continue running courses of the type referred to in paragraph 7.42, and consider extending them to other airports.

Conclusion

7.46   Customs and Border Protection and the AFP have closely intersecting roles at Australia's international airports. Overall, the ANAO found that the relationship between the two agencies at airports is sound and effective. Both agencies, at airports and central offices, gave consistent and positive feedback to the ANAO about their relationship.

7.47   The only significant issue of concern in the relationship is the referral of suspected internal couriers, particularly with regard to the difficulties involved in the process of transferring suspicion from Customs and Border Protection to the AFP. This issue is being actively managed by Customs and Border Protection and the AFP, through the introduction of a referral form and initiation of information sessions. In the longer term, the introduction of body scanners and the resultant provision of objective evidence are likely to improve the transfer of suspicion process.

Ian McPhee   Canberra ACT

Auditor-General   25 June 2012

Appendices

Appendix 1: SmartGate eligibility assessment

Figure A 1

Key validation processes performed by SmartGate

Event Triggers

SmartGate Processes

ePassport on reader

Get MRZ data and validate ← ePassport

Get chip data and check against certificates in Customs PKD ← Customs PKD

Compare MRZ and chip data to ensure they match

Check PACE for alerts and expected movements ← PACE

Collect and assess the answers to questions presented by kiosk

Obtain and store photo from ePassport → SmartGate

Issue SmartGate ticket

If there is a failure, or criteria for self-processing is not met at any stage in the process, the individual will be referred to a Customs Primary Line Officer for manual processing.

Ticket inserted at Gate

Compare stored ePassport photo with photo taken at Gate

Confirm the passenger is eligible to enter Australia

Open Gates

Person may still be referred at this point for reasons other than photo mismatch (e.g. alert on traveller)

Source: Customs and Border Protection.

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