



Australian Government

Aviation Safety Regulation Review

MAY 2014



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The Hon Warren Truss MP
Deputy Prime Minister
Minister for Infrastructure and Regional Development
Parliament House
CANBERRA ACT 2600

Dear Deputy Prime Minister

In accordance with the Terms of Reference we are pleased to present the Report of the Aviation Safety Regulation Review (the Review).

Extensive public consultations, including meetings with over 200 individuals and some 269 formal submissions, have informed the Review's work.

There are opportunities to improve the aviation safety regulatory system and in this regard the Review has made 37 recommendations, focussed on:

- improving the performance of the Australian Government agencies within the system;
- optimising governance mechanisms and frameworks;
- completing the regulatory reform program; and
- changing the regulatory philosophy of the safety regulator.

We would like to note our appreciation for the interest and commitment to the Review shown by the Australian aviation industry. The industry responded well to the call for public submissions and engaged with the Review in a positive and productive manner. We would also like to express our appreciation to the Australian Government agencies for their productive engagement with the Review.

Together, these attitudes bode well for implementation of the recommendations of the Review and the reinvigoration of the Australian safety regulatory system.

Finally we would also like to record our thanks to the Secretariat that supported the Review's work.

Yours sincerely

Handwritten signature of David Forsyth in black ink.

David Forsyth AM
Panel Chair

Handwritten signature of Don Spruston in black ink.

Don Spruston
Panel Member

Handwritten signature of Roger Whitefield in black ink.

Roger Whitefield
Panel Member

30 May 2014

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Executive summary

Australia has an excellent, high-capacity Regular Public Transport safety record and an advanced aviation regulatory system. However, there are opportunities for the system to be improved to ensure Australia remains a leading aviation state.

The Aviation Safety Regulation Review makes 37 recommendations for the Australian Government to consider.

Despite Australia's good standing, the aviation industry is highly self-critical and regularly has a 'take no prisoners' approach to public discourse. While this critical introspection may contribute to its good record, it can at times be counter-productive to promoting rational public debate on aviation safety and to building a positive and collaborative national aviation safety culture.

The current relationship between industry and the regulator is cause for concern. In recent years, the regulator has adopted an across the board hard-line philosophy, which in the Panel's view, is not appropriate for an advanced aviation nation such as Australia. As a result, relationships between industry and the Civil Aviation Safety Authority (CASA) have, in many cases, become adversarial.

Leading regulators across the world are moving to performance-based regulation, using a 'trust and verify' approach, collaborating with industry to produce better safety outcomes and ensuring the regulator stays in touch with rapidly advancing technology and safety practices. On occasions, individual operators may push the boundaries and require close regulatory oversight and a firm regulatory response. An effective risk-based regulator will judge when a hard line is necessary.

A number of countries with advanced aviation regulatory systems have developed collaborative relationships between their regulators and industry, leading to open sharing of safety data. Due to the present adversarial relationship between industry and CASA, Australia lacks the degree of trust required to achieve this important aim. Sharing safety data is a fundamental principle of good safety management.

The Panel concludes that CASA and industry need to build an effective collaborative relationship on a foundation of mutual trust and respect. Therefore, CASA needs to set a new strategic direction. The selection of a new Director of Aviation Safety should concentrate on finding an individual with leadership and change management abilities, rather than primarily aviation expertise. Other jurisdictions have appointed leaders without an aviation background, who have been successful in changing the strategic direction of the safety regulator.

The CASA Board should exercise full governance over the organisation. The addition of two extra directors and filling of two upcoming vacancies provides an opportunity to ensure the CASA Board has an appropriate blend of skills including experienced practitioners from across the aviation industry.

To help improve the industry – regulator relationship, the Panel recommends that CASA align its organisation with industry, re-establish small offices at major airports, adopt an industry exchange program, devolve medical renewals to DAMEs, and publish service KPIs.

The Panel also recommends a number of changes in regulatory oversight. The regulatory audit program should reflect international auditing standards, fully disclosing findings during an audit and at exit briefings. Findings should be graded on a scale of seriousness. The Panel also recommends that CASA make use of third party commercial audits as a means of supplementing its surveillance program.

Current appeals processes, while having a sound basis, can be improved. The Panel recommends that the CASA Industry Complaints Commissioner report to the CASA Board and be authorised to convene independent review panels on merits matters, chaired by a CASA non-executive director.

The Regulatory Reform Program has been ongoing for over two decades and has changed direction several times. This has led to widespread 'reform fatigue' within the industry. A speedy resolution to the current program is required, and a more manageable (but regular) process of periodic maintenance should be adopted. This maintenance should only change regulations when change is required to improve safety, or to ensure harmonisation with global best practice and the Standards and Recommended Practices of the International Civil Aviation Organization (ICAO). Australia should ensure that its unique regulatory requirements are minimised.

Industry is frustrated with many new Civil Aviation Safety Regulations, viewing them as overly legalistic, difficult to understand and focused on punitive outcomes. The situation has arisen from a combination of the move to a two-tier regulatory approach, policy decisions by the regulator, and government drafting requirements. The Panel recommends returning to a third tier of regulation, removing as much detail as possible from regulations, and using plain language standards in the third tier. A reduced number of high-level offence and penalty provisions would remain in the regulations. The third tier of standards should be carefully drafted using small project groups of industry experts working with the regulator, separate from the day-to-day regulatory task.

The Australian Transport Safety Bureau (ATSB) has been heavily criticised in Australia for its report into the 2009 ditching of a Pel-Air Westwind off Norfolk Island¹. Canada's Transportation Safety Board is completing a review of the ATSB and will report shortly. The Panel considers that the Pel-Air report was an aberration, and not typical of the high standard that the ATSB usually attains. The Panel recognises that the ATSB is putting measures in place to prevent a reoccurrence. To improve the ATSB's governance, the Panel recommends that an additional Commissioner be appointed, with extensive aviation experience.

ICAO requires that countries formulate a State Safety Program (SSP), which Australia has done. The Panel considers that Australia should develop the SSP as a strategic plan for the aviation safety system, under the leadership of the Aviation Policy Group. To implement this plan, the Department of Infrastructure and Regional Development should play a stronger policy role in the SSP, providing policy guidance while respecting the operational independence of CASA, the ATSB, and Airservices.

The Panel appreciates the significant level of interest, support and contribution from both the aviation community and government agencies.

¹ ATSB, Ditching – Israel Aircraft Industries Westwind 1124A, VH-NGA, AO-2009-072, August 2012

List of recommendations

The Aviation Safety Regulation Review Panel recommends that:

1. The Australian Government develops the State Safety Program into a strategic plan for Australia's aviation safety system, under the leadership of the Aviation Policy Group, and uses it as the foundation for rationalising and improving coordination mechanisms.
2. The Department of Infrastructure and Regional Development plays a stronger policy role in the State Safety Program.
3. The Australian Transport Safety Bureau investigates as many fatal accidents in the sport and recreational aviation sector as its resources will allow.
4. The Australian Transport Safety Bureau and the Civil Aviation Safety Authority utilise the provision in their bilateral Memorandum of Understanding to accredit CASA observers to ATSB investigations.
5. The Australian Government appoints an additional Australian Transport Safety Bureau Commissioner with aviation operational and safety management experience.
6. The Civil Aviation Safety Authority's Board exercises full governance control. The non-executive directors should possess a range of appropriate skills and backgrounds in aviation, safety, management, risk, regulation, governance and government.
7. The next Director of Aviation Safety has leadership and management experience and capabilities in cultural change of large organisations. Aviation or other safety industry experience is highly desirable.
8. The Civil Aviation Safety Authority:
 - a. reinstates publication of Key Performance Indicators for service delivery functions
 - b. conducts a stakeholder survey every two years to measure the health of its relationship with industry
 - c. accepts regulatory authority applications online unless there is a valid technical reason against it
 - d. adopts the same Code of Conduct and Values that apply to the Australian Public Service under the *Public Service Act 1999*.
9. The Civil Aviation Safety Authority develops a staff exchange program with industry.
10. Airservices Australia, in conjunction with the Department of Infrastructure and Regional Development and the Civil Aviation Safety Authority, reconsiders the policy on 'Assessment of Priorities' that stipulates that air traffic controllers sequence arriving aircraft based on category of operation, rather than on the accepted international practice of 'first come, first served'.
11. The Australian Transport Safety Bureau and the Civil Aviation Safety Authority amend the wording of their existing Memorandum of Understanding to make it more definitive about interaction, coordination, and cooperation.
12. The Civil Aviation Safety Authority delegates responsibility for the day-to-day operational management of airspace to Airservices Australia, including the designation of air routes, short-term designations of temporary Restricted Areas, and temporary changes to the classification of airspace for operational reasons.

13. The Department of Infrastructure and Regional Development and Department of Defence (and appropriate agencies) establish an agreed policy position on safety oversight of civil operations into joint user and military airports.
14. The Civil Aviation Safety Authority changes its regulatory philosophy and, together with industry, builds an effective collaborative relationship on a foundation of mutual understanding and respect.
15. The Civil Aviation Safety Authority continues to provide appropriate indemnity to all industry personnel with delegations of authority.
16. The Civil Aviation Safety Authority finalises its Capability Framework and overhauls its training program to ensure identified areas of need are addressed, including:
 - a. communication in a regulatory context
 - b. decision making and good regulatory practice
 - c. auditing.
17. The Civil Aviation Safety Authority publishes and demonstrates the philosophy of ‘just culture’ whereby individuals involved in a reportable event are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training. However, actions of gross negligence, wilful violations and destructive acts should not be tolerated.
18. The Civil Aviation Safety Authority reintroduces a ‘use of discretion’ procedure that gives operators or individuals the opportunity to discuss and, if necessary, remedy a perceived breach prior to CASA taking any formal action. This procedure is to be followed in all cases, except where CASA identifies a Serious and Imminent Risk to Air Safety.
19. The Australian Transport Safety Bureau transfers information from Mandatory Occurrence Reports to the Civil Aviation Safety Authority, without redaction or de-identification.
20. The Australian Transport Safety Bureau transfers its safety education function to the Civil Aviation Safety Authority.
21. The Civil Aviation Safety Authority changes its organisational structure to a client-oriented output model.
22. The Civil Aviation Safety Authority establishes small offices at specific industry centres to improve monitoring, service quality, communications and collaborative relationships.
23. The Civil Aviation Safety Authority shares the risk assessment outputs of Sky Sentinel, its computerised risk assessment system, with the applicable authorisation holder.
24. The Civil Aviation Safety Authority provides full disclosure of audit findings at audit exit briefings in accordance with international best practice.
25. The Civil Aviation Safety Authority introduces grading of Non-Compliance Notices on a scale of seriousness.
26. The Civil Aviation Safety Authority assures consistency of audits across all regions, and delivers audit reports within an agreed timeframe.
27. The Civil Aviation Safety Authority implements a system of using third-party commercial audits as a supplementary tool to its surveillance system.
28. The Civil Aviation Safety Authority establishes a safety oversight risk management hierarchy based on a categorisation of operations. Rule making and surveillance priorities should be proportionate to the safety risk.

29. Recreational Aviation Administration Organisations, in coordination with the Civil Aviation Safety Authority, develop mechanisms to ensure all aircraft to be regulated under CASR Part 149 are registered.
30. The Civil Aviation Safety Authority changes the current two-tier regulatory framework (act and regulations) to a three-tier structure (act, regulations and standards), with:
 - a. regulations drafted in a high-level, succinct style, containing provisions for enabling standards and necessary legislative provisions, including offences
 - b. the third-tier standards drafted in plain, easy to understand language.
31. The Civil Aviation Safety Authority structures all regulations not yet made with the three-tier approach, and subsequently reviews all other Civil Aviation Safety Regulation Parts (in consultation with industry) to determine if they should be remade using the three-tier structure.
32. The Civil Aviation Safety Authority reassesses the penalties in the Civil Aviation Safety Regulations.
33. The Civil Aviation Safety Authority applies a project management approach to the completion of all Civil Aviation Safety Regulation Parts not yet in force, with drafting to be completed within one year and consultation completed one year later, with:
 - a. a Steering Committee and a Project Team with both CASA and industry representatives
 - b. implementation dates established through formal industry consultation.
34. The Civil Aviation Safety Authority's Director of Aviation Safety meet with industry sector leaders to jointly develop a plan for renewing a collaborative and effective Standards Consultative Committee.
35. The Civil Aviation Safety Authority devolve to Designated Aviation Medical Examiners the ability to renew aviation medical certificates (for Classes 1, 2, and 3) where the applicant meets the required standard at the time of the medical examination.
36. The Australian Government amends regulations so that background checks and the requirement to hold an Aviation Security Identification Card are only required for unescorted access to Security Restricted Areas, not for general airside access. This approach would align with international practice.
37. The Civil Aviation Safety Authority amends the current Terms of Reference of the Industry Complaints Commissioner so that:
 - a. the ICC reports directly to the CASA Board
 - b. no CASA staff are excluded from the ICC's jurisdiction
 - c. the ICC will receive complaints that relate to both the merits and the process of matters
 - d. on merits matters, including aviation medical matters, the ICC is empowered to convene an appropriately constituted review panel, chaired by a CASA non-executive director, to review the decision
 - e. while all ICC findings are non-binding recommendations, the original decision-maker is required to give reasons to the CASA Board if a recommendation is not followed.

Acronyms

AAIB	Air Accident Investigation Branch (United Kingdom)
AAO	Administrative Arrangement Orders
AAT	Administrative Appeals Tribunal
ABC	Australian Broadcasting Corporation
AC	Advisory Circular
ACCC	Australian Competition and Consumer Commission
ACMA	Australian Communications and Media Authority
AC-MAC	Australian Civil – Military Air Traffic Management Committee
ACT	Australian Capital Territory
ADJR Act	<i>Administrative Decisions (Judicial Review) Act 1977</i>
AIDS	Accident/Incident Data Systems
AIG	Aviation Implementation Group
AME	Aircraft Maintenance Engineer
AMROBA	Aviation Maintenance Repair and Overhaul Business Association
AMSA	Australian Maritime Safety Authority
ANAO	Australian National Audit Office
ANSP	Air Navigation Service Provider
ANZCERTA	Australia–New Zealand Closer Economic Relations Trade Agreement
AOC	Air Operator’s Certificate
APG	Aviation Policy Group
APS	Australian Public Service
ARAC	Aviation Rule Making Advisory Committee
ARFF	Aviation Rescue and Firefighting
Airservices	Airservices Australia
ASIC	Aviation Security Identification Card
ASTRA	Australian Strategic Air Traffic Management Group
ATC	Air Traffic Control
ATM	Air Traffic Management
ATS	Air Traffic Services
ATSA	<i>Aviation Transport Security Act 2004</i>
ATSB	Australian Transport Safety Bureau
ATSR	Aviation Transport Security Regulations 2005
AVID	Aviation Identification Card
AWI	Airworthiness Inspector
BITRE	Bureau of Infrastructure, Transport and Regional Economics
BOM	Bureau of Meteorology
CA Act	<i>Civil Aviation Act 1998</i>
CAA	Civil Aviation Authority
CAAP	Civil Aviation Advisory Publication
CAC Act	<i>Commonwealth Authorities and Companies Act 1997</i>
CACO	Civil Aviation Contingency Operations

CAO	Civil Aviation Orders
CAR	Civil Aviation Regulations 1988
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations 1998
CAT	Commercial Air Transport
CCM	Complex Case Management
CEO	Chief Executive Officer
COSCAP	Cooperative Development of Operational Safety and Continuing Airworthiness Programme
DAME	Designated Aviation Medical Examiner
DAO	Designated Aviation Ophthalmologist
DAS	Director of Aviation Safety
DDAAFS	Directorate of Defence Aviation and Air Force Safety
DGCA	Director-General of Civil Aviation
Department	Department of Infrastructure and Regional Development
EASA	European Aviation Safety Agency
ECCAIRS	European Co-ordination Centre for Accident and Incident Reporting Systems
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FOI	Flying Operations Inspector
GA	General Aviation
GASP	Global Aviation Safety Plan
GDP	Gross Domestic Product
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ICC	Industry Complaints Commissioner
IOSA	IATA Operational Safety Audit
IS-BAO	International Standard for Business Aircraft Operations
ISO	International Organization for Standardization
JAASACG	Joint Agency Aviation Safety Analysis Coordination Group
KPI	Key Performance Indicator
LOS	Loss of Separation
MOR	Mandatory Occurrence Report
MOS	Manual of Standards
MOU	Memorandum of Understanding
MP	Member of Parliament
MSIC	Maritime Security Identification Card
NCC	Non-Commercial Complex Aircraft
NCN	Non-Compliance Notice
NCO	Non Commercial Operations
NFRM	Notice of Final Rule Making
NPRM	Notice of Proposed Rule Making
NTSB	National Transportation Safety Board (United States)
OBPR	Office of Best Practice Regulation

OPC	Office of Parliamentary Counsel
OTAR	Overseas Territories Aviation Requirements
OTS	Office of Transport Security
RAAF	Royal Australian Air Force
RAAO	Recreational Aviation Administration Organisation
RA-Aus	Recreational Aviation Australia
RCA	Request for Corrective Action
RFACA	Royal Federation of Aero Clubs of Australia
RIS	Regulatory Impact Statement
RPT	Regular Public Transport
RRP	Regulatory Reform Program
SARP	Standards and Recommended Practices
SCC	Standards Consultative Committee
SIIMS	Safety Investigation Information Management System
SIPTF	Safety Information Protection Task Force
SMS	Safety Management System
SRA	Security Restricted Area
SRP	Systems Risk Profile
SSP	State Safety Program
SSP-CAT	State Safety Program Cross-Agency Team
TAIC	Transport Accident Investigation Commission (New Zealand)
TC	Transport Canada
TSA	Transportation Security Administration (United States)
TSB	Transportation Safety Board (Canada)
TSI Act	<i>Transport Safety Investigation Act 2003</i>
UK	United Kingdom
UK CAA	United Kingdom Civil Aviation Authority
US	United States
USOAP	Universal Safety Oversight Audit Programme

1. Introduction

1.1 Background

Australia has a long history in aviation and an excellent high-capacity Regular Public Transport (RPT) safety record. A comparison of accident statistics internationally shows that Australia is among the safest countries in which to fly.² However, past performance should not be taken as an indication of the future. Aviation safety can only be maintained by constant vigilance and evolution of the safety system.

To ensure that Australia maintains its strong air safety record, in November 2013 the Deputy Prime Minister and Minister for Infrastructure and Regional Development, the Hon Warren Truss MP, commissioned the Aviation Safety Regulation Review (the Review). Terms of Reference for the Review, biographies of the Review Panel and other relevant details are at Appendices A1–A3.

As outlined in the Terms of Reference, the Review's principal objectives were to investigate:

- the structures, effectiveness and processes of all agencies involved in aviation safety
- the relationship and interaction of those agencies with each other, as well as with the Department of Infrastructure and Regional Development (the Department)
- the outcomes and direction of the regulatory reform process being undertaken by the Civil Aviation Safety Authority (CASA)
- the suitability of Australia's aviation safety-related regulations when benchmarked against comparable overseas jurisdictions
- any other safety-related matters.

This Report is the outcome of the Review. In delivering this Report, the Panel reaffirms the primacy of safety, but the Panel also acknowledges that there is a need for regulations and a regulator that allow businesses to operate in a sustainable manner. These outcomes are not mutually exclusive.

This Report has been structured to align with the principal objectives of the Review. This introductory section briefly describes the Australian aviation industry, some of the key events that shaped the current regulatory framework and how the Panel has approached the Review. Chapter 2 considers the effectiveness of each agency involved in aviation safety and Chapter 3 considers the interactions between these agencies. Chapter 4 looks more closely at the effectiveness of CASA's safety oversight functions, including how Australia's regulatory framework compares with international practice. Chapter 5 discusses CASA's regulatory reform process and Chapter 6 considers a number of other safety related-issues that the Panel considered relevant to the Review.

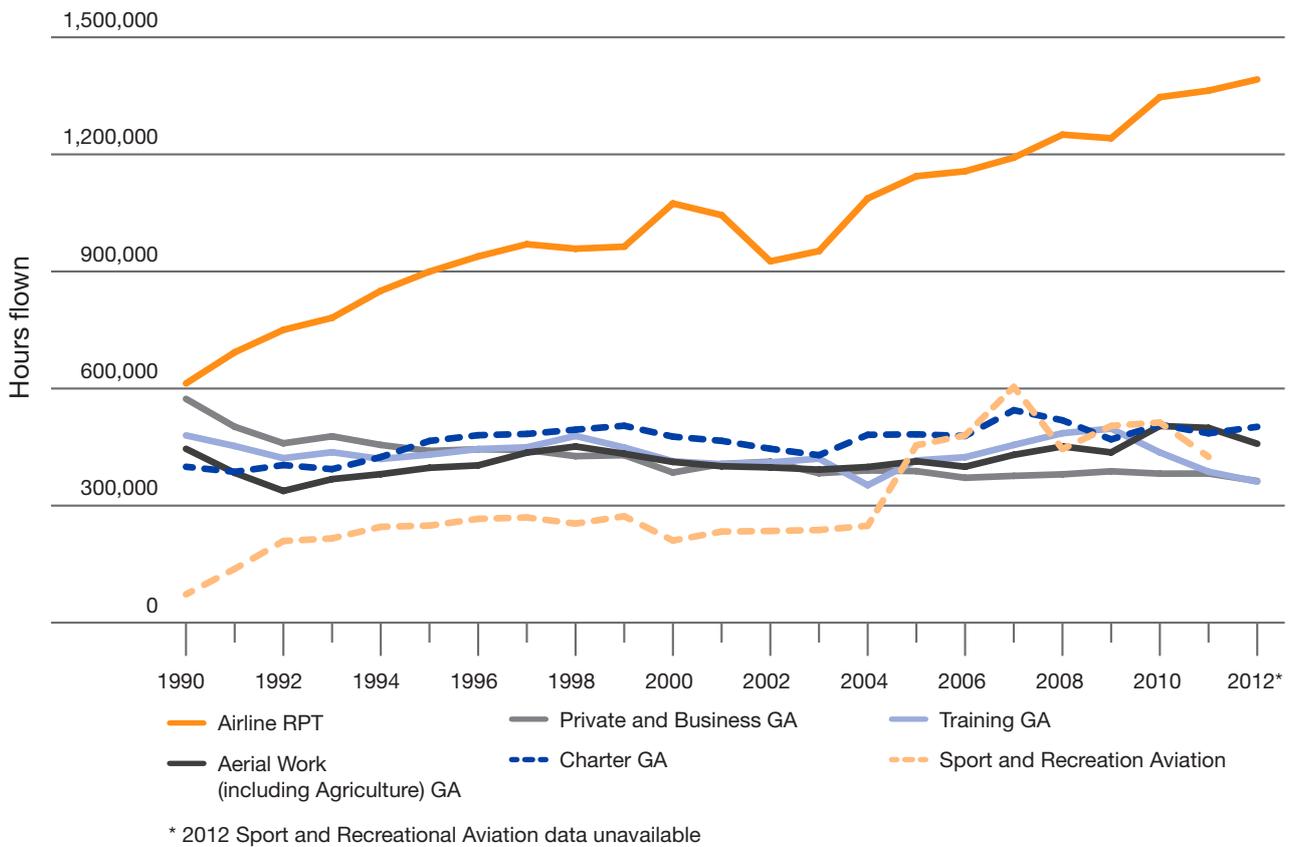
² Data provided by CASA.

1.2 Australian aviation industry

Australia is more reliant on aviation than many other countries due to its vast and sparsely populated landscape, and its remoteness from many of the world’s population centres. Figure 1 shows the number of hours flown for each sector in the industry since 1990.³

As of 2012, the Australian aviation industry comprised approximately 20,500 active aircraft, including over 7,500 sports and recreational aviation aircraft.⁴ This number has grown from approximately 17,000 aircraft in 2002. Industry commentators agree that the aviation industry is expected to grow into the future, particularly the airline industry, which is predicted to double in size in the next 20 years.⁵

Figure 1 Hours flown by sector



Source: BITRE⁶

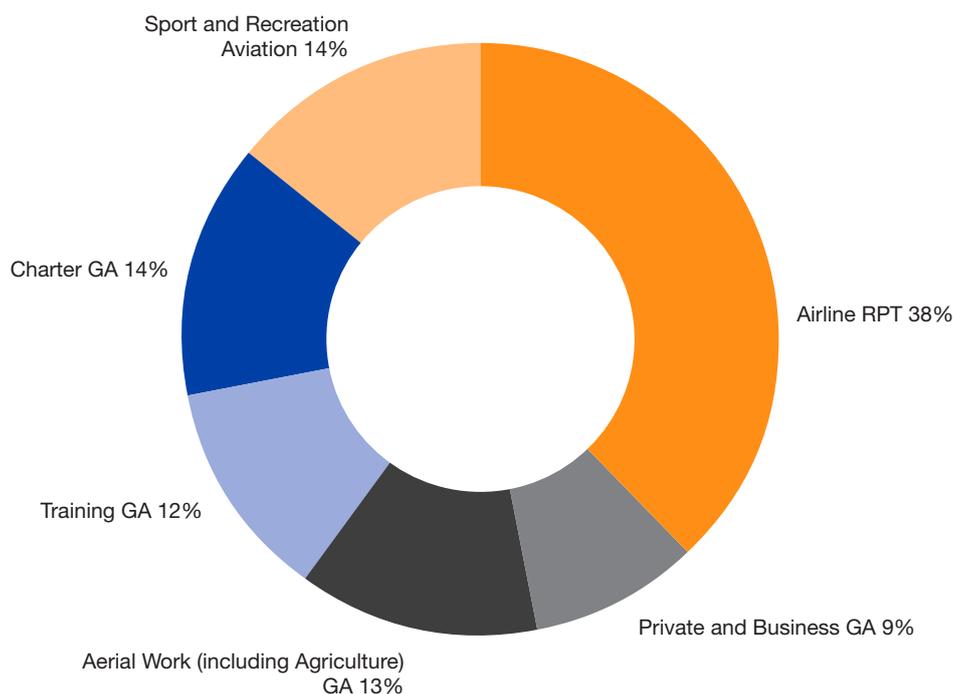
3 Data sourced from BITRE.

4 Data sourced from BITRE.

5 BITRE Research Report, Air Passenger Movements through capital and non-capital city airports to 2030-31, November 2012, which predicts the number of passenger movements through all Australian airports is forecast to increase from 135.1 million in 2010-11 to 279.2 million in 2030-31.

6 2012 Sport and Recreation hours not available. 2000-2004 Gliding Federation of Australia (GFA) data not available.

Figure 2 2012 Aviation activity by sector (hours flown)



Source: BITRE⁷

In 2012, RPT accounted for 38 per cent of all hours flown in Australia. By some estimates, the sector contributes \$32 billion or 2.6 per cent to Australia's Gross Domestic Product (GDP) (2009 figures).⁸

General Aviation (GA), including charter, training, aerial work, and private and business flying, accounted for 48 per cent of total hours flown.⁹ The GA sector provides vital services to many Australian industries, including agriculture, tourism and mining. The sector also provides key services to remote communities that rely, sometimes exclusively, on aviation for important supplies, such as mail, medical services, and business and community services.

Sports and recreational aviation accounted for 14 per cent of hours flown, including ultralight planes, gliders, balloons and gyrocopters. CASA advised the Panel that the sports and recreational sector has nearly 70,000 participants.

1.2.1 Aviation industry diversity

Aviation is a diverse industry, which creates challenges for regulation.

As modern and competitive international businesses, the major airlines continue to adopt new technology to improve productivity, efficiency and service delivery. Developments in safety systems and technology mean that, for the most part, the challenges facing regulators in the RPT sector are no longer significant failures of equipment or technology. Rather, the focus is on more subtle shifts in safety systems, with both technical and human dimensions.

Australia's regulatory system must be able to accommodate the rapidly evolving RPT sector, while not unnecessarily encumbering smaller operators. The major airlines typically use much newer aircraft

⁷ Sport and Recreation data extrapolated by ASRR.

⁸ Oxford Economics, *Economic Benefits from Air Transport in Australia*, 2011.

⁹ The categories of flying included in GA in these statistics are sourced from BITRE and are broadly consistent with the classifications used for statistical purposes within ICAO. This definition may differ from the definitions of GA used in other jurisdictions.

than most other sectors — in 2012, the average age of the Australian major airline fleet was eight years, compared to 28 years for smaller airlines and GA.¹⁰ The differing scale between the sectors also has implications for the types of safety systems they use. CASA must account for this diversity in its regulatory oversight.

The inherent differences between the sports and recreation sector and other aviation sectors are recognised and accommodated through a different model of regulation known as ‘self-administration’. Under a system of, inter alia, exemptions, delegations and approvals, certain authorised aviation industry sector organisations are permitted to oversee their own sector including registrations, inspections, certifications, training and licensing.

1.3 Significant events in Australian aviation safety

Over the past decade, Australia’s aviation safety framework has been shaped by both external events and deliberate acts of government policy, through commissioning various inquiries into aviation regulatory matters. This section details significant events in Australian aviation over the past 10 years, culminating in the commissioning of this Review.

1.3.1 2003–04 CASA governance and strategic changes

In 2003, the CASA Board was abolished. Subsequently the Chief Executive Officer reported to the (then) Minister for Transport and Regional Services. In 2004, as part of a new strategic direction, CASA placed its greatest safety focus on high-capacity RPT.

1.3.2 2005 Lockhart River accident

In 2005, a Metroliner operated by Transair crashed at Lockhart River in North Queensland, killing all 15 people on board. This event was significant, not only due to the loss of life, but also because subsequent investigations identified a number of systemic issues in the regulatory system that prompted a series of reforms.

The Lockhart River accident was investigated by both the State Coroner, with assistance from the Australian Transport Safety Bureau (ATSB) and CASA, as well as an independent Annex 13 investigation by the ATSB. Investigation reports from both parties were released in 2007.

The ATSB found the accident was a result of controlled flight into terrain, with a range of contributing safety factors including the crew’s qualifications, the operator’s systems, and failings in CASA’s regulatory oversight.

Similarly, the Coronial Inquest: found that Transair’s poor safety management systems contributed to the accident, highlighted failings in CASA’s oversight of Transair, and recommended the need for a high-level review of interactions between CASA and the ATSB.

Although both reports were critical of CASA’s oversight of Transair, the report did not find that CASA’s oversight could have prevented the accident. Tensions arose between CASA and the ATSB during the Lockhart River investigation, particularly when CASA sought access to investigative information obtained by the ATSB to use in its regulatory role.

1.3.3 2007 regulatory consolidation

In July 2007, responsibility for airspace regulation was moved from Airservices Australia (Airservices) to CASA, making it the sole safety regulator for the civil aviation system in Australia.

¹⁰ Data sourced from BITRE

1.3.4 2007 Miller Review

Following the Lockhart River accident, in 2007 the Government commissioned a review of the relationship between CASA and the ATSB. The review was aimed at identifying areas for improved aviation safety outcomes through better cooperation and coordination, as well as assessing whether the agencies' administrative and legislative frameworks were working effectively. This review was led by Mr Russell Miller AM and is generally known as the Miller Review.

The Miller Review recommended that the ATSB become an independent commission. The Miller Review also recommended a range of other measures to improve cooperation and sharing of information between the ATSB and CASA.

1.3.5 2007 Hawke Report

In 2007, the Australian Government also established an Aviation Regulation Review Taskforce, chaired by former Secretary of the (then) Department of Transport and Regional Services, Dr Allan Hawke AC. This taskforce focused on assisting CASA to set key directions and priorities for aviation regulatory reform over five years.

The Hawke Report raised concerns about the complexity of the transitional regulatory system during the reform process, which required two regulatory frameworks to operate in parallel. The report also noted the industry's frustration with the reform process and CASA's consultative mechanisms. The report made 15 recommendations for expediting and prioritising the reform program, and improving coordination between safety agencies. A number of the recommendations related to internal CASA practices. The report also recommended Australia continue to benchmark its regulatory approach against other countries. Details on the implementation of the recommendations of the Hawke and Miller Reports are at Appendix A4.

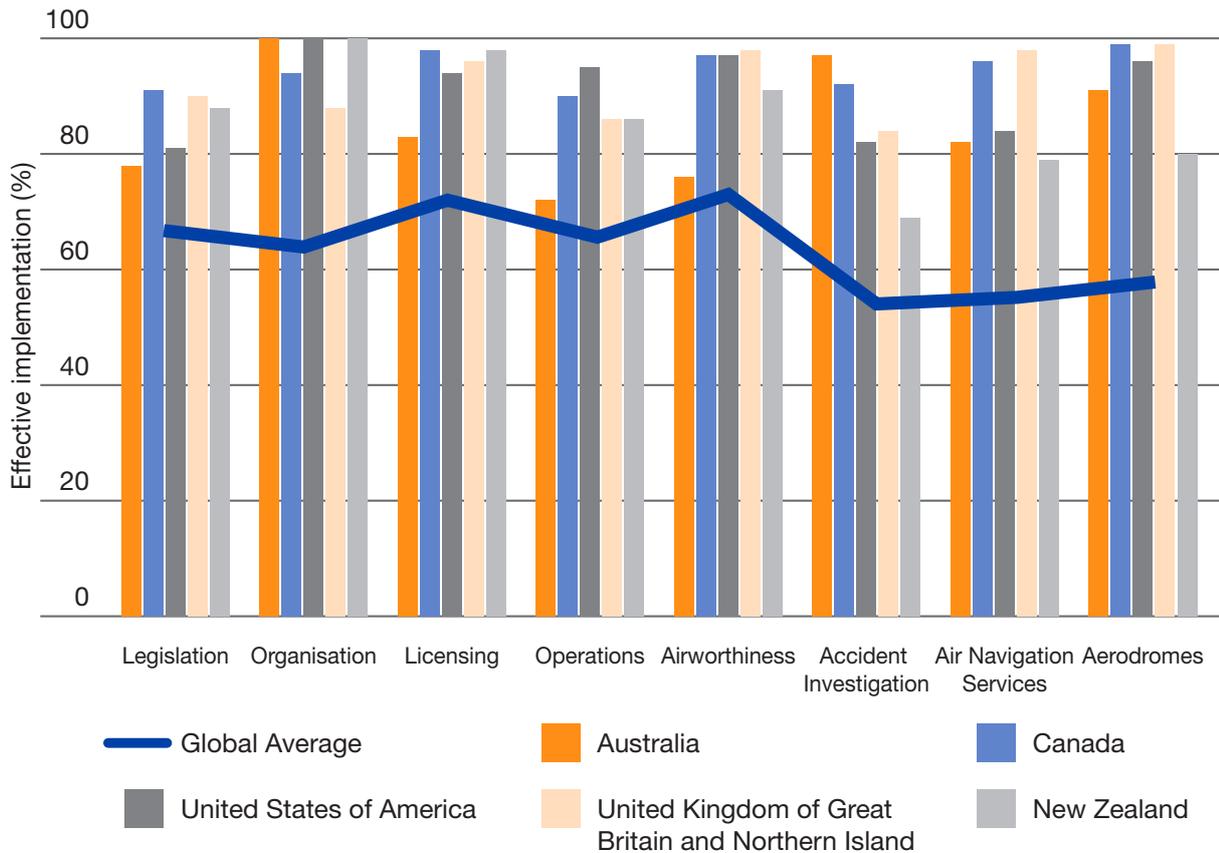
1.3.6 2008 ICAO Universal Safety Oversight Audit Programme

In February 2008, Australia's aviation safety system was reviewed against ICAO's global Standards. The audit identified a need to improve Australia's capacity to retain technical expertise within the safety regulator. The report noted a need for more formal training programs for inspectors.

Figure 3¹¹ shows that ICAO's Universal Safety Oversight Audit Programme (USOAP) audit of Australia's safety system found the level of effective implementation of ICAO's Standards and Recommended Practices (SARPs) was above the global average. However, in the areas of legislation, licensing, operations and airworthiness, Australia's implementation was slightly less than other leading jurisdictions such as Canada, the United States (US), the United Kingdom (UK) and New Zealand. Australia was only benchmarked as having a higher level of effective implementation than its counterparts for accident investigation.

11 This chart was generated from information available on the ICAO website: <http://www.icao.int/safety/Pages/USOAP-Results.aspx>, accessed 17 May 2014.

Figure 3 Australia's effective implementation of ICAO SARPs



1.3.7 2008 Senate Committee Inquiry into CASA administration

In 2008, the Senate Standing Committee on Rural and Regional Affairs conducted an inquiry into the administration of CASA, examining the effectiveness of administrative and governance reforms undertaken since 2003. The inquiry focused on the implementation of the CASA regulatory reform program, CASA's governance structure, the perception of CASA among industry participants and CASA's relationship with the aviation industry.

During the inquiry, the Senate Committee became aware of:

- concerns about the internal management and governance of CASA, and the internal culture within CASA that, in some cases, struggled to adapt to the new Safety Management System (SMS) approach
- the high level of frustration within industry with CASA's regulatory reform process
- problems with inconsistent application of regulations across different CASA offices.

The report recommended:

- strengthening the governance arrangements of CASA by re-introducing a governing Board
- bringing the regulatory reform process to a conclusion as quickly as possible to provide certainty to industry, in accordance with the findings of the Hawke Review
- that the Australian National Audit Office (ANAO) audit CASA's implementation and administration of its SMS approach.

Details on the implementation of the recommendations of the Senate Committee are at Appendix A4.

1.3.8 2009 Governance changes for ATSB and CASA

In February 2009, a governing Board for CASA was re-introduced. From July 2009, the ATSB became an independent statutory agency as a result of recommendations of both the Miller Review and the 2008 Senate Committee Inquiry.

1.3.9 2009 Pel-Air accident

In November 2009, an IAI Westwind business jet VH-NGA, operated by Pel-Air and performing an aeromedical operation, ditched into the ocean in bad weather off Norfolk Island after exhausting its fuel supply following several missed approaches. All six people onboard survived the ditching.

In August 2012, the ATSB released its final report into the ditching of the Pel-Air aircraft.¹² The ATSB attributed the accident primarily to incomplete pre-flight and en-route planning by the operating crew, particularly relating to fuel management.

Over time, this report received significant public criticism due to its delay (nearly three years after the accident) plus lack of both detailed analysis and useful recommendations for avoiding future incidents and accidents.

In 2012, an investigation (entitled 'Crash Landing') by the Australian Broadcasting Corporation's current affairs television program *Four Corners* triggered significant public criticism of the ATSB report, arguing that the ATSB unfairly attributed responsibility to the flight crew and did not attribute enough responsibility to the operator for alleged systemic failures. *Four Corners* highlighted a range of documents and information held by CASA about Pel-Air that were allegedly not provided to the ATSB during its investigations. The program was also critical of CASA's oversight of Pel-Air prior to the accident.

1.3.10 2009 Aviation White Paper

The 2009 Aviation White Paper reinforced the concerns from the Hawke Review about the speed of CASA's regulatory reform and outlined a priority for CASA to complete the program by 2011. This deadline proved overly ambitious, and the regulatory reform program is still ongoing. In 2010, CASA received a substantial funding boost from an increase in fuel excise rates and additional resources to expedite the reform process.

1.3.11 2010 Australian National Audit Office's report of CASA's Safety Management System approach

The ANAO Report into CASA's transition to regulatory oversight of operators' SMSs recommended that CASA improve the rigour of its review of SMSs by providing a clearer and more consistent evidentiary trail.

1.3.12 2012 Senate Committee Inquiry into Aviation Accident Investigations

In September 2012, the Senate Regional and Rural Affairs and Transport References Committee commenced an inquiry into Aviation Accident Investigations, focusing on the Pel-Air accident. This inquiry investigated the findings of the ATSB's report; the nature of, and protocols for, communications between agencies and other parties; and the mechanisms in place to ensure recommendations from investigations are adopted. The Senate Committee's final report, released in May 2013, made a range of recommendations about the ATSB's operations in general, specific recommendations to re-open the Pel-Air investigation, and recommendations to improve cooperation between the ATSB and CASA.

¹² ATSB, Ditching – Israel Aircraft Industries Westwind 1124A, VH-NGA, AO-2009-072, August 2012

The Australian Government tabled its response to the Senate Committee Report in March 2014, agreeing to 20 of the report's 26 recommendations. Four of the remaining recommendations (that related to the reopening of the Pel-Air investigation) were considered matters for the ATSB in the context of its statutory responsibilities. Two of the recommendations were not supported by the government: that the ATSB Chief Commissioner be required to demonstrate extensive aviation experience and that an expert panel be established to quality assure ATSB reports. The government argued that the multi-modal mandate of the ATSB makes it inappropriate to require the Chief Commissioner to have specific aviation expertise and that an expert review panel for ATSB reports would add an unnecessary extra layer of bureaucracy.

1.3.13 2014 Aviation Safety Regulation Review

On 14 November 2013, the Deputy Prime Minister and Minister for Infrastructure and Regional Development, the Hon Warren Truss MP, announced the Aviation Safety Regulation Review (the Review) and members of the Review Panel.

1.4 Analysis of submissions to this Review

The Review received public submissions between 6 December 2013 and 31 January 2014.¹³ In total, 269 submissions were received. Approximately one-third of submissions were made confidentially.

A summary of the main issues raised by industry sector is presented in Table 1. The three most common issues across all submissions were the regulatory reform program (136); CASA's inflexible regulatory approach (120); and the need for more promotion of aviation (90).

Both pilots and the maintenance and engineering sector identified the regulatory reform program as their primary concern. The sports and recreation sector accounted for the most responses regarding CASA's inflexible regulatory approach, the need for greater promotion of aviation and the system of self-administration. Responses from airlines, the agricultural sector, lawyers, helicopter operators, aero clubs and academics focused on a variety of issues.

1.5 Consultation meetings

The Panel met with over 200 individuals across Australia, visiting Sydney, Melbourne, Adelaide, Perth, Brisbane, Cairns, and a number of regional centres.

Consultations included a broad range of industry sectors, with representatives from GA, maintenance and engineering, flight training, charter, sports and recreation, gliding, agricultural, regional airlines, charter operators, major international airlines (both Australian and foreign), airports, airport associations, State Governments, and aviation lawyers.

The Panel met with all relevant Australian Government agencies, as well as a number of former senior government officials. The Panel also held meetings with members of the Senate's Rural and Regional Affairs and Transport References Committee.

To assist with benchmarking Australia's aviation safety regime against other countries, the Panel met with aviation industry members and government authorities in the UK, Canada and New Zealand, as well as international bodies including ICAO and the International Air Transport Association (IATA).

¹³ A number of late submissions were received after the closing date (31 January 2014). All late submissions were considered by the Panel.

Table 1 Summary of issues raised in submissions by industry sector

Aviation Sector	ASIC Governance ¹⁴	CASA Governance ¹⁴	CASA knowledge/ training	CASA consultation processes	Medical approvals	RRP ¹⁵	International harmonisation	Self-administration	Non-aviation developments at airports	Promotion of aviation	CASA Culture / Industry relationship	Data sharing	Inflexible regulatory approach	Agency interactions
Academics	2	3	3	1	2	2	2				3		1	1
Aero Clubs	2	1	1	2	3	4	3		2	3	2		2	
Agriculture	4	2	2	2	3	3	1			1	1	2	3	1
Airline	4	2	3	3	7	7	4				4	2	4	4
Airports	2	2	2	2	5	5	2		13	1			1	1
DAME				3	1									
Government				2	1	2	1		1			1		4
Helicopter	1		2	2	2	2				1	2		3	1
Legal	5	1	1	2	4	5	5	1		3	6	2	4	1
Maintenance and Engineering	4	14	13	6	6	25	21	4	1	10	10		14	1
Other	1	7	9	3	2	12	5	1	1	2	10	3	6	6
Pilots	9	12	8	12	11	28	21	6	4	8	13	3	21	8
Sport and Recreation Aviation	5	4	5	3	2	23	6	69	1	55	4	1	55	4
Training and Charter	1	3	5	4	5	11	4		2	6	5	1	4	1
Not provided	3	2	1	1	1	7	4	1			4		2	
Grand Total ¹⁶	25	61	52	41	36	136	2	82	25	90	64	15	120	33

¹⁴ Includes comments about CASAs organisational structure, the Board, the DAS, the ICC, and CASAs Executive Management.

¹⁵ Includes comments relating to regulatory complexity, legal overlay, cost of compliance and continual state of flux that has been the reform program.

¹⁶ Some submissions raised more than one issue

2. Structures, effectiveness and processes of agencies

2.1 International experience

Around the world, governments have adopted different organisational structures to regulate their civil aviation sectors. Australia has a decentralised system, with an independent aviation safety regulator, an independent accident investigator, and an independent air navigation service provider, with other aviation matters overseen by other agencies. This structure is in the minority internationally, although broadly similar to the UK, New Zealand and Singapore. Many other countries, including China, France, the United Arab Emirates and Indonesia, have a single agency responsible for all aviation matters. Other countries, such as the US and Canada, apply approaches in between these two models, with an aviation safety regulator reporting to government through the national transport department.

2.2 Economic regulation

In line with the broader economic reform agenda since the 1980s, the Australian Government has deregulated the domestic aviation market and liberalised the international market. Aviation has been placed under the same regulatory frameworks that apply across the economy (for example, consumer and competition matters), except where aviation-specific regulation is warranted, specifically in relation to safety and security.

Since the 1980s, the Australian Government has also moved Australia's aviation industry towards a predominantly private sector operation. The private sector owns or operates airlines, most airports, airport terminals, and aviation services throughout the country. While Australia's air traffic services provider, Airservices, remains government-owned, it operates on a commercial basis without government appropriation and is regulated by Australia's aviation safety regulator, like any other civil aviation industry participant.

2.3 Safety regulation

Australia separated its safety regulatory agency from other government functions in the 1990s, based on lessons learnt from aviation safety regulation domestically and overseas. The formation of CASA in 1995 created an independent regulator responsible for aviation safety.

In 2009, the ATSB, previously a division within the Department of Infrastructure and Regional Development (the Department), transitioned to a statutory agency with operational independence.

2.4 Aviation responsibilities

As a result of this decentralised structure, the functions typically associated with a country's aviation authority are, in Australia, split across a number of different entities, as detailed in Table 2. The roles and responsibilities of each entity are set out in Australia's State Safety Program (SSP), first released in 2011 in accordance with ICAO requirements. Australia's SSP is discussed in more detail in section 3.1.1.

In the Panel's view, the structure of Australia's aviation safety regulatory system is sound. While a number of issues have been identified in how the system operates, significant structural change is not warranted.

Table 2 Decentralised structure of Australia's aviation regulation and safety entities

Entity	Responsibility
Minister for Infrastructure and Regional Development	Responsible to Parliament and the Australian public for civil aviation matters, including safety and security.
Department of Infrastructure	Provides overarching policy advice to the government on a broad range of aviation-related matters, including safety regulation. The Department also undertakes economic, security and environmental regulation of aviation.
ATSB	Australia's independent transport safety investigator.
CASA	Australia's independent aviation safety regulator.
Airservices Australia	Australia's sole civil air navigation service provider. A wholly government-owned corporation providing air traffic operations and associated aviation services.
Department of Defence	Responsible for Australian military aviation, including air traffic control in military-controlled airspace.
Australian Maritime Safety Authority	Australia's aviation and marine search and rescue provider.
Bureau of Meteorology	Responsible for providing meteorological services to the aviation sector.

Responsibilities for the implementation of ICAO Annexes¹⁷ are distributed amongst Australian Government agencies by the Tripartite MOU between the Department, CASA and Airservices.¹⁸ In some cases, responsibility is shared amongst more than one agency, as shown in Table 3.¹⁹

Table 3 Responsibilities for International Civil Aviation Organization Annexes

Annex	Description	Agency Responsibilities
ANNEX 1	Personnel Licensing	CASA
ANNEX 2	Rules of the Air	CASA
ANNEX 3	Meteorological Service for International Air Navigation	Airservices/BOM
ANNEX 4	Aeronautical Charts	Airservices
ANNEX 5	Units of Measurement	Airservices/CASA/BOM
ANNEX 6	Operations of Aircraft	CASA
ANNEX 7	Aircraft Nationality and Registration Marks	CASA
ANNEX 8	Airworthiness of Aircraft	CASA
ANNEX 9	Facilitation	Department
ANNEX 10	Aeronautical Telecommunications	Airservices/CASA
ANNEX 11	Air Traffic Services	Airservices/CASA
ANNEX 12	Search and Rescue	AMSA/Department
ANNEX 13	Aircraft Accident Investigation	ATSB/Department
ANNEX 14	Aerodromes	CASA
ANNEX 15	Aeronautical Information Services	Airservices
ANNEX 16	Environmental Protection	Department
ANNEX 17	Security	Department
ANNEX 18	Safe Transport of Dangerous Goods by Air	CASA
ANNEX 19	Safety Management	CASA

17 Annexes to the Chicago Convention set out the Standards and Recommended Practices applicable for international civil aviation.

18 See http://www.infrastructure.gov.au/aviation/international/icao/pdf/Tripartite_Memorandum_of_Understanding_Aust.pdf, accessed 26 May 2014.

19 Annex responsibilities are distributed by the Tripartite MOU amongst agencies that are party to it. In some cases, day-to-day implementation of Annexes is undertaken by other agencies that are not party to the Tripartite MOU. For example, AMSA implements Annex 12, and the ATSB implements Annex 13, but both agencies nominally share responsibility with the Department.

2.5 Effectiveness of Australia's aviation entities

The Terms of Reference for this Review tasked the Panel with assessing the effectiveness of all agencies²⁰ involved in aviation safety. The rest of Chapter 2 is the Panel's assessment of each agency.

In assessing an agency's effectiveness, the Panel generally considered their performance against their statutory functions and industry's perceptions of their effectiveness.

The Panel also considered the appropriateness of the agency's behaviours against the ANAO's Better Practice Guide to Public Sector Governance (2003) which sets out six principles of public sector governance:

- **Accountability:** public sector organisations and the individuals within them must be responsible for their decisions and actions and subject to appropriate external scrutiny, with clearly defined roles through a robust structure.
- **Transparency and openness:** open, meaningful consultations with stakeholders and clear accurate information leads to effective action and ensures stakeholders have confidence in the decision making processes and actions of public sector organisations.
- **Integrity:** public sector organisations and their staff must be straightforward, honest, objective and demonstrate high standards of probity and propriety, reflected in quality of reporting and the entity's decision-making processes.
- **Stewardship:** public sector organisations must act in a way that maintains the trust placed in the organisation by the government and in such a way that the public interest is maintained or improved over time.
- **Leadership:** an organisation-wide commitment to good governance requires a commitment to good governance at the top of the organisation, and effective modelling of these six principles.
- **Efficiency:** public sector organisations must make the best use of public resources, applying a commitment to evidence-based strategies for improvement and merit principles.

2.6 Department of Infrastructure and Regional Development

2.6.1 Role and structure

The Department is a department of state established under the Commonwealth Administrative Arrangements Orders (AAOs) made by the Governor-General. Aviation matters are only one element of the Department's broad responsibilities.

In relation to aviation, the Department is responsible for:

- policy development and coordination
- regulation of non-safety matters, including security, economic and environmental regulation
- administration of the Australian Government's interests in major (federally leased) airports, particularly on-airport planning and construction requirements
- administration of a range of assistance programs to promote aviation safety in Australia and neighbouring regions, often in consultation with portfolio agencies such as CASA and the ATSB
- research and economic policy analysis through its professional research bureau, the Bureau of Infrastructure, Transport and Regional Economics (BITRE)
- co-ordination of Australia's engagement with ICAO.

²⁰ Throughout this Report, the term 'agency' is used in a general sense to refer collectively to Australian Government organisations.

Aviation security matters are handled by the Office of Transport Security (OTS) within the Department; other aviation responsibilities are administered by the Aviation and Airports Division.

As a department of state, the Secretary of the Department is appointed by the Governor-General on the advice of the Prime Minister. The current Secretary was appointed in June 2009.

The *Air Navigation Act 1920* (and Regulations) gives effect in Australian law to the Chicago Convention,²¹ and provides Australia's economic and aviation environmental regulatory framework. A range of subordinate legislation covers economic, noise and other issues.

The Department is responsible for implementing a number of ICAO Annexes, as shown in Table 3.

2.6.2 Effectiveness

In the consultation and submissions processes, the Department was generally well regarded by industry. It was seen as performing its role well, and as being in touch with industry. However, the Department was only 'on the radar' of larger aviation industry participants; smaller industry participants, particularly in GA, did not comment on the Department or its role and performance.

In the Panel's assessment, the Department has a good reputation for **Transparency and Openness, Integrity, and Leadership**. The Department engages well with industry, for the most part, and is seen by industry as effective and trustworthy.

However, the Panel noted the Department should play a greater role in developing and driving aviation policy, including driving coordination across the portfolio, as discussed further in Chapter 3.

2.6.3 Engagement and relationships with industry

The Australian Public Service Commission's 2012 Capability Review of the Department²² was generally complimentary of its performance. The Capability Review found the Department was well regarded within government and industry, but did not necessarily present a 'unified front', particularly in engaging the aviation sector. The Capability Review found the Department could benefit from a more strategic approach to consultation and stakeholder engagement.

2.6.4 Skills, resource levels and organisational issues

The Capability Review highlighted the difficulties in drawing together the Department's disparate range of activities, a task compounded by the recent addition to the portfolio of responsibility for regional development, local government, and the administration of Australia's territories. The Capability Review also found the Department faces a range of challenges in managing people and performance, with risks created by a high level of reliance on the expertise and knowledge of key individuals, inconsistent management of performance issues, and challenges in attracting and retaining staff.

2.6.5 Potential for a stronger and more visible policy role

It is the Panel's view that the Department should perform a greater role in promoting and developing the aviation industry, and can provide greater policy leadership across the portfolio's agencies. As discussed in Chapter 3, the Panel recommends the existing Aviation Policy Group (APG)²³ be reinvigorated and given oversight of the SSP as the foundation for rationalising and improving inter-

21 The Convention on International Civil Aviation, opened for signature at Chicago on 7 December 1944 [1957] ATS 5, commonly referred to as the Chicago Convention (ICAO Doc 7300)

22 See <http://www.apsc.gov.au/aps-reform/current-projects/capability-reviews/doi>, accessed 22 May 2014

23 The APG is comprised of the heads of the Departments of Infrastructure and Defence (RAAF), CASA and Airservices.

agency coordination. The Panel also recommends that the Department play a greater policy leadership role under this new arrangement.

A common theme in public submissions to the Review was the need for CASA to play a role in promoting the aviation industry, particularly GA. The Panel is of the view that it is not appropriate for CASA, as the independent safety regulator, to be responsible for promoting the industry or developing industry policy; this role is the responsibility of the Department.

In the Panel's view, the Department has not always demonstrated sufficient policy leadership in aviation. A number of issues emerged during the Panel's deliberations where policy outcomes fell short of their potential. While many factors contribute to policy decisions, as the responsible department of state and chair of the policy coordination mechanisms across the portfolio (as discussed in Chapter 3), the Department should bear responsibility for delivering sound and effective policy direction in pursuit of a safe, secure and sustainable aviation industry in Australia.

The Panel's consultations identified a number of areas in which better policy outcomes could have been achieved:

- **Aviation security:** While Australia has adopted a number of aviation security policies and regulations that differ from ICAO Standards, Australia meets or exceeds all of the requirements under Annex 17. For example, all persons seeking unescorted access to the airside area of a security controlled airport must have undergone background checking, while ICAO Standards only require background checking for access to Security Restricted Areas. The Panel noted that many aviation security policies and regulations appear to have been adopted without due regard to the burden they impose on the aviation industry, and that the same security outcomes could often be achieved with less impost. The specific issue of Aviation Security Identification Cards (ASICs), which have a disproportionate impact on private pilots, is discussed further in section 6.2. As the agency responsible for aviation security regulation, the Department needs to deliver a security framework that is more responsive to industry, and needs to engage industry more in the delivery of that framework.
- **Protection of airport flight paths and operations:** While noting the significant work undertaken in the past four years through the National Airports Safeguarding Framework, the Panel considers that the protection of airport flight paths and operations from the encroachment of on- and off-airport developments is becoming an urgent policy issue. There is an emerging risk to the long-term viability of Australia's existing aviation infrastructure. The issues are complex, crossing jurisdictions and levels of government, meaning that no single agency is able to deliver the required outcomes. However, as the agency responsible for on-airport planning issues at the 21 federally leased airports, and as the lead agency on aviation and airport issues, the Department must take a policy leadership role to ensure that the future viability of airport infrastructure is not compromised by poor planning and land-use decisions.
- **Aviation rescue and firefighting:** In Australia, the requirement for aviation rescue and firefighting (ARFF) services is triggered when an airport receives 350,000 passenger movements in a year. While the service levels provided in Australia match ICAO requirements for certain airport categories,²⁴ this threshold trigger is unique to Australia. The Panel understands there are a range of different perspectives among Australian Government agencies on whether the trigger should be changed, or if a range of graduated services should be adopted. Because the matter requires a clear policy judgement, the Panel would expect the Department to take the lead in providing policy guidance to the regulator and service provider.

²⁴ Australia applies ARFF services consistent with ICAO categories 6–10, depending on the usage of the airport.

- **Military air traffic control of civil aircraft:** As recently noted by the ATSB,²⁵ the number of ‘loss of separation’ incidents involving civil aircraft in military airspace in Australia is disproportionately high. Air Traffic Control (ATC) services provided by Defence are not regulated by CASA, and the ATSB recommended CASA’s oversight role in this area be reviewed. To effectively deal with the ATSB’s recommendations, the Department should take a leadership role, including negotiating with the Department of Defence. As a portfolio-wide policy issue, the Department must identify and implement an acceptable policy position to help ensure the safety of the travelling public in military airspace.

With the Government’s 2013 election commitment to reinvigorate the GA sector through the General Aviation Industry Action Agenda, there is also an opportunity for the Department to play a more visible role in policy development and implementation to support the aviation industry, particularly at the smaller end. The Panel encourages the Department to fully engage with both industry and the other aviation agencies through this process.

The Panel recommends that:

1. The Australian Government develops the State Safety Program into a strategic plan for Australia’s aviation safety system, under the leadership of the Aviation Policy Group, and uses it as the foundation for rationalising and improving coordination mechanisms.
2. The Department of Infrastructure and Regional Development plays a stronger policy role in the State Safety Program.

2.6.6 Involvement in the development of regulations

While the Department is responsible for the administration of the *Civil Aviation Act 1988* (the CA Act) which creates CASA, CASA itself is responsible for the development of regulations made under the CA Act and instructing the Office of Parliamentary Counsel (OPC) on the drafting of those regulations. A number of submissions argued that this regulatory development function should be removed from CASA and placed within the Department, shifting the responsibility for the setting of rules to the Department, leaving CASA to enforce the rules.

Submissions suggested that the Department would be better placed to develop regulations with a balanced focus on both the safety and the economic impacts of a particular proposal. It was argued that this would help deliver the outcome sought by many in industry: a more thorough policy analysis of new regulations, including an effective cost–benefit analysis.

While the Panel agrees that the Department’s involvement in the rulemaking process may assist in developing regulations that deliver safety outcomes without imposing an excessive cost burden on industry, the Panel is not convinced that the regulatory development function should be transferred to the Department for a number of reasons:

- The impact of new aviation safety regulations is already analysed and considered through the Regulation Impact Statement (RIS) process overseen by the Office of Best Practice Regulation (OBPR). This process provides a level of cost–benefit analysis justifying the regulatory impact. If the RIS process is failing to produce thorough and effective cost–benefit analyses, which appears to be the case,²⁶ it is more important for that process to be improved rather than

²⁵ ATSB, Loss of Separation between Aircraft in Australian Airspace, AR-2012-034, October 2013.

²⁶ Analysis conducted by the Review of a sample of past Regulation Impact Statements prepared by CASA (and approved by the OBPR) suggests that CASA does not appear to always take full account of the impacts on industry.

rearranging administrative responsibility for regulation development.

- It is common practice internationally for aviation regulators to be responsible for regulation development because of the highly technical and specialised nature of the subject matter.
- CASA is the only agency within the Australian Government that has the necessary knowledge and expertise to develop the regulations in a way that will provide an acceptable assurance of safety. Moving this function to the Department would require transfer or secondment of CASA personnel to undertake this function, creating a level of inefficiency and withdrawing expertise from the regulator.

While the Panel agrees that the Department should have an enhanced role in the regulatory development process, this role should be in helping to set the policy framework for regulatory development through involvement in the Steering Committee to oversee the completion of the Regulatory Reform Program (RRP), and in the ongoing regulatory development program through the Standards Consultative Committee (SCC) as discussed further in Chapter 5.

Improving the existing cost–benefit analysis processes, and improving industry’s engagement in the public RIS process, is also an important part of the regulatory reform principles discussed in Chapter 5. In the Panel’s view, these measures can help to alleviate industry’s concerns.

2.7 Australian Transport Safety Bureau

2.7.1 Role and Structure

The ATSB is an independent statutory agency established under the *Transport Safety Investigation Act 2003* (TSI Act). Its primary role is investigation of transport accidents and other safety occurrences with the objective of delivering improved transport safety outcomes for the travelling public across aviation, marine and rail. The ATSB employs approximately 110 staff across Australia.

In 2009, the ATSB was established as a separate and independent statutory agency.

The ATSB’s function is to improve safety and public confidence in the aviation, marine and rail modes of transport through measures including:

- undertaking independent ‘not-for-blame’ investigations of transport accidents and safety occurrences
- recording, analysing and researching safety data, with both voluntary and confidential reporting
- fostering safety awareness, knowledge and action through publicising safety issues and issuing safety recommendations.

Within the aviation sector, the ATSB is responsible for acting as the independent investigator of accidents and other safety occurrences involving civil aircraft in Australia, and taking part in the investigation of accidents and other occurrences involving Australian aircraft overseas.

Aviation investigations are conducted under the authority of, and the procedures set out in, the TSI Act (and Regulations). In assessing whether to investigate, priority is given to occurrences that have the potential to deliver the best safety outcomes, in particular, where circumstances are perceived to pose a threat to future transport safety. The TSI Act contains powers for the release of transport safety information, including investigation reports, that detail the findings and significant factors that led to a particular transport safety occurrence.

The ATSB's usual approach to distributing its findings is to bring identified safety issues to the attention of relevant stakeholders to encourage voluntary safety actions, prior to issuing any formal safety recommendations. The ATSB has no power to enforce its recommendations. Any person, organisation or agency issued with a safety recommendation by the ATSB must provide a written response within 90 days. The response must include details of whether the recommendations are accepted or specific reasons for rejecting any recommendations. All ATSB investigation reports are made public.

The ATSB is responsible for ICAO Annex 13 (Aircraft Accident Investigation). The ATSB is also responsible for collecting, analysing and researching safety data. In this role it administers the various voluntary and mandatory reporting schemes established under the TSI Act.

The ATSB is managed by a Chief Commissioner and two part-time Commissioners. The Chief Commissioner is responsible for managing the day-to-day operations of the ATSB. The ATSB Commission is responsible for governing the functions under the TSI Act. The ATSB Commission is appointed by, and is accountable to, the Minister. Part 2 of the TSI Act governs the appointment of the ATSB Commissioners. The Chief Commissioner is appointed by the Minister for a maximum term of five years, and part-time Commissioners are appointed by the Minister for a maximum term of three years. Commissioners are required by sub-section 13(3) to have 'a high level of expertise in one or more areas relevant to the ATSB's functions'. The current Chief Commissioner was appointed in July 2009 for a five-year term.

The ATSB Commission is subject to a Statement of Expectations issued by the Minister. The current Statement of Expectations is for the period 1 July 2013 to 30 June 2015. In response to the Statement of Expectations, the Commission provided a Statement of Intent presenting its high-level expression of direction and priorities for the ATSB.

2.7.2 Effectiveness

Feedback revealed that the ATSB is broadly well regarded by the Australian aviation industry, noting that most in industry have little direct engagement with the organisation. However, the time the ATSB takes to produce safety reports did attract negative comments in the submissions and consultation process. Industry also expressed concerns over the ATSB passing safety occurrence information to CASA. This is discussed in detail in Chapter 4.

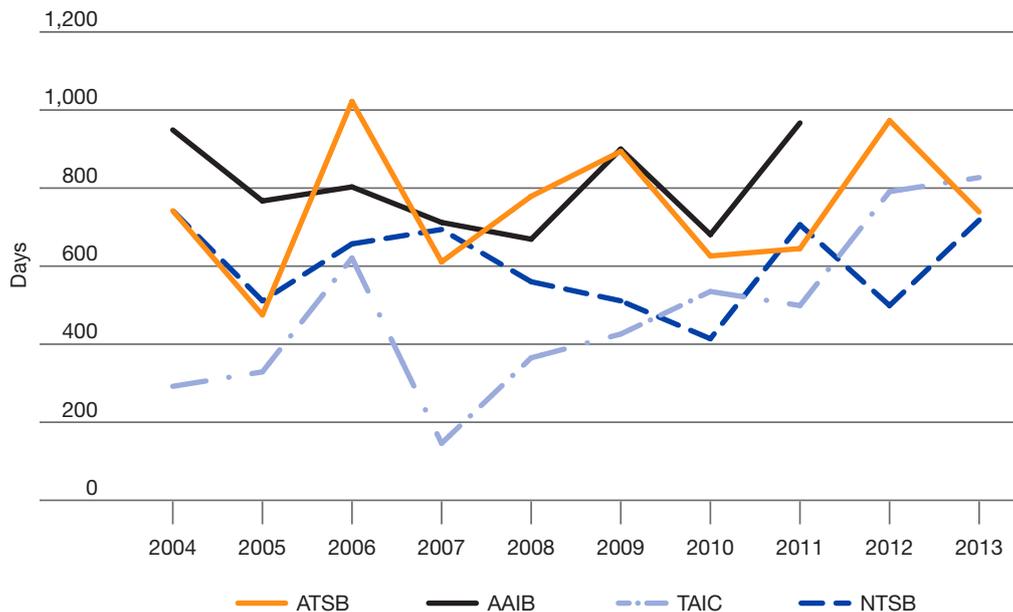
The ATSB has a strong reputation for **Integrity**, with many in industry seeing it as reliable and trustworthy. Some in industry were critical of the ATSB's **Leadership**, arguing there needs to be more aviation experience at senior management levels, and the failings of the Pel-Air investigation damaged the perception that the ATSB's **Stewardship** of its responsibilities is adequate.

2.7.3 Timeliness

The Panel considered the average time taken by the ATSB to publish its findings. While noting that the length of an investigation is highly dependent on the specific circumstances, a long-term average provides useful guidance to the efficiency of the process.

To assess whether the ATSB is significantly slower than its international counterparts in publishing reports, a comparison was undertaken with three overseas accident investigation bodies, New Zealand's Transport Accident Investigation Commission (TAIC), UK's Air Accident Investigation Branch (AAIB), and the US' National Transportation Safety Board (NTSB), looking at major aviation investigations only. The results are shown in Figure 4.

Figure 4 Comparison of time required for safety investigators to report on self-identified major aviation occurrences (ATSB, TAIC, AAIB and NTSB)



While there is a great deal of variability from year to year, Figure 4 shows that the ATSB is broadly similar to equivalent investigators internationally in the time it takes to produce complex major investigation reports.

The Panel considers that the ATSB's reporting timelines are longer than desirable and significant delays for some individual reports are a concern. However, the Panel notes that the timelines are broadly consistent with international performance.

2.7.4 Quality of investigations

The Panel did not undertake an in-depth review of the quality of investigations carried out by the ATSB. A detailed review would have duplicated the work being undertaken by the Transportation Safety Board (TSB) of Canada, which is expected to be finalised in 2014. While the Panel has been briefed by the TSB on its review, it is not the Panel's intention to comment on the TSB's findings and recommendations.²⁷

Consultation revealed a widespread view within industry that the ATSB's 2009 report of the investigation into the Pel-Air ditching near Norfolk Island was sub-standard and failed to adequately identify and attribute systemic causes to the accident.

In discussions with the Panel, the ATSB admitted that the Pel-Air report was below its usual standard of work. Submissions to this Review generally acknowledged that the report was atypical. While this matter has diminished the ATSB's reputation in some parts of the industry domestically, it does not appear to have diminished the ATSB's reputation internationally. The Panel is comfortable that steps are being taken within the ATSB to address failings at both the investigator and management level to ensure the issue is not repeated.

In contrast to the Pel-Air investigation, the ATSB's report into Qantas flight QF32,²⁸ which experienced an uncontained engine failure shortly after take-off from Singapore, was highly regarded both internationally and domestically, and evidences the high quality work the ATSB is capable of producing.

²⁷ Details and scope of the TSB review are outlined at Appendix A5.

²⁸ ATSB, In-flight uncontained engine failure, Airbus A380-842, VH-OQA, AO-2010-089, June 2013

The occurrence was thoroughly investigated by the ATSB and industry applauded the approach to the human factors and man/machine interface in the ATSB's investigation.

2.7.5 Safety management principles

As discussed in Chapter 4, aviation regulation globally is moving towards a performance-based model, and away from a compliance-based and procedural approach. Australia, like many countries, is currently transiting between approaches and has been experiencing some difficulties. It is important that the ATSB remains aware of how this transition is progressing when considering the role of the regulator in future investigations. Effective training of ATSB investigators in SMS concepts and implementation will be important in delivering this cultural shift.

2.7.6 Skills, resource levels and organisational issues

The ATSB generally investigates high profile and serious safety occurrences, which it considers have the most potential to create safety benefits. The Panel notes that, at present, there is minimal investigation by the ATSB of accidents in the sports and recreational sectors and in some GA activities, due to resource limitations. With the growth in activity of sport and recreational aviation in Australia in particular, the Panel recommends the ATSB investigate as many fatal accidents in this sector as resources will allow.

The Panel recommends that:

3. The Australian Transport Safety Bureau investigates as many fatal accidents in the sport and recreational aviation sector as its resources will allow.

For a highly technical and specialised agency like the ATSB, attracting and retaining appropriately skilled technical experts is a challenge, especially given the different skill sets that may be required to investigate future accidents and incidents. In its submission to the Review, the ATSB outlined several measures it has taken to access specialised expertise, including exploring standing arrangements for the secondment of industry experts from organisations such as Airservices and from airlines.

In addition to the common international practice of accrediting industry observers to Annex 13 accident investigations, in some countries the regulator is also accredited. For example, in the US, the Federal Aviation Administration (FAA) is automatically part of NTSB investigations, and, in Canada, Transport Canada (TC) routinely provides observers to TSB investigations. Discussions with Canadian representatives during the Panel's international consultations confirmed the positive way this arrangement works.

The Panel noted that, although the ATSB-CASA Memorandum of Understanding (MOU) provides for CASA observers to be accredited to ATSB investigations, this option is not currently used. While important protocols and safeguards need to be agreed to operationalise these arrangements, the Panel recommends Australia should follow this practice.

The Panel recommends that:

4. The Australian Transport Safety Bureau and the Civil Aviation Safety Authority utilise the provision in their bilateral Memorandum of Understanding to accredit CASA observers to ATSB investigations.

2.7.7 Appointment to key roles

The 2013 Senate Inquiry into Aviation Accident Investigations recommended that criteria be set in the TSI Act requiring the Chief Commissioner of the ATSB to demonstrate extensive aviation safety expertise and experience. The government did not accept this recommendation and the Panel agrees with the government's response.

The Panel does, however, endorse the principle that one of the ATSB Commissioners should have extensive aviation sector experience. The Panel recommends this be achieved by increasing the total number of part-time Commissioners from two to three, so that they each have expertise in one of the three transport modes for which the ATSB is responsible. It is the Panel's view that this arrangement would strengthen the governance of the ATSB and the expertise of the Commission.

The Panel recommends that:

5. The Australian Government appoints an additional Australian Transport Safety Bureau Commissioner with aviation operational and safety management experience.

2.8 Civil Aviation Safety Authority

2.8.1 Role and structure

CASA was established in July 1995 under the *Civil Aviation Act 1988* (the CA Act) as an independent statutory authority. It was formed when the former Civil Aviation Authority was split, giving responsibility for regulatory functions to CASA and responsibility for air traffic control to Airservices.

Under the CA Act, the main objective of CASA is to establish a regulatory framework for maintaining, enhancing and promoting the safety of civil aviation in Australia. CASA is the safety regulator of civil aviation operations and airspace in Australia and of Australian aircraft overseas. CASA has approximately 850 employees across Australia.

CASA performs its primary regulatory functions by:

- developing and promoting appropriate, clear and concise aviation safety standards
- developing effective enforcement strategies to secure compliance with aviation standards
- issuing certificates, licences, registrations and permits
- conducting comprehensive aviation safety surveillance
- conducting reviews of civil aviation safety to monitor the safety performance of the aviation industry, to identify safety-related trends and risk factors and to promote the development and improvement of the safety system
- conducting regular and timely assessments of international safety developments.

The legal framework under which CASA carries out the safety regulation of Australian aviation includes:

- *Civil Aviation Act 1998*
The CA Act establishes CASA and provides the legislative basis for issuing, suspending, and cancelling Air Operator's Certificates and other permissions.
- *Airspace Act 2007*
The *Airspace Act 2007* establishes CASA's responsibility, and gives CASA powers for

administering and regulating Australian-administered airspace.

- Civil Aviation Regulations 1988 (CARs) and the Civil Aviation Safety Regulations 1998 (CASRs). The Regulations provide the general regulatory controls over air navigation safety. The Regulations detail the safety standards that are required for airworthiness of aircraft, licences and ratings of operating crew and maintenance personnel, air traffic control, rules of the air, dangerous goods and other safety issues.
- Civil Aviation Orders
Regulations authorise CASA to issue Civil Aviation Orders in relation to detailed matters of regulation.
- Manuals of Standards (MOS)
MOSs are detailed technical material prescribed by CASA, and uniform specifications and standard applications determined to be necessary for the safety of air navigation.
- Advisory publications
CASA publishes various other documents that are advisory, rather than legislative. These advisory publications explain the intent and purpose of the legislation and how compliance with the legislation may be achieved. The advisory publications are issued under various names, including, Civil Aviation Advisory Publications, Advisory Circulars and Guidance Material.

CASA is responsible for implementing a number of ICAO Annexes, as shown in Table 3.

Following changes to the appointment process in 2009, the Director of Aviation Safety (DAS), the chief executive officer of CASA, is appointed by the CASA Board following consultation with the Minister. The DAS is responsible for managing the day-to-day operations of CASA, subject to oversight by the CASA Board.

The current Board structure comprises four part-time Board members, as well as the DAS (ex-officio, full-time). Board members are appointed by the Minister for a maximum term of three years. Legislation was passed in early 2014 changing the CA Act to expand the Board to six members, plus the DAS.

Part VIIA of the CA Act governs the appointment of the DAS. The DAS is appointed by the Board for a maximum term of five years; unlike the TSI Act, there are no legislated criteria for appointment. The current DAS started in March 2009 and will conclude his tenure in August 2014. Notably, the current DAS was appointed directly by the (then) Minister prior to the reintroduction of a CASA Board.

The CASA Board is subject to a Statement of Expectations issued by the Minister, which constitutes a notice of strategic direction under section 12A of the CA Act. The current Statement of Expectations is for the period 1 July 2013 to 30 June 2015. In response to the Statement of Expectations, the Board provided a Statement of Intent presenting its high-level expression of direction and priorities for CASA.

2.8.2 Effectiveness

Industry's views on the effectiveness of CASA are mixed. It was evident in the Panel's overseas consultations that CASA is well-regarded internationally. While some domestic submissions and consultations did convey positive comments about the regulator, the majority of industry feedback was critical, with the suggestion that CASA has become more combative and heavy-handed in its regulatory stance over recent years. There was a common view that CASA does not communicate or engage with industry as constructively as it could.

The Panel noted the clear message that industry is dissatisfied with CASA's performance. However, it is important to acknowledge that, in an industry requiring as much safety oversight as aviation, a level of tension between industry and regulator is normal.

Extensive discussion of CASA's effectiveness in relation to its safety oversight role is detailed in Chapter 4 and in relation to its regulatory development role in Chapter 5.

In the Panel's view, CASA is falling short of the standards it ought to attain, judged by the ANAO's six principles. Based on industry's perception, CASA falls short on **Transparency and Openness**, being seen by industry as closed to engagement. CASA's **Leadership** also appears wanting, with a failure to translate good procedures and policies on paper into effective behaviours across the organisation. While CASA appears to be trusted by many in government, the industry's trust in CASA is failing, compromising CASA's **Stewardship**, and industry perceives CASA's **Accountability** as being compromised.

2.8.3 Engagement with industry

Although a majority of submissions suggested that CASA's relationship with industry has deteriorated recently, many acknowledged that they have good working relationships with some of the staff in their local CASA offices, but find it more difficult to engage with the management and leadership team of CASA.

One of CASA's primary means of interface with the aviation industry is through its audit, surveillance and oversight activities. As discussed further in Chapter 4, much of the dissatisfaction with CASA can be attributed to its regulatory approach on the ground. There was a common view that CASA inspectors, during audit and surveillance activities, issue pedantic, administrative findings.

Among GA and smaller maintenance operations, frustration was expressed that it is not possible for industry to easily reach a CASA officer who is knowledgeable about their industry sector. Many in industry attributed this problem to the closure of local airport-based CASA offices and consolidation of CASA's offices in city centres. The Panel concludes that CASA's internal organisational structure is hampering its relationship with industry, a matter discussed further in Chapter 4.

The combative nature of the relationship between CASA and industry was illustrated by the announcement of, and reaction to, CASA's decision to defer commencement of the new licensing suite: CASR Parts 61, 64, 141, and 142. These four new Parts were finalised in February 2013, with a planned commencement date of 4 December 2013. Industry and CASA had many months to finalise supporting documentation, including (critically) the relevant MOS. In November 2013, the Panel was receiving correspondence from industry participants highlighting that the MOS was still unavailable only days out from the commencement of the regulations. CASA eventually deferred commencement of the new Parts on 19 November 2013, attributing the delay to industry not being ready to implement the changes.²⁹ Many of the statements in CASA's media release about the deferment are correct — industry did need more time to prepare, and there had been significant feedback to CASA on the new Parts since the regulations were drafted. However, the overall message in the media release was that industry was to blame for the delay in implementation.

The Panel is concerned by the dichotomy between industry's and CASA's perceptions of their relationship. While CASA is clearly aware of specific instances of industry dissatisfaction, it does not appear to fully comprehend the level or breadth of ill-feeling across all industry sectors. This lack of comprehension is especially apparent at the senior leadership level, including within the CASA Board.

²⁹ CASA media release, New implementation timetable for licensing suite, 19 November 2013, http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC_101830, accessed 21 May 2014

The Panel considers CASA should take steps to better understand the issues of concern to industry and enhance the level of dialogue, both through a more productive two-way relationship, and also through initiating regular, anonymous stakeholder surveys to gauge industry's perceptions.

Other Australian Government agencies undertake anonymous surveys of their stakeholders, and the Panel considers these surveys would be a valuable tool to ensure CASA's senior management are fully aware of the state of industry sentiment. While aviation is necessarily a tightly regulated industry, and a level of tension with the regulator is inevitable, identifying when the relationship has deteriorated below an acceptable level is an important function of the executive and Board of the organisation. Results of industry surveys should be published, together with any plans by CASA to improve in areas where stakeholders perceive a problem. A better understanding of how industry views the regulator is an essential step in resetting the CASA-industry relationship.

2.8.4 Regulator behaviour

The Terms of Reference for this Review tasked the Panel with advising government on options for improving the oversight and enforcement of aviation regulations. In forming its advice, the Panel considered the approach CASA takes to oversight activities, including the regulatory philosophy that underpins its activities. This issue is discussed in detail in Chapter 4.

2.8.5 CASA's statutory functions

CASA's functions are set out in section 9 of the CA Act. Section 9A(1) states that CASA's 'most important consideration' in exercising those functions is the safety of air navigation:

In exercising its powers and performing its functions, CASA must regard the safety of air navigation as the most important consideration.

Many industry participants recommended that CASA be tasked with promoting aviation, creating a 'dual mandate' regulator, responsible for both regulating and growing the industry. Industry participants also recommended that CASA be made to consider the viability of aviation when it exercises its functions.

The Panel notes the problems faced by dual mandate regulators in other jurisdictions, as illustrated by the controversy following the 1996 crash of ValuJet Flight 592 in the US.³⁰ The Panel considers that, for an independent safety regulator to function effectively, it must continue to have safety as its primary consideration. It would be inappropriate if CASA delegates were required to consider industry viability or sustainability, as well as safety. Such an arrangement could lead to untenable outcomes.

The Panel's attention was also drawn to other overseas jurisdictions, such as New Zealand, where the Civil Aviation Authority is given an objective under section 72AA of the *Civil Aviation Act 1990* (New Zealand) of '...undertak[ing] its safety, security, and other functions in a way that contributes to the aim of achieving an integrated, safe, responsive, and sustainable transport system.' Some participants in the Australian industry have argued for similar recognition in the CA Act of the principle of (economic) sustainability, to require CASA to take economic impacts into account.

However, the Panel is not persuaded that this would be an appropriate action for Australia. The New Zealand Civil Aviation Act is not directly comparable to the Australian CA Act. The New Zealand Act not only covers safety regulation, but also security and economic issues that are covered by at least five separate pieces of legislation in Australia. Because the New Zealand Act covers other matters in addition to safety, broad objectives are perhaps appropriate, although the Panel understands from

³⁰ See <http://www.nts.gov/investigations/summary/AAR9706.html>, accessed 23 May 2014.

consultations in New Zealand that following the Pike River Mine tragedy the New Zealand Government is currently reviewing regulator mandates.³¹

The primary basis for arguing for this type of amendment is that CASA needs to have more regard to the burden its regulations impose on industry. The Panel considers this outcome can be achieved without amending the CA Act and has made a number of recommendations in this Report relating to improved consultation and a new approach to regulatory development.

2.8.6 Governance

The role of the CASA Board is set out in the CA Act and the Minister's Statement of Expectations. Most stakeholders who commented on CASA's governance suggested the Board is disengaged and ineffective in providing strategic direction. It is the Panel's view that the Board should exercise full governance over the organisation. The Board must set the strategic direction for CASA, provide clear guidance on regulatory posture, behaviour and stakeholder relationships. The Board should monitor CASA's progress and performance, using independently sourced information, such as stakeholder surveys and direct industry feedback.

Throughout the Panel's consultation process, industry has been critical of the current Board's lack of aviation experience, with only one member having aviation industry experience. The government has already committed to expanding the CASA Board, which presents an opportunity to ensure Board members with aviation experience are appointed. Collectively, non-executive directors on the CASA Board should have the following attributes:

Highly desirable

- High-capacity RPT experience in aircraft operations
- GA operations experience
- Sports or recreational aviation experience
- Safety systems and risk management experience
- Regulatory and legal experience
- Executive leadership.

Beneficial

- Air traffic control experience
- Airport management experience
- Government experience
- Finance expertise.

Normal Board governance principles should apply so that directors are acting in the interests of CASA and the government, on behalf of the Australian people as the ultimate 'shareholders.'

As noted in section 2.8.3 the Board needs to be aware of, and engaged with, industry views about CASA's performance. In its consultations, the Panel noted a disparity between the Board's view of CASA's relationship with industry and industry's view. It is clear that the current Board is unaware of the depth of industry concern and frustration with the regulator. It must be noted, however, that industry

³¹ See for example the 2012 Report of the Royal Commission on the Pike River Coal Mine Tragedy (<http://pikeriver.royalcommission.govt.nz/>, accessed 21 May 2014), which noted the need for a regulator focussed solely on health and safety.

has failed to communicate its views to the Board when the opportunity has been presented, including direct interaction with Board members.

CASA's role as an independent regulator under the management of the DAS does not preclude the Board informing itself of how CASA is exercising its powers and performing its functions. Section 73(1) of the CA Act makes it clear that the DAS is to manage CASA 'subject to the directions of, and in accordance with policies determined by, the Board', while section 53(1)(b) requires the Board to 'ensure that CASA performs its functions in a proper, efficient and effective manner.'

Ministerial guidance to the CASA Board is critical. Under the present structures, the Board receives a Statement of Expectations from the Minister, and responds with a Statement of Intent. Under previous arrangements, when there was no Board, the DAS was issued with a Charter Letter by the Minister.

It is noteworthy that the last Charter Letter, issued in 2003,³² was focused on the behaviours that CASA was to exhibit as a regulator carrying out its responsibilities under the CA Act, while the 2009 Statement of Expectations listed a range of specific projects to be progressed, with less emphasis on behaviours.

A simple Statement of Expectations might be adequate where the agency is operating effectively. In the current situation, more in-depth guidance is required, similar to the 2003 Charter Letter. The Panel considers the new Board should have a clear and unambiguous mandate from government.

The question of whether the DAS should be a Board member provoked a range of views in the Panel's consultations. The DAS's accountability to the Board is heightened if the DAS is not a member of the Board. However, the Panel considers that the benefits of the DAS being bound by fiduciary duties as a director of the organisation outweigh any downside risk. Therefore, the Panel recommends the DAS remain an ex-officio Board member.

The Panel recommends that:

6. The Civil Aviation Safety Authority's Board exercises full governance control. The non-executive directors should possess a range of appropriate skills and backgrounds in aviation, safety, management, risk, regulation, governance and government.

Appointment of the Director of Aviation Safety

Many have argued that the DAS should be a pilot, or at least experienced in aviation operations, suggesting this experience is necessary to understand the industry. The Panel, however, is of the opinion that the most important qualification for the DAS is leadership and management experience and capabilities in cultural change of large organisations. Aviation or other safety experience is also highly desirable.

While a number of skills are required amongst CASA's senior management, they do not all need to be held by one person. The DAS should have a supportive and complementary team of deputies and senior executives. The DAS should have an understanding of aviation, but does not need to be an operational expert. If CASA is structured and staffed appropriately, it should have sufficient subject matter expertise within the organisation, or be able to obtain that expertise from industry.

A change in philosophy at CASA will be critical to make the recommendations in this report effective. A philosophical change requires a cultural change and this must be driven by the DAS.

³² Charter Letter from the then Deputy Prime Minister and Minister for Transport and Regional Services to then DAS, dated 25 November 2003 and referenced in the then Deputy Prime Minister's Media Release A170/2003 on 23 December 2003, http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD:1001:pc=PC_91984, accessed 22 May 2014

The Panel recommends that:

7. The next Director of Aviation Safety has leadership and management experience and capabilities in cultural change of large organisations. Aviation or other safety industry experience is highly desirable.

2.8.7 Service provision and key performance indicators

Industry complained to the Panel about the timeliness and quality of CASA services, particularly when issuing approvals. Delays can affect the livelihoods of individuals and the viability of businesses. Delays of months or even years were reported in some instances, particularly relating to licence and Air Operator's Certificate (AOC) approvals.

Almost no information about CASA's performance in service delivery is publicly available.

In 2006/07 CASA started public reporting of its service delivery standards and its performance against those standards. In April 2009, CASA stopped this reporting. Since 2009, CASA's website has displayed a statement advising that CASA '...is currently updating how its Service Delivery information is communicated.'³³

CASA advised the Panel that:

Although service delivery standards have not been published on the CASA website since April 2009, CASA has continued to monitor its performance having regard to those earlier standards. During this time, the Industry Permissions Division has given consideration to a review of the standards, and the development and publication of new standards.

Beginning in March of this year (2014) the Industry Permissions Division will assign tasks to designated work teams to review particular service-delivery processes and to set appropriate performance standards for each of those processes, having regard to existing data, divisional experience and consumer expectations and feedback. The teams will also consider reporting and publication methods, including the most effective way to place both the standards and, eventually, CASA's performance against those standards on the CASA website.

With the continuing implementation and improvement of CASA's online services and workflow management systems, real-time service delivery tracking is expected to be available by the end of 2015.

CASA should, as a matter of priority, reintroduce reporting of its service performance. In many of its activities, CASA is, or should be, a service-oriented organisation: issuing licences, permissions, certificates and other approvals is a service to the aviation industry. CASA needs to demonstrate an appropriate level of service orientation in performing its functions.

One opportunity to improve service delivery is via more online services. CASA's online portal was introduced in mid-2008, but it has not had any additional functionality added since. The portal can be used to update contact details, add details of aircraft engines or propellers, and manage subscription details, but cannot be used for most of CASA's regulatory services. CASA advised the Panel that all service delivery functions will be available online by the middle of 2015. The Panel welcomes this advice and suggests that the CASA Board monitor the project to ensure the deadline is met.

33 http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD:611458872;pc=PC_91510, accessed 23 May 2014.

2.8.8 Inconsistency

One of the most common themes in the public submissions about CASA is inconsistency in its application of rules and regulations between offices. The factors contributing to this inconsistency are discussed in Chapter 4.

2.8.9 Organisational values

CASA staff, while public servants in the broadest sense because they work for the Australian Government, are not technically members of the Australian Public Service (APS), because they are not employed under the Public Service Act 1999. As such, CASA staff are not bound by the APS Values or the APS Code of Conduct.³⁴

CASA has implemented its own Code of Conduct, which applies the same principles as the APS Code, but is more limited in scope.³⁵ However, it is in the values which APS and CASA employees are respectively obligated to uphold that a greater distinction appears. APS employees are required to act and be:

- impartial
- committed to service
- accountable
- respectful
- ethical.

In contrast, CASA's Values are:

- We are committed to CASA's mission
- We value our people
- We perform our functions to maintain Australia's status as a leading aviation nation
- We understand our relevance and responsibilities to the wider aviation community
- We encourage effective leadership, management and a team approach.

While CASA's Values are well intentioned, the Panel notes that many of industry's complaints about CASA's behaviour relate to service culture, accountability, respect for industry, and ethical behaviour. These issues are clearly part of the broader APS Values, but are not part of CASA's Values. CASA's Values are more inward looking, focusing on the organisation itself, rather than on the public.

It is desirable for CASA staff to be held to the same levels of accountability and professional conduct as the broader APS. Therefore, the Panel recommends that CASA staff be subject to the same values as the broader APS.

³⁴ For the APS Values and Code of Conduct, see the *Public Service Act 1999*.

³⁵ For example, while APS employees are required to 'at all times behave in a way that upholds the APS Values and Employment Principles, and the integrity and good reputation of the employee's Agency and the APS', CASA employees are required to 'Behave at all times in a way that upholds CASA's Values and the integrity and good reputation of CASA.'

The Panel recommends that:

8. The Civil Aviation Safety Authority:
 - a. reinstates publication of Key Performance Indicators for service delivery functions
 - b. conducts a stakeholder survey every two years to measure the health of its relationship with industry
 - c. accepts regulatory authority applications online unless there is a valid technical reason against it
 - d. adopts the same Code of Conduct and Values that apply to the Australian Public Service under the *Public Service Act 1999*.

2.8.10 Skills, mobility and experience

CASA appears to encounter difficulties in attracting and retaining suitably qualified and skilled staff.

CASA's *Workforce Plan 2012–2014* highlights a number of particular challenges for CASA in managing its workforce, including:

- the need to attract qualified and experienced candidates from industry
- the time taken to build regulatory capability within CASA
- the age profile of the workforce
- difficulties in retaining capable staff.

Many of CASA's current staff, some in critical subject matter expert roles, are nearing retirement age, and suitably qualified replacements will be difficult to recruit.

While CASA's *Workforce Plan 2012–2014* notes a downward trend in the average age of employees between 2007 and 2011, at the end of 2011, some 15 per cent of CASA staff were over the age of 60. The average age of CASA's 30 Flying Operations Inspectors (FOIs), who carry an endorsement loading for specific aircraft³⁶ is 51.4 years (with some in their 60s and 70s).

All regulators face the challenge of keeping up-to-date with technology, and must acknowledge that industry holds higher levels of expertise, especially for new generation aircraft like the A380 and B787. Some regulators, such as the UK CAA, advised the Panel that a collaborative working relationship with industry assists in keeping them across the latest technology and developments.

The Panel also examined options used in other countries for Airworthiness Inspectors (AWIs) and FOIs to maintain currency in their areas of expertise. The Panel considers there would be merit in CASA and industry jointly developing a model for an industry exchange program. This program would allow CASA to access expertise, and it could be used to facilitate the finalisation of CASA's Regulatory Reform Program, as discussed in Chapter 5.

An industry exchange program needs appropriate probity frameworks, to ensure that secondees to CASA are not in positions that could influence decisions related to their employer, or could allow access to confidential information relating to their employer's competitors.

³⁶ CASA advised the Panel that it currently employs 75 FOIs, but only 30 carry an endorsement loading.

The Panel discussed this proposal with the Chief Pilots of Australia's major airlines and other industry representatives, who were supportive of the proposal in principle.

The Panel recommends that:

9. The Civil Aviation Safety Authority develops a staff exchange program with industry.

2.9 Airservices Australia

Airservices is a government owned authority established under the *Air Services Act 1995* (Air Services Act).

Airservices is Australia's only civilian air navigational service provider and is responsible for managing airspace (except military airspace), aeronautical information, aviation communications, radio navigation aids, and aviation rescue and firefighting services. Airservices provides communication, surveillance and air navigation services across 11 per cent of the world's surface. This includes the Australian flight information region and international airspace over the Pacific and Indian Oceans. Airservices has approximately 4,200 employees.

Airservices does not receive funding from general government appropriations, rather recovering its costs (including a return on the government's invested capital), through charges to the aviation industry. The Australian Competition and Consumer Commission (ACCC) periodically reviews Airservices' long-term pricing agreement upon application from Airservices. This agreement offers price certainty to industry participants, usually across a five-year period. The current pricing agreement expires in 2016.

Airservices delivers:

- en route and terminal air traffic services at two major centres (Melbourne and Brisbane)
- aeronautical data services, such as charts and departure and approach procedures;
- tower services at 29 airports
- aviation rescue and firefighting services at Australia's 22 busiest international and domestic regular public transport airports
- environmental-related functions, including the management of a noise inquiry service, developing and assessing proposals to reduce noise impacts on the community and the endorsement of Australian Noise Exposure Indices/Forecasts for airports
- management of the Australian national air navigation infrastructure.

In performing these functions, Airservices is regulated by CASA, and subject to independent investigation by the ATSB. Airservices is required to hold CASA approval for its activities, and conducts Air Traffic Management (ATM) services under CASR Part 172 and ARFF under CASR Part 139H approvals.

The *Air Services Act* established the legal entity of Airservices as a provider of air navigation services and facilities, on the premise that safety is its first priority. Under the Air Services Act, Airservices is also charged with promoting and fostering civil aviation and carrying out activities to protect the environment from the effects of aircraft.

Airservices has a Board that operates subject to the *Commonwealth Authorities and Companies Act 1997* and the Air Services Act, and reports to the Minister. It receives a Statement of Expectations and responds with a Statement of Intent.

Airservices is responsible for implementing a number of ICAO Annexes, as shown in Table 3.

Airservices also contributes to other government policy or regulation-making processes in the same way as other industry participants, rather than setting regulation itself. For the purposes of this Review, Airservices is viewed both as an industry participant and an agency within the aviation safety system.

2.9.1 Effectiveness

Submissions received were generally complimentary of Airservices' approach as service provider. Cost of services was raised as an issue by some, but examining costs of services is outside the scope of the Terms of Reference for this Review.

The business and corporate aviation industry raised concerns about Airservices' policy on the assessment of priorities (AIP ENR 1.4-10) that requires air traffic controllers to give arrival-sequencing priority to RPT flights over GA aircraft, even if the GA aircraft have performance characteristics equivalent to the RPT aircraft.

This policy, which the Panel understands is unique to Australia, has existed for over 30 years and its origin is unclear. It is normal international practice to sequence traffic on a 'first come first served basis', acknowledging that slot-controlled airports may have specific local procedures.

The Panel agrees with the business and corporate aviation industry that this policy has potential negative safety implications because it adds to controller workload, increases airspace congestion and adds unnecessary flying time, fuel burn, and complexity for operators. The industry provided examples of aircraft being held for significant time awaiting an RPT aircraft many kilometres away. Other examples of controllers routing aircraft low on fuel after long holding periods to airports unsuitable for high performance aircraft were also cited.

From a safety point of view, Airservices' SMS was reviewed within the last year by an external safety consultant, and found to be robust. Airservices holds regular meetings with industry on safety matters, including the Australian Strategic Air Traffic Management Group (ASTRA). This engagement is highly regarded by industry.

The Panel recommends that:

10. Airservices Australia, in conjunction with the Department of Infrastructure and Regional Development and the Civil Aviation Safety Authority, reconsiders the policy on 'Assessment of Priorities' that stipulates that air traffic controllers sequence arriving aircraft based on category of operation, rather than on the accepted international practice of 'first come, first served'.

2.10 Other government agencies

The following Australian Government agencies also form part of Australia's aviation safety system, and are included in the SSP. However, given their comparatively minor roles in the aviation regulatory system, and limited criticism of their performance, the Panel has not examined their structure, processes and effectiveness in detail, although some of their interactions are discussed further in Chapter 3.

2.10.1 Department of Defence (Royal Australian Air Force)

The Department of Defence (Defence), through the Royal Australian Air Force (RAAF) is responsible for the safety and airworthiness of military aircraft and aviation systems. It provides air navigation services at joint user (civil/military) aerodromes, as well as aviation rescue and firefighting services at some airbases. Defence provides air traffic control services and supporting infrastructure such as radar facilities, at military and certain joint user (civil/military) aerodromes.

2.10.2 Australian Maritime Safety Authority

The Australian Maritime Safety Authority (AMSA) is established under the *Australian Maritime Safety Authority Act 1990*. AMSA is Australia's national agency responsible for maritime safety and maritime and aviation search and rescue. AMSA is responsible for the implementation of ICAO Annex 12, in conjunction with the Department.

2.10.3 Bureau of Meteorology

The Bureau of Meteorology (BOM) is Australia's national weather agency and operates under the authority of the *Meteorology Act 1995* and the *Water Act 2007*. BOM is the aeronautical meteorological service provider for Australia. BOM shares responsibility for the implementation of a number of ICAO Annexes, as shown in Table 3.

3. Relationship and interaction of agencies

3.1 Existing coordination mechanisms

The Australian Government, through the Minister for Infrastructure and Regional Development, sets the overall aviation policy direction, either through executive policy direction or legislated legal direction. Within this context, a range of coordination mechanisms, set out below, draw together the agencies that form Australia's aviation safety regulatory system.

3.1.1 State Safety Program

In accordance with ICAO requirements, Australia published its first SSP in January 2011, approved by the then Minister for Infrastructure and Transport. The SSP was updated in April 2012. Australia's SSP is updated as required to reflect any significant changes in policy or regulations. The SSP is a public document, available on the Department's website.³⁷

The SSP addresses key elements in Australia's aviation safety system, including:

- the legislative framework
- safety oversight arrangements
- SMS requirements for service providers
- performance indicators for improvement in areas of safety concerns
- accident and incident investigation management
- promotion of aviation safety.

Australia's SSP outlines how aviation safety in Australia is managed, with an emphasis on using safety systems. It also provides a framework for the continuous improvement of aviation safety by establishing how the various elements of Australia's safety system are integrated. The SSP identifies and describes current arrangements and outlines the continuing steps required to respond to future safety challenges.

The Department chairs a State Safety Program Cross-Agency Team (SSP-CAT), made up of representatives of all agencies involved in Australia's safety regulatory system. The SSP-CAT was responsible for developing the SSP document and is responsible for its ongoing maintenance, together with monitoring and reporting the implementation of the SSP and aviation safety-related indicators. From consultations with the Department, the Panel understands that the SSP-CAT does not meet frequently, but conducts most of its work out of session, and that it focuses on the maintenance of the SSP document itself. According to the Department, the SSP is subject to an annual review, and reviews may be initiated by the SSP-CAT on an ad-hoc basis. No formal reporting is undertaken by agencies tasked with responsibilities or specific safety actions under the SSP.

When Australia's SSP was first produced, the current safety framework was already in place and the SSP was essentially written to describe the pre-existing structures. This approach may have limited the strategic direction of the SSP because it describes what is, rather than what should be in place. Publication of the SSP satisfied Australia's initial obligations under ICAO's Global Aviation Safety Plan

³⁷ <http://www.infrastructure.gov.au/aviation/safety/ssp/index.aspx>, accessed 17 May 2014.

(GASP). Full implementation of the SSP framework is required by 2022, and several aspects require further development, such as the articulation of an Acceptable Level of Safety under the SSP.

3.1.2 Tripartite framework

To coordinate the management of Australia's engagement with ICAO, a Tripartite Memorandum of Understanding (MOU) is in place between the Department, CASA and Airservices.³⁸ This MOU defines both the individual and shared roles and responsibilities for coordinating engagement with ICAO and provides processes for cooperation and shared decision making. A section within the Aviation and Airports Division of the Department is responsible for coordinating tripartite management, but each agency undertakes its own responsibilities with a high degree of autonomy. The breadth of engagement in ICAO functions across agencies is evidenced by Australian membership of approximately 70 ICAO panels, committees, study groups, regional planning groups and other working groups.³⁹

The Department chairs monthly meetings of the Tripartite Working Group, which discusses ICAO matters, coordination of portfolio briefings, international delegations and arrangements for information sharing between agencies.

Section 2 of the Tripartite MOU outlines the joint responsibilities of the three signatory agencies:

- decisions on which agency is responsible for particular ICAO Annexes
- composition of delegations and preparation of materials for major ICAO meetings such as the Assembly and Directors-General of Civil Aviation (DGCA) meetings
- recruitment and selection of Australian representatives to ICAO.

All other matters, including furthering technical or policy objectives in particular forums, are the responsibility of individual agencies and their staff. Appropriately, the Department is identified as the coordinating agency for engagement with ICAO, and the formal point of contact between the Australian Government and ICAO.

The Tripartite Working Group is focused on administrative and coordination issues, with the Tripartite MOU also creating the Aviation Implementation Group (AIG), which is responsible, amongst other things, for strategic ICAO-related matters.

3.1.3 Aviation Policy Group

The APG is a coordination committee established to enhance cooperation and coordination across the four Australian Government agencies responsible for aviation policy, regulation and service provision. APG members are:

- the Secretary of the Department (Chair)
- the DAS of CASA
- the Chief Executive Officer (CEO) of Airservices
- the Chief of the Royal Australian Air Force representing the Department of Defence.

The APG provides an opportunity for member agencies, at a senior level, to discuss cross-agency issues to ensure coordinated and cooperative actions are delivered for the government. According to its Terms of Reference, the APG provides a forum to:

³⁸ The Department advised that the MOU is currently being reviewed. The current MOU is available here: http://www.infrastructure.gov.au/aviation/international/icao/pdf/Tripartite_Memorandum_of_Understanding_Aust.pdf, accessed 26 May 2014.

³⁹ http://www.infrastructure.gov.au/aviation/international/icao/icao_list.aspx , accessed 17 May 2014.

- share and discuss advice on civil and military aviation-related issues to assist in coordinated and cooperative action by Government agencies on these issues
- assist in the development and implementation of a coordinated approach to Australian air traffic management planning.⁴⁰

The APG's Terms of Reference state that the APG is not a decision-making body. Individual APG members are responsible for the performance of their respective legislative, regulatory and service provision roles. Each agency reports their activities through their own individually established governance frameworks.

The APG has developed and adopted a forward work program that identifies key aviation issues for the APG and identifies the lead agency for presenting on those issues. This work program also aligns with the aviation reform priorities of the Australian Government's aviation policy. In its consultations, the Panel found that, overall, the APG is regarded as a valuable forum in principle, but its effectiveness could be improved by a renewed strategic mandate within the overall safety system.

3.1.4 Aviation Implementation Group

The AIG is a committee formed as a sub-committee of the APG, under the APG's Terms of Reference. It is also recognised in the Tripartite MOU. The AIG is responsible for progressing work on aviation and related issues identified by the APG for the AIG, and for 'proactively and strategically managing ICAO issues'.⁴¹

The tripartite agencies (the Department, CASA, Airservices) are all members of the AIG. Given its role supporting APG, Defence is also a member of the AIG. Individual agencies represented on the AIG act on their own behalf.

The AIG has a dual role. As a sub-committee of the APG, the AIG is responsible for implementing cross-agency strategies, including identifying and providing advice to APG on current and emerging cross-agency aviation and related issues, developing proposals for formal consideration by APG, and engaging with ASTRA to ensure coordination between industry and AIG on air traffic management issues. As the high-level committee of senior representatives responsible for strategically managing ICAO issues, AIG is also tasked with reporting to APG on developments in the SSP and on guiding the SSP-CAT in its role overseeing the SSP.

During consultations, the Panel found that AIG is, in principle, a valuable forum. However, as with APG, its effectiveness could be improved by a renewed mandate as part of the broader system.

40 APG Terms of Reference 2013.

41 Tripartite MOU section 6.3.

3.1.5 Australian Civil–Military Air Traffic Management Committee

Airservices and Defence have established the Australian Civil–Military Air Traffic Management Committee (AC-MAC), which comprises senior leadership from both organisations, to manage the coordination of future joint ATM initiatives, including OneSKY (discussed further in section 3.3.6). These agencies are jointly procuring this new integrated civil–military ATM automation platform. This platform will deliver the next generation of ATM system capability, providing a single national solution to meet the needs of both civil and military air traffic services. Airservices is the lead agency for the acquisition of the new integrated ATM platform.

3.1.6 Joint Agency Aviation Safety Analysis Coordination Group

The Joint Agency Aviation Safety Analysis Coordination Group (JAASACG) is focused on collecting and analysing safety data. JAASACG consists of representatives from the ATSB, CASA, BITRE, Airservices, and the Directorate of Defence Aviation and Air Force Safety (DDAAFS) and includes safety data managers, researchers and analysts.

JAASACG’s primary functions are to review and analyse safety data, to maintain stakeholder relationships, and to ensure ongoing sharing and research efforts are coordinated between agencies to improve aviation safety. The SSP outlines the role of the group is to:

- facilitate the exchange of safety-related data and analyses between the agencies, for the sole purpose of improving aviation safety
- identify joint safety analysis projects that utilise the combined capabilities of the joint agencies to produce outputs of safety benefit.

Responsibility for hosting and coordinating the JAASACG rotates between members. The output of JAASACG is fed into members’ own agencies, but the group does not formally report to any particular bodies, and there is little clarity and visibility on the outputs from the group. Since its creation, the group’s meetings have become less frequent than originally intended in its Terms of Reference.⁴²

3.2 Memorandums of Understanding

Australia’s aviation agencies are signatories to several MOUs which coordinate roles and responsibilities. These MOUs aim to ensure responsibilities and communication protocols are clearly articulated between relevant agencies. A list of the MOUs, as summarised in the SSP, is shown in Table 4. This creates a complex framework of MOUs, as illustrated in Figure 5.

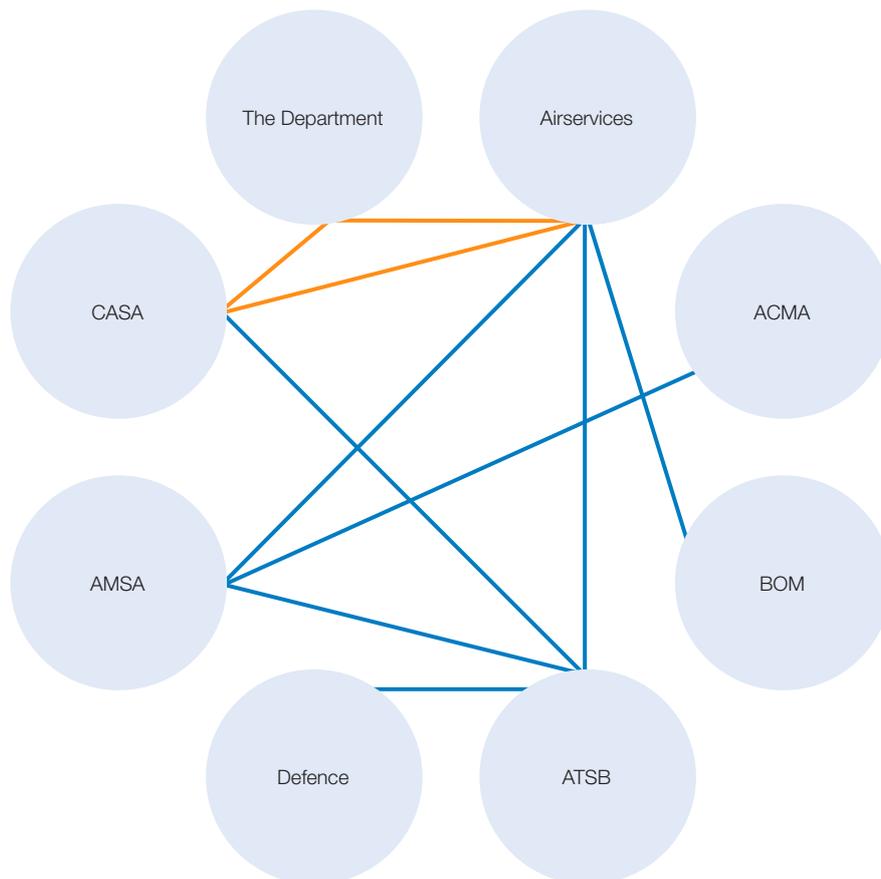
These MOUs, and the coordination and consultations mechanisms that exist within them or in parallel to them, have grown and developed in an uncoordinated way to meet specific needs at specific times. They have not been ‘designed’ to be part of a unified system, and as with the SSP, there is no coordinating framework to pull them together.

⁴² The Panel noted the reduction in the frequency of JAASACG meetings, noting its Terms of Reference states that it ‘should meet as a minimum on a quarterly basis.’ The Panel notes that JAASACG now convenes only biannually.

Table 4 Aviation-related Memorandums of Understanding

MOU	Description
ICAO Tripartite	Arrangements for Australia's participation and engagement with ICAO, and formation of the AIG.
CASA/ATSB	Objectives include maximising aviation safety outcomes, enhancement of public confidence, adoption of system approaches, knowledge of the operations of each organisation's action, and sharing data and other safety related information. Although the MOU expired in 2013, each agency is continuing to follow the arrangements outlined within it.
Airservices/ATSB	Outlines the respective roles and responsibilities of, and the relationship between, Airservices and the ATSB in relation to the investigation of aviation accidents and incidents and the exchange of safety information.
Defence / ATSB	Provides a framework to support cooperation between Defence and the ATSB in the investigation of transport safety matters.
Airservices / BOM	Sets out arrangements between the organisations for the provision of meteorological services in support of civil aviation.
AMSA / Airservices	Defines the division of responsibilities between AMSA and Airservices as component organisations contributing to the national aviation search and rescue system.
AMSA / ATSB	Defines the roles and relationship between the parties in carrying out their respective statutory functions of aviation search and rescue and accident investigations.
AMSA / ACMA	To facilitate a cooperative relationship between the parties in relation to support services for SAR operations. The MOU also sets out areas of cooperation and mutual interest in the administration of radio communications services in Australia.

Figure 5 Aviation-related Memorandums of Understanding



Note: The ICAO Tripartite is shown in orange, and other MOUs are shown blue.

3.3 Individual agency to agency relationships

3.3.1 The Australian Transport Safety Bureau–Civil Aviation Safety Authority relationship

The relationship and interaction between the ATSB and CASA has been the focus of intense and often critical opinion and analysis from many political, media and industry sources. The relationship is frequently scrutinised and has been the subject of a number of reviews.

At present, the relationship between the ATSB and CASA is mostly professional and appropriate. The consultations revealed that within industry, some perceive the ATSB as the agency that holds CASA to account, but in the Panel's opinion, this view is misplaced. The ATSB is not a full-time watchdog overseeing CASA, but an accident investigator whose remit is to identify what went wrong so that the industry and the regulatory system can avoid it recurring. While the ATSB may, if required, investigate or make recommendations to the regulator, it does not oversee or hold the regulator to account. It is inevitable there will be tension from time to time between the accident investigator and the regulator, and this tension is perfectly natural – indeed it can often be productive.

A greater understanding of the respective roles of CASA and the ATSB could be achieved by increasing the mobility of ATSB and CASA officers to interchange between agencies. As part of its international benchmarking, the Panel noted positive outcomes in Canada from mobility between the TSB and TC.

Submission comments

Submissions and consultations showed two distinct perspectives within industry on the relationship between CASA and the ATSB, with some citing a divide and a lack of engagement and communication, and others citing that the agencies are too close and 'collude' and 'protect each other'. For example, one submission saw the ATSB as 'protecting' CASA from scrutiny, noting 'the widespread industry view is that the ATSB has largely lost its way post-Lockhart River and post-Miller and is now subservient to CASA.'⁴³ In contrast, another submission noted 'inter-agency hostilities, especially between ATSB and CASA.'⁴⁴

Ideally, the relationship between the two organisations should not be either too close, nor should it exhibit excessive rivalry. In its submission, CASA commented:

There should always be a measure of dynamic tension in the relationship between the accident investigation agency and the aviation safety regulator authority. This is natural and appropriate, given the complementary, but differently focused, safety-related roles and responsibilities of these organisations.⁴⁵

However, CASA also stated that finding the right balance in the relationship is essential, acknowledging that:

...to an extreme, however, such tension can be counterproductive, inimical to the overarching interests of aviation safety and erosive of public confidence in each organisation's ability to fulfil its distinctive safety-related functions.⁴⁶

It is important to have a two-way relationship between the ATSB and CASA, given the critical role each organisation plays in the system and to ensure cooperation during investigations, and in communicating safety information and developments. In its submission, the ATSB noted that the two agencies must work cooperatively for the mutual benefit of aviation safety and it was also important 'that the ATSB's

43 Submission #197

44 Submission #39

45 Submission #239

46 Submission #239

independence and role as the no-blame safety investigator remains distinct from the role of the regulator.⁴⁷

A number of submissions and the Senate Committee Report into Aviation Accident Investigations asserted there had been collusion between the ATSB and CASA to ‘water down’ aspects of the draft Pel-Air report. The Panel could not establish this fact and it was denied by both parties. There was also an allegation that CASA withheld information from the ATSB regarding CASA’s audit of Pel-Air. The audit results were not offered to the ATSB and, in hindsight, this was an error by CASA, but CASA denies deliberately withholding information.

Indeed, from some of the Panel’s consultations, far from the alleged state of affairs of the ATSB ‘looking after’ CASA in a ‘cosy bureaucratic protection racket,’ there is a level of distrust and suspicion between the agencies. This is not evident in official communications or positions, only recounted during confidential discussions.

Data and information flows

A chief concern noted by the Panel is the largely one-way information flow between the ATSB and CASA. Information appears to flow from the ATSB to CASA, but often fails to flow from CASA to the ATSB. For example, the ATSB indicated, ‘CASA does not normally share, with the ATSB, information from its safety defect reports or from its audits and surveillance about hazards and risks.’⁴⁸ An effective safety system requires information to flow so that the regulator and investigator can monitor performance within the industry. The current information flows do not demonstrate a relationship that is completely effective, nor are they indicative of a system that is delivering optimal performance.

The *2007 Miller Review* made a number of recommendations about the ATSB–CASA relationship. The context for that report was a view that CASA and the ATSB had an adversarial relationship evidenced during investigation of the Lockhart River accident. Accusations were made that CASA sought access to ATSB investigation data, possibly to take enforcement action.

The most challenging aspect of the ATSB–CASA relationship, and possibly the issue that has driven industry to be so critical of it, is sharing of occurrence information between the two agencies. This issue is discussed in detail in Chapter 4, where the Panel recommends that the ATSB share occurrence reports in full with CASA, under an appropriate ‘Just Culture’ framework. Concerns over data flows will continue to be an issue whenever there is a breakdown of trust between industry and CASA.

In contrast, the Panel observed the mature relationship between industry and the regulator in the UK, which enables data sharing between operator and regulator. This is made possible because organisations trust each other and understand that they are working together to improve safety performance. The perception that the regulator will use the safety data to identify compliance breaches and enforce penalties on operators defines the relationship in Australia, but is notably absent in the UK. When this fundamental issue of trust between industry and CASA is repaired, the data access issues should be resolved. It is important that the data flows between the ATSB and CASA improve in order to facilitate more free-flowing safety data within the system.

47 Submission #157

48 Submission #157

Australian Transport Safety Bureau–Civil Aviation Safety Authority Memorandum of Understanding

The current MOU between the ATSB and CASA was signed in 2010 and expired in 2013. However, the agencies advise they are continuing to operate under the now expired MOU as if it remained valid. The renewal of the MOU was put on hold due to the 2012 Senate Inquiry into Aviation Accident Investigations and was delayed further due to the change of government in 2013. This Review was then announced in late 2013.

The Miller Review recommended a new MOU to improve communication and the relationship between the agencies.⁴⁹ The Panel sought information about how successful the implementation of the recommendations had been. Responses from the agencies suggested that the initiatives from the Miller and Hawke Reviews are being progressed. Information on the implementation of these recommendations, as provided by CASA and that ATSB, is at Appendix A4. However, it appears a number of collaborative opportunities have been less than thoroughly implemented. The Panel formed the impression that implementation of the Miller and Hawke Reviews was focused on clearing the recommendations, rather than actively implementing change.

Submissions suggested that the ATSB–CASA MOU needs to be updated, stating that it ‘does not address the pivotal role both agencies play in setting the strategic agenda for aviation safety regulation’⁵⁰ and that ‘the MOU should be discarded or re-written’.⁵¹ The Panel agrees that in a revised MOU, two-way information flows must occur and at regular intervals, and the MOU must be more definitive about what information should be exchanged and when. The Senate Inquiry into Aviation Accident Investigations highlighted the importance of CASA giving information to the ATSB. The Panel supports the need for the regulator to provide all required information to the accident investigator during any investigation. The Panel also supports greater information sharing between CASA and the ATSB more generally, as outlined in Chapter 4.

The Panel recommends redrafting of the CASA–ATSB MOU to provide for a greater degree of cooperation and coordination between the two agencies, with more definitive obligations and expectations, particularly in relation to data flows. However, while the Panel concludes that updating the MOU is warranted, improved coordination and cooperation within the safety system will result from the changes in regulatory philosophy and data sharing recommended in Chapter 4. Improved consultation mechanisms outlined in this Chapter should also contribute to the cultural change necessary to deliver more effective cooperation and coordination.

As noted in Chapter 2, the Panel suggests there is merit in the ATSB and CASA exploring the potential for CASA observers to be part of ATSB investigations.

The Panel recommends that:

11. The Australian Transport Safety Bureau and the Civil Aviation Safety Authority amend the wording of their existing Memorandum of Understanding to make it more definitive about interaction, coordination, and cooperation.

49 Miller Review 2007, recommendation #17

50 Confidential submission #229

51 Submission #160

3.3.2 The Department of Infrastructure and Regional Development– Civil Aviation Safety Authority relationship

The overall relationship between the Department and CASA is not dictated by an MOU and the relationship is generally effective. However, from some of the Panel's confidential discussions, it appears that while interactions at senior executive levels are good, interaction becomes increasingly distant and sometimes distrustful at the operational level. For the most part, the relationship between the agencies is not collegiate; while other Australian public service departments tend to view their colleagues from other departments as colleagues working for one entity (the Australian Government), CASA's 'separateness' leads to a certain distance in the relationship.

The Panel heard a variety of perspectives about the relationship between the Department and CASA. The Panel formed the view that the Department takes a very 'hands off' approach in its dealings with CASA, generally allowing CASA to perform its functions with limited or no engagement from the Department. While it is important that CASA undertake its regulatory activities independently, in its other activities, such as international engagement and regulation development, it is important that CASA has definitive policy guidance from the Department, and assistance in assessing the industry impact of regulatory proposals (see Chapter 5 on regulatory reform).

It is important that the Department, in its role advising the Minister, has a view on matters relating to CASA, and provides those views to assist the Minister in his/her oversight of CASA.

3.3.3 The Department of Infrastructure and Regional Development– Australian Transport Safety Bureau relationship

The relationship between the Department and the ATSB is generally viewed as effective and cordial. Since the ATSB became an independent statutory authority in 2009, the degree of interaction between the two agencies has decreased. However, a shared organisational history and the fact that the ATSB remains housed in the Department's Canberra building with shared corporate and IT services, contributes to a close working relationship.

The ATSB has made minimal recommendations to the Department from ATSB investigation reports; a major recommendation for the Department from any future ATSB investigation may test the true nature of this current relationship.

3.3.4 Airservices Australia–Civil Aviation Safety Authority relationship

As a service provider, Airservices' relationship with CASA is, in many ways, similar to the relationship of any industry authority holder with its regulator. However, the two agencies are also cooperative partners under the Tripartite MOU, and other frameworks, as agencies forming part of the safety system.

Overall, the two agencies navigate this dual-nature relationship effectively. Nonetheless, it was apparent to the Panel that significant tensions had existed, at times, between the two agencies. Some of this tension resulted from the limited resources, experience and understanding within CASA to oversight ATM and ARFF functions, the prescriptive compliance-based approach used by CASA, and its aggressive regulatory stance.

Serious tensions between Airservices and CASA arose in January 2013, when CASA advised it had completed an audit of Airservices' Part 172 approval as an Air Traffic Service provider. It is noteworthy that these same tensions exist in the relationship between CASA and other industry participants, as outlined in Chapter 2.

Responsibility for day-to-day airspace functions

When Airservices and CASA were split from the CAA into two separate agencies in 1995, the regulation of airspace was part of Airservices' responsibilities. Following a range of concerns through the late 1990s and early 2000s when Airservices was both service provider and regulator, in 2007 the government moved the airspace regulation function out of Airservices and into CASA.

CASA currently manages some routine operational functions, such as designation of temporary restricted areas. Airservices outlined to the Panel that, as the regulator moves to a more outcome- and performance-based oversight regime, it might not be appropriate for such day-to-day functions to remain within CASA. The Panel agrees with this proposal. The function of determining an air route is not regulatory, and could be more effectively undertaken (on a day-to-day basis) by the air navigation service provider, under the oversight of the regulator. Similarly, the function of making temporary changes to the classification of airspace for operational or emergency situations would be more appropriately and effectively undertaken by Airservices as the service provider, rather than by CASA as the regulator. In undertaking these roles, Airservices' systems and procedures to make and implement decisions would remain under the oversight of CASA.

Clarifying the responsibilities of the air navigation service provider and safety regulator will be beneficial to the operation of the overall aviation safety system. Clarification of responsibilities may also assist in eliminating some of the difficulties associated with designing flight paths and airspace procedures for new airports or new airport facilities, such as parallel runways in Brisbane, Melbourne and Perth.

The Panel recommends that:

12. The Civil Aviation Safety Authority delegates responsibility for the day-to-day operational management of airspace to Airservices Australia, including the designation of air routes, short-term designations of temporary Restricted Areas, and temporary changes to the classification of airspace for operational reasons.

3.3.5 *Civil–military interface*

With the forecast increase in aviation activity, the relationship between civil and military operations is critical for Australia's aviation safety. With the major airports facing capacity constraints, there is a move to use some existing military airports to assist in meeting the increasing volumes of civilian air movements. One of the most critical issues in the interface of civil and military aviation is in relation to air traffic control at joint-user and military aerodromes.

Defence air traffic control

In a 2013 ATSB report,⁵² it was reported that a disproportionately high number of loss of separation (LOS) incidents involving civil aircraft within Australia take place within military-controlled airspace. In the report, the ATSB focused on LOS incidents to understand how and why they occur and to identify any system issues or trends within the ATM system.

In particular, the report was critical of military-controlled civil airspace, noting that 'military controlled terminal area airspace in general, and all airspace around Darwin and Williamtown in particular, had a disproportionate rate of LOS (for civilian aircraft). Most of these LOS occurrences were contributed to

⁵² ATSB, Loss of separation between aircraft in Australian airspace January 2008 to June 2012, AR-2012-034, October 2013.

by air traffic controller actions.⁵³ The ATSB recommended that CASA ‘...review the results of this report and determine whether its current level of involvement with Military air traffic services (ATS) is sufficient to assure itself that the safety of civil aircraft operations while under Military ATS control is adequate.’⁵⁴

The Panel reviewed the correspondence on safety issue AR-2012-034-SI-02 (Regulatory Oversight of Military Air Traffic Services), as published by the ATSB.⁵⁵ While Defence and CASA made accurate and reasonable comments about the benefits of work between Defence, CASA and Airservices, the Panel is concerned that CASA’s response to the ATSB’s recommendation AR-2012-034-SR-015 stated:

CASA is limited in its ability to influence military ATS in relation to the safety of civil aircraft using military airspace as regulation 172.005 of the Civil Aviation Safety Regulations 1998 provides Part 172 does not apply to a person providing an ATS for the Defence Force, or any ATS provided by the Defence Force.

The focus of the ATSB’s recommendation is on the safety policy question of whether there is sufficient civil regulatory oversight of military ATM services provided for civil aviation. Properly addressing this policy question requires a higher-level response from government.

While it is true that, as the CASRs currently stand, Defence is not subject to CASR Part 172, government could decide to enable this. There are good reasons, steeped in international practice, as to why military aviation is not subject to civil regulation. However, there are also instances, including in Australia, where military or state aviation is subject to civil regulation. For example, CAR 136 bans any foreign state aircraft from operating within Australia without the express approval or invitation of CASA.

The structural separation of CASA and Airservices was effected to ensure that Airservices is an air navigation service provider and CASA is a regulator. Australia has two air navigation service providers providing ATM services to civil aviation: Airservices and Defence. However, only Airservices is subject to regulatory oversight by CASA. It would seem prudent for both providers serving the civil aviation market and managing the safety of the general travelling public to be subject to safety oversight by the civil regulator. The Panel notes that while the Manual of Air Traffic Standards used by both civil and military controllers is the same, there are differences in the training of controllers.

In the Panel’s view, air traffic controllers providing ATM services for civil aircraft should all be trained to the same level of expertise. In the future, the new OneSKY system, which will be used by both Defence and Airservices will be certified by CASA, contributing to an alignment of training and standards.

Issues arising from the crossover of activities at joint-user airports require policy coordination across the government. In the Panel’s view, the Department should provide policy leadership, using the APG and its work groups to agree on an Australian Government position.

The Panel recommends that:

13. The Department of Infrastructure and Regional Development and Department of Defence (and appropriate agencies) establish an agreed policy position on safety oversight of civil operations into joint user and military airports.

53 <http://www.atsb.gov.au/publications/2012/ar-2012-034.aspx>, accessed 18 May 2014.

54 ATSB Issue Number AR-2012-034-SI-02, see http://www.atsb.gov.au/publications/investigation_reports/2012/air/ar-2012-034/si-02.aspx, accessed 18 May 2014.

55 See http://www.atsb.gov.au/publications/investigation_reports/2012/air/ar-2012-034/si-02.aspx, accessed 18 May 2014.

3.3.6 OneSKY

A major initiative between Airservices and Defence is the joint acquisition of a single ATM platform known as 'OneSKY'. This project will aim to deliver harmonisation between the civil and military ATM interfaces, which should enhance the safety and efficiency of Australia's skies to meet the future growth in air traffic.

While this aim is commendable and will realise significant benefits for industry and the nation if implemented effectively and on budget, the Panel considers that safety oversight for ATM services needs to be addressed in line with Recommendation 13, regardless of the potential benefits that flow from the implementation of OneSKY.

3.4 The future – working as a single system

While Australia has an appropriate framework for aviation safety regulation, with defined roles and responsibilities, there is scope for improvement within the existing mechanisms. At times, current interactions between agencies demonstrate a lack of cohesive focus and shared intent, as evidenced in reports and reviews undertaken since 2007.⁵⁶

No single agency is responsible for the overall performance and health of the aviation safety system. Each agency is collectively responsible for actively and effectively discharging their functions and responsibilities, and engaging regularly with each other for the overall benefit of the entire safety system.

The Panel considers that the SSP, which meets Australia's obligations to ICAO, appears to be regarded by agencies as an 'add on' to the existing system. Australia's SSP 'Safety Actions' have a descriptive 'business as usual' focus. In contrast, comparable overseas SSPs reviewed by the Panel place more emphasis on how the safety system will work in the future and what change will be achieved.⁵⁷ In the Panel's view, having established an SSP, there is now an opportunity to use it as an evolving document, and as the basis for describing the future state safety system.

3.4.1 Consultation and coordination mechanisms

The current system of consultation and coordination mechanisms and resulting MOUs outlined has developed in an ad-hoc fashion, without any strategic design. There is a lack of organisation, no clear reporting structures, and the mechanisms focus on outputs rather than strategic direction and accountability.

On the issue of the effectiveness of the APG and AIG, consultations by the Panel revealed that APG has largely been a success, but it is dependent on personal relationships. The Department advised the Panel that:

The success of APG and AIG depends on the willingness of the members to take active part and to exchange views frankly on subjects where responsibilities overlap. In practice, there can be some challenges.

Representatives engaging in Group discussions will have their own reporting lines and accountability, in some cases to Boards. Their capacity may be limited to express views or negotiate shared outcomes on issues which have not been fully considered within the agency. CASA representatives need to be conscious of the need to maintain appropriate independence for future regulatory decisions.

⁵⁶ Miller Review 2007, Senate Committee Inquiry into CASA Administration 2008, Senate Committee Inquiry into Aviation Accident Investigations 2012

⁵⁷ In particular, the UK SSP, but also the Swiss and Singaporean SSPs, and Dutch EGAS report on the development of SSPs.

CASA and Airservices both advised the Panel that APG was working well, on the whole, but there is some scope for improvement in its effectiveness. These perspectives highlight both the importance of personal engagement in ensuring effectiveness in bodies such as APG, and that even the most strategic bodies aimed at implementing Australia's safety system still struggle to overcome the independent nature of agency structures.

The purpose and intent of APG and AIG is compounded by the confusion that exists in the content of their work programs. Whilst the Panel notes that ICAO matters are discussed at APG and AIG meetings, they do not appear in the Work Program or the Terms of Reference for either group.

As with APG, consultations indicated that AIG was, in principle, a valuable forum. However, its effectiveness could be improved, and a revised mandate is required to clarify its exact role and intent.

The Panel's consultations revealed a general perception that the concept of the APG was good, and that a framework to bring together the heads of the various agencies involved in aviation was desirable. The Panel considers that the concept of APG is sound; however, the opportunity exists for it to be broadened to cover a range of aviation safety matters than fall within its current Terms of Reference. New Terms of Reference would enable APG to engage in discussions on a broader range of topics, delivering strategic direction across the full breadth of the SSP, and focusing more on what agencies are intending to do (and why) rather than on what they have already decided to do.

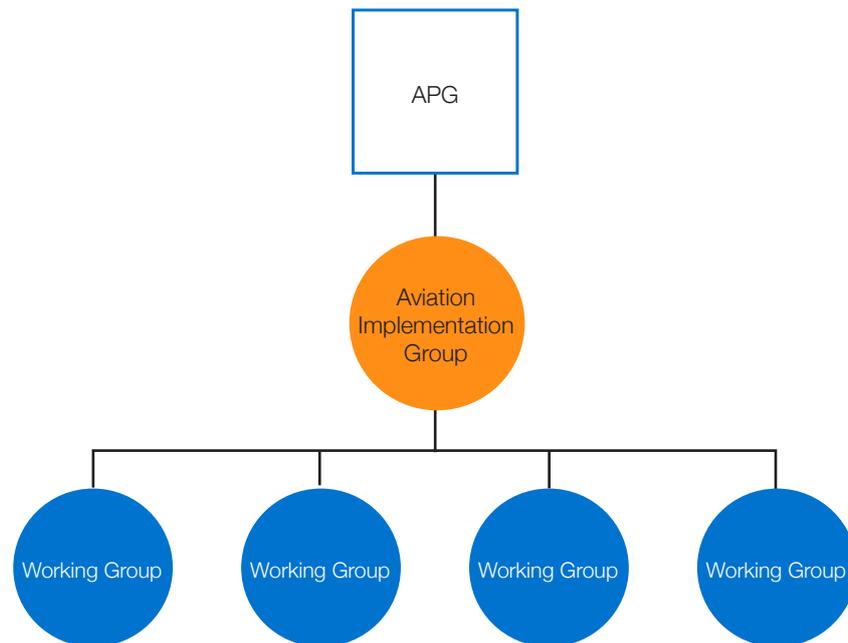
Over time, the Department's policy coordination role and policy leadership authority has either eroded or not been utilised to its full potential, and as a consequence, its governance and policy responsibility needs to be re-established and reinforced. The Panel considers this could be done under the authority of a reinvigorated forward-looking SSP.

The Panel recommended in Chapter 2 that the Government establish the SSP as a strategic plan for the safety system, under the leadership of the APG. The Panel has also recommended that the APG and the SSP be used as the foundation for rationalising and improving coordination mechanisms.

Existing consultation and coordination groups should be evaluated and, if appropriate, reformed into sub-groups reporting to the APG. For example, the Panel noted the value of JAASACG in drawing together government agencies, particularly bringing Defence and civil agencies together. In the interests of sharing information and continuous improvement to the safety framework, JAASACG should evolve to take on the role of centralised safety analysis group, reporting to the APG.

The proposed structure of consultation bodies operating as working groups would streamline coordination and reporting arrangements to a single peak body responsible for the SSP, as shown in Figure 6.

Figure 6 Proposed structure of consultation bodies



Greater clarity and shared understanding of the Department’s role in the overall aviation safety system will help the Department to guide interactions and outcomes, which would be beneficial to the overall safety system framework.

To improve the transparency of the government’s aviation safety agenda and to ensure continuous improvement in this area, the APG should report annually to the Minister on the delivery of the SSP. This reporting would be different from the routine annual reports of the agencies involved; the SSP reporting would be a report on the state and direction of the aviation safety system as a whole.

The Panel considers existing structures, such as APG, can be evolved into this recommended structure; no new bodies or structures are required to deliver the desired improvements in coordination and strategic policy direction.

3.4.2 Relationships between agencies

International comparisons show that Australia’s aviation governance and legislative arrangements are well regarded, almost to a best practice standard, particularly because of the clear delineation of regulation, investigation, service provision and policy advisory roles. As noted in Chapter 2, Australia’s aviation safety system and regulator are well regarded internationally. Since Australia set up its multi-agency structure, other countries have moved in the same direction.⁵⁸

The Australian Government has endeavoured to improve the extent to which all departments and agencies work collaboratively. Similarly, there is a need for all agencies involved in the aviation safety framework to think of themselves as one system and to function as one system. At times, the individual focus of each agency, or an agency’s interests, can impact on the collaborative whole-of-system

58 In 2003, the authors of a review of Swiss aviation safety looked to Australia’s experience in providing greater independence for safety agencies as an example (NLR-CR-2003-316). In early 2014, an amendment was made to the *Civil Aviation Authority of Singapore Act 2009* (No. 17 of 2009) to clarify the responsibilities of the regulator and the Transport Ministry, with the CAAS to regulate aviation safety and the Ministry to investigate air accidents and incidents, regulate aviation security and provide licences for air services.

approach. In short, the Department and agencies do not always function as parts of a cohesive, interlinked system.

This is particularly true in international engagement, where at times it appears Australian agencies do not represent a united front. However, it is not clear whether this is because the Department has not provided sufficient advice to the agency delegation, or whether the delegates from ‘independent’ agencies do not necessarily adhere to the Australian Government position provided by the Department. It is important that Australia present a united front internationally. The Department needs to have a stronger international coordination mandate under the SSP, and an accompanying framework to drive coordination of international engagement.

Much of the engagement between CASA, the ATSB and the Department is driven by formal processes: either an MOU or similar framework. The Panel recommends enhancing existing relationships between agencies to promote an increase in the level of natural engagement. The flow of information facilitated by working relationships appears to be absent from the more formal, coordinated engagement between agencies involved in aviation. Some of the Panel’s discussions with those working in the system evidenced that the level of engagement between aviation agencies is at times less effective and collegiate than interactions between non-aviation agencies.

3.4.3 Independent decision making, but not complete autonomy

One of the key elements of the Australian safety framework is that it enables Airservices, CASA, and the ATSB to operate under a degree of independence from the government. This independence is appropriate and desirable for independent service providers, regulators, and investigators. Independence has enabled more focused decision making, has minimised the opportunity for political interference, and ensured agencies focus on their primary objectives. There is nevertheless a need for independent agencies to communicate to prevent duplication, omission and policy split. This is a tenet of good public governance.

However, to varying degrees, the agencies involved in the aviation safety system need to improve their ability to work together as one integrated system and as part of the broader Australian Government.

It is important that CASA and Airservices, while functioning as independent agencies, recognise the role and authority of the SSP and the Department. One possible mechanism would be to incorporate specific reference into their respective Statements of Expectations issued by the Minister.

The Panel is conscious that managing a decentralised aviation safety system such as Australia’s requires strong coordination, as well as appropriate levels of oversight. The Panel is of the opinion that the Department has allowed a degree of latitude to the agencies on the grounds that they are independent. This independence needs to be recast as independent decision making within the Government’s agenda and the SSP, not as complete autonomy to develop and pursue an independent agenda, without reference to or coordination with other agencies.

To achieve this, the Panel reaffirms Recommendations 1 and 2, that the SSP should be developed into a strategic plan for Australia’s aviation safety system, and the Department must play a stronger role in helping to resolve policy matters relating to the SSP.

4. Effectiveness of safety oversight

4.1 Introduction

Under the Terms of Reference for this Review, the Panel was asked to advise the government on options for improving the oversight and enforcement of aviation regulations. While Chapter 2 considered the effectiveness of all agencies involved in aviation safety, this chapter looks more closely at how CASA conducts its safety oversight role and how CASA's regulatory philosophy, use of safety reporting data, communication, and organisational structure are affecting its relationship with industry and its safety oversight functions. This chapter also considers the effectiveness of CASA's audit and surveillance activities and the oversight of self-administered organisations.

CASA's regulatory approach, as described in various policy documents and manuals, is advanced and in line with best practice approaches among global aviation regulators. To ensure compliance with CASA's obligations under section 16 of the CA Act to consult with relevant bodies and organisations, the CASA Governance Framework includes extensive direction and guidance on how the regulatory program is to be conducted, including references to fairness and good communication.

4.2 Global challenge for aviation safety agencies

Aviation is a highly technical and complex industry. Training of qualified professionals is expensive and expertise is usually gained from years of experience.

Historically, the civil aviation community benefited from a flow of trained and experienced personnel from the world's armed forces and a large, active GA training network. Highly trained pilots and technical engineers completed military duty and then moved to civil aviation as a second career. Similarly, flying and technical schools trained considerable numbers, who often worked in small organisations until they had enough experience to move to larger operators and aircraft. Trained personnel were also recruited by civil aviation authorities to participate in the regulatory oversight system.

However, over the past 20 years, the availability of military expertise has diminished as governments reduced armed forces and changed retirement policies. Many GA schools closed due to increasing costs of GA flying. The result is global concern about the diminishing availability of trained, capable and experienced pilots and engineers.

The shortage of expertise, along with a growing air transport sector, is leading to challenges in filling critical safety oversight positions. The work of inspectors is highly specialised and, often, lower paid than industry, making the recruitment of highly qualified and willing personnel increasingly difficult. In the Panel's experience, on average it requires one to two years training and on-the-job supervision before a knowledgeable and qualified industry professional can become an effective safety inspector.

Compounding the challenge for safety regulatory agencies internationally is the significant change in the approach to safety oversight over the past two decades. Performance-based rules and the application of SMS, along with risk-based surveillance concepts require a change in how safety agencies work. These changes bring challenges, placing more responsibility on regulated organisations and changing how regulators conduct oversight.

Regulators must balance using modern and sophisticated approaches to safety management with the capacity to provide alternatives for the GA community where new safety approaches like SMS must

be phased in at a modified pace. Increasingly, more responsibility is being placed on capable and organised low-risk sectors and new methods of safety oversight are being introduced for high-risk sectors. Regulators are having to step back from prescriptive hands-on inspection processes and apply systems approaches to safety oversight.

Overall, CASA has been among the leading safety oversight agencies in introducing SMS and performance-based concepts. However, like other countries, the transition has not been easy. There is general acceptance of the principles of performance-based safety systems in both the industry and CASA, but specific processes have not been universally understood and, to a certain extent, are being resisted.

4.3 Regulatory philosophy

A constant challenge for civil aviation regulators worldwide is to find a balance between firm safety oversight and a more collaborative approach. Regulatory philosophy can vary on a sliding scale between stringent and lenient, with the most appropriate position depending on factors such as the maturity of the aviation industry and confidence the regulator and the industry have in each other.

ICAO describes this balancing process in its Safety Oversight Manual:

2.4.3 A State exercising a passive role relies almost completely on the civil aviation industry's technical and organizational competence and commitment to safety. In these situations, the industry is responsible for both the interpretation and the implementation of the regulations, thus becoming essentially self-regulating. As a result, the State is not in a good position to assess the adherence of the civil aviation industry to the regulations, other than by knowledge acquired fortuitously or in the course of accident and incident investigations. Such a system would not enable the State to be proactive and exercise the necessary preventive and corrective responsibilities required under the Convention.

2.4.4 If, on the other hand, the State safety oversight system is so rigorous as to amount to a complete domination and dictation of the conduct of operations, then under such an environment the civil aviation industry is not empowered with the responsibility and self-sufficiency for safe operations. This can undermine the morale of the civil aviation industry's personnel and result in a lowering of safety standards. It could also be cost-prohibitive for the State to maintain the large enforcement organization required to sustain this level of oversight.

2.4.5 In practice, neither of these extremes is compatible with the objective of a well-balanced division of responsibilities between the State and the aviation community. The public interest would best be served by a balanced approach, where both the State and the aviation community have clearly defined responsibilities for the safe and efficient conduct of their functions.⁵⁹

A firm, hard-line regulatory stance may be the most effective approach in countries where the aviation industry is relatively new and has a degree of immaturity. In these countries the rules must be more prescriptive and the regulator must provide tighter oversight and be more diligent in ensuring rules are followed. Aviation in Australia is advanced and the safety record is good. The aviation community is generally at the forefront of new advancements and safety thinking.

59 ICAO Doc 9734

4.4 CASA's safety message to industry

The message that CASA presents to industry is not always consistent with the message in its manuals. The DAS outlined CASA's regulatory philosophy in a presentation to a Senate Estimates Committee in 2009:

My aim is to refocus CASA on our core function, which is regulating aviation safety. I have delivered the message to our staff that CASA is a regulator, that 'regulator' starts with the letter R and that, in my opinion, it is a capital R. That means neither that we bully all until they submit, nor that we abandon consultation with the industry. Indeed, consultation is specifically required by the Act. But it does mean consultation, and not endless attempts to reach consensus.⁶⁰

Similar announcements of CASA's firm regulatory philosophy have been made in other presentations to the industry, and appear to be evident in the trends in CASA enforcement action.⁶¹ Although the rationale for 'firmness' in regulatory oversight is understood, and clearly has a place, the industry's assessment is that CASA takes an overly aggressive position, which is having an overriding and consuming influence over the aviation community and damaging trust. Combined with concerns in other parts of the safety oversight program as described later in this chapter, the result is an industry that has retreated from open dialogue and participation.

A hard-line regulator creates an environment in which regulated entities, be they air operators, maintenance providers, airports, or even air navigation service providers, may withhold information. Industry consultation has highlighted that many in the Australian aviation industry now actively avoid engagement with CASA unless absolutely necessary.

4.5 Collaborative approach between regulator and industry

The concept of partnership between the regulator and industry is frequently debated. There is an argument that regulators should not be in partnership with industry because it can create the risk of capture or undue leniency. CASA has taken the position that the regulator should not be involved in partnership, as it advised the Panel:

CASA's engagement with the industry forms a significant part of its standards development, educational, advisory and operational activities. Whilst the maintenance of an appropriately close, cooperative and mutually respectful relationship with industry remains critically important, the concept and the expression of a 'partnership with industry' has disappeared from CASA's lexicon.⁶²

ICAO has many collaborative working relationships with industry associations for airspace planning, development of best practices and rule making. Industry is heavily involved in work groups, committees and panels, including rule development. In some instances, ICAO involves industry in developing Annex provisions.

The Panel reviewed the approach taken by a number of overseas regulators. Leading regulators are moving to performance-based regulation, using a 'trust and verify' approach. An effective risk-based regulator will adopt a generally collaborative approach, working with industry to build safety outcomes, but judging when a hard line is necessary.

For example, the UK CAA Regulatory Enforcement Policy says:

We will work collaboratively with those we regulate, to ensure there is clarity about how to comply with

60 Australian Senate Rural and Regional Affairs and Transport Legislation Committee, Budget Estimates, 28 May 2009, Hansard p.91.

61 See Appendix A7.

62 Information provided by CASA.

applicable aviation requirements, but we will deploy a range of scaled responses to actual, suspected or potential breaches.⁶³

A collaborative approach builds trust, facilitating and promoting effective flows of information allowing industry and the regulator to make more effective risk-based decisions.

A performance-based safety system uses SMS to ensure safety policies and processes are effective. The whole aviation community must work together to be innovative in addressing safety risk. Achieving this outcome requires an inclusive, collaborative approach. Both CASA and the aviation industry will have to adjust if such an approach to aviation safety is to take effect in Australia.

Effective collaboration requires commitment by all participants. Maturity and dedication to aviation safety must be evidenced by both the regulator and industry. The industry will need to be better prepared to assume safety responsibility and representative bodies must commit to contributing to both rule development and operational monitoring.

To conduct effective safety oversight, with more open and willing communication between the industry and regulator, the Panel recommends that CASA adopt a more consultative and collaborative approach with industry.

The Panel recommends that:

14. The Civil Aviation Safety Authority changes its regulatory philosophy and, together with industry, builds an effective collaborative relationship on a foundation of mutual understanding and respect.

4.5.1 Delegate Indemnity

As part of this collaborative approach to safety oversight, CASA may need to become more reliant on industry delegates to issue low-risk approvals on its behalf. In implementing such arrangements, CASA must continue to indemnify industry delegates, when they are making decisions on behalf of the regulator to ensure that they are able to carry out these functions with confidence and legal certainty.

The Panel notes that a number of reviews of the level and type of indemnity offered to delegates have been conducted or proposed in recent years. In the Panel's view, it is essential that appropriate indemnity arrangements are in place for all industry delegates of CASA.

The Panel recommends that:

15. The Civil Aviation Safety Authority continues to provide appropriate indemnity to all industry personnel with delegations of authority.

4.5.2 Communication

The Panel notes a significant divergence between CASA's communication policies and perceptions within the aviation community. CASA publishes extensive, well-written material on policies, plans and status of projects and rules. Its safety awareness material and aviation safety seminar programs are of high quality by international standards. CASA staff routinely attend industry association meetings. The regulation-making consultation program is, on paper, well designed and is similar to equivalent structures in other countries. The CASA website contains extensive information, and, in some parts,

⁶³ Available from <http://www.caa.co.uk/default.aspx?catid=2516>, accessed 27 May 2014.

is well designed and easy to use. Senior managers, including the DAS, have a regular schedule of meetings with industry bodies, operators and maintenance organisations. In many ways, on the surface, it seems a model regulatory communication program.

Yet the Panel heard consistent concerns from the industry that CASA was not communicating with them. The Panel queried this contradiction with many in industry, and within CASA, to determine why communication links were not working as effectively as they should. The Panel concluded the following:

- The industry feels that CASA management does not listen. In their mind, CASA is good at providing briefings, but does not listen to industry’s response, or understand the issues that industry raises.
- Some sectors of the aviation community are not making sufficient efforts to keep themselves abreast of change. For example, the Panel heard from many small companies that the new Part 145 requirements are too onerous; however, none of these companies seemed to have read the CASA Discussion Paper about the intention to have a special Part 145 for small operators, even though it had been on the CASA website for some time.⁶⁴
- The amount of regulatory change within the industry, including the ongoing process of regulatory reform, is tiring the industry.
- The industry appears to have difficulty finding the right person in CASA to ask technical questions (see further discussion on CASA’s structure in section 4.7).

Given CASA’s communication programs appear well founded, improvement could be achieved simply by mutual agreement with industry that good, two-way communication must be a priority. Both CASA and the aviation industry will have to adjust and change the ‘talk to/tune out’ framework to create effective two-way communication.

The Panel noted that the industry reports good communication with some inspectors and poor communication with others. This is not surprising, as interpersonal relationships will always vary; however, the issue appears to relate more to an unwillingness of some inspectors to engage with industry at a substantive level.

The Panel considers there is a need for a more consistent, service-oriented communication by CASA staff. Such an improvement could be achieved by an increased emphasis on inspector entry-level training as well as periodic ‘communication for regulatory effectiveness’ courses. The Panel also considers that some of CASA’s own training courses should be available to industry representatives as a way of improving a mutual understanding of constraints and demands. The Panel has identified a range of other training needs within CASA, particularly relating to auditing (see section 4.8.3). The Panel notes that the Capability Framework identified as a priority by CASA in its Workforce Plan 2012–14 has not yet been completed.⁶⁵ Completion of this Capability Framework, and an associated overhaul of training programs, to target identified areas such as communication, would improve CASA’s overall ability to deliver on its objectives.

The Panel also considers that the industry will have to improve its ability to engage with CASA, including through the use of professional-level representation. Some sectors of the industry are not represented by professional associations, which makes it difficult for the regulator to determine how to act in that sector’s interests. If good two-way communication is to be effective, industry representative bodies will need to be better organised and must work towards a more coordinated approach. Aviation sectors in other countries, and some industry associations in Australian aviation sectors (e.g. the

64 See for example CASA Discussion Paper DP1214SS Maintenance of non-RPT Aircraft, part of Project SS05/01 Second phase of continuing airworthiness and maintenance reform Parts 42, 66, and 145. (http://casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC_101208, accessed 18 May 2014.)

65 Information provided by CASA.

aircraft maintenance sector represented by the Aviation Maintenance Repair and Overhaul Business Association (AMROBA)), are able to achieve much more in their engagement with governments because they operate through representative associations.

The Panel recommends that:

16. The Civil Aviation Safety Authority finalises its Capability Framework and overhauls its training program to ensure identified areas of need are addressed, including:
 - a. communication in a regulatory context
 - b. decision making and good regulatory practice
 - c. auditing.

4.6 Data sharing and use

Modern aviation safety systems are dependent on timely, accurate and informative reports about safety incidents and events. Having sufficient intelligence about what is happening within the system enables trends to be identified, recurring issues to be rectified and risks within the system to be measured.

To achieve this end, there needs to be a positive reporting culture where pilots, engineers, and other industry participants, are willing to disclose any incidents that occur and any mistakes they make. To encourage full disclosure, aviation safety regulators in most jurisdictions have introduced a ‘just culture’ approach. Under this approach, people who report incidents and mistakes are not normally prosecuted or punished unless the action was wilful or grossly negligent.

The Australian aviation industry does not consider just culture principles are adequately applied in Australia and, as a result, is reluctant to disclose information to CASA.

A common suggestion in submissions was for all identifying information to be removed from safety reports before they are provided to CASA. One submission commented that ‘confidentiality of incident reporting is critical – CASA should not have access to VH or location details or this threatens to undermine all reporting’.⁶⁶

4.6.1 International practice

Safety reporting is addressed in ICAO Annex 13⁶⁷ on the non-disclosure of records, and Annex 19⁶⁸ that covers safety data collection, analysis, protection and exchange. These Annexes outline a system for:

- sharing appropriate safety information to authorities implementing the SSP
- addressing safety deficiencies through safety data analysis
- a voluntary non-punitive incident-reporting system with protection for the source
- restricted use of safety data for safety-related purposes only
- promoting safety information sharing among aviation industry participants.

66 Submission #39

67 ICAO Annex 13 Chapter 5 Paragraph 5.12

68 ICAO Annex 19 Chapter 5 Safety Data Collection Analysis and Exchange

Section 5.3.2 of Annex 19 provides:

States should not make available or use safety data referenced in 5.1 or 5.2 [mandatory and voluntary reporting] for other than safety-related purposes, unless exceptionally, an appropriate authority determines in accordance with their national legislation, the value of its disclosure or use in any particular instance, outweighs the adverse impact such action may have on aviation safety.

ICAO has also published a Safety Management Manual for more guidance that contains details on:

- safety data collection and analysis⁶⁹
- safety data collection, analysis and exchange relating to the SSP⁷⁰
- guidance on reporting and safety information protection.⁷¹

Internationally, governments have taken different approaches to implementing the ICAO Annexes and guidance material, as outlined in Table 5. While the reporting mechanisms differ, in all cases, the regulator has access to some level of information. Many countries have formal policies limiting the use of safety reports for prosecution or regulatory action; however, this is not the case in all instances.

69 ICAO Doc 9859, Safety Management Manual Chapter 2, 2.11

70 ICAO Doc 9859, Safety Management Manual Chapter 4, 4.2 SSP Component 3.2

71 ICAO Doc 9859, Safety Management Manual Appendix 2, 3, 5, 6

Table 5 State mandatory aviation accident and incident notifications regimes provided by the Australian Transport Safety Bureau

Country	What is reported? ⁷²	Who is it reported to?	What does the regulator get?	What can the regulator do with it?	Public access
Australia	Mandatory Occurrence Reporting (including Accidents, incidents and serious incidents)	Australian Transport Safety Bureau (ATSB)	CASA receives direct information from ATSB	CASA will not use the report for administrative action unless it is demonstrably in the interests of safety and there is no alternative source of information. Further, CASA will not recommend criminal proceedings unless a person has acted intentionally, knowingly, recklessly or with gross negligence	The ATSB publishes an online searchable database with registration and identifying details removed
United Kingdom	Accidents and serious incidents	Air Accidents Investigations Branch (AAIB)	Full details. AAIB passes report to regulator. In addition, the regulator also receives flight data from airlines	The CAA will use occurrence reports to take licence action if it is no longer satisfied the licence holder is competent, medically fit or a fit person to exercise the privileges. It will not instigate prosecutions for unpremeditated and inadvertent breaches of the law, except in the case of gross negligence	AAIB publishes monthly bulletins of accidents and serious incidents, including registration number, times, dates and locations
	Incidents and Mandatory Occurrence Reporting	UK Civil Aviation Authority (CAA)			Not published, but there is limited distribution to registered individuals/ organisations. Requests for de-identified data are also accepted
United States	Accidents and serious incidents	The National Transportation Safety Board (NTSB)	NTSB and FAA coordinate on the investigation with either an FAA officer assigned to the NTSB investigation, or the investigation is delegated to FAA	Accident and incident records may be used as evidence in enforcement investigations	Details including a summary of the report and the aircraft registration number are published for accidents investigated by NTSB
	Incidents	The Federal Aviation Administration (FAA)	The FAA gets full details of the report		For incident reports the FAA Accident/Incident Data System (AIDS) database includes details other than an individual's name
European Union	Occurrences: including accidents, serious incidents & incidents	A report is given directly to the regulator, investigator or other authority and also provided to the European Co-ordination Centre for Accident and Incident Reporting Systems (ECCAIRS)	Both the regulator and investigator must have access to information stored on a national database from occurrence reports. Personal information is only to be made available to the extent necessary for maintaining and improving aviation safety	Member states are to refrain from instituting proceedings for unpremeditated or inadvertent infringements that come to their attention only through a report made in accordance with the regulation (does not apply in cases of gross negligence)	Member states may publish de-identified occurrence reports
Denmark	Accidents and incidents	Danish Accident Investigation Board	Report referred to regulator	No protections	Investigation reports published
	Occurrences	Danish Civil Aviation Authority	Regulator receives the report. Original report stored for five years, but names of individuals not included in database	Protection from punishment for occurrences that are not accidents and incidents	De-identified statistical summaries published

Table 5 State mandatory aviation accident and incident notifications regimes provided by the Australian Transport Safety Bureau

Country	What is reported? ⁷²	Who is it reported to?	What does the regulator get?	What can the regulator do with it?	Public access
Canada	Accidents and serious incidents	Transportation Safety Board (TSB)	TSB will notify the Civil Aviation Contingency Operations (CACO) Centre with a report made including rego, times, dates, locations and description of occurrence	No restrictions	Civil Aviation Daily Occurrence Reporting System: rego, times, dates, locations
	Incidents	Transport Canada	Full report		
New Zealand	Accidents and Incidents	New Zealand Civil Aviation Authority (CAA) in conjunction with the Transport Accident Investigation Commission (TAIC). Note: TAIC only investigates major accidents. CAA does the rest	Full report	Name of reporting individual is not disclosed and information that might reveal the identity of the source if the reporting individual removed on request. The Authority shall not use or make available for the purpose of prosecution investigation or for prosecution action any information submitted to it	CAA publishes a quarterly Aviation Safety Summary Report, and a six-monthly Aviation Industry Safety Update. Also available on the website are occurrence briefs with identifiable information including location, registration and model details

4.6.2 Current Australian reporting system

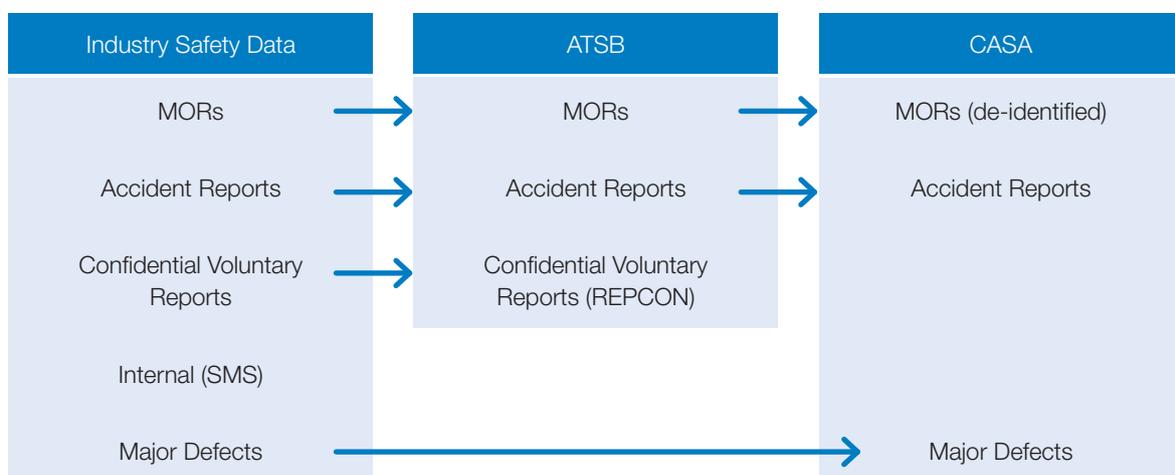
Types of reporting

Within the Australian aviation industry, most incident reporting falls into four categories:

- Mandatory Occurrence Reports (MOR) to the ATSB
- Confidential Voluntary Reports to the ATSB
- Major Defect Reports to CASA
- Internal reports within a company for its own internal SMS.

The current scheme for data collection in Australia is summarised in Figure 7.

Figure 7 Current Australian data collection and reporting scheme



72 For detail on definitions, see Appendix A8.

These data collection systems address the mandatory and voluntary incident reporting systems for data collection outlined in ICAO Annex 19 (standards 5.1.1 and 5.1.2 on reporting systems) and are also consistent with the guidance from the ICAO Safety Management Manual.

Mandatory Occurrence Reports

MORs provide accounts of actual or potential safety hazards and deficiencies. These reports are used to identify safety issues that need to be addressed to improve safety systems.

There are international recommendations for MORs in Chapter 8 of ICAO Annex 13 and in Chapter 5 of ICAO Annex 19, which require countries to establish mandatory incident reporting systems.

In Australia, accidents, serious incidents and incidents must be notified to the ATSB through an MOR system, in accordance with sections 18 and 19 of the TSI Act.

Confidential voluntary reports

Confidential voluntary reporting is intended to capture information about safety concerns and hazards that are not subject to mandatory reporting. Such reports tend to focus on procedures and risk management that lead to human errors as noted in Chapter 5 of the ICAO Safety Management Manual:

Confidential incident reporting systems facilitate the disclosure of hazards leading to human error, without fear of retribution or embarrassment.

As voluntary reporting can place reporters in a situation where their management could take disciplinary action, reporters' identities are always kept confidential to promote an effective reporting culture and the proactive identification of safety issues. It is important to note confidential voluntary reporting systems differ from anonymous reporting systems because they provide the means to contact the reporter for additional details if required.

Australia incorporates confidential voluntary reporting through the ATSB's REPCON reporting scheme, under the Transport Safety Investigation (Voluntary and Confidential Reporting Scheme) Regulations 2012.

Major defect reports

Major defect data is mandatorily reported to CASA in accordance with Part 4B of the CARs.

Internal reporting systems

Operators in the aviation industry establish their own internal reporting systems as part of their SMS, to collect a database of safety occurrences specific to their operations. These systems may include both reports by staff and flight data captured automatically by aircraft systems. Accidents and incidents that are reported through an operator's system are also reported to authorities through mandatory reporting requirements.

ICAO guidance material references the need for operators to have internal reporting systems as part of their internal SMS, but does not prescribe how this data should be reported or what operators (and regulators) should do with the information.

4.6.3 Information sharing between agencies

The ATSB provides summarised and de-identified information from MORs to CASA. The information provided to CASA includes:

- daily de-identified (excluding aircraft registrations) reports of all occurrences from the ATSB's database with standard information including aircraft registration without a detailed narrative
- automated weekly transfer of summaries of information received by the ATSB that does not have identifying information (e.g. aircraft registration) but contains enough detail for safety trends analysis and safety risk identifications
- information on accidents and serious incidents received by the ATSB, which may contain identifiable details such as 'operator names, registration numbers, times, dates, locations and a description of the event',⁷³ but the ATSB will aim to avoid direct identification of individuals.

There is limited sharing of data from CASA's surveillance activities and safety defect reports with the ATSB. Data is only shared if the ATSB is conducting an investigation and requires the relevant information from audit reports as stated under the TSI Act and clause 4.4.6 of the MOU between the two organisations.

4.6.4 Data storage and analysis

The ATSB's safety database is known as the Safety Investigation Information Management System (SIIMS), which stores occurrence data, comprising accident and incident information. As noted in the joint ATSB-CASA Safety Information Policy Statement,⁷⁴ this information is examined by the ATSB to assist in determining issues requiring safety investigation, and is also used by the ATSB for publishing research and trend analysis.

CASA's safety database stores information from its surveillance and audits as well as reported safety defect data and the de-identified data it receives from the ATSB. This data is then used to identify safety trends and determine whether regulatory action is required. CASA's use of the information is to assist in determining whether to initiate regulatory inquiries and to maintain a safety database for trends analysis. The statement also details that CASA will not rely on mandatory reporting information for taking action unless there is no other source of information available to it. This policy statement outlines that:

CASA will not normally recommend the institution of criminal proceedings in matters which come to its attention only because they have been reported under ATSB's mandatory reporting scheme. The exceptions will be in cases of conduct that should not be tolerated, such as where a person has acted intentionally, knowingly, recklessly or with gross negligence.

Information from both the ATSB and CASA is considered by JAASACG. The JAASACG comprises specialist safety analysis staff from the ATSB, CASA, Airservices Australia, BITRE, and the Directorate of Defence Aviation and Air Force Safety. These members are involved in the collection and analysis of safety data and the role of the group, as required in the SSP is:

- to facilitate the exchange of safety-related data and analyses between the agencies, for the sole purpose of improving aviation safety
- to identify joint safety analysis projects that utilise the combined capabilities of the joint agencies to produce outputs of safety benefit.⁷⁵

73 Safety Information Policy Statement, <http://www.ATSB.gov.au/aviation/safety-information-policy-statement.aspx>, accessed 18 May 2014.

74 Ibid.

75 Infrastructure website, http://www.infrastructure.gov.au/aviation/safety/ssp/chapter_3.2.aspx, accessed 18 May 2014.

4.6.5 Just culture

The Panel noted conflicting views within the Australian aviation industry on the subject of ‘no blame’ and ‘just culture’. There is a common view that, as the ATSB conducts ‘no blame’ investigations, this approach should extend to incident reporting and that no blame should be apportioned on the basis of a safety report. This is incorrect. ‘No blame’ attaches to ATSB accident and serious incident investigations only.

The ICAO Safety Management Manual outlines the intent of a just culture approach:

Safety information should be collected solely for the improvement of aviation safety, and information protection is essential in ensuring the continued availability of information. This may be realized through a safety reporting system that is confidential, voluntary and non-punitive. The benefits are twofold. Often personnel are the closest to safety hazards, so the reporting system enables them to actively identify these hazards. At the same time, management is able to gather pertinent safety hazard information and also build trust with personnel.⁷⁶

Previously, the Australian approach largely echoed this sentiment, as explained in the foreword to the 2004 version of CASA’s Enforcement Manual:

- A person who reports making an honest mistake generally should not be prosecuted or fined, nor should they have their licence, certificate or authority suspended or cancelled
- There should be a measured response to less serious contraventions of safety rules which should involve counselling, warnings, training, infringement notices or enforceable voluntary undertakings, rather than either criminal prosecution or the suspension or cancellation of licences, certificates or authorities.⁷⁷

This wording no longer appears in the current version (2009) of the manual. More recently, Australia has advocated for more limited just culture protections. In September 2010 at ICAO’s 37th Assembly, Australia submitted a Working Paper titled ‘Some Caveats on Just Culture’, arguing:

...no concept of just culture should preclude the possibility that there are a range of actions that may be taken by aviation safety regulatory authorities, which properly balance the impact on the future free flow of safety information against the safety-related objective of taking those actions in particular cases.⁷⁸

In September 2013, at the 38th Assembly, Australia put forward a Working Paper titled ‘Current and Future work on the Appropriate Use and Protection of Safety Information’⁷⁹ and successfully moved an amendment to Resolution A37-3 to distinguish between ‘punitive’ and ‘non-punitive’ action.

CASA’s current perspective, as understood by the Panel, is that the ‘just culture’ principles prevent any prosecution or punitive action on the basis of safety reports. However, where a report indicates that a safety risk exists, non-punitive administrative action may be taken in the interests of safety. In recent times, CASA’s view on what constitutes (non-punitive) administrative action has been extended to include the suspensions, variations and cancellations of approvals.

At a strict definitional level, this view may be accurate—the intention of such action is not punishment, but rather mitigation of a safety risk—but, from the perspective of industry, it is often seen as punitive and fosters amongst the industry a reluctance to report.

⁷⁶ ICAO Doc 9859 Safety Management Manual Paragraph 2.6.17

⁷⁷ CASA 2004 Enforcement Manual foreword Version 3.0, www.casa.gov.au/manuals/regulate/enf/009rfw.pdf, accessed 18 May 2014.

⁷⁸ A37-WP/289

⁷⁹ A38-WP/173

The Panel recommends that:

17. The Civil Aviation Safety Authority publishes and demonstrates the philosophy of 'just culture' whereby individuals involved in a reportable event are not punished for actions, omissions or decisions taken by them that are commensurate with their experience and training. However, actions of gross negligence, wilful violations and destructive acts should not be tolerated.

4.6.6 The use of discretion

A common theme that has emerged throughout this Review is that industry perceives that CASA has become a heavy-handed regulator, focused on issuing notices or taking other formal actions against operators and individuals. This has contributed to an adversarial relationship between CASA and industry.

As an illustrative example of this attitude by CASA, in April 2012 Requests for Corrective Action (RCAs) were changed to become Non-Compliance Notices (NCNs). At the time, CASA indicated that the name change to NCN more accurately reflected the purpose of the notice, although it is noteworthy that other countries use less aggressive language.⁸⁰ According to CASA, the name change clearly shows the recipient 'that CASA believes they have breached the regulations and are expected to take appropriate action to bring themselves back into compliance.'⁸¹ This approach makes no allowance for the possibility that there has been no breach. If there are grounds for believing that there has been a breach, the recipient of the notice should be given an opportunity to answer the allegations and the response should be considered fairly and with a mind open to the possibility that there has been no breach.

The Panel considers that CASA employees must use discretion in their approach to an event. In the first instance, an informal meeting, telephone conversation or exchange of emails should attempt to determine the facts and discuss an action plan to address any identified problem. On reaching consensus, the outcomes or an action plan would be notified in writing to CASA; should agreement not be reached, CASA would continue to the next step of their procedures as detailed in its Surveillance Manual and Enforcement Manual. This approach should not fetter CASA in its ability to invoke the Serious and Imminent Risk procedures under Part III, Division 3A of the CA Act, but would introduce a degree of procedural fairness.

The Panel recommends that:

18. The Civil Aviation Safety Authority reintroduces a 'use of discretion' procedure that gives operators or individuals the opportunity to discuss and, if necessary, remedy a perceived breach prior to CASA taking any formal action. This procedure is to be followed in all cases, except where CASA identifies a Serious and Imminent Risk to Air Safety.

4.6.7 Sharing of mandatory occurrence reports

While the Panel is concerned about the current reluctance within industry to make safety reports for fear of regulatory sanction, it does not agree that CASA should be denied access to this information. The

80 For example, New Zealand CAA calls them 'Findings Notices'.

81 http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC_100847 accessed 18 May 2014.

Panel notes that in many other countries, as outlined in Table 5, occurrence information is reported to the safety regulator, not the accident investigator.

The Panel considers that CASA must have access to occurrence information to understand the risks inherent in the sector and to make properly informed decisions on safety. Access to this information will ultimately allow both CASA and the industry to improve risk assessment processes and further the safety management approach. The Panel recommends that CASA have full access to MORs made to the ATSB.

Given the current lack of trust between the industry and CASA, there will undoubtedly be strong resistance to this proposal. To address this resistance, CASA will need to actively demonstrate a just culture attitude towards incident reporting and use discretion, as per Recommendations 17 and 18. Just culture is not a process or procedure, but a set of behaviours that drives certain outcomes.

Under the proposed system, the ATSB would continue to receive and hold data in a safety database in accordance with ICAO Annex 19, but would provide all mandatory reports to CASA, in full.

Many in industry noted during the consultations that current de-identification processes still allow industry and CASA to identify which operators (or sometimes personnel) were involved in an event. As a result, a number of submissions pressed for more stringent de-identification of mandatory reports before they are passed to CASA. However, complete de-identification would undermine the value of the information itself, and the best protection for industry is not de-identification, but a clear and binding just culture policy requiring CASA to use information appropriately.

Throughout this report, the Panel recommends changes that, if actioned, will contribute to the rebuilding of trust between the industry and CASA. Changing its regulatory philosophy is the most important shift that CASA must make. Coupled with a much stronger policy towards just culture, the Panel considers that the relationship between CASA and industry can reach a level of maturity where, as in many of the countries identified in Table 5, regulator access to safety data is no longer controversial.

The Panel recommends that:

19. The Australian Transport Safety Bureau transfers information from Mandatory Occurrence Reports to the Civil Aviation Safety Authority, without redaction or de-identification.

4.6.8 Data analysis and education

The Panel considers there is an opportunity for greater use of the work of the JASAACG in guiding industry education. The outputs from the JASAACG are not obvious to industry.

While the Panel agrees that the group performs an important function in sharing information and methodology between agencies, there is an opportunity for increased sharing of its outputs with industry. As the group with the largest cross-agency collection of data between its members, and the statistical expertise from the various agencies, the Panel would like to see its outputs published, with the goal of directing industry education programs undertaken by CASA.

Under this new approach, the Panel also considers that all safety education functions currently undertaken by the ATSB could be transferred to CASA, which would have access to the necessary information to undertake this function. This would free the ATSB to focus on its primary function of accident investigation.

The Panel recommends that:

20. The Australian Transport Safety Bureau transfers its safety education function to the Civil Aviation Safety Authority.

4.7 CASA organisational structure

The effectiveness of a country's safety oversight program is highly dependent on how the regulator's organisational structure is aligned to the industry it is regulating. This section considers how CASA's services and communication could be enhanced, and the effectiveness of its safety oversight improved, by moving to a structure more representative of the industry it is regulating.

Consultations revealed many examples of industry confusion about the most appropriate contact point in CASA to obtain information. Although submissions to the Panel did not generally suggest organisational change, the Panel was struck by the number of concerns about communication and specialist guidance raised by the industry. Many of the issues appear to relate to the organisational structure of CASA, where it is not clear to the industry who they should contact to resolve questions and issues. The Panel determined that many of these communication issues could be resolved with a more transparent organisational structure and management focus on specific industry sector operations.

4.7.1 International experience with regulatory organisational structures

ICAO guidance on the establishment of a safety oversight organisation is generally only at a high level, the model being applicable to small countries.

Countries such as Canada and New Zealand have largely structured their safety oversight program to align with the industry, and have specific groups dedicated to industry sectors (e.g. GA, airlines, aircraft certification, maintenance, airports and air navigation services). In the UK, a recent review on 'red tape reduction' led to the establishment of a dedicated GA unit within the UK CAA. The US Federal Aviation Administration (FAA) structure is somewhat different. However, within the FAA Flight Standards Service office, there are dedicated experts and teams that align to particular segments of industry.

Many organisational studies have been conducted on aviation safety regulatory structures. Among the best known was New Zealand's Swedavia-McGregor Report⁸². The report contained a number of broad recommendations, including the establishment of an independent safety authority. The authors of the report looked at a number of organisational demands, including:

- minimising management levels
- enhancing internal communications
- simplifying client relations and clarifying who in the Civil Aviation Division is responsible for those relationships
- being adaptable and responsive to external change
- being reflective of the relative importance of various functions
- balancing standards development against surveillance duties
- clearly defining levels of authority.

82 Review of Civil Aviation Safety Regulations, and the Resources, Structure and Functions of the New Zealand Ministry of Transport Civil Aviation Division, published in 1988.

The authors proposed a ‘client-oriented output’ structure, which recognises that in a steady-state organisation, less emphasis is needed on standards and rule development. However, they refer to a continuing need for standards development stating that:

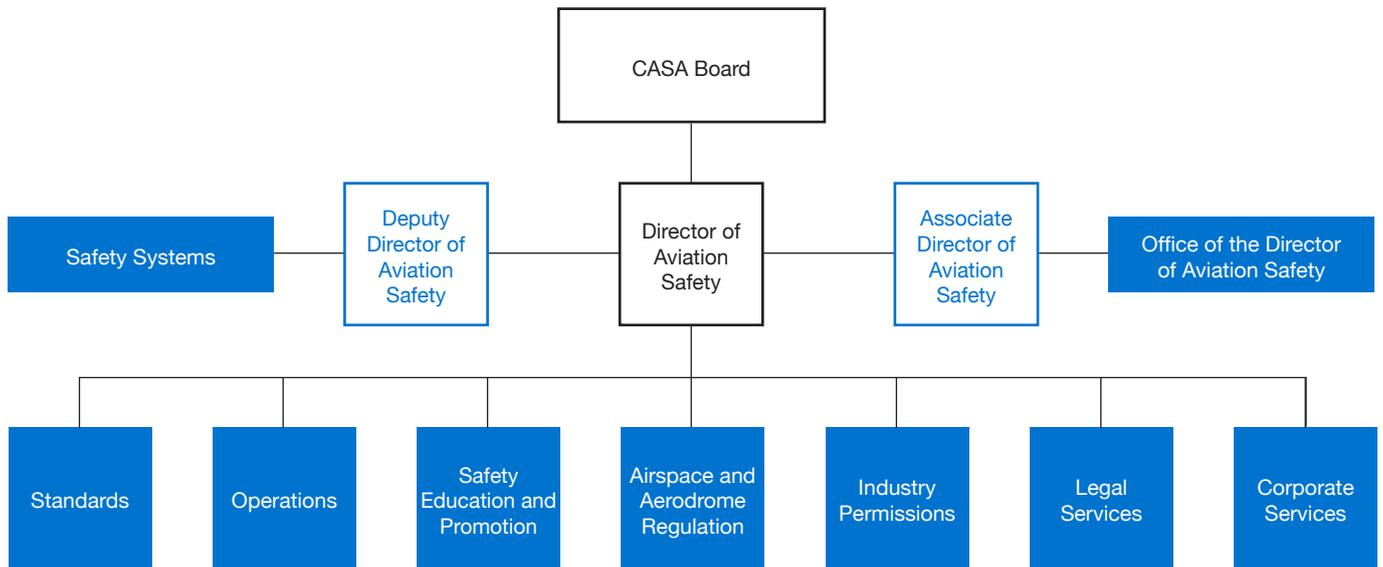
...to safeguard against this eventuality a standards development unit should be instituted, cutting across all the main client-oriented functions. This unit needs few permanent staff since standards development will be undertaken by specialist staff seconded from the main technical units for specific projects. The standards development unit needs permanent staff for coordinating, editing and project management only.⁸³

Although the Swedavia-McGregor Report was completed 25 years ago, the principles are still relevant today. The Panel considers that CASA should adopt an organisational structure similar to that developed for New Zealand, with modifications to suit the size and scope of the aviation community in Australia. The transformation envisaged in this concept, which is intended to structure CASA along the lines of industry’s activities (a client-oriented output model) rather than CASA’s activities, is depicted in Figure 8. Many variations of such a model are possible, and the proposal is not prescriptive. However, the key intention is to clarify accountability and improve the points of contact for the aviation community.

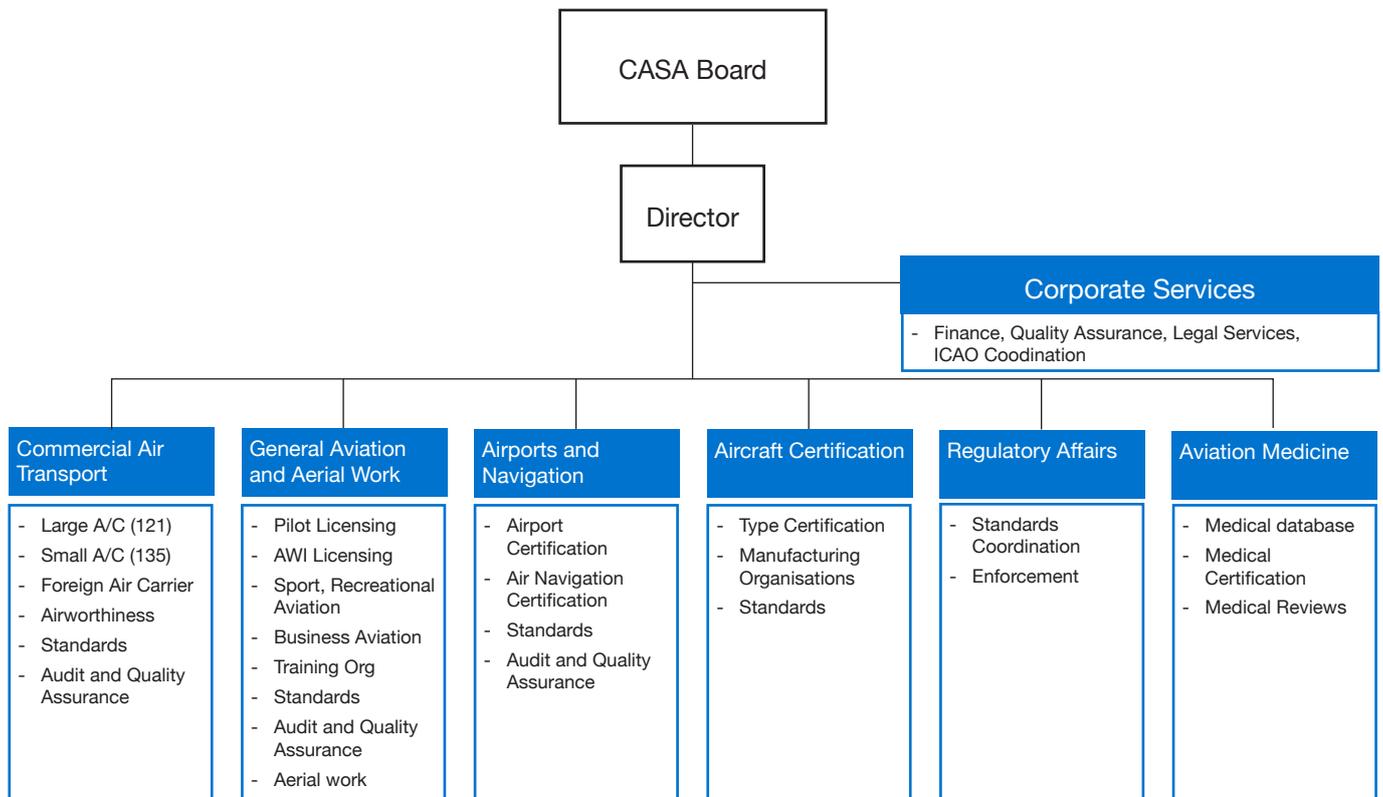
83 Swedavia-McGregor Report, p.251

Figure 8 The Civil Aviation Safety Authority's current structure and proposed structure

*CASA's current organisational structure:*⁸⁴



Proposed CASA organisational structure:



84 http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC_91623, accessed 18 May 2014.

4.7.2 Regional offices

The Panel considered a number of suggestions from the industry and CASA staff about regional office structures. Consultation suggested that some industry participants develop good relationships with individual regional inspectors, but they find dealing with CASA's head office more difficult. Another frequent comment from industry was that centralisation of CASA regional staff to city centres deprived industry of the valuable daily contact that makes for collaborative safety oversight.

There were also a number of comments that decisions made by different regional offices are inconsistent and to a certain extent there was evidence of inspector shopping by the industry to obtain a favourable regulatory outcome.

The Panel considers that the benefits from maintaining a small CASA unit at specific industry centres may be worth the potential cost. For example, a GA unit consisting of one FOI and one AWI could be re-established at large GA airports such as Jandakot in Perth. Similarly, airline-qualified inspectors could represent CASA in a unit at large RPT airports. While this recommendation would need to be considered within the budgetary context, the costs of such units could be relatively small. Personnel in the units would be tasked with assisting industry at the airport, coordinating approvals and performing routine monitoring and ramp inspections. To ensure impartiality, system audits would be conducted by audit teams from other CASA offices.

The Panel recommends that:

21. The Civil Aviation Safety Authority changes its organisational structure to a client-oriented output model.
22. The Civil Aviation Safety Authority establishes small offices at specific industry centres to improve monitoring, service quality, communications and collaborative relationships.

4.8 Audit and surveillance

Changing the regulatory philosophy of CASA, its organisational structure, communication practices and use of data are all key to improving its effectiveness as a regulator. These changes will improve CASA's audit and other surveillance functions, which are often its primary means of interface with the aviation industry.

4.8.1 Surveillance program

A country's surveillance program is one of its safety oversight obligations under the ICAO framework. The ICAO Safety Oversight Manual outlines a country's surveillance obligations:

The implementation of processes, such as inspections and audits, to proactively ensure that aviation licence, certificate, authorization and/or approval holders continue to meet the established requirements and function at the level of competency and safety required by the State to undertake an aviation-related activity for which they have been licensed, certified, authorized and/or approved to perform. This includes the surveillance of designated personnel who perform safety oversight functions on behalf of the CAA.⁸⁵

⁸⁵ ICAO Doc 9734, section 3.8 (CE-7)

The ICAO GASP includes the need to provide surveillance of industry organisations. More specifically, the GASP includes a strategy about audit programs that ‘perform regular independent audits of operational safety to assess ongoing compliance across the industry’.⁸⁶

The GASP also details use of industry audit processes in its list of Best Practices, emphasising the use of internal audits, regulatory authorities’ audits and recognised and accepted industry audits processes.⁸⁷

CASA’s national regulatory surveillance obligations are founded in the CA Act (section 9), the SSP and the CASA Surveillance Policy. The detailed directions and processes are in the CASA Surveillance Manual.

The CASA Surveillance Manual includes two levels of surveillance. Level 1 surveillance includes Systems Audits, health checks and post-authorisation reviews. Level 2 surveillance involves less formal interaction with authorisation holders, is significantly shorter in duration, and is generally scheduled through the normal surveillance planning and approval process based on identified areas of concern. Level 2 surveillance activities include ramp checks, site inspections, en-route checks, manual reviews and key personnel interviews.

The CASA Surveillance Manual details scheduling of Systems Audits based on a Systems Risk Profile (SRP), which depicts the most recent mitigated risk results of an organisation, with full details of the risk assessments displayed in Sky Sentinel, CASA’s internal IT system used for monitoring risk data. The SRP provides risk history and an indication of an organisation’s ability to manage its risks. CASA’s Surveillance Priority Review Group meets monthly and manages the surveillance planning, including the Systems Audits.

The CASA Surveillance Manual outlines the steps required to complete the surveillance including the planning, conduct and follow-up to the audit. The manual advises:

Surveillance is the mechanism by which CASA monitors the ongoing safety health and maturity of authorisation holders. Surveillance comprises audits and operational checks involving the examination and testing of systems, sampling of products, and gathering evidence, data, information and intelligence. Surveillance assesses an authorisation holder’s ability to manage its safety risks and willingness to comply with applicable legislative obligations.

4.8.2 Sky Sentinel

In 2012, CASA adopted the software system Sky Sentinel to provide risk assessment and surveillance oversight guidance. CASA advised the Panel that Sky Sentinel:

Automates the processes and surveillance philosophy contained in CASA’s Surveillance manual, and contains all Authorisation Holders in the Australian aviation system. It brings together in one place ‘all’ the surveillance related information related to a particular Authorisation Holder.⁸⁸

By employing sophisticated algorithms, the software assesses potential safety risks and recommends surveillance and oversight activities.

The Panel acknowledges the benefits of Sky Sentinel as a database and analytical tool for industry-wide safety trend assessments and analysis. Examples of risk indicator trends for sectors were provided to the Panel, which are valuable to CASA and industry in the prioritisation of resources for improved safety outcomes. In line with the more collaborative approach previously discussed, the Panel recommends

⁸⁶ ICAO GASP, p.17.

⁸⁷ ICAO GASP, Appendix 2 General Best Practices for ICAO, States and Industry

⁸⁸ Information provided by CASA.

that CASA should share the outputs from Sky Sentinel with authorisation holders. If it reveals potential safety risks, this information is equally valuable to an organisation's SMS as it is to CASA's regulatory oversight system.

The CASA Surveillance Manual states that Sky Sentinel is not the only source of risk analysis used by CASA, but that it is one input to the process. Provided that procedures are followed as described in the manual, the Sky Sentinel outputs are a useful validation tool for CASA inspectors.

The Panel recommends that:

23. The Civil Aviation Safety Authority shares the risk assessment outputs of Sky Sentinel, its computerised risk assessment system, with the applicable authorisation holder.

4.8.3 Conducting audits

CASA's audit and surveillance program is comprehensively documented in the CASA Surveillance Manual. The risk-based concepts, as outlined in the manual, are advanced and in accordance with international practice for safety oversight.

The Panel was informed in submissions and during consultation that industry was concerned about the lack of consistency in CASA's audit process. Further, the Panel concluded that systems audit problems have damaged the confidence and trust between the industry and CASA. All sectors of the aviation community identified problems with the audit program. The Panel considers that a new approach to safety auditing will benefit long-term safety oversight in Australia and will result in better cooperation and communication between the regulator and industry. The Panel proposes renewed audit policies, auditor training and a change to a more high-level management approach to safety oversight and regulatory surveillance.

Although the risk-based surveillance program approach adopted by CASA is generally sound, and the Certificate Management Team approach to audits has been effective and positively received by the industry, the Panel determined that attention is needed to improve the program.

Communication during audits

Industry feedback revealed concerns about the lack of effective communication during audits. The internationally accepted standard for audits calls for routine debriefings and exchange between parties throughout the audit to ensure information is disclosed and issues understood.⁸⁹ The CASA Surveillance Manual proposes periodic meetings with the audited organisation:

The purpose of these meetings is to provide communication between the surveillance team and the authorisation holder. On a periodic basis, ideally daily, the surveillance team should discuss their findings or unresolved issues/enquiries with the authorisation holder.⁹⁰

The manual makes it clear that auditors should be disclosing issues on a daily basis as per international conventions, but numerous instances have been reported where this has not been occurring.

A number of examples were provided to the Panel where findings (and resulting NCNs) in the final audit report had not been discussed or disclosed during the audit. The CASA Surveillance Manual is clear that issues must be raised with the authorisation holder on a routine basis.

⁸⁹ For example ANAO and ISO guidelines.

⁹⁰ CASA Surveillance Manual section 4.5.10.2

Both industry and CASA advised the Panel that it was not CASA audit practice to disclose findings and NCNs, even at the exit briefing. The CASA Surveillance Manual states that:

Findings must not be issued to the authorisation holder at the exit meeting. Findings must be included in and form part of the Surveillance Report associated with the event.⁹¹

The manual also states:

When providing feedback to the authorisation holder at the exit meeting, the surveillance team should not discuss specific potential regulatory breaches. Instead, discuss identified areas of concern, e.g. management of tooling in the maintenance hangar or current training deficiencies and explain the processes needed to be undertaken before any formal findings can be issued. Also, advise the authorisation holder that the Surveillance Report will be produced within a maximum of 20 business days from the date of the exit meeting and, if there are any delays, they will be notified before this time.

The reasons for this approach to disclosure include:

- ensuring the correct category of finding is used
- allowing the opportunity for peer review of surveillance findings prior to release, ensuring standardisation of surveillance findings
- taking the time to consider the most appropriate action to take once the surveillance data has been assessed.⁹²

Audit best practice calls for complete disclosure at audit exit briefings. This best practice is standard in most aviation audit programs and is pursuant to audit standards of the International Organization for Standardization (ISO), which recommend that ‘a closing meeting, chaired by the audit team leader, should be held to present the audit findings and conclusions’.⁹³

ISO 19011 is recognised by ICAO as the authoritative international standard for auditing.

The Panel recommends that:

24. The Civil Aviation Safety Authority provides full disclosure of audit findings at audit exit briefings in accordance with international best practice.

Classification of audit findings

The CASA Surveillance Manual outlines the differing levels of classification for audit findings, notably between immediate and urgent safety issues and all other findings. Auditors have the authority to raise a Safety Alert (serious system safety issue), but there is no alternative classification regarding the level of severity for other findings that result in the issuance of an NCN. This approach is not in accordance with best practice of most audit programs and is causing the industry concern. For example, ISO 19011 specifically references ‘grading’ non-conformances.⁹⁴ In the Panel’s consultations in New Zealand, it was outlined that the New Zealand CAA grades their equivalent Finding Notices as ‘Minor’, ‘Major’ or ‘Critical’.

91 CASA Surveillance Manual section 4.6.7

92 CASA Surveillance Manual section 4.5

93 ISO 19011 Guidelines for Auditing Management Systems (Second edition, 2011) section 6.4.9

94 ISO 19011 Guidelines, section 6.4.7

The Panel considers it is preferable to delineate between clear safety (regulatory) issues and minor issues. If there is a series of minor issues indicating a systemic management problem, a single NCN can be raised to cover the range of issues.

The current system of giving equal weight to each NCN, unless they are raised as a serious safety issue, does not adequately represent the associated risk. It can result in the impression that an operator is conducting its business in an unsafe matter, when in fact all non-compliances may be relatively minor and administrative. The Panel recommends a change to create a tiered ranking of non-compliances by severity, so that audit findings more accurately reflect the safety risk identified.

The Panel recommends that:

25. The Civil Aviation Safety Authority introduces grading of Non-Compliance Notices on a scale of seriousness.

Experience and knowledge of auditors

The Panel largely agrees with industry feedback that, while there are a great many highly capable CASA inspectors, some inspectors lack adequate knowledge and understanding of the sector they are regulating to ensure correct and consistent regulatory decisions. Although this issue most likely represents a small number within the total group of inspectors, sufficient evidence was presented to cause the Panel concern.

Interviews with industry representatives and CASA staff indicated that adequate audit training is not provided. It was also evident that some auditors require additional training to adapt to a new audit style. Evidence also indicated a lack of adequate experience and training and some instances of poor selection of audit teams. While the issue of team composition can be addressed to some extent through the changes to organisational structure, improving the experience and knowledge of auditors requires changes to CASA's recruitment and training practices.

The Panel reviewed a number of examples where allegations of incorrect assessments were made during an audit that can be largely attributed to the insufficient experience and knowledge of auditors. The Panel considers that lack of inspector experience and knowledge—and the consequent lack of certainty in draft findings—may also be one of the main reasons CASA does not follow the normal audit best practice of full disclosure at exit meetings. It may also be a reason as to why final reports are often delayed.

The Panel recommends that:

26. The Civil Aviation Safety Authority assures consistency of audits across all regions, and delivers audit reports within an agreed timeframe.

Inspector training

Discussions between the Panel and CASA management confirmed that the agency is aware of the resourcing challenges it is facing, including the experience and knowledge of auditors.

Given that audits are causing widespread concern, a concentrated training program would help to enhance audits and develop better overall relationships between the industry and CASA, with clear long-term safety benefits.

As per Recommendation 16, CASA should overhaul its internal training program to meet identified needs. Audit training should be part of that program of training.

4.8.4 Third-party commercial audits

The Panel proposes an enhanced approach to assist CASA's oversight role. The proposal involves increasing the use of third-party expertise to contribute to ongoing audit and inspection schedules, for example contracting regulatory audits to accredited third-party audit companies, and using industry safety standards and their audit programs.

The Panel proposes that CASA policies and the CASA Surveillance Manual be updated to recognise the value of third-party commercial audit capability to supplement the CASA audit program, increasing the scope of the risk management program.

The ICAO Safety Oversight Manual recognises the need for a shared responsibility between the regulator and industry, but is clear that the regulator must not relinquish its obligations for safety oversight. Section 2.4.6 states:

States need to carefully consider the public interest when establishing the various safety oversight functions and to ensure that a proper system of checks and balances is maintained. The State should retain effective control of important inspection functions. Such functions cannot be delegated; otherwise, aviation personnel, maintenance organizations, general aviation, commercial operators, aviation service providers, aerodrome operators etc. will in effect be regulating themselves and will not be effectively monitored by CAA inspectors.

However, ICAO also recognises that a balance is needed, particularly when skilled resources are required. Expertise currently exists in the aviation community to contribute to effective safety monitoring. The ICAO Safety Oversight Manual states:

... the CAA could also consider the employment of a competent commercial organization that would supply qualified personnel as needed to perform the required inspection functions in an advisory capacity for the CAA.⁹⁵

Many smaller countries do not have the capacity to conduct all of their safety oversight obligations and, in these situations, ICAO recognises alternatives that these countries can use, for example regional inspection programs such as the ICAO Cooperative Development of Operational Safety and Continuing Airworthiness Programme (COSCAP). Given that Australia has a well-established safety oversight program, surveillance methods such as COSCAP are not appropriate. However, as the availability of technical and operationally skilled staff is strained, like other regulators around the world, CASA will have to find alternatives. One option is to increase the use of industry auditing capacity.

The Panel recognises that CASA must retain responsibility for collecting and assessing risk data to make informed decisions. However, the Panel considers that the oversight system would be enhanced if CASA audit staff were better trained and in a better position to provide high-level oversight of high-risk areas. To do this, CASA should re-align staff towards high-level system management and quality assurance, taking advantage of industry auditing capacity to supplement the CASA Systems Audit program.

The CASA safety oversight program could be modified to include third-party commercial audits as an alternative to CASA audits on low-risk companies and could be done on an alternative cycle to the CASA audits or based on a risk management criteria established by CASA. These audits would need to be conducted against the Australian regulatory requirements.

⁹⁵ ICAO Doc 9734 Safety Oversight Manual, section 3.4.2.5

The Panel proposes a flexible audit policy, with CASA determining the frequency of audits required, based on the company’s risk profile, and then permitting authorisation holders to apply to CASA to have a number of these audits completed by an accredited commercial audit provider, under condition that a copy of the audit report is provided to CASA.

An example of how such a flexible approach could be applied is set out in Table 6.

Table 6 Example of a flexible audit approach rotating a mix of CASA and third-party audits

Example audit program for airline X		Example audit program for airline Y	
Year 1	CASA audit	Year 1	CASA audit
Year 2	Commercial audit	Year 2	CASA audit
Year 3	CASA audit	Year 3	Commercial audit
Year 4	Commercial audit	Year 4	CASA audit
Year 5	CASA audit	Year 5	CASA audit
Year 6	Commercial audit	Year 6	Commercial audit

The third-party commercial audit concept is not a delegation of authority, nor does it mean the authorisation holder will not be subject to random inspections. Rather, it introduces an additional tool to the oversight program and supplements the CASA program.

The authorisation holder would contract directly with a CASA-accredited audit organisation. CASA would retain the right to monitor the audit and would be supplied with audit results. As noted in ICAO manuals, the regulator retains full responsibility over the safety oversight program. CASA would need to ensure that approved third-party audit providers meet and maintain an acceptable standard so that their findings can be relied on for regulatory purposes. A quality control and assessment process would need to be developed.

Key elements of a quality control and assessment process include:

- audit organisations would be required to seek accreditation from CASA, and CASA would need to satisfy itself that the audit organisation has the necessary skills and personnel to undertake to the role
- published, transparent and objective criteria on which CASA would accredit third-party commercial audit organisations
- authorisation holders would not be permitted to retain the same audit organisation for more than a set time period, forcing rotation among audit organisations to ensure high standards and avoid the risk of an inappropriate relationship developing
- audit results would be provided to CASA to consider in their ongoing surveillance of the authorisation holder
- audit organisations would be required to immediately notify CASA of any serious issues identified, before the end of an audit, if the issue constituted a serious risk to air safety.

In implementing this outcome, the Panel is mindful of the need for CASA to engage constructively in the process. An unwillingness by the regulator to confirm any providers as acceptable for the purpose of third party audits would undermine the initiative.

Over the past decade, international aviation bodies have developed industry safety standards that are intended to raise safety levels of their respective industry operators. Examples of international programs are the IATA Operational Safety Audit (IOSA) and the International Standard for Business Aircraft Operations (IS-BAO), both of which are recognised by ICAO. Many other commercial standards and

audit programs exist and more will be developed if there is a market for them. Essentially, all industry safety standards have complementary audit programs and industry associations have implemented global auditing networks with quality assurance programs. Some countries are using the industry audit programs in their own regulatory safety oversight program.

CASA's safety oversight program should also recognise the value of established industry audit programs.

The Panel recommends that:

27. The Civil Aviation Safety Authority implements a system of using third-party commercial audits as a supplementary tool to its surveillance system.

4.9 Categorisation of operations and risk management

The Terms of Reference for the Review tasked the Panel with assessing the suitability of Australia's aviation safety regulations when benchmarked against comparable overseas jurisdictions. The Panel examined the differences between Australia's regulations, ICAO SARPs and other major aviation countries. The Panel also examined considerations of risk management safety oversight applied to the categorisation of operations used in Australia.

Submissions and consultations included many comments about Australian regulations. Submissions from the industry included suggestions for change, including adopting another country's regulations. These proposals are addressed in Chapter 5.

4.9.1 Categorisation of operations

CASA published the categorisation of operations for rule making in the CASA Standards Development Procedures Manual in December 2012, which changed the categories previously applied in various documents. Table 7 compares Australian categories of operations against ICAO SARPs for Aircraft Operations.

Table 7 Comparison of Categories of Operation

ICAO SARPs	Australian Categories	Australian Regulations (CASRs) (Draft unless noted)
Commercial Air Transport (CAT) - Aeroplanes (Annex 6 Part I)	Air Transport Operations (scheduled/non-scheduled/on-demand charter flights; will include medical transport flights)	CASR Part 119 AOC requirements for aeroplanes and rotorcraft
		CASR Part 121 large aeroplanes
Commercial Air Transport (CAT) - Helicopters (Annex 6, Part III, Section II)		CASR Part 135 small aeroplanes (9 pax & less, MTOW up to 8,618 kg)
		CASR Part 133 rotorcraft
Aerial Work (ICAO has no SARPs - definition only)	Aerial Work Operations	CASR Part 131 balloons (ICAO has no SARPs)
		CASR Part 137* – Aerial Applications (currently applies to aeroplanes; will be extended to include rotorcraft)
General Aviation (Annex 1) Training organisations	General Aviation Operations - Commercial Flight Training	CASR Parts 136/138* – Aerial Work (aeroplanes and rotorcraft conducting aerial work, other than aerial applications)
		CASR Parts 141* & 142* – Flight Training Organisations
Small aeroplanes Section 2 (Annex 6, Part II)	General Aviation Operations	CASR Part 61* – Flight Crew Licensing
		CASR Part 91 (operational rules applicable to all aircraft operations)
Large aeroplanes Section 3 (Annex 6, Part II)	General Aviation Operations - usually Business Aviation	CASR Part 94 (new CASR Part under consideration; Part 91 also addresses)
		CASR Part 96 (new CASR Part under consideration; Part 91 also addresses)
Helicopters Section III (Annex 6, Part III)	General Aviation Operations	CASR Part 96 (new CASR Part under consideration; Part 91 also addresses)
Not addressed specifically in ICAO SARPs	General Aviation Operations - Sport & Recreational Aviation	CASR Parts 101,103,105,132 and 149 (apply to industry administered sport and recreational aircraft operations)

*Note: CASR Parts 61, 137, 141 and 142 are current law (will commence on 1 September 2014) CASR Parts 119, 133 and 135 have commenced the making process. Although Part 136 is still listed in the CASR Regulatory Structure, CASA has advised the Review Panel that Part 136 has been incorporated into Part 138.

The categorisation shown in Table 7 is based on the safety regulatory framework administered by CASA under the CA Act – different Australian Government agencies, applying different legislative frameworks, apply differing categorisations for their own distinct purposes. The Panel has not addressed the other categorisations.

Commercial air transport operations

Both ICAO SARPs and Australian regulations for commercial air transport operations apply to passenger and cargo-carriage commercially – that is, services conducted for hire or reward or that are publicly available. Commercial air transport can be either scheduled or non-scheduled, including charter operations.

In commercial operations, passengers generally cannot be expected to know the level of risk and have little or no control over those risks. As a result, a diligent ‘level of care’ is owed to the passengers through government safety oversight.

In Australia, scheduled services using large aircraft are termed RPT under the CA Act and the CARs; however, the term RPT will cease to be in use with the completion of the CASRs. CASR Part 91 covers general operational rules for all aircraft. CASR Part 121 is the specific Part applicable to large aircraft air transport operations; Part 121 is currently in draft form, and once made will replace existing CAR regulations for both charter and RPT operations. The counterpart in the ICAO SARPs is Annex 6, Part I. Other countries' rules, such as in the US, have an equivalent Part 121. The European Aviation Safety Agency (EASA) publishes air transport rules in EASA's Regulations on Air Operations (the EASA OPS).

Air transport operations are viewed by CASA as requiring the highest level of safety standards and the most significant level of safety oversight. The Panel agrees with CASA's policy of giving RPT the highest priority in safety oversight activities.

CASR 135 is a new Part in the Australian regulatory framework, currently in draft form, which will apply to air transport operations of small aircraft carrying nine passengers or less, and weighing not more than 8,618 kg (19,000 lb). The regulation generally applies to small aircraft scheduled operations, and on-demand charter operations, but includes aeromedical services, which had previously been regulated in Australia as aerial work.

ICAO Annexes do not separate large and small aircraft operations, nor does EASA. Many countries, such as the US, New Zealand and Canada publish a separate rule applicable to small aircraft commercial services. However, most countries apply a different maximum weight. Australia's proposed Part is in draft form and the Panel is recommending a review before Part 135 is made (see Chapter 5).

Like large aircraft RPT, small aircraft operations, on-demand charter and aeromedical operations are available to the public; therefore passengers deserve a similar level of protection under a government's 'duty of care' responsibility for safety oversight. Although the aircraft are smaller and less complicated, the commercial pressures and complexity of the operations have the potential to be significant. Globally, the accident record in small aircraft commercial air transport operations is not as good as large aircraft scheduled services.⁹⁶ For these reasons, the Panel considers the safety oversight of small aircraft commercial operations should be at a high level, equivalent to RPT (or the new Air Transport Operations – Large Aircraft category under the CASR framework). CASA should continue to take this priority into account when conducting safety profile assessments towards the development of surveillance plans.

The Panel is also aware that the application of commercial air transport requirements to aeromedical services will have an impact on services in remote areas. The standards applicable to these services in remote areas must provide for performance-based risk assessments to ensure operations are safe but provide for successful emergency operations.

Helicopter operations (air transport)

Helicopter operations are generally conducted for aerial work, specialty commercial transport and charter purposes. Many companies in the resource sector use helicopters for transporting crews and supplies to remote sites. From a safety oversight and rulemaking perspective, helicopters used in transporting passengers are treated similarly to commercial air transport operations. Helicopters used in aerial work are discussed later in the next section.

In both the ICAO SARPs and Australia's proposed CASRs, helicopter rules apply to both commercial and non-commercial operations. ICAO publishes SARPs for helicopters in Annex 6, Part III and Australia has a draft CASR Part 133 applicable to operators of rotorcraft that conduct passenger transport services. EASA publishes helicopter safety rules as a subset of the air transport operations rules for the

⁹⁶ See, for example, statistics from the NTSB at http://www.nts.gov/data/aviation_stats.html, accessed 22 May 2014

specific types of operations (commercial air transport, non-commercial operations and non-commercial operations of complex aircraft). Most other countries provide helicopter regulations in specific dedicated regulations in a similar way to Australia.

Helicopter operations tend to be higher risk due to flight profiles typically at lower level, under visual flight and often into difficult landing areas. Although it is not easy to distinguish between the accident record of helicopters in aerial work operations from those conducting air transport operations, the global accident record overall for helicopters is not as good as desired, even by the industry itself.⁹⁷ Acceptance of industry safety standards and performance based-safety concepts like SMS have generally been slow in the helicopter sector. For these reasons, safety oversight of helicopter operations should be at a high level, at least until the industry shows its capability to assume more responsibility for monitoring operations. The Panel considers that CASA will have to continue a high level of safety oversight of helicopter passenger transport and should encourage a more robust application of safety management concepts within the helicopter community.

Aerial work operations

Aerial work operations are not covered in international standards published by ICAO. The potential of adding applicable SARPs to Annex 6 has been considered by the Air Navigation Commission from time to time, but, to date, the Commission has determined there are few international applications of these operations and as a result it has been reluctant to proceed to further rule making. In Annex 6, ICAO defines aerial work as:

An aircraft operation in which an aircraft is used for specialized services such as agriculture, construction, photography, survey, observation and patrol, search and rescue, aerial advertising, etc.

In Australia, aerial work operations are very important given the vast land mass, type of industries, agriculture property sizes and remoteness of many communities. Aerial work operations in Australia include (but are not limited to):

- agricultural spraying (aerial application)
- firefighting
- search and rescue
- mustering
- construction.

Proposed CASR Parts 136/138⁹⁸ will provide regulations that will govern aerial work operations. A more specific current regulation applicable to aerial application using aeroplanes is published as CASR Part 137.

Aerial work operations present a level of operational and organisational risk and the potential for injury or damage to persons or property if there is an accident. The operations themselves present a level of risk to the operator, but as operations are generally conducted in more sparsely populated areas and passengers are not generally carried, the risks for third-party injury are reduced.

This reduction in risk is not universal given that some aerial work operations can be conducted with larger aircraft in populated areas, for example firefighting, and the risks can be high in some of these operations. Similarly, aerial work may involve specially trained or qualified 'task specialists', who

⁹⁷ See for example, the Mission Statement and data of the International Helicopter Safety Team, <http://www.ihst.org>, accessed 22 May 2014

⁹⁸ Although Part 136 is still listed in the CASR Regulatory Structure, CASA has advised the Review Panel that Part 136 has been incorporated into Part 138.

perform duties onboard related to the specialised use of the aircraft. Operations may involve the carriage of limited numbers of passengers who are informed of and accept the risks associated with the flight.

Aerial work introduces a significant range of specialised work, often using technically complex equipment. It is unrealistic to expect the regulatory agency to have expertise in all specialty areas, so it is incumbent on the agency to find the most effective way to fulfil its safety oversight obligations under the constraints of different operations. Given the reduced risk of injury to the general public, the Panel considers that the level of risk in aerial work operations is not as significant as it is in commercial air transport. As a result of the specialty nature of the operations and lower level of risk, safety oversight should be adjusted to be proportional to the scope and risk of the operations.

The Panel makes a specific recommendation in this chapter for restructuring CASA's organisation to align with industry sectors, including creation of a specific unit dedicated to GA and aerial work operations, with a specific aerial work team. It is expected that this structure will lead to improved communication and decision making within and for the sector.

The Panel also is of the opinion that the representative bodies in the aerial work sector provide a comparatively high level of knowledge and expertise in their respective operations. The Panel noted some sections of the aerial work community are familiar with safety systems and demonstrate a willingness to participate in the oversight program. For this reason, the Panel suggests the representative bodies should be given increased responsibility for safety oversight of specific specialised operations.

To do this, CASA should provide broad guidance and coordination for the sector as a whole, but rely more on the representative bodies to help in development of rules, guidance material and surveillance. Where aerial work operators have a commercial venture and are required to have an AOC, CASA should permit the representative bodies to arrange third-party, commercial systems audits for member operators, with results to be taken into account in CASA's risk management systems. Associations should be given more responsibility for accreditation of documents and processes, given the wide range of technical expertise required and the relatively low risk of the operations.

Although the self-administration concept described later for the sports and recreational aviation sector may not be immediately appropriate, industry bodies that demonstrate appropriate effectiveness and organisational integrity should be given increased responsibility proportionate to the complexity and scope of the operations of their sector and members.

General aviation

The Panel conducted considerable consultation with the GA community. The community was widely and unanimously concerned about the future sustainability of the industry, citing a range of causes including increasing costs, airspace and airport availability and strained relations with the regulator.

While this Review is focused on the safety regulatory system, not industry policy, the Panel noted government commitments to undertake steps to address the future viability of the GA industry, including revitalising the General Aviation Industry Action Agenda.⁹⁹ The regulatory framework is an important element of addressing the future viability of the GA industry, and some recommendations made by the Panel will help address this. In the context of broader deregulation agendas, including the Australian Government's 'Cutting Red Tape' commitment to reduce the burden of regulation on the

⁹⁹ The Coalition's Policy for Aviation, August 2013, <http://lpaweb-static.s3.amazonaws.com/Coalition%202013%20Election%20Policy%20%E2%80%93%20Aviation%20%E2%80%93%20final.pdf>, accessed 18 May 2014.

economy,¹⁰⁰ the Panel expects that the Department will take on a more active policy role in relation to the GA industry.

GA in the ICAO context consists of all operations other than commercial air transport and aerial work. Therefore, for ICAO purposes, GA consists of:

- training (Annex 1)
- non-commercial use of aircraft (Annex 6, Part II, Section 1 and 2)
- non-commercial use of large aircraft (Annex 6 Part II, Section 3).

ICAO does not separate sport and recreational aviation as a distinct sub-sector. Most GA operations are covered in the general provisions for operation of an aeroplane as provided in Annex 6, Part II.

ICAO clarifies in the Annexes that the level of safety oversight provided for both rules and surveillance should be different in non-commercial operations. Annex 6, Part II states in the foreword:

The Commission endorsed the philosophy established during initial development of the Annex that the owner and pilot-in-command must assume responsibility for the safety of operations in non-commercial operations where travel is not open to the general public. In such operations the Standards and Recommended Practices need not be as prescriptive as those in Annex 6, Part I, due to the inherent self-responsibility of the owner and pilot-in-command. The State does not have an equivalent 'duty of care' to protect the occupants as it does for fare-paying customers in commercial operations. The Commission endorsed the level-of-safety philosophy that the Standards and Recommended Practices of Annex 6, Part II, must protect the interests of third parties.

GA in the Australian categorisation of operations is essentially in line with ICAO definitions.

Under the CASRs, Part 91 (General Operating and Flight Rules) will be applicable to all aircraft operations. While other operational regulations will build on it, Part 91 becomes, by default, the base Part for all operations, including small private aircraft. GA participants are also subject to a number of regulations specific to authorisations such as pilot licences.

Maintenance regulations in GA are a significant issue for the sector. CASR Part 145 implementation for large aircraft operations began in 2011 and an equivalent rule set was intended for small aircraft and GA. To date, this rule set has not been finalised, although a CASA project is active and Discussion Papers have been issued, as noted elsewhere in this chapter, although industry's engagement on this issue appears to have been limited.

Training

Flight crew and maintenance engineer training is generally considered 'commercial general aviation'. Although the service is commercial, it is not air transport, hence by definition is recognised as GA.

ICAO SARPs relating to training and approval of training organisations are in Annex 1. Australia provides for flight crew training in CASR Part 141 for basic single pilot training and Part 142 for an AOC to conduct training for multi-crew, pursuant to licensing provisions in Part 61. AME training is in CASR Parts 66 and 147. Other countries, such as the US and New Zealand, have a similar Part 141 rule for flying school operations. EASA has rules for approved training organisations in Part-ORA.

In the course of this Review, the Panel received extensive comments on the regulatory provisions for licensing and training. In general, there was positive and appreciative input about CASA's work to improve the training system and there was also some positive input on the drafted regulations.

¹⁰⁰ See <http://www.cuttingredtape.gov.au/>, accessed 22 May 2014

However, there were also significant concerns with the Part 61 rule making and consultation process, as well as problems with its implementation.

Training of personnel has an inherent level of risk, particularly in flight operations. However, training is extremely important given that the standard of training will have an overarching impact on the foundation of the workforce's knowledge and capability. If training is not provided to a high standard, the integrity of the foundation will be weak and safety will suffer in the long term.

The Panel recognises that this sub-sector provides commercial services and is open to commercial pressures and, therefore, requires a degree of 'duty of care' by the safety regulator. The Panel also noted a widespread problem with consultation in this sub-sector, primarily because the industry has no representative body to articulate a single voice to government. The result is difficulty for CASA to determine the best course of action for rule making.

In discussions with the industry, some argued for rules that were different from international standards and different from most advanced aviation countries. The Panel considers this to be problematic because pilots trained to a standard that is not recognised internationally will create challenges for Australian crews flying, or those seeking to fly, internationally. The Panel considers there is scope for allowing training to be conducted by independent instructors not employed within approved organisations. The best practices of major countries should be taken into consideration.

Given the commercial nature of the training and importance of providing a high standard, the Panel proposes a moderate to high level of safety oversight of the training sector. Within the Panel's proposed CASA structure outlined in Figure 8, a new flight training team within in the GA and Aerial Work unit should be given a mandate to work with industry to improve their consultation capability and to collaboratively address the need to develop high-quality standards for training flight crew and maintenance engineers. Compatibility with international standards must be retained.

Non-commercial operations – general

ICAO SARPS relating to non-commercial basic operations of powered aeroplanes are in Annex 6, Part II, Sections 1 and 2. CASR Part 91 will, once complete, provide the relevant regulations in Australia. Other major countries apply an equivalent regulation covering all operations as a foundation for additional operating provisions; EASA publishes a 'Non-Commercial Operations' regulation intended for the same purpose.

Generally, operations in this category are private use of aeroplanes that have a Type Certificate under FAR Part 23, and are operated by pilots who have a Private Pilots Licence (although many pilots may have higher level licences).

There are more substantial risks inherent in these small aircraft private operations given that the experience and knowledge of pilots may be lower than in commercial or aerial work operations, and operations may be from unprepared runways or in areas with limited facilities. Globally, as would be expected, the accident record of small aircraft GA operations is not as good as commercial operations.¹⁰¹ Risk in GA operations is generally proportional to the consequences: risk becomes greater as the number of persons carried on the aircraft increases, but given that operations are of small aircraft, there are usually few persons on the aircraft, lowering the risk.

As described in the ICAO principles applied to non-commercial operations, there is less 'duty of care' responsibility placed on governments for private operations, and an increased responsibility must be placed with the owner or pilot to ensure passengers are aware of the risks inherent in a flight. The

¹⁰¹ See, for example, statistics from the NTSB at http://www.nts.gov/data/aviation_stats.html, accessed 22 May 2014

aviation regulator still retains responsibility to provide a degree of safety oversight to ensure licensed personnel understand their responsibilities.

The Panel considers that CASA must continue with a moderate level of safety oversight over the sector, but work gradually towards increasing safety oversight responsibility being assigned to representative bodies. The Panel's proposals for structuring CASA along industry lines should improve communication with this sector, leading to a more collaborative working relationship. Education and awareness building activities are also key to the lifting of safety standards in the private GA sector.

Non-commercial operations – large aircraft

In 2010, ICAO published an amendment to Annex 6, Part II, which incorporates new provisions for modern, technically advanced, GA operations. A new Section 3 was introduced to govern large non-commercial operations.

Australia has not yet developed rules for this sub-sector to implement the new Annex 6, Part II, Section 3. Other countries are in mixed stages of implementing the new Section 3. The US has not addressed the new Section 3, but there is an older rule under Part 91, Sub-part F, that covers some of the provisions. EASA recently published draft Non-Commercial Complex aircraft regulations to implement the new Section 3. Some smaller countries have taken the new ICAO Section and built national regulations that are identical to the SARPs.

Aircraft operations in this sub-sector are generally those of companies or high net-worth individuals who own and operate aircraft for business purposes, operating them privately, but with professional crews. There are over 33,000 business turbine aircraft operating globally,¹⁰² and Australia has traditionally been a significant user of these aircraft.

The ICAO Standards for this sector were developed in recognition of the good global safety record, equivalent to large airline-scheduled operations (western-built jets over 60,000lb).¹⁰³ The new Section 3 requires that operators have an SMS, with much of the additional requirements built around performance-based provisions proportionate to the size and scope of the operations.

ICAO SARPs for this sector do not require an AOC or other level of operator certification. The new EASA regulation requires that operators in this sector declare implementation of the rule, showing how they have demonstrated compliance through an industry audit. Countries governed under the British Overseas Territories Aviation Requirements (OTAR) rules can undertake a similar process.

The Panel notes that Australia has not yet started development of rules for this sector and that operators are generally applying base Part 91-type rules for aircraft operations when flying privately, although some operators maintain an AOC. There is no safety imperative in not having these rules in place immediately as the sector's safety standards appear robust. However, given that Australia has not implemented Annex 6, Part II, Section 3, the difference should be addressed. In the Panel's view, safety oversight surveillance of this sector can continue at a level lower than commercial air transport operations given the historically good safety record and self-monitoring through industry standards and auditing.

Sport and recreational aircraft operations

Sport and recreational aircraft operations are not separated in the ICAO SARPs from small aircraft GA operations in Annex 6, Part II. In other countries, this grassroots level of the aviation community has been

102 IBAC Business Aviation Safety Brief, Issue No.12, 15 September 2013, <http://www.ibac.org/wp-content/uploads/2010/07/IBAC-Safety-Brief-12.pdf>, accessed 22 May 2014

103 Ibid.

regulated in different ways given the lack of international standards. Many advanced aviation countries have introduced mechanisms to allow considerable freedom to the community, such as simple motor vehicle medical requirements and removal of aircraft certification.

Sport and recreational aviation consists of a number of unique operations, such as:

- gliding
- ultralight aircraft
- ballooning
- antique/warbird aircraft
- parachuting
- hang gliding.

The sport and recreational aviation community consists of aviation enthusiasts. The sector is significant in size, operating some 7,500 aircraft, which in simple numerical terms represents almost 40 per cent of the entire Australian civil aviation fleet.¹⁰⁴

In Australia, a concept has been developed to provide for safety oversight of this sub-sector through industry self-administration. The self-administration framework will be formalised through the draft CASR Part 149, which will replace the existing system of exemptions from the CARs. New Zealand operates a comparable system of regulation, using delegations under Part 149 of the New Zealand Civil Aviation Rules.

Self-administration

The following Recreational Aviation Administration Organisations (RAAOs) operate under Australia's self-administration framework:

- Australian Ballooning Federation
- Australian Parachute Federation
- Australian Sports Rotorcraft Association
- Australian Warbirds Association
- Gliding Federation of Australia
- Hang Gliding Federation of Australia
- Model Aeronautical Association of Australia
- Recreational Aviation Australia
- Sport Aircraft Association of Australia.

The concept of self-administration is an Australian system where these groups are responsible for their own registration, licensing, training standards and airworthiness. They operate under a system of inter alia, exemptions, delegations and approvals from CASA, although the completion of the draft Part 149 will formalise the framework in the regulations. RAAOs are responsible for the safety, welfare and standards of their members. CASA conducts periodic checks of their governance and administration, including oversight of their control of licence and airworthiness standards.

The success of these groups is highly dependent on the governance, efficiency and knowledge of their governing bodies and it is on these areas that CASA has to concentrate its oversight activities. In the Panel's view, there are three basic principles that have to be demonstrated before CASA should

¹⁰⁴ BITRE data, see section 1.2.

authorise self-administration, and the RAAO should continue to demonstrate these principles on an ongoing basis to retain their authority:

- have stable, capable and active governance
- demonstrate it has control over its membership
- recognise that the regulator retains ultimate authority for safety oversight and regulation.

Self-administration is an efficient, economic and reasonable form of regulation, but is not without its challenges. Most of the management workforces are part-time volunteers and, in some cases, their enthusiasm outstrips their skills and experience, particularly in relation to the demands of corporate governance. There is a marked variability between clubs, particularly in relation to teaching standards and oversight abilities.

Control over membership and registrations has been identified as a problem. There may be a number of aircraft that are not under the VH or RA-Aus registration oversight umbrella. The size of the problem is impossible to gauge as aircraft may have been retired or no longer in use; however, this ambiguity supports the argument that there may be aircraft flying without adequate oversight.

The combined accident rate amongst GA (VH-registered) and recreational aviation (RA-Aus) is close to the global average; however the RA-Aus rate of fatal accidents has climbed for the last five years and needs enhanced monitoring (see Appendix A9).

The Self-Administering Sport Aviation Organisation Section within CASA is responsible for the oversight of the current nine national self-administering bodies (RAAOs), in accordance with the CASA Surveillance Manual. This is a substantial workload, with the sports and recreational aviation industry accounting for approximately 14 per cent of all aircraft hours flown in Australia today,¹⁰⁵ but almost 40 per cent of aircraft. CASA acknowledges that there is a need to increase staffing in this area and has advised the Panel that it is increasing resources. The Panel is of the opinion that a further increase may be necessary to keep the sector under a suitable level of oversight

The Panel considers that self-administration can only work effectively if there is a well-managed system to ensure industry oversight and it is applied to all personnel and aircraft in the category.

The Panel considers that self-administration, if conducted under the principles discussed, is an acceptable system of safety oversight in an environment where risk to third parties is low.

The Panel recommends that:

28. The Civil Aviation Safety Authority establishes a safety oversight risk management hierarchy based on a categorisation of operations. Rule making and surveillance priorities should be proportionate to the safety risk.
29. Recreational Aviation Administration Organisations, in coordination with the Civil Aviation Safety Authority, develop mechanisms to ensure all aircraft to be regulated under CASR Part 149 are registered.

¹⁰⁵ See Figure 2

5. Regulatory Reform Program

5.1 Introduction

The process of reforming Australia's aviation safety regulations is the source of significant concern for the aviation community. Since the late 1980s, the reform process has been restarted or reoriented at least five times. In spite of years of effort, the result is widely viewed as a failure in delivering on the original promise of clear and concise regulations. Industry is almost universally critical, describing the regulations as difficult to understand, overly burdensome and unnecessarily punitive. Submissions to the Review included a range of suggestions including starting the process again, adopting another country's rules and accelerating completion of the current product.

The long timeframes for rule development, together with a set of rules the industry views as problematic, has resulted in the aviation community withdrawing from active involvement in the regulatory development process. Collaborative rule making, which is critically important to acceptance and commitment, does not exist. The industry's lack of interest in helping to develop effective safety rules must be corrected.

The Panel considers the current Regulatory Reform Program (RRP) is having a negative impact on effective safety oversight. The industry is unnecessarily consumed with rules that are not only taking a significant time to complete, but also are not producing the desired result. The Panel is of the opinion that the RRP must be rapidly completed, with effective and easy to understand safety rules, so that the aviation community can more closely focus its attention on the management of aviation safety.

This chapter provides a brief history of regulatory reform and recommends an approach for completing the RRP.

5.2 A brief history of regulatory reform in the aviation sector¹⁰⁶

5.2.1 1990: New Zealand Harmonisation Concept

In 1990, the Australian Government set a goal of enacting complementary regulations to those under development in New Zealand. Following the adoption of the 1983 Australia–New Zealand Closer Economic Relations Trade Agreement (the ANZCERTA),¹⁰⁷ there was a general push for closer regulatory cooperation between the two countries. Consultation was undertaken with the aviation industry and the New Zealand Civil Aviation Authority to progress this goal, but ultimately, while it resulted in the cancellation of some Civil Aviation Orders, the goal of trans-Tasman harmonisation was abandoned.

5.2.2 1993: Regulatory Structure Validation Project

In 1993, the government embarked on an exercise to validate and restructure Australia's existing aviation safety legislation. The goal was to:

- consolidate all rules for each subject in one place, and
- re-number the regulatory Parts to align with the numbering system used in the US.

At the time, it was decided not to harmonise the Australian regulations with any international approach, as the required consultation was considered excessive and unnecessary for what was essentially a

¹⁰⁶ For further historical information, see CASA's August 2001 Review of the Regulatory Reform Program

¹⁰⁷ [1983] ATS 2

restructuring exercise. The revised regulations were due to come into effect in mid-1997 and by 1996 two-thirds of them were complete. However, due to emerging concerns that long-standing safety issues would not be adequately addressed, the project was halted and a different reform program commenced.

5.2.3 1996: Regulatory Framework Program

In 1996, the government initiated a complete review and rewrite of the Australian aviation safety regulations under the Regulatory Framework Program. The program was to be separate from, but build on, the work completed by the Regulatory Structure Validation Project. The objective of the program was to develop regulations that were clear, concise and aligned with international standards and practices. To achieve this objective, several joint industry/CASA technical committees were established and an industry-based Program Advisory Panel was appointed to oversee the program.

The revised rules were to be developed according to set criteria and to be justifiable, clear, concise, unambiguous and focused on safety. Early in the program it was decided that Australia would:

- employ two tiers of legislation (the Act and the CASRs)
- continue with the US numbering system for Parts
- harmonise regulations with the leading international standards (principally the US and European regulations)
- allow a transition period of around 12 to 18 months before each rule comes into effect.

The original timetable for completion of the program was the end of 1998, subsequently revised to the end of 2001. By December 1999, the slow rate of progress, and tensions between the Program Advisory Panel and the CASA Board, saw the government recast the regulatory reform process again.

5.2.4 1999: Regulatory Reform Program

In 1999, in response to the then Minister's Charter Letter and Policy Statement on Aviation Reform, CASA instituted a formal RRP. The new program was a continuation of the processes adopted under the Regulatory Framework Program. The objective was to provide stakeholders with advance notice of the regulatory reforms over the anticipated life of the program. The original target completion date of December 2001 was subsequently revised to September 2002, then April 2003, largely due to the volume of legislative drafting that was involved.

A great deal of work was done by CASA, industry and the (then) Office of Legislative Drafting; however, the industry was becoming concerned about the implementation date. In November 2003, in his Charter Letter to the incoming DAS, the then Minister said:

I want to make it very clear that the Government remains committed to the timely implementation of the regulatory reform program. However, we must also take care not to squander the unique opportunity we have to get right the key aviation safety regulations that will be with us for decades to come. Meeting deadlines alone will serve little purpose if we do not achieve CASA's aim of safety through clarity and moreover if we do not end up with a world's best practice regulatory system. Therefore, I would urge you to not treat regulatory reform as a case of 'don't get it right get it written'.¹⁰⁸

While further work continued on regulatory reform, progress slowed significantly.

¹⁰⁸ Charter Letter from the then Deputy Prime Minister and Minister for Transport and Regional Services to then DAS, dated 25 November 2003 and referenced in the then Deputy Prime Minister's Media Release A170/2003 on 23 December 2003, http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD:1001:pc=PC_91984, accessed 22 May 2014

5.2.5 2001: Incorporation of the Criminal Code

In 1995, the Commonwealth Parliament enacted the *Criminal Code Act 1995* (Criminal Code). The code was subsequently applied to all Commonwealth offences in 2001. The CA Act was amended to include the provision:

7A Application of the Criminal Code

Chapter 2 (other than Part 2.5) of the Criminal Code applies to all offences created by this Act.

This policy change had a significant impact on the RRP because rules had to be rewritten in the new style. Regulations were subsequently drafted to make all offences compatible with the Criminal Code.

5.2.6 2005: European Maintenance Rules

In 2005, CASA established a stand-alone Maintenance Regulation Development Project. This Project, comprised of technical personnel from CASA and industry, reviewed international regulatory formats that could be adopted as a basis for Australian maintenance regulations. CASA announced that the European model was preferred and would be adopted as the starting point for the Australian maintenance regulations. A suite of maintenance regulations were developed and applied to larger Australian operators by way of CAOs, although the relevant Parts were not formally made until 2010. Regulatory Advisory Panels were created to advise the DAS of the adequacy of proposed new regulatory Parts before industry consultation began. Only a small number of Parts were made, until the appointment of the current DAS in March 2009.

5.2.7 2009: The push to completion the regulatory reform program

On appointment, the current DAS listed the completion of the RRP as a key priority. The then Government's Aviation White Paper, also released in 2009, identified slow regulatory reform as a concern and, in 2010, CASA received a substantial funding boost and additional drafting resources to expedite the process. Several Parts relating to maintenance were completed in 2010 and commenced in June 2011. Several more Parts were drafted in 2013, relating to Flight Crew Licensing and Training. The intended commencement date of this suite of rules was December 2013; however, implementation was delayed until September 2014 because the MOSs that describe how compliance could be achieved, were not promulgated by CASA in time for industry to adopt the new rules.

5.2.8 2014: The current situation

Some 42 Parts of the CASRs have been made and adopted into Australian law, with 13 Parts remaining. Of those 13 Parts, four have been drafted and are awaiting adoption by government, with the remaining nine in various stages of development.

5.3 Current processes for regulatory development

5.3.1 Two tiers of legislation

A decision was made early in the RRP to apply a two-tier legislative framework consisting of the CA Act and the CASRs.

Before the regulatory reform process began, all regulatory requirements were contained in various CARs and CAOs, as well as a number of ad-hoc exemptions and special approval documents. The goal is for all requirements to be contained in the CASRs.

5.3.2 Consultation

CASA is responsible under sub-section 9(2)(b) and section 16 of the CA Act for promoting full and effective consultation and communication with all interested parties on aviation safety issues. In performing its functions and exercising its powers, CASA must consult with government, commercial, industrial, consumer and other relevant bodies and organisations, where appropriate. CASA has what appears, on paper, to be a sound and substantial process for consultation on regulatory development covering both large changes (e.g. a full Part development) and smaller changes (such as a new or amended Advisory Circular).

The SCC is the principal industry consultative body established to provide advice and recommendations on standards development issues. The SCC is comprised of 40 aviation industry bodies. It brings together CASA staff and representatives from a diverse range of aviation organisations to work jointly during the development phase of standards and advisory material.

The SCC is chaired by an industry representative who is nominated by peers and agreed to by CASA. Technical issues are considered through eight sub-committees that are broadly representative of the various functional sectors of the aviation industry and the regulatory framework. These sub-committees are:

- Airspace and Infrastructure Users Group
- Operation Standards
- Flight Crew Licensing Standards
- Maintenance Standards
- Certification Standards
- Sports and Recreational Aviation Standards
- Aviation Medical Standards
- Unmanned Aircraft Systems Standards.

The sub-committees all have an industry and CASA co-chair. They commonly establish working groups on particular issues to assist the sub-committee undertake the work assigned by the SCC. The SCC meets at least annually with sub-committees meeting as required, depending on workload and priorities, usually about two or three times per year.

5.3.3 Rule-making process

In creating a new aviation safety regulation, the typical process is for a working group to draft a discussion paper on the topic. The draft discussion paper is reviewed by the relevant sub-committee and the SCC and, if approved, published for comment. Comments on the draft discussion paper are considered by the sub-committee and a Notice of Proposed Rule Making (NPRM), containing a draft of the rules, is developed. This NPRM is published for comment. Comments are considered before a Notice of Final Rule Making (NFRM) is published, which outlines how CASA has acquitted comments received on the NPRM and provides the intended final rules.

Following the SCC process, proposed rules go through the normal Australian Government processes for subordinate legislation, including (but not limited to):

- regulatory impact analysis to the satisfaction of the Office of Best Practice Regulation
- preparation of a human rights Statement of Compatibility pursuant to the *Human Rights (Parliamentary Scrutiny) Act 2011*.

Regulations are formally made by the Governor-General, on the recommendation of the Minister. Following signature by the Governor-General, the regulations are registered on the Federal Register of Legislative Instruments and tabled in Parliament, in accordance with the *Legislative Instruments Act 2003*. The regulations are subject to Parliamentary disallowance. It is normal practice for regulations to be considered by Parliamentary Committees such as the Senate Standing Committee on Regulations and Ordinances. Aviation safety regulations have been disallowed by Parliament (for example, Part 47 – Registration of Aircraft was disallowed in 2000¹⁰⁹). It is normal practice for aviation safety regulations to come into effect on a date well after the regulation is actually made, to give industry and CASA time to prepare for the new requirements, and allow time for Parliamentary scrutiny.

5.3.4 International rule-making processes

In considering CASA's consultation arrangements, the Panel reviewed the approaches of the US and Canada. While arrangements vary in detail, all rule-making processes have similar features:

- all have industry representative advisory committees designed to provide advice and recommendations
- sub-committees, working groups or other bodies are a common feature of the rule making process
- all jurisdictions go through a public consultation processes on proposed rules.

5.3.5 Commonwealth drafting policy

Drafting of aviation safety regulations is undertaken by the Office of Parliamentary Counsel (OPC) under instructions from CASA. As described, in the early 2000s Australia began applying Criminal Code provisions to the CASRs, consistent with the Commonwealth's overarching policy for regulatory drafting. Under this approach, described in the Attorney-General's Department's Guide to Framing Commonwealth Offices, Infringement Notices and Enforcement Powers,¹¹⁰ each physical element of an offence must be clearly and separately specified, using a different paragraph for each physical element.

This change, and the policy decision to make all non-compliances under the CASRs a criminal offence, has resulted in confusing and punitive regulations. For example, the draft Part 135 contains the following provision:

135.035 Categories of aeroplanes to be used

(1) The operator of an aeroplane commits an offence if:

(a) the operator operates the aeroplane; and

(b) the aeroplane does not meet the requirement mentioned in subregulation (2).

(2) For paragraph (1) (b), the requirement is that the aeroplane must be type certificated in the normal, commuter or transport category.

Penalty: 50 penalty units.

(3) An offence against this regulation is an offence of strict liability.¹¹¹

109 For further background see http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC_90928, accessed 22 May 2014

110 Available from <http://www.ag.gov.au/Publications/Pages/GuidetoFramingCommonwealthOffencesInfringementNoticesandEnforcementPowers.aspx>, accessed 22 May 2014

111 As a draft, this rule is subject to change.

The intent of this section is to say ‘the operator must use an airplane type certified in the normal, commuter or transport category’. There are numerous similar examples in the regulations, where a quite simple provision has transformed into a confusing statement, which imposes significant penalties on anyone who fails to comply.

OPC advised the Panel that this approach is primarily the result of a policy decision to make all non-compliances under the CASRs a criminal offence, and not the result of the Commonwealth drafting style.

5.4 Key issues with the RRP arising from industry

The issue of regulatory reform was raised in 50 per cent of submissions to the Review, and all, at least to some extent, were critical of the length of time the RRP was taking and the poor product it was creating. Regulatory reform was also one of the main topics raised in the consultation sessions held by the Panel. The criticism of the RRP was consistent across all industry sectors.

The main issues raised in submissions were:

Complexity	It was suggested that the complexity of the regulations has led to confusion and mistrust within industry. There was agreement among submissions that the cost and impost of complying with regulatory requirements is excessive and unsustainable. One submission commented that: ‘Despite the 155 pages of regulations growing to 2,827 pages (so far) there is almost no practical consequence for the way aircraft are operated and maintained today compared with when the regulatory reform program commenced.’ ¹¹²
Compliance costs	Some submissions suggested that operators would be forced to exit the industry due to the increased cost of complying with new regulations, noting that: ‘Businesses need to be profitable in order to be ‘safe.’ [...] Compliance is often heavily human resource dependent and is expensive for business to implement and maintain. Any implementation of compliance without recognised improved outcomes will drive cost without benefit.’ ¹¹³
Legalistic drafting	It was often noted that, at the outset, regulatory reform was intended to deliver a set of ‘plain English’ regulations that could be easily understood and adopted by industry, but that this has not been realised. Submissions described the rules as: ‘lengthy, repetitive and wordy. This places unreasonable demands on most aviation industry participants [...] to review such turgid documents.’ ¹¹⁴ One submission expressed: ‘... hope that this review can bring forward ideas and suggestions that can be taken by the government and implemented to help to breathe new life into an industry that has been slowly destroyed in the last few years by a Civil Aviation Safety Authority generating regulations that are so confusing that even their own staff have varying interpretations which they individually enforce and fine an industry participant for failure to understand the regulations fully.’ ¹¹⁵

112 Confidential Submission #173

113 Submission #192

114 Submission #120

115 Submission #126

Responsibility for policy development and instruction	<p>A number of submissions questioned the appropriateness of CASA being responsible for policy development, instructing OPC in regulatory drafting and enforcing the regulations, suggesting that there is an inherent conflict in this process. Some suggested that the Department should assume responsibility for regulatory development: ‘Not only is there a conflict of interest in having the ‘aviation policeman’ draft the laws that it has to enforce, but as the Australian experience has shown, continuity of the reform process suffers with frequent changes in personnel and direction. The Australian experience is a strong argument for aviation policy and regulatory development to be administered by the Department.’¹¹⁶</p> <p>The Panel considered this argument in Chapter 2, but did not recommend that the Department be given responsibility for the development of regulations.</p>
One size does not fit all	<p>There was a common view in submissions from the GA sector that regulations are heavily geared towards commercial airlines and make ‘...no provision for non-airline/ fare paying passengers operation. Cessna 172 and on, basically com[e] under the same requirements as airline aircraft.’¹¹⁷</p>
European focus	<p>Among GA operators there was criticism of the decision to model Australian maintenance regulations on the EASA system, with many arguing that: ‘In contrast, New Zealand and Papua New Guinea have regulatory systems that are far better suited to operations in Australia. Their regulations are easier to apply, less confusing, with excellent safety outcomes. There are obvious advantages in harmonising our regulatory system with those of our nearest neighbours.’¹¹⁸</p>
Two-tiered system	<p>A number of submissions were critical of the move away from a three-tiered regulatory system, to a two-tiered system. This was blamed for reducing CASA’s flexibility in administering the regulations and possible the root cause of many of the current issues facing the industry. One submission recommended this policy ‘...be revisited with a view to returning to a three tier structure, so that the actual working part of the legislation can be written in technical rather than legal language.’¹¹⁹</p>

5.4.1 Discussion

Although opinions differ, the Panel estimates that the RRP will take at least another five years to complete. Furthermore, the final product of regulatory reform will not meet the aviation community’s needs and will not be consistent with the ICAO principles for plain language, easily understood, safety rules. Nor will the final regulations be harmonised with those of any foreign jurisdiction. The 25-plus year history of regulatory reform has been consuming the industry, and distracting the aviation community from the objective of managing safety in its operations. On this basis, the Panel concludes that continuing along the current path is not in the interests of aviation safety in Australia and that a new approach must be developed for regulatory reform.

Harmonisation

Harmonisation of rules in the aviation environment means making the rules of two or more countries uniform or mutually compatible. The international aviation community has long-aspired to global harmonisation to ensure operators are subject to the same rules and procedures wherever they fly internationally.

¹¹⁶ Confidential Submission #240

¹¹⁷ Submission #208

¹¹⁸ Confidential Submission #230

¹¹⁹ Submission #67

However, harmonisation with a county's rules does not guarantee mutual recognition of approvals and certificates because mutual recognition arrangements will still be required. In consultations with industry, many mistakenly expect that if Australia harmonises its regulatory suite with an overseas jurisdiction, then CASA-issued approvals or certificates will automatically be accepted in that foreign jurisdiction. It is not understood that this type of mutual recognition is not possible without an appropriate inter-governmental legal framework. Australia has concluded such bilateral arrangements with nine countries and the European Union; however, the content and extent of each arrangement varies substantially.¹²⁰

Reform fatigue

The Panel is conscious of the extent to which industry is fatigued by the ongoing regulatory change. The Panel established that, based on the Annual Regulatory Plans of relevant Government agencies,¹²¹ the Australian aviation industry is subject to 92 active regulatory change proposals, in addition to the 23 proposals completed during 2012–13.¹²² While each of the regulatory changes was justified and considered by government (in isolation), these figures highlight the extent to which industry is subjected to constant change.

Regulatory reform objectives

Based on the feedback received from industry, best practice examples from overseas and the Panel's deliberations, the following objectives have been identified for the development of a new approach to regulatory reform in Australia.

Objective 1: Timeliness for completion

The length of time of the reform process has had a significant negative impact on the industry. Continuing delays have seen the turnover of both management and technical staff within CASA, and in the industry. This turnover has affected consistency and continuity and the lack of results has proven a disincentive for the current generation of industry representatives to engage in the process. An accelerated and definitive end to the program is needed.

Objective 2: Clarity of rules

The Panel considers the application of Criminal Code provisions to the CASRs, and the consequent phrasing of each provision in terms of what is prohibited rather than what is permitted, is a central cause of industry confusion and dissatisfaction with the regulatory reform process. While such language may be beneficial for successful prosecutions, it has caused significant disharmony within industry and contributed to a breakdown of trust between industry and CASA. To be effective, rules must be clear and easily understood.

Objective 3: Rule harmonisation

Throughout the history of the regulatory reform process, harmonising Australian rules with international practice has been a constant objective, but opinions differ on what rules should be applied. While

¹²⁰ Information provided by CASA. For example, airworthiness agreements are published on the CASA website at http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC_90820, accessed 22 May 2014.

¹²¹ CASA does not publish an Annual Regulatory Plan, but CASA information has been drawn from the CASA regulatory reform website.

¹²² CASA nominate 80 active legislative change projects comprising changes to existing legislation, regulation or advisory materials. During 2013–14, the Department plans 12 regulatory changes that will impact on aviation. During 2012–13, the Department completed another 12 regulatory changes that impacted aviation. In addition, other departments also effected regulatory changes that impacted on aviation: the Department of Immigration and Citizenship completed two, the Department of Agriculture completed one, the Customs and Border Protection Service completed one, the Department of Environment completed five, and Treasury completed five.

Australia is obliged to implement ICAO SARPs (or lodge a difference), there have also been various attempts to harmonise with the European, US and New Zealand rule sets. The Panel considers the best approach is to harmonise with ICAO requirements as a principle, and take best practices from major aviation countries where appropriate for Australian operations.

Objective 4: Consultation and industry acceptance

The current consultation program, centered on the SCC, is based on sound principles and is similar to the processes in other countries. Under normal circumstances, the current consultation system should deliver good results. The Panel attributes its current problems to:

- fatigue from continual dialogue with minimal progress
- the large number of small associations representing specific industry sectors, and some sectors with no representative body at all, creating difficulty for industry participants to make their views known
- a view within industry that inputs to the rule-making process are ignored by CASA.

Additionally, there is a view within some parts of the industry that the RRP should be slowed because of the difficulty of managing too many changes at once. Renewal of effective consultation on safety rules is needed.

5.5 Options for the regulatory reform process

The Panel considered a number of options to progress the RRP.

Option 1. Current design with the addition of guidance material

Under this option, the current program to establish the regulatory suite would continue as planned. In addition, a number of documents would be produced in plain language that would serve as guidance to the industry and CASA staff to explain the requirements of the rule set. Such an approach is compatible with legislative requirements and would largely mirror the approach taken in motor vehicle standards legislation.

On the negative side, this option does not provide for plain language regulations as promoted by ICAO. The ICAO Safety Oversight Manual states:

A State's laws and regulations must be framed in legal phraseology. They must, however, also be written in such a way that they can be used by the staff of the licensing, certificating, and approving authority in the execution of their day-to-day activities and also by the general public, who need to know how to go about qualifying for a particular licence, certificate or other prescribed approval. ¹²³

The option is also arguably inconsistent with the CA Act, which under section 9(1)(c) charges CASA with 'developing and promulgating appropriate, clear and concise aviation safety standards'. Given that aviation is a technical industry with many operational complexities, regulations have historically been directly applied by system participants with good results. Aviation safety systems have always been very advanced and in part are the reason for Australia's excellent safety record. The technical and operational content of regulations has been accepted by the aviation community as the best way to ensure commonality, global cross-border operations and interchange of services. The aviation industry is used to working directly with the regulations and may have difficulty accepting a guidance document or pamphlet as their daily working tool.

On the positive side, this option provides for strong continuity with the current program.

¹²³ ICAO Doc 8734, section 3.3.1.4

The Panel understands that many industry participants would not respond well to ‘regulation by pamphlet’ when they are accustomed to dealing directly with regulations. Further, for this option to be successful, industry participants would need assurances that they would not be penalised if they complied in good faith with the guidance material, but did not meet the actual regulations. If given, such assurances would provide protection from regulatory sanction by CASA, but may not always stand up in legal proceedings. While smaller operators would likely benefit, the larger industry participants would continue to use the regulations to develop their own manuals and processes and would therefore experience minimal relief.

For these reasons Option 1 is not preferred.

Option 2. Change the Criminal Code drafting style to plain language drafting

Option 2 is to change the Criminal Code drafting style to plain language drafting. This option would require a government policy decision to change how the rules are drafted. If government policy could be changed, all future aviation regulations would be drafted (and current regulations redrafted) in a new plain language style, and provision for offences changed accordingly. As an alternative to this change in drafting policy, another sub-option would be to change the offence provisions from the criminal to civil penalties. Both options would require a major change to the current regulatory framework. These two sub-options essentially retain the two-tier regulatory policy now in place. Many in the industry have called for this option, or something similar.

Redrafting the CA Act and regulations may take significant time. There is also some uncertainty about seeking to adopt a new drafting style that does not accord with Commonwealth criminal law drafting policy.

The civil penalties sub-option has further complexity because it changes how violations of the regulations must be presented in the courts regarding the burden of proof. The current test of ‘beyond reasonable doubt’ that applies to criminal offences would be lessened to the ‘balance of probabilities’ test applied to civil matters. Also, under this option, CASA would be able to set the monetary amounts of penalties, which would no longer be linked to penalty units under the criminal code; the penalties may end up being much larger.

On the positive side, the result would likely be a plain language suite of regulations, easily understandable, and in compliance with ICAO guidance.

Option 2 has considerable merit, but would require a significant change in Commonwealth policy on drafting or a significant policy change to use civil rather than criminal penalties. Although redrafting could be accelerated for this type of change, it is unlikely that the required change in government drafting policy, amendments to the CA Act and the redrafting of the regulations could be achieved within five years. While the Panel considers the ultimate outcome under this option has merit, it is considered unlikely to be achievable in an acceptable timeframe, if at all.

For these reasons Option 2 is not recommended.

Option 3. Principles-based approach

This option involves a complete redrafting of the regulations in accordance the principles- based approach, which the OPC has tested in other policy areas. This style avoids detail and concentrates on general principles, but involves a degree of uncertainty regarding compliance by participants. In principle, this style is intended to make the regulations easier to read, but the resulting regulation can also be unclear and left to open to interpretation by the courts. There are few regulations pursuant to this style in Australia as both the policy development and the drafting tends to be very difficult. OPC

advised the Panel that a principles-based approach that was considered by the Australian Taxation Office was abandoned for this reason.

The negative and positive implications of this option are similar to Option 2. This approach, if implemented effectively, would make a significant contribution towards implementing an outcomes-based regulatory system. However, it is likely that it would need to be supported by large amounts of supplementary guidance material to provide the level of detail sought by GA.

The Panel considers that this option is fraught with difficulty as demonstrated by attempts to implement in other portfolios. Further, given the complaints from industry about regulatory uncertainty, this option will not be popular. Adopting a largely untested and uncertain approach is counter to the objectives identified for the RRP.

Option 3 is not recommended.

Option 4. Adopt rules from another country

This option calls for formal adoption of another country's rules (Act and regulations), and was a popular suggestion in industry consultation. Approximately 15 per cent of the submissions received by the Review proposed that Australia adopt either the New Zealand or US rules. On the surface this appears to be a simple solution, but such a change would require substantial legislative amendments.

The Panel is concerned about how practical this concept is in reality, and how it would be accepted socially and politically. Acceptance of a complete regulatory suite from another country would trigger considerable debate both inside and outside the aviation industry and likely delay the program by a number of years. There could also be complex legislative issues to consider, requiring a process of ensuring provisions are compatible with Australian law and legislative practice, while seeking to minimise the number and extent of changes being made. It is also probable that the introduction of changes to ensure compatibility with Australian law would undermine the benefits sought from the complete adoption of an existing set of regulations.

Most of the proponents of this option pointed to the Parts of the various international regulatory systems they see as being easier to comply with than the Australian rules. However, while there are definitely examples within those regulatory suites where the rules are superior to Australia's, the Panel is aware of examples of rules in other systems that are not user-friendly¹²⁴ and may cause difficulty for local operators. The unintended and uncertain consequences of adopting another country's rules make this option difficult.

If this approach were implemented, it would be impossible to satisfy the entire industry. Of the available rule sets that could be considered for adoption (New Zealand, US or EASA), there is a clear distinction between the airline and GA sectors: GA tends to prefer the more prescriptive US framework, or the simpler New Zealand framework, which is based on the US system. In contrast, larger operators tend to prefer the EASA rule set that is clearly the most advanced and modern, and the most suited to SMS.

The Panel is also conscious that, although a number of industry participants argued for the adoption of the US Federal Aviation Regulations (FARs) because they are seen as shorter and simpler, the comparison seems to be based only on the FARs themselves. When the added complexity of the multiple levels of exemptions, authorisations and circulars are added to the FARs, the US framework becomes quite complicated and difficult to follow, and not as simple (at least in structure) as completed CASRs should be.

124 See Appendix A10.

This option is attractive in its seeming simplicity and ease to apply; however, implementation would be difficult due to socio-political and legislative challenges, with unintended and perhaps unknown consequences for the industry. The Panel considers that this option would not only fail to accelerate the program, but is likely to delay it.

On this basis, Option 4 is not recommended.

Option 5. Concise, enabling regulations and plain language standards

This option requires a change in rule-making policy from a two-tier to three-tier system. The regulations would be considerably reduced in size and only provide power to enable standards, the requirements for authorisation and cancellation of documents and offence-making provisions. This option parallels the structure recently used for CASR Part 145, which features a high-level regulation and a comprehensive, plain language MOS. This approach would not require amendments to the CA Act. The regulation numbering system would remain intact, but the regulations themselves would be reduced to become as small and succinct as possible, incorporating only offences and enabling the relevant standards as a legislative instrument. The standards would be written in a simple, plain language style following principles sanctioned by the industry and regulator.

This option requires a change in rule-making philosophy from a two-tier to a three-tier system. Some in industry may be concerned about rules established by CASA. However, protections now exist through Parliamentary disallowance. There will be considerable workload to transform complicated regulations into a plain language and well-understood standards.

On the positive side, the final product would contain all provisions for responsibilities and actions of industry participants in a plain language set of standards. Regulations would be redrafted into concise regulations along the lines now provided in Part 145. In day-to-day management of the aviation system, most participants would not refer to the regulation itself, but would use the plain language standard. Although this option requires considerable work, the Panel considers that it could be achieved quickly as there would be less need for OPC drafting given that detail would no longer be in the regulations.

The concept removes much of the technical detail from the regulations themselves without the need to fundamentally change the Commonwealth drafting policy, and without the need to change the CA Act. The approach proposed in Option 5 is similar to previous approaches on many regulations that were drafted before the change in drafting style. These regulations for the most part are easier to understand and are for the most part accepted by the industry.

Recommended option

The Panel proposes a combination of Option 5 and Option 1 be pursued immediately, with completion of the RRP within two years. Two channels would be applied:

- All Parts currently under development should be converted to a three-tier structure through a RRP Project Management program.
- All Parts already made and in force are not included in the RRP, but should be updated at a later date, as required, through the post-RRP ongoing rule-making process.

The RRP Project Management process described later in this chapter should be used to complete the RRP within two years. The four Parts currently ready for approval — Parts 119, 129, 133 and 135— are to be converted to the three-tier structure unless industry consultation confirms a preference to approve the current version.

5.6 Three-tiered approach

The structure of the current Part 145 serves as an example of the three-tier approach. Although industry frequently raises concerns about Part 145, those concerns relate not to its structure (a concise regulation with detail set out in the MOS) but to the content (which small operators feared would impose burdensome requirements). This approach removes significant (and perhaps unnecessary) detail from the regulations and fully utilises the MOS.

The Panel has consulted with a number of industry participants who agree that the structure of Part 145, as a concise regulation with detail in the third tier, is an acceptable and easier structure than other Parts.

The plain language approach to the rules satisfies ICAO principles for rule making. The ICAO Manual of Procedures for Operations Inspection, Certification and Continued Surveillance states:

To facilitate compliance and avoid differences in interpretation, State regulations should be written in clear language, using plain language techniques, and should be complemented by appropriate guidance material.¹²⁵

Internationally, countries vary in how they apply two-tier versus three-tier rule structures. A review of a sample of regulations in other countries showed that plain language has been achieved in most cases. ICAO does not explicitly propose one form or another, although there is clear recognition that countries should have technical rules in a form that allows for rapid amendment given aviation's continuous and advancing safety measures. The ICAO Manual of Procedures for Operations Inspection, Certification and Continued Surveillance further states:

The operating regulations and rules [...] need frequent revision to keep pace with developments in civil aviation and aviation safety. This is not possible unless these regulations and rules can be amended rapidly. One possible approach to ensure this would be to place these detailed operating regulations and rules under the authority of the DGCA and not incorporate them in national civil aviation law.¹²⁶

The Panel interviewed a number of associations and found that most were comfortable with the standards concept if an effective consultation program is in place. The Panel concludes that a significant renewal of the consultation program in conjunction a more collaborative regulator is needed to restore confidence and trust in the rule-making process. The consultation charter must include provisions to ensure all proposed rule development, its progress and drafts are reviewed through a collaborative industry and regulator program. At the same time, the industry must improve its capability and resolve to work with the regulator in cooperative rule making.

The current CA Act provides for enabling legislative instruments within the regulations; therefore, no change to the Act is required. Subsection 98(5A) of the CA Act provides:

- (5A) The regulations may empower CASA to issue instruments in relation to the following:
- (a) matters affecting the safe navigation and operation, or the maintenance, of aircraft;
 - (b) the airworthiness of, or design standards for, aircraft.

An instrument must not prescribe a penalty.

Given the length of time already taken by the RRP, the number of reviews and taskforces over the past 25 years, and the regulation and consultation fatigue of both the industry and regulator, the process

¹²⁵ ICAO Doc 8335, section 3.4.2

¹²⁶ ICAO Doc 8335, section 3.1.2.2

requires acceleration of a conclusion to rule development. A three-tier structure using standards approved by the regulator through a consultative program has the potential for rapid delivery. However, given the significant amount of work required to convert drafted regulations and develop rules that have not yet started, there is need for focused project management.

The Panel has tested the proposed concept with CASA and the OPC by using the CASR Part 42 as an example of how to reduce the current lengthy regulation to a more succinct rule. The test verified that the regulation could be simplified without too much difficulty. An example of this simplification is at Appendix A6.

The Panel recommends that:

30. The Civil Aviation Safety Authority changes the current two-tier regulatory framework (act and regulations) to a three-tier structure (act, regulations and standards), with:
 - a. regulations drafted in a high-level, succinct style, containing provisions for enabling standards and necessary legislative provisions, including offences
 - b. the third-tier standards drafted in plain, easy to understand language.
31. The Civil Aviation Safety Authority structures all regulations not yet made with the three-tier approach, and subsequently reviews all other Civil Aviation Safety Regulation Parts (in consultation with industry) to determine if they should be remade using the three-tier structure.

5.7 Scale of penalties

The Panel identified a concern about the severity of the penalty provisions in the CASRs. The Panel recommends that the current penalty provisions be re-assessed within the RRP.

An example of the regulations in which the Panel considers the penalties to be disproportionate to the infringement is from Part 11, where regulation 11.070, inter alia, provides a maximum penalty of 50 Penalty Units (currently \$8,500), for an authorisation holder failing to inform CASA of a change of address within 14 days. Relevantly, the regulation reads:

(1) It is a condition of an authorisation that its holder must, within the period mentioned in subregulation (3), tell CASA, in writing, of a change of either of the following kinds:

(b) the holder changes any of the following addresses:

(i) if the holder is an individual—his or her residential address;

(2) A person commits an offence if:

(a) the person is the holder of an authorisation; and

(b) a change mentioned in paragraph (1)(a) or (b) happens in relation to the person; and

(c) the person does not tell CASA, in writing, of the change within the period mentioned in subregulation (3).

Penalty: 50 penalty units.

(3) The period is:

within 14 days after the change happens;

(4) An offence against subregulation (2) is an offence of strict liability.

In contrast, the maximum penalty for a person holding an Australian Capital Territory (ACT) driver licence failing to notify the government of a change of address within 14 days is \$2,800.¹²⁷

A re-assessment of the penalty provisions is a relatively easy task that could be completed in a short timeframe, requiring a general policy decision and then application of new levels. The general objective is to lower the penalty provisions to something less than the maximum penalty generally now imposed. This exercise should be conducted in conjunction with the redrafting of the regulations as per Recommendations 30 and 31.

The Panel recommends that:

32. The Civil Aviation Safety Authority reassesses the penalties in the Civil Aviation Safety Regulations.

5.8 Project management approach

The Panel recommends a Project Management approach to complete all outstanding CASR Parts. This will complete the RRP.

The Panel proposes establishing a Project Team, with oversight from a Steering Committee. A Project Charter should be established with clear principles for rule development, constitution of the project team, consultation processes and firm deadlines for completion.

In the Panel's view, redrafting the Rules should not exceed one year and the time for consulting on the Rules should not exceed one additional year. The RRP's target completion date should be two years from the start of using the Project Management approach. Further work on changes to the current rules would be undertaken by CASA on a timeline negotiated with the industry through the formal consultation program.

Project oversight

A Steering Committee should be established, chaired by the DAS. Members of the Steering Committee should include, at a minimum: a representative appointed by the Department, a representative appointed by the OPC, and two industry representatives appointed by the Minister. The Steering Committee would report to the CASA Board.

The Steering Committee would be responsible for overseeing the RRP and appointing a Project Manager to manage the process.

Principles for rule development

The Project Charter should be developed by the Steering Committee and include a series of principles for rule development that are strictly followed by the Project Team. Principles should be developed for both the standards and the regulations. While the specific principles are a matter for the Steering Committee to determine, the Panel suggests the following outcomes as a useful starting point.

¹²⁷ Regulation 74 of the Road Transport (Driver Licensing) Regulation 2000 (ACT).

In relation to the standards:

- as a first priority, compliance with ICAO SARPs, with any departures from ICAO SARPs to be specifically identified for formal approval by the Steering Committee
- plain language in a logical understandable structure
- adherence as closely as possible to the substance of rules in other developed jurisdictions (US, New Zealand, Europe, and Canada) to ensure compatibility, facilitating bilateral recognition agreements and efficient international operations
- include unique Australian provisions only when absolutely necessary, and only when the Steering Committee formally agrees to their inclusion
- take into account the economic impact and a RIS is to be completed
- current draft documents are to be used as a starting point to help accelerate the program.

In relation to the regulations:

- be as succinct as possible, using the current Part 145 regulations as a model
- include offense provisions and provisions for enabling standards
- include additional provisions for authority to issue documents, and others, only when required to satisfy Australian legislative drafting and fairness provisions.

Project team members

The Steering Committee should select a Project Manager. The Project Manager could come from CASA, a government department or the industry, as appropriate. Selection should be based primarily on the ability to deliver the project outcomes within two years.

The Project Manager should assemble a Project Team consisting of subject matter sub-teams for relevant aviation disciplines (for example: operations/large aircraft, operations/ small aircraft, GA, maintenance and flight training) comprising representatives from CASA and the industry. Project Team members should be selected on the basis of their knowledge, ability and commitment.

Industry representative reimbursement

The Panel acknowledges that participating in working groups is a significant impost for industry and many potential members for the Project Team would be unable to dedicate the necessary time. To overcome this situation, CASA would need to develop a suitable process for compensating industry representatives. Options could include using the industry exchange program to have CASA-remunerated industry representatives working within CASA (as per Recommendation 9), or through some other mechanism.

Distribution of responsibilities

The Panel suggests that five sub-teams be considered for the Project:

Sub-Team 1: Air Transport Operations - Large Aircraft

Standards for Parts 121, 129, 119 and appropriate Parts as agreed by the Steering Committee.

Sub-Team 2: Air Transport Operations - Small Aircraft

Standards for Part 135 and other Parts as agreed by the Steering Committee.

Sub-Team 3: General Aviation

Standards for Part 91 and all Parts related to recreational aviation.

Sub-Team 4: Flight Crew Licensing and Training

Standards for Part 61, 64, 142, 141 and 67.

Sub-Team 5: Maintenance

Standards for Parts 145, 42, 66 and 147 and additional Parts as determined by the Project Manager through the consultation process. The Maintenance sub-team would primarily be responsible for developing the standards for non-RPT maintenance, although a separate sub-project could be established to review the 145 requirements currently in place for RPT.

Additional sub-teams may be required and the Project Manager would need to consider progress and resource allocation considering the deadlines set by the Steering Committee. In addition to the subject matter teams, a Quality Assurance and Coordination unit within the Project Team would ensure consistency between the subject matter sub-teams and deliver a quality assurance function.

Consultation

Leaders of each sub-team should informally and routinely consult with CASA managers and relevant industry sectors during the development of the draft regulations and standards. The status of the project should be monitored through a dedicated website and team leaders should update the information weekly. Formal consultation should begin when each draft standard has been completed; however, consideration should be given to the staging of formal consultation to ensure adequate time is available for considered responses. Following this formal step in consultation and re-drafting, an NPRM would be issued and feedback considered before the regulations are made.

Each rule part is likely to have different implications that will warrant consideration of implementation dates. The Steering Committee should recommend implementation dates to the Minister based on consultation with impacted industry sectors.

The Panel recommends that:

33. The Civil Aviation Safety Authority applies a project management approach to the completion of all Civil Aviation Safety Regulation Parts not yet in force, with drafting to be completed within one year and consultation completed one year later, with:
 - a. a Steering Committee and a Project Team with both CASA and industry representatives
 - b. implementation dates established through formal industry consultation.

5.9 Rule-making process after the regulatory reform program

5.9.1 Collaborative rule making

The Panel considers a collaborative partnership in rule making to be critical to the safety of the Australian system. The RRP will have a temporary rule making process so that the RRP can be accelerated; however, an ongoing permanent consultative process must be in place to ensure safety rules keep pace with safety demands in the future.

Following completion of the RRP, the Project Team will be disbanded and all further rule development will be addressed through CASA's ongoing process.

Some of the existing CASR Parts may be acceptable to industry in their current form. For this reason, CASA should work in collaboration with industry to assess whether a change to a three-tier structure is necessary. The result may be a range of actions from a complete re-drafting to a three-tier system, or only a change to the offence provisions.

5.9.2 Standards Consultative Committee

The Panel reviewed the design of the SCC and determined that it is fundamentally sound. The current program of regulation reform is not working effectively due to communication problems and general withdrawal of the industry from collaborative rule making, rather than problems with the system design.

A number of submissions to the Review advised of the large number of participants at the SCC plenary sessions, which they suggested worked against any meaningful dialogue. The Panel was advised that, in some cases, large groups from one association would be represented at meetings, with no representation from other sectors. Submissions also advised that the program was not being conducted according to the design of the SCC because discussion papers were not always developed in advance of rules being drafted and safety problems were not always discussed to determine the most appropriate solution.

The Panel considers that a fundamental decision must be made about the membership of the SCC. A list of member representative bodies should be established and each body asked to name their member by name. Those SCC members should be the only persons invited to plenary meetings, although if the member wishes to bring observers this is to be permitted, but the formal SCC member will be the speaker for the group. A minimum of two formal plenary sessions should be held each year.

The Panel also considers that the consultative program would benefit from the SCC establishing sector-based sub-groups that meet quarterly, some of which may be held in conjunction with a plenary session. The SCC sub-groups should consist of the SCC members themselves and provide direction and oversight to ad-hoc teams that have the responsibility for developing rules when the SCC process has determined that a rule is the best option to resolve a safety problem.

The revised CASA structure, as per recommendation 21 in Chapter 4 will assist with effective collaboration and consultation, contributing to an overall improvement in the quality of rule making.

The Panel considers the re-birth of the SCC process to be a high priority. The SCC should be working effectively in time for the formal review of regulations and standards developed through the RRP project management process. The Panel suggests that the DAS hosts a meeting of the new SCC members to listen to their concerns and to discuss how best to reconstruct the consultative program.

The Panel recommends that:

34. The Civil Aviation Safety Authority's Director of Aviation Safety meet with industry sector leaders to jointly develop a plan for renewing a collaborative and effective Standards Consultative Committee.

6. Other specific safety-related issues

During the course of the Review, a number of specific issues arose that warranted consideration by the Panel, but were separate from the broader themes and matters discussed elsewhere in the Report.

The Terms of Reference for the Review specifically tasked the Panel with examining ‘any other safety-related matters’. Three matters are discussed in this chapter:

- aviation medical issues
- Aviation Security Identification Cards (ASICs)
- CASA complaint and appeal mechanisms.

6.1 Aviation medical issues

6.1.1 Key issues arising from industry

Aviation medical issues were among the more contentious raised in submissions. A number of submissions raised particular medical conditions, such as colour blindness, seeking changes to the standards required for the issue of a medical certificate.

In its consideration of aviation medicine, the Panel focused on the strategic and systemic, rather than specific medical conditions. Further, submissions on medical issues were often (understandably) emotive and passionate. Key issues raised by industry included:

- concern that CASA processing times for medical certificate issue and renewal are excessive, and impact negatively on the industry by grounding pilots while they wait for certificates
- a view that the standards applied by CASA in medical certification are lagging behind developments in broader medical practice
- a lack of transparency in communication from the aviation medical area of CASA, so certificate holders who have lost their certification often feel they do not understand why they have lost their certification or that they have not been properly heard in the process.

Submissions that recommended a way forward highlighted delegating the authority to issue medical certificates to Designated Aviation Medical Examiners (DAMEs).

6.1.2 Discussion

The system today

Medical fitness is a licensing requirement under the provisions of ICAO Annex 1, and the Australian Government is required to implement a system of Medical Assessments (within the definition and requirements of Annex 1) to ensure that licence holders are medically fit to fly.

In Australia, medical certification under Part 67 of the CASRs combines examination by DAMEs or Designated Aviation Ophthalmologists (DAOs) (as applicable) and consideration by CASA’s aviation

medical branch before a decision is made by a CASA delegate. Medical certificates are then issued by CASA.

This system contrasts to some international systems. For example in the UK, medical examiners conduct renewal examinations, and they also issue renewal certificates under authorisations issued by the regulator, provided that the licence holder meets the required medical standards. In cases where the licence holder does not, or may not, meet the medical standards, the case is escalated to the regulator for consideration.

New Zealand has had a system of devolved issuance for many years, providing a useful comparison to Australia. Medical examiners in New Zealand issue medical certificates as delegates of the CAA, if the licence holder meets the required standard, referring complex cases that may require an exercise of discretion to the CAA.

New Zealand's system has undergone a number of changes over the years. For a time, two categories of medical examiners were approved under the Civil Aviation Regulations, differentiating between Medical Examiner 1s, who were able to issue all medical certificates, and Medical Examiner 2s, who were only able to issue Class 2 medical certificates. This system was overhauled in the early 2000s, following a review that highlighted that excessive de-centralisation and inadequate CAA oversight had created a system with unacceptable variation in decision-making.¹²⁸ More recently, the New Zealand industry has complained about the cost of medical certificate renewals and complimented the Australian system.

Industry in Australia complains that the renewal of medical certificates can take many weeks as a matter of course, but acknowledges that the length of time taken is not necessarily all due to CASA: applicants may submit late or incomplete paperwork; there may be delays in DAMEs submitting documentation; and the volume of medical certificates issued (an average of 25,000 per annum since 2008–09) all contributes to delays. Industry has highlighted the frequency with which professional airline pilots are grounded because of delays in CASA issuing medical certificates.

Service delivery and the role of the regulator in the medical field

Given the dissatisfaction in industry with the timeliness of medical certification, the Panel obtained data from CASA on the time taken to process medical certificates. While CASA does not publish a full set of service delivery standards or KPIs, CASA nominates 28 days as its applicable service delivery standard for aviation medicals. The data provided indicates that approximately 50–55 per cent of medicals are processed by CASA within 14 days, and approximately 20 per cent within 14–28 days. This means that almost a quarter of all medical certificates are taking more than 28 days to process, with some taking over 100 days. The Panel also noted that this measure is based on the date that data is entered into CASA's system, which means that delays in entering data may make the 'real' service delivery timeframe (as experienced by the applicant) even longer.

Only a small number of medical certificate cases (1.0–1.5 per cent) are escalated beyond routine processing to the Complex Case Management committee.¹²⁹ With the majority of cases being non-complex, the Panel considers the time taken to process medical certificates is too long.

Industry participants often feel that CASA does not listen to opinions that do not agree with its assessments.¹³⁰ In aviation medical certification, this sees CASA making all the decisions about whether industry participants are medically fit to perform their roles. In overseas jurisdictions, this process has

¹²⁸ The Process of Determining Fitness to Fly Aeroplanes in New Zealand: A Review of Current Practice and Recommended Changes, by Professor Sir John Scott and Professor Des Gorman, 2001 (the 2001 Scott-Gorman Report).

¹²⁹ Information provided by CASA.

¹³⁰ Submission #167

become more collaborative, with DAMEs (or equivalents) being trusted partners in the system, making decisions and issuing medical certificates.

Delegation to DAMEs of the authority to approve medical certificates, or another form of devolution, in cases where the certificate holder meets the medical standards required would deliver a more efficient process and remove unnecessary 'red tape'.

Where a case is routine and not complex, consideration (or reconsideration) by the aviation regulator's central office appears unnecessary. Provided that the safety regulator's network of DAMEs and DAOs are appropriately skilled, accredited and oversighted, devolution of authority where applicants meet the required medical standards does not appear to denigrate safety standards. Such devolved systems are used effectively by a range of countries, including the US, New Zealand and the UK.

A move to delegate or otherwise devolve to DAMEs the authority to issue medical certificates would alleviate much of CASA's day-to-day aviation medical processing workload. This approach would allow CASA to refocus its aviation medical resources away from routine paperwork and a large volume of non-contentious cases to more involved matters. However, this approach would also need an accompanying shift in regulatory approach, with CASA devoting more time and effort to training, accreditation and quality control of the DAME and DAO network, to ensure appropriate and consistent decisions are made in the field.

If most medical certificates were issued without reference to CASA, CASA could lose cost recovery revenue from processing fees. This loss of revenue would not be offset by a reduction in workload, as CASA would need to strengthen its auditing and monitoring of the DAME network to ensure accuracy and consistency in DAME assessment and decision making.

A range of cost recovery-related issues would require clarification and consultation with industry if CASA moved to devolve the issuance of medical certificates. The Panel is conscious that industry, which has been pressing for delegation of medical certificate issuance, may be expecting the elimination of CASA fees for medical certificates. This would not necessarily be the case, as CASA would still be responsible for the integrity of the medical approval regime and may, therefore, continue to charge fees for services.

The opportunity for CASA to shift its aviation medical workload away from the processing of applications and towards monitoring of the system as a whole is consistent with the general movement towards SMS, and the role of a safety regulator as the manager of an effective safety oversight system.

The ICAO Manual of Civil Aviation Medicine highlights this potential, noting that safety data collection, analysis and exchange are particularly important for aeromedical safety.¹³¹ The ICAO manual also notes¹³² that the lack of routine analysis of medical findings leads to aeromedical regulatory policy being based on expert opinion, which varies from specialist to specialist and from country to country. The ICAO manual recommends a move to a safety management approach and the Panel endorses this philosophical shift.

Mitigating risks to safety in a devolved system

Inherent in any move to delegated or otherwise devolved medical certificate issuance are several risks to be managed and mitigated by the regulator:

- a risk of inconsistent decision making, which could be mitigated with additional guidance and structure for DAMEs to ensure consistent assessments and decisions, including a framework

¹³¹ ICAO Doc 8984 Manual of Civil Aviation Medicine para 1.2.19-20.

¹³² ICAO Doc 8984 para 1.2.21-22.

within which DAMEs only issue medical certificates where the certificate holder falls within nominated parameters and refers all other cases to CASA for consideration

- risk associated with indemnity and liability issues, which can be managed with careful consideration by the regulator of whether to indemnify DAMEs or allow DAMEs to rely on their own liability insurance, or by developing a devolution framework that sees DAMEs delivering the certificate, on behalf of CASA as the issuing authority
- risks that the regulator may lose information and data to monitor consistency and prevent ‘doctor shopping’, which may be able to be addressed by leveraging existing online initiatives, such as the eHealth system, and ensuring DAMEs have appropriate online access so that medical reports are stored centrally by CASA after DAMEs complete assessments and issue certificates.

From discussion with CASA, the Panel understands these are the primary risk factors previously identified by CASA when it considered a ‘half-way’ approach of delegating Class 2 medicals only while retaining Class 1 and 3 medicals in-house at CASA. The Panel is concerned that such a compromise move would actually add cost and complexity; a more effective solution would be to devolve all classes of medical certificate renewal to DAMEs, allowing CASA to complete the cultural shift from controller to safety system manager.

The Panel is also concerned that allowing DAMEs to issue initial medical certificates for new pilots and controllers may open a risk of increased inconsistency. Retaining initial medical certificate issuance in-house would allow CASA’s aviation medicine team to retain greater visibility of certificate holders’ entry into the medical certificate system, while still allowing renewals to be carried out at the DAME level.

Options for devolving issuance authority

A range of different options exist for the devolution of issuing authority for medical certification to the medical examiner:

- CASA could formally delegate the authority to issue medical certificates to DAMEs, so DAMEs would act on behalf of CASA as delegates.
- Part 67 of the CASRs could be amended to provide the legal authority to DAMEs to issue medical certificates upon their own authority, within a framework administered by CASA.
- CASA could put an appropriate mechanism in place that uses information management and communication technology so that medical certificates are legally issued by CASA, but are physically delivered ‘on the spot’ by DAMEs.

The risks and benefits inherent in each of these options will require detailed consideration by CASA, DAMEs, and the aviation industry. In the Panel’s view, the essential outcome is that routine medical certificate issuance should be simplified and streamlined, so that a licence holder receives the medical certificate ‘on the spot’ in the DAME’s office, rather than several weeks later from CASA. For the most part, the legal or technical questions surrounding who is the issuing authority for a medical certificate do not matter to the aviation industry.

If the third option is implemented, the Panel notes the importance of ensuring that the technological solution is appropriate for the purpose. The Panel notes the Administrative Review Council’s Best Practice Principles for Automated Assistance in Administrative Decision Making,¹³³ outlines a number of important principles, including that:

¹³³ Automated Assistance in Administrative Decision Making, Report to the Attorney-General by the Administrative Review Council, Report No. 46, 2004.

- processes need to be in place to avoid human manipulation of the process
- a comprehensive audit trail should be available
- agencies should have the capacity and the will to conduct internal review of decisions manually.

Complex case management

Under existing processes, where detailed examination of a case is required, the matter is escalated to the Complex Case Management (CCM) committee within CASA. The committee, comprised of medical practitioners within CASA (including the Principal Medical Officer), meets in private. Having reviewed a de-identified example of CCM meeting notes and communications, and reflecting on feedback from industry, the Panel considers that CCM records and communications, particularly with certificate holders, could be improved.

Communication between decision-makers within CASA and certificate holders is, according to industry, problematic. CASR 67.185 requires CASA to provide a person to whom CASA has decided not to issue a medical certificate with an explanation of why the person has failed to meet the required medical standards. Pilots and other medical certificate holders within industry expressed to the Panel that when they receive advice about an outcome, it reads ‘as if it were written by a lawyer’ and does not clearly explain the reasons for the decision in terms they readily understand.

However, the Panel’s discussions with aviation medical professionals outside of CASA painted a different picture: their clear and concise explanations of the quantitative and demonstrable reasoning used by CASA’s aviation medical decision makers stood at odds with industry’s complaints. CASA’s decisions were described as being ‘evidence-based’ rather than ‘eminence-based’ decisions. That is, decisions are based on a numerical analysis of the likelihood of a particular condition resulting in a particular outcome within a particular portion of the population, in contrast to opinions that can be expressed by specialists opining that ‘in my expert opinion, the risk is low’.

To undertake this numerical assessment, CASA compares the risk of incapacitation arising from an applicant’s condition against the normally acceptable risk applicable to the flying duties they undertake (1.0–2.5 per cent annual risk of an event that can cause incapacitation for a Class 1, and 2–5 per cent for a Class 2). In addition to this numerical assessment, CASA has a range of options available to allow certificate holders who may be at the upper end of acceptable risks to be placed under additional medical review requirements, or other limitations (e.g. private pilots with particular conditions may be restricted from carrying passengers).

The Panel considers that many of the problems surrounding refused or conditional issuance of aviation medical certificates are created by administrative processes used by CASA, and the lack of (or poor quality of) communications from CASA, rather than by the quality of decision making itself.

Reconsideration and appeals mechanisms

Two appeal options are available if CASA declines to issue a medical certificate: the CASRs provide for a reconsideration by CASA (CASR 67.190), and a refusal to issue a medical certificate is reviewable by the Administrative Appeals Tribunal (AAT).

Industry highlighted that the AAT is a very public venue for personal medical details, and recourse to the AAT can be expensive and often time consuming.

A request for reconsideration under the CASR means a second decision maker within CASA reviews the case. CASA's internal processes provide that a decision by a single decision maker will be referred to 'a panel of doctors' or, if the case had previously been escalated to the CCM committee, the views of an external consultant are added to the (medical) panel's consideration.

While intended to provide a means of recourse, the process is not transparent. In particular, because the original decision maker may still be part of the decision-making panel, and CASA selects the external specialist, it does not appear to be unbiased. The process has given rise to views within industry that CASA 'shops' for specialist opinions that will endorse the judgements already formed by CASA.¹³⁴

In the UK, appeals mechanisms are provided within the CAA. A decision can be appealed to the CAA Medical Department (the original decision having been made by a medical examiner in private practice), and eventually to the Chief of Medical.

In New Zealand, an established appeals process exists for medical certificates. The process provides a greater degree of independence. Under section 27J of the Civil Aviation Act 1990 (New Zealand), the Minister of Transport appoints a Convener to review medical certifications. The Convener is supported by a Deputy Convener and the Ministry of Transport (rather than the Civil Aviation Authority), and can consult medical specialists as required; the process is managed by the Ministry of Transport. The Civil Aviation Authority is not legally required to accept the Convener's decision, but must give written reasons if it does not.

Discussions with the New Zealand Ministry of Transport, and New Zealand industry, indicated that, since its establishment in 2006, this process has been generally respected and accepted by industry and the regulator. It has not been without problems, and the regulator has rejected the Convenor's decisions in a number of cases. Use of the Convenor has reduced in recent years as the majority of decisions have confirmed the original CAA decision was correct.

With the primary deficiency of Australia's aviation-related medical appeals system being a lack of transparency, and the resulting lack of trust from industry, the Panel does not regard the UK system as offering a suitable option for Australia.

The New Zealand system, with its degree of independence from the CAA, would address this issue. However, it would require a new bureaucratic structure within the Department, and would blur the lines of the independent safety regulator by creating an appeal to the Department. The Panel has considered appeal mechanisms in detail in section 6.3 and suggests that requests for a medical reconsideration under regulation 67.190 should be directed to the Industry Complaints Commissioner (ICC) for consideration by an appropriately qualified review panel. This will provide a suitably effective, transparent and independent reconsideration structure.

The Panel recommends that:

35. The Civil Aviation Safety Authority devolve to Designated Aviation Medical Examiners the ability to renew aviation medical certificates (for Classes 1, 2, and 3) where the applicant meets the required standard at the time of the medical examination.

¹³⁴ Submission #167 citing Bolton v CASA [2013] AATA 941

6.2 Aviation Security Identification Cards

Although not strictly an aviation safety matter, but rather a security matter, Aviation Security Identification Cards (ASICs) were raised regularly during consultations with the Panel.

As the ASIC scheme has a significant regulatory impost on the industry as a whole, and because the administration of the ASIC scheme for GA members is part of CASA's operational responsibilities, the Panel considered ASICs fall within the scope of this Review. The Panel recognises, however, that CASA's role in relation to ASICs is limited to issuing them, and that the Department is responsible for the policy and regulatory framework within which CASA and other issuing bodies operate.

6.2.1 International context

Annex 17 to the Chicago Convention sets out the SARPs creating the international aviation security system. It requires all States to:

- control access to airside areas of airports¹³⁵
- create appropriate Security Restricted Areas (SRAs) at relevant airports to provide additional security for appropriate operations¹³⁶
- ensure identification systems are established to prevent unauthorised access to airside areas and SRAs¹³⁷
- ensure background checks are conducted on persons granted unescorted access to SRAs.¹³⁸

In Australia, the *Aviation Transport Security Act 2004* (ATSA) implements these (and other) Annex 17 requirements. The purpose of the ATSA is to establish a framework to safeguard against unlawful interference with aviation. Access control to security sensitive areas is an important part of this framework, and Part 3 of the ATSA establishes the legal framework for airport areas and zones for security purposes. This control includes conditions of entry, the issue and use of security passes, and other identification systems. The ATSA and Aviation Transport Security Regulations 2005 (ATSR) also create the ASIC scheme as part of these control mechanisms.

6.2.2 ASIC overview

The ASIC scheme was introduced in 1998 under the Air Navigation Regulations 1947¹³⁹ as a means to reduce the risks of unlawful interference against aviation by people with unescorted access to airports and aircraft. Access to Australian airports has become more controlled over time and today anyone accessing an airside area of a security-controlled airport must have an ASIC. While the purpose and intent of the ASIC scheme (and its maritime equivalent, the Maritime Security Identification Card (MSIC)) have remained the same, law enforcement agencies and the Parliamentary Joint Committee on Law Enforcement¹⁴⁰ have argued to broaden the purpose of the scheme as a general crime prevention measure.

¹³⁵ Standard 4.2.1

¹³⁶ Standard 4.2.2

¹³⁷ Standard 4.2.3

¹³⁸ Standard 4.2.4

¹³⁹ In 2004–05, the aviation security framework under the ATSA and ATSR replaced the previous aviation security framework under the Air Navigation Act 1920 and Air Navigation Regulations 1947.

¹⁴⁰ Parliamentary Joint Committee on Law Enforcement — Inquiry into the Adequacy of Aviation and Maritime Security Measures to Combat Serious and Organised Crime, June 2011

While a strict interpretation of Annex 17 only requires background checks for persons working in SRAs, Australian regulations require anyone accessing the airside area of a security-controlled airport to have an ASIC.

In Australia all pilots are required to undergo background checking; pilots require an ASIC if they fly in/out of security controlled airports, or an aviation identification card (AVID), if they only fly to airports that are not security controlled. All pilots require either an ASIC or an AVID card.

An ASIC is issued to persons who have successfully undergone a background security check in order for them to work unsupervised within security controlled areas of Australian airports.

The ASIC scheme is administered by the OTS within the Department, in accordance with Part 6 of the ATSR.

ASICs are not issued by a centralised government agency, but are instead issued by a range of private and public sector issuing bodies appointed under Division 6.3 of the ATSR, in accordance with a plan developed by the issuing body and approved by the government. A range of government and private sector organisations are issuing bodies, including:

- some airport operators, for staff working at the airport, including staff working in stores within the airport
- airlines, for their pilots and crew
- other aviation organisations, for members or employees (for example RA-Aus)
- Australian Government agencies, for their own staff (for example the Australian Customs and Border Protection Service)
- CASA, for private pilots and members of the GA industry
- commercial ASIC service providers, offering application and issuing services for employees and individuals across the sector.

The process for obtaining an ASIC requires the issuing body to confirm the applicant's identity, followed by a referral to AusCheck, which performs the background security check. AusCheck¹⁴¹ is the Australian Government's background checking service provider, and operates on a cost-recovery basis. Centralised background checking was introduced in response to the 2005 Wheeler Review,¹⁴² tightening and consolidating the background checking process with the aim of improving consistency and robustness of checking.¹⁴³

According to the OTS, the use of a nationally consistent framework (instead of relying on employer-based employment conditions alone) increases flexibility and mobility. The OTS argues that aircrew and engineers often need to access different airports for their jobs and access is made easier by a nationally recognised system.¹⁴⁴

An ASIC is currently valid for two years from the date of the background check. Issuing costs vary slightly between the bodies through which the application is made. An ASIC application or renewal through CASA costs \$200.50;¹⁴⁵ of which \$98 is the AusCheck background check fee.¹⁴⁶

141 <http://www.ag.gov.au/CrimeAndCorruption/AusCheck/Pages/default.aspx>. AusCheck operates under the AusCheck Act 2007, accessed 18 May 2014

142 An Independent Review of Airport Security and Policing for the Government of Australia, the Rt Hon Sir John Wheeler DL, September 2005

143 Information provided by the Department

144 Information provided by the Department

145 http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC_90103, accessed 18 May 2014

146 <http://www.ag.gov.au/CrimeAndCorruption/AusCheck/Pages/Fees.aspx>, accessed 18 May 2014

6.2.3 Key issues arising from submissions and consultations

Nine per cent of all submissions to the Panel provided comments about ASICs. Several issues were raised about ASICs across each of those submissions. There was an even split between individual respondents and responses on behalf of organisations. ASICs and security requirements were more of an issue for smaller operators than for larger ones; ASICs were a particular focus for GA respondents.

Overall, submissions questioned the validity of the ASIC requirements, in particular for operators at regional and remote airports where it was noted that other security measures such as perimeter fencing and passenger screening are sometimes minimal and the ASIC regime is seen by industry as disproportionate to the level of localised risk. Submissions suggested that ASICs create a significant impost without delivering a commensurate security benefit. Specific concerns were aired about:

Expense	ASICs are considered unnecessarily expensive and the cost allocated to maintaining an ASIC is depriving operators from investing in alternate areas that deliver real safety outcomes, 'for RA-Aus members alone, the cost is in excess of \$0.8 million per year. If these costs were redirected to training, education or other activities the safety implications would be much greater.' ¹⁴⁷ The cost component of ASICs was not raised by commercial airlines.
Renewal frequency	The current two-year renewal requirement for ASICs is considered excessive and inflexible. References were made to other forms of identification that have a longer validity, for example some submissions recommended 'the ASIC card be issued once for a period of ten years, then renewed' ¹⁴⁸ and 'the renewal period be extended to mirror the currency of source secure documentation such as the passport, driver's license [sic] etc.' ¹⁴⁹
Intent	There is scepticism from industry about the benefits for pilots, aircraft owners and operators of holding ASICs, particularly at smaller regional airports, where ASICs are not always checked for access control, with one submission noting 'nor should regional communities be restricted by regulation that assumes the worst possible scenario when the risk is low.' ¹⁵⁰
International consistency	Comparisons were made to a more flexible approach applied to GA pilots in the US.
Duplication	It was suggested that the pilot's licence be used as a valid form of identification in place of an ASIC, 'many suggest a pilot photo license [sic] which seems a sensible and practical idea.' ¹⁵¹

6.2.4 Discussion

Industry communication and engagement on ASICs

The Panel notes the level of confusion and frustration within the GA industry about security requirements. Many in the industry indicated that they understand the need for security measures in general, but not the particular measures put in place by government. The Panel considers that the Australian aviation industry has not received adequate explanations on the introduction and intention of

¹⁴⁷ Submission #127

¹⁴⁸ Submission #37

¹⁴⁹ Submission #15

¹⁵⁰ Submission #35

¹⁵¹ Submission #144

the ASIC scheme, which has resulted in many industry participants questioning the validity and purpose of the program.

Many in industry see ASICs as identification cards or access cards. According to the OTS, the ASIC is more an identity measure, providing evidence that those who are airside have had a background check and have a bona-fide operational need for unescorted access. Pilot licences are security designated authorisations, requiring an ASIC or AVID. According to the OTS, this ensures that pilots do not pose an unreasonable risk of unlawful interference as their identity has been confirmed and they have been subjected to a background or security status check.¹⁵²

The Panel noted that communications on aviation security requirements are written from a government perspective that suggests tighter regulatory controls make the transport system more secure and are therefore a positive step. For example, the Department's website outlines 'enhancements' made to the ASIC scheme following the 2009 Aviation White Paper.¹⁵³ Similarly, in its consultations with the Panel, the OTS referred to 'enhancements' made to the ASIC scheme. The Panel is, however, aware that the 'enhancements' referred to by the OTS are largely increases in regulation, which, from an industry perspective, is not an enhancement, but a step backward.

The Panel recommends that as part of any changes made to the ASIC program, the Department needs to ensure that it better communicates the intent and purpose of the scheme, and ensures that the message reaches industry participants 'on the ground' at smaller airports, not just those who attend established aviation security consultation meetings.

International comparisons

Industry has widely claimed that Australia's ASIC regime is unique and excessive when compared to other jurisdictions, particularly the US. Australian industry perceives that the US has a more pragmatic approach to the application of security requirements for GA operations.

In the US, GA pilots are not subject to requirements to carry specific identity cards, unless they access the SRA of an airport. At some airports, depending on its security classification, there may be a requirement for pilots to carry local airport identity cards, while other airports may have fewer security restrictions, and do not require pilots to carry identification. In the US there is no ASIC-type requirement, except for pilots flying for a commercial carrier and accessing an SRA routinely.

In Australia, as in other countries, the airside of an airport is divided into multiple zones, depending on the security risk ratings of the activities undertaken in that area. Most importantly, the areas of an airport used for RPT flights are designated as an SRA.

SRAs (and other airport security zonings) in Australia are approved by the Secretary of the Department, based on zoning proposed by the airport operator. Under the ATSA, all airports in Australia that receive RPT flights are automatically given a higher security rating and are classified as 'security controlled airports'. ASICs are required for airside access to the entire airport at a security controlled airport.

In the US, and other countries including Canada, stricter RPT-standard security restrictions are only applied to the area of the airport from which RPT operations are conducted (the SRA), leaving GA operations to take place at less heavily restricted facilities at the same airport.

While Australia also differentiates between the SRA, where higher security standards apply, and the general airside area, Australian regulations require an ASIC for all airside access not just for access

¹⁵² Information provided by the Department.

¹⁵³ See http://www.infrastructure.gov.au/transport/security/aviation/asi/asic_enhancements.aspx, accessed 20 May 2014.

to the SRA. In applying this requirement, Australia is applying a higher level of access control and background checking than is required by Annex 17, and is unique amongst equivalent states.

The Panel concludes that the US approach has provided greater flexibility for those GA pilots not accessing an SRA. The international approach under Annex 17, which (appropriately) requires background checking for access only to an SRA, also provides greater flexibility for GA. In Australia, in contrast, the ASIC program has been introduced as a ‘one size fits all’ approach, meaning that an ASIC is required to access an entire airport, not just the RPT facilities within the SRA, as is usual international practice.

Tailoring Aviation Security Identification Card requirements

In the Panel’s view, it is important that requirements for ASICs are appropriately tailored to achieve security outcomes, while minimising the impost on industry and mitigating realistic security risks responsibly. A range of such measures are available, however, the Panel considers that most simply the elimination of ASIC requirements for all airside areas apart from the SRA would eliminate much of the confusion, cost and inconvenience that irks industry about the current ASIC scheme.

If the Government regards the current application of the ASIC scheme as essential from a serious and organised crime prevention perspective (i.e. that all persons working in aviation and on airports should be subject to a background check) then alternative methods of requiring background checking should be explored. For example, airports could be required to ensure they conduct background checks before issuing airport identification or access cards. Pilots not accessing the SRA of an airport would not need an ASIC, as they could instead utilise an AVID (which is required in order to pilot an aircraft).

The Panel recommends that:

36. The Australian Government amends regulations so that background checks and the requirement to hold an Aviation Security Identification Card are only required for unescorted access to Security Restricted Areas, not for general airside access. This approach would align with international practice.

6.3 CASA complaints and appeals mechanisms

An important principle of government is that those affected by government decision making should have access to rights of review or recourse. Administrative law regulates government decision making. Access to review of government decisions is a key component of access to justice.¹⁵⁴

Australian administrative law provides a range of options for those seeking to appeal or review an administrative decision. These options can be either a review of the merits of the matter, or a review of the process by which the decision was made. An explanation of the difference between these two types of review is:

Merits review	Process (Judicial) review
A review that reconsiders all the facts, law and policy aspects leading to the initial decision. A merits-based review is about ‘stepping into the shoes’ of the original decision maker.	A review of the lawfulness of the process used to make the decision, without considering the merits of the decision.

¹⁵⁴ <http://www.ag.gov.au/LegalSystem/AdministrativeLaw/Pages/default.aspx>, accessed 20 May 2014.

6.3.1 Existing appeal and review options

If an individual or a corporate entity is dissatisfied with a CASA decision, there are a number of options available for merit and/or process reviews. These options include an internal CASA mechanism, general administrative law remedies, and appeals to bodies such as AAT.

Merits review	Process (Judicial) review
Statement of Reasons	Statement of Reasons
Industry Complaints Commissioner, if the decision is 'wrong' or 'unfair'	Industry Complaints Commissioner
Administrative Appeals Tribunal	Commonwealth Ombudsman
	Federal Court
	<i>(Administrative Appeals (Judicial Review) Act 1977, and/or Prerogative Writs (Judiciary Act 1903))</i>

Statement of Reasons

Under Australian administrative law, persons affected or aggrieved by a decision may be able to apply to the decision maker for a formal Statement of Reasons. A Statement of Reasons is available if the decision in question could be appealed to either the AAT¹⁵⁵ or the Federal Court under the Administrative Decisions (Judicial Review) Act 1977 (ADJR Act)¹⁵⁶ and can be obtained by requesting the Statement of Reasons in writing. While not an avenue of appeal as such, obtaining a Statement of Reasons can assist a person aggrieved by a decision to assess whether they have a case worth appealing, by fully explaining the reasons for a decision and the findings of fact and evidence considered by the decision maker. The Administrative Review Council has identified a number of benefits flowing from formal use of Statements of Reasons, namely they:

- provide fairness by enabling decisions to be properly explained and defended
- assist the person affected to decide whether to exercise rights of appeal or review
- improve the quality of decision making
- promote public confidence in the administrative process
- assist tribunals and courts to better perform administrative or judicial review.¹⁵⁷

Commonwealth Ombudsman

The Commonwealth Ombudsman (the Ombudsman) considers and investigates complaints from those who consider they have been treated unfairly or unreasonably by an Australian Government department or agency, including CASA. Usually, a complaint is required to be initially lodged with the applicable agency, before the Ombudsman starts an investigation. During 2012–13, of the 23 complaints made to the Ombudsman about CASA, five were investigated.¹⁵⁸ CASA encourages the use of the Ombudsman¹⁵⁹ and the Panel recommends that this option for seeking redress should be noted by industry.

155 *Administrative Appeals Tribunal Act 1975*, Section 28

156 *Administrative Decisions (Judicial Review) Act 1977*, Section 13

157 See Practical Guidelines For Preparing Statements of Reasons, and Commentary on the Practical Guidelines, ARC, 2002, available from <http://www.arc.gov.au/Publications/Reports/Pages/OtherDocuments.aspx>, accessed 20 May 2014.

158 Commonwealth Ombudsman's Annual Report 2012–13.

159 http://www.casa.gov.au/scripts/nc.dll?WCMS:STANDARD::pc=PC_101040, accessed 20 May 2014.

Application to Federal Court for Judicial Review of an Administrative Decision

Under the ADJR Act, applicants may apply to the Federal Court for judicial review of most administrative decisions made under Commonwealth enactments on grounds relating to the legality, rather than the merits, of the decision.

Judicial review holds public officials to account for the legal exercise of their powers, rather than in relation to the merits of any decision made in the exercise of the powers. The legality of the decision may include consideration of whether appropriate information was considered, but does not extend to whether the decision was correct on the merits of the case. During 2012–13, affected persons appealed three CASA decisions to the Federal Court, while CASA separately took one matter to the Federal Court.¹⁶⁰

Administrative Appeals Tribunal

The AAT commenced on 1 July 1976 and was established under the *Administrative Appeals Tribunal Act 1975* (AAT Act). The Tribunal is within the Attorney-General's portfolio. The AAT is the primary option for a review based on merit. The AAT provides independent merits review of administrative decisions. It aims to provide a review mechanism that is fair, just, economical, informal and quick.¹⁶¹ The AAT reviews a broad range of administrative decisions made by Australian Government ministers, departments, agencies and some other tribunals.

The AAT can only review a decision if an Act, regulation or other legislative instrument states that the decision is subject to review by the Tribunal. The AAT maintains a list of Commonwealth laws under which decisions may be made that the AAT can review and includes the CA Act, noting:

The following decisions of the Civil Aviation Safety Authority: to refuse to grant or issue a certificate, permit or licence under the Act or Regulations; to cancel suspend or vary a certificate, permit or licence, granted or issued under the Act or Regulations; to impose or vary a condition contained [in] a certificate, permission permit or licence granted or issued under the Act or Regulations; to cancel suspend or vary an authorisation, contained in such certificate, permission, permit or licence granted or issued under the Act or the Regulations, but not suspend an authorisation under s30DC, or suspend or cancel an authorisation under Division 3D; to reinstate under s30EF(3) a civil aviation authorisation that has been suspended or cancelled under Division 3D.¹⁶²

During 2012–13, some 20 applications were made to the AAT for merits review of CASA decisions. Notably, of those 20 applications, the most common categories of CASA decisions appealed were medical certification (11), AOCs (4), and flight crew licences (2).¹⁶³

Other options

While rarely used, a number of traditional common law remedies are also available through Australian courts. Injunctions and prerogative writs¹⁶⁴ may be sought against the Commonwealth or an officer of the Commonwealth pursuant to section 75(v) of the *Constitution* and section 39B of the *Judiciary Act 1903*.

160 CASA Annual Report 2012–13, p.178, table B.8

161 <http://www.aat.gov.au/AboutTheAAT/IntroductionToTheAAT.htm>, accessed 18 May 2014.

162 <http://www.aat.gov.au/docs/JurisdictionList31December2013.pd>, accessed 18 May 2014

163 CASA Annual Report 2012–13, p.177, tables B.6 and B.7

164 Writs of certiorari, prohibition and mandamus

6.3.2 Industry Complaints Commissioner

CASA has established an ICC, which operates within Terms of Reference that support its complaint-handling process, which is aimed at resolving problems between members of the industry and CASA officers and ensuring that any deficiencies in CASA's processes and procedures are identified and rectified.¹⁶⁵ The ICC is essentially a review of process and integrity, and was not originally created as an avenue for reviewing the merits of decisions.

The ICC is situated within the Office of the Director of Aviation Safety. The ICC's Terms of Reference outline that its role is to provide a mechanism for:

- complaints made about the administrative actions or services provided by CASA staff, delegates or authorised persons to determine if they are wrong, unjust, unlawful, discriminatory or unfair; and
- meaningful, timely and effective responses to complaints can be initiated and followed through to completion by CASA.¹⁶⁶

The ICC's Terms of Reference specifically state that the ICC may not deal with the following type of complaints:

- any action or decision by a CASA officer or delegate taken under or pursuant to the civil aviation legislation, which is subject to review in the Administrative Appeals Tribunal (AAT) under the *Administrative Appeals Tribunal Act 1975*, or in the Federal Court under the *Administrative Decisions (Judicial Review) Act 1977*;
- any matter that has already been dealt with in the AAT or in a court;
- any matter that is currently, or ought more properly be, the subject of investigation by, or under the authority of, another CASA manager;
- any matter that is currently the subject of an investigation under Part IIIA of the *Civil Aviation Act 1988*, or which the ICC knows (or determines) is the subject of an investigation by another government or law enforcement authority;
- except as approved by the Board or DAS, any matter the ICC is satisfied the complainant became aware of more than 12 months before the complaint was first raised with the ICC;
- unless authorised by the Board or the DAS, complaints about CASA's regulatory, operational or corporate policies and practices generally (as opposed to complaints about the conduct or actions of individual officers, managers, delegates or authorised persons), and complaints made by a CASA employee about other staff, delegates or authorised persons;
- complaints about or concerning the conduct of a member of the Board, the DAS, the Deputy DAS, or the Associate DAS;
- any matter in respect of which the ICC is satisfied the complainant does not have a legitimate or sufficient interest; and
- complaints that are frivolous or vexatious or which the ICC is satisfied have not been made in good faith.

¹⁶⁵ CASA Annual Report 2012–13, p.104

¹⁶⁶ CASA's ICC Governance arrangements http://www.casa.gov.au/wcmswr/_assets/main/download/icc-terms-of-reference.pdf, accessed 20 May 2014.

Key issues about the Industry Complaints Commissioner arising from industry, submissions and consultations

Rights of review was a common theme in the submissions received and consultations held by the Panel. One submission summed up the issue by stating, 'Australia's aviation industry requires a transparent and independent regulatory review and escalation process.'¹⁶⁷

Analysis of submissions identified that many questioned the current role, independence and performance of the ICC. The main issues raised by submissions were:

ICC governance	The ICC drew broad criticism that it is not sufficiently independent from the organisation against which complaints are made, that it should not report to the DAS, and that it should be within the remit of the ICC to investigate the DAS and the CASA Board. One submission recommended 'that the CASA Industry Complaints Commissioner be established as a separate statutory office and be given powers to investigate and report to the CASA board and Minister on complaints in regard to CASA administration.' ¹⁶⁸
ICC effectiveness	Several concerns were raised regarding the timeliness and effectiveness of the ICC, including 'the current system of the ICC reporting direct to the CASA CEO is seen by industry as largely ineffective and, again, discourages some industry complaints due to fear of retribution,' ¹⁶⁹ and 'it is essential that there is a reliable, robust and transparent complaints process that is managed in a timely manner.' ¹⁷⁰
Alternate appeal options	Submissions noted concern about the limited alternates for appeals, given the void between the ICC and the AAT. An example includes that 'the industry should have an appeal procedure against decisions made by CASA. Currently the AAT is the only avenue. This should be used as a last resort as its aviation expertise is limited.' ¹⁷¹
An aviation ombudsman	Some suggested the establishment of an aviation ombudsman or an inspector general of aviation, with one submission proposing that as 'Australia already has three bodies that essentially fill the role of industry ombudsmen: the Australian Airline Customer Advocate, the Aircraft Noise Ombudsman, and CASA's ICC. It may be worth considering combining these three roles into a truly independent Aviation Industry Ombudsman.' ¹⁷²
General confusion about the ICC	There was widespread uncertainty about the role of the ICC. The ICC's Terms of Reference state that its purpose is to resolve complaints. However, industry's submissions and comments in consultations suggested there is a perception that it is also a mechanism to appeal decisions, perhaps due to past actions of the ICC.

167 Confidential Submission #109

168 Submission #197

169 Submission #246

170 Submission #67

171 Confidential Submission #2

172 Submission #236

6.3.3 Discussion

Industry Complaints Commissioner governance

A number of views were expressed to the Panel about the governance of the ICC. Submissions called for the ICC to increase its independence from CASA, particularly from the CASA senior executive. Submissions were concerned with the ICC's governance structure, stating that the current arrangements do not encourage a fair and independent process of review. Comments from submissions expressing their dissatisfaction with the ICC's structure included:

The CASA Industry Ombudsman should report directly to the Board of CASA and not the CEO. The current situation of that position reporting to the CEO does not reflect good corporate governance¹⁷³

How can anybody have confidence in a system where complaints are investigated by the same organisation that is the subject of the complaint?¹⁷⁴

Other submissions argued for the ICC to be made completely independent from CASA, with one commenting, 'the role of the CASA Industry Complaints Commissioner should be reinforced with direct reporting lines to either the Minister or the head of the Department of Infrastructure.'¹⁷⁵

The Panel is concerned with the ICC's current Terms of Reference, which preclude investigation of 'complaints about or concerning the conduct of a member of the Board, the DAS, the Deputy DAS, or the Associate DAS.' This exclusion was widely criticised by industry, as it gives impression that CASA senior management are 'untouchable'. One submission noted that the ICC's Terms of Reference should be re-drafted for 'the inclusion of all CASA staff, including the Executive of CASA, within the Commissioner's purview'.¹⁷⁶ The Panel agrees and proposes that the exclusion of the DAS, the Deputy DAS and the Associate DAS from the scope of the ICC's investigations be removed.

The Panel considers that having the ICC reporting to the DAS compromises the governance, and the appearance of fairness of the ICC process. Even if the ICC and DAS act impartially, and give genuine consideration to complaints, industry's perception is that any ICC complaint reviewed by the DAS is unlikely to gain a favourable outcome for the complainant. The Panel recommends that to strengthen the actual and perceived independence and governance of the ICC, it should report directly to the CASA Board, removing any involvement by the DAS.

The Panel does not consider that complete separation of the ICC function from CASA is required, as this would not prove to be time or cost effective in resolving industry complaints. The ICC is an internal mechanism of CASA; it is not an external review process. To turn the ICC into an external review process would cause confusion with other existing external mechanisms, such as the Ombudsman.

Industry Complaints Commissioner performance

The Panel noted concerns in submissions about the performance of the ICC. Submissions were critical of the ICC's timeliness to resolve complaints, claiming 'experience with the ICC is that the process is very time consuming'.¹⁷⁷ In examining the timelines of the ICC's resolutions in 2013, as provided to the Panel by CASA, the ICC took an average of 20 business days for complaints to be resolved for the 127 complaint cases closed during 2013. This average is reduced to 15.5 business days if the four cases of the longest duration are excluded. The Panel feels that an average of 20 business days is reasonable,

173 Confidential Submission #2

174 Confidential Submission #230

175 Submission #39

176 Submission #39

177 Submission #246

especially given the complexity and degree of investigation required to review some complaints in an appropriately thorough manner. The Panel notes that more than one in three cases were resolved in five business days or fewer.

Uncertainty about the Industry Complaints Commissioner role

The ICC's Terms of Reference state that it is a complaints resolution body; however, among industry there is a common belief that the ICC is a mechanism for individuals or companies to lodge an 'appeal'. Having reviewed summaries of the matters considered by the ICC, the Panel considers there is need for the ICC's role to be established with greater clarity. The ICC appears to have received and actioned complaints that may have been essentially a complaint about the merits of the decision. The ICC's Terms of Reference are largely focused on process and probity issues, offering a mechanism to 'complain' about the behaviour of CASA officers; however, the ICC also has the power to consider complaints that a decision is 'wrong' or 'unfair', which gives it a degree of latitude to investigate the merits of matters.

International comparisons

Across other countries, the Panel noted that complaint commissioners similar to the ICC are not common. According to CASA, in the UK, New Zealand, Canada and the US, there is 'no Industry Complaints Commissioner or equivalent.' Instead, the most common option is for complaints to be lodged to a supervisor or to contact a complaints hotline.

Similar to Australia, other countries also have appeal mechanisms available outside of the regulatory agency:

- In Canada, the Transportation Appeal Tribunal, established under the Transportation Appeal Tribunal of Canada Act 2001 provides a mechanism for appeals from regulatory decisions under applicable legislation. The tribunal is a specialised transportation law tribunal, considering cases from the aviation, marine, rail and the international bridges and tunnels sectors. The tribunal is essentially analogous to the AAT in the Australian context, except that the AAT is an economy-wide tribunal that draws on expert members as required for a particular case.
- In the UK, regulation 6 of the Civil Aviation Authority Regulations 1991 provides a long-established procedure for reviewing decisions or proposals made by employees of the CAA. Under this regulation, a panel of (normally two) non-executive Board members sit as a review panel.

Alternate appeals options

Several submissions cited a need for an alternative complaints review process separate from the ICC and other existing appeal mechanisms such as AAT, the Ombudsman and the Federal Court. Submissions put forward options such as:

- a 'peer/expert Review Appeal mechanism within CASA'¹⁷⁸
- an aviation ombudsman or an inspector general of aviation
- an aviation tribunal to hear merits reviews in place of the AAT.

¹⁷⁸ Submission #39

The Panel considered each option, but does not believe that an adequate case has been made for any of these specific concepts proposed in submissions. In reaching this conclusion, the Panel notes that:

- a range of existing mechanisms are available, and extra layers of review or appeal mechanisms add cost and complexity to the system
- the Australian Government has already rejected the recommendation of the recent Senate Committee Report into Aviation Accident Investigations for establishment of an Inspector-General of Aviation Safety. The government opposed this recommendation to avoid adding a further layer of administrative oversight to the existing framework
- existing Australian administrative law emphasises that the AAT should be the merits review tribunal for all Commonwealth administrative decisions unless there are specific policy requirements for a unique tribunal,¹⁷⁹ a position endorsed by the Australian Government's recent National Commission of Audit, which recommended that most of the existing subject matter tribunals be subsumed into the AAT.¹⁸⁰ The Panel does not accept that there are specific policy requirements in aviation that justify a unique tribunal
- the Ombudsman already holds substantial and far-reaching powers to investigate administrative matters, providing an effective option for the aviation industry to raise concerns about the regulator's behaviour with an external body empowered to investigate as it sees fit.

However, the Panel does see merit in the form of a review panel system within CASA. Rather than establishing a stand-alone process, the Panel considers a review panel could be effectively integrated into an expanded role for the ICC, with the ICC convening review panels as appropriate.

6.3.4 Recommended model for Civil Aviation Safety Authority complaints reviews

Considering the themes provided in the submissions, extensive industry and government consultations, and noting the existing appeals mechanisms, the Panel recommends that the best outcome for reviewing aviation regulatory decisions would be to use a staged and graduated review process. If an individual or company is seeking merits or process review, the Panel considers that an effective complaint or review procedure should include three steps:

1. First step — a detailed **explanation** of the regulatory decision is provided to the affected party, so that they fully understand the decision and reasons for it
2. Second step — the affected party can make a **complaint** to CASA about the decision, either because of the process followed or because the affected party considers the decision is wrong
3. Third step — the affected party can **appeal** outside of CASA to an external appeal body that can formally review the decision.

179 See Australian Administrative Law Policy Guide 2011 - <http://www.ag.gov.au/LegalSystem/AdministrativeLaw/Documents/Australian%20Administrative%20Law%20Policy%20Guide.pdf>, accessed 20 May 2014.

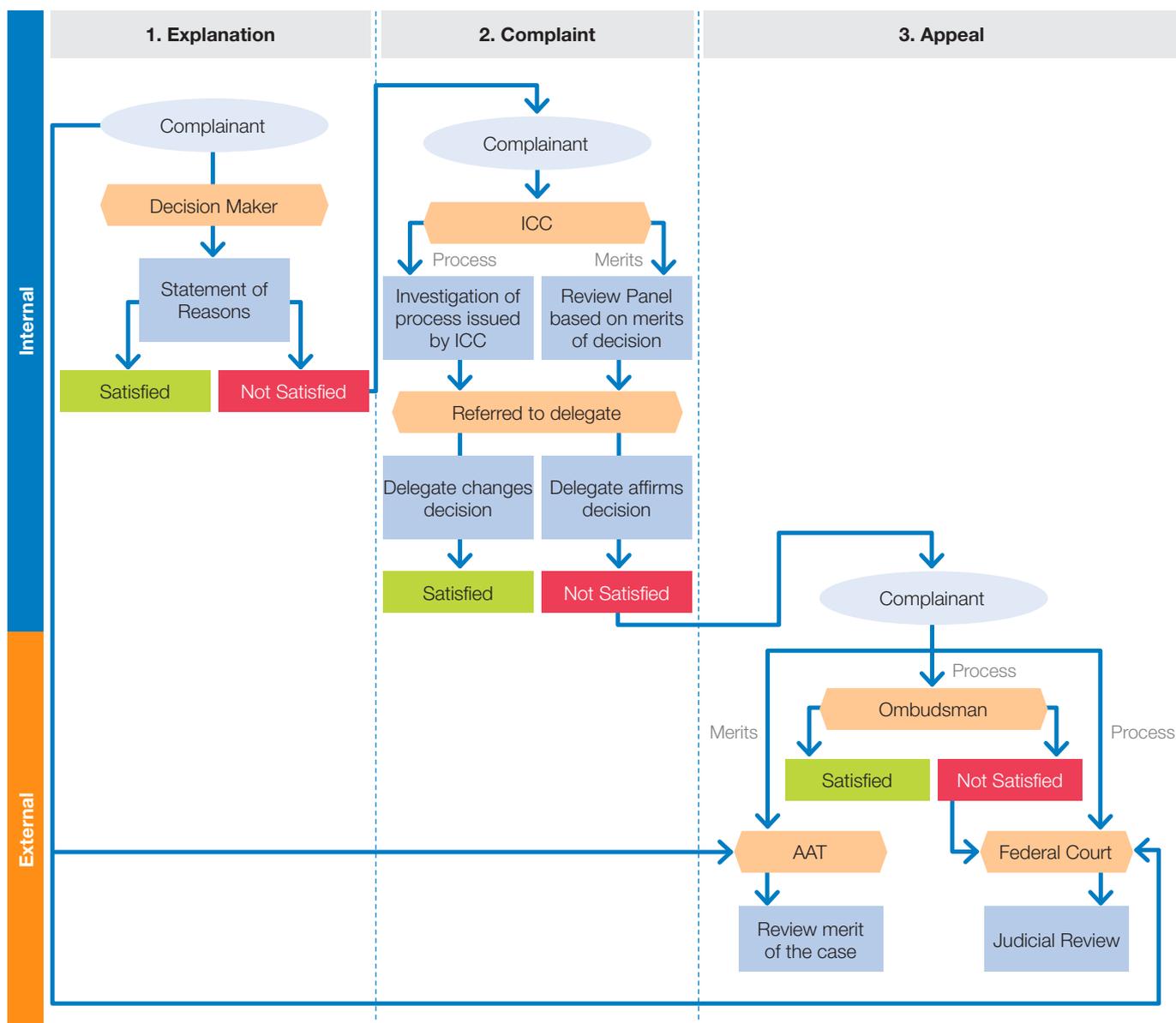
180 National Commission of Audit, Recommendation 54, p.lxii, <http://www.ncoa.gov.au/>, accessed 20 May 2014

This multi-step process can be put in place for both merits and process reviews as shown in Table 8 and Figure 9.

Table 8 Proposed multi-step review process for merits and process reviews

Stage	Merits review	Process (Judicial) review
1: Explanation	Statement of Reasons	Statement of Reasons
2: Complaint	Complaint to the ICC, who may convene a Review Panel, chaired by a non-executive director	Complaint to the ICC for investigation Complaint to the Ombudsman
3: Appeal	Appeal to the AAT	Appeal to the Federal Court

Figure 9 Proposed three-step review process



Statement of Reasons

An affected party may request a Statement of Reasons for a decision made by the original decision maker within CASA. Provision of a Statement of Reasons has the potential to both improve decision making within CASA and also to assist the affected party to better understand the decision and the reasons for it. This is a necessary step in deciding whether to exercise the further steps in the review process. As already discussed, Statements of Reasons are already available from CASA under law, and the Panel would encourage more industry participants to use them. While CASA should already aim to provide explanations of its decisions, industry participants should use their right to a Statement of Reasons if they deem it necessary.

Lodging a complaint with the Industry Complaints Commissioner

If an affected party receives a Statement of Reasons and is of the opinion that the decision is wrong, unjust, was based on flawed reasoning or processes, they may then lodge a formal complaint with the ICC. The ICC will review the complaint and assess how to investigate it.

If the complaint relates to CASA's processes, the ICC would investigate the complaint themselves, in line with current ICC processes.

If the complaint relates to the merits of a CASA decision, the ICC may convene an ICC Review Panel, composed of expert members drawn from appropriate sources and chaired by a non-executive director from the CASA Board. The ICC Review Panel would review the decision, examining the processes followed, the evidence considered and the decision made. The ICC Review Panel would make non-binding recommendations to the original decision maker about whether the decision was correct and appropriate, with recommendations copied to the DAS so that senior management are aware of issues within the organisation. The original decision maker would then consider the ICC Review Panel's recommendations and decide whether the original decision should be revised. An appropriate legal framework for this reconsideration will be required.

If the decision-maker does not agree with the recommendations of the ICC Review Panel, and elects not to act upon the recommendations, the decision-maker must provide written reasons to the CASA Board.

The ICC Review Panel proposal would provide a suitably separate and impartial review mechanism. This process would also give the Board direct insights into decision-making within the organisation.

External appeals

If an affected party is not satisfied with the verdict from the ICC or the ICC Review Panel, then they may proceed to appeal with an external body. Alternatively, the affected party may always elect to proceed immediately to external appeal earlier in the process. An external appeal may go to:

- the AAT if the affected party wishes to appeal the merits of a CASA decision under the AAT Act
- the Federal Court if the affected party wishes to seek judicial review of the decision under the ADJR Act

The Panel considers these external appeal mechanisms already provide a broad range of effective administrative law remedies for industry participants dissatisfied with a CASA decision.

Reconsideration of medical decisions

As discussed in Aviation Medical Issues (section 6.1), the Panel considers that requests for a reconsideration of a medical decision under the CASRs (regulation 67.190) should be directed to the ICC, which can then convene an ICC Review Panel to consider the reconsideration request. The Panel considers that incorporating this specific (and specialised) review into a general review mechanism is desirable. Medical reconsiderations will require specialised aeromedical members, and the review panel will need to apply appropriate confidentiality procedures for medical cases.

The Panel recommends that:

37. The Civil Aviation Safety Authority amends the current Terms of Reference of the Industry Complaints Commissioner so that:
 - a. the ICC reports directly to the CASA Board
 - b. no CASA staff are excluded from the ICC's jurisdiction
 - c. the ICC will receive complaints that relate to both the merits and the process of matters
 - d. on merits matters, including aviation medical matters, the ICC is empowered to convene an appropriately constituted review panel, chaired by a CASA non-executive director, to review the decision
 - e. while all ICC findings are non-binding recommendations, the original decision-maker is required to give reasons to the CASA Board if a recommendation is not followed.

Appendices

Appendix A1 Terms of Reference

Objectives

The principal objectives of the review are to investigate:

- the structures, effectiveness and processes of all agencies involved in aviation safety
- the relationship and interaction of those agencies with each other, as well as with the Department of Infrastructure and Regional Development (Infrastructure)
- the outcomes and direction of the regulatory reform process being undertaken by the Civil Aviation Safety Authority (CASA)
- the suitability of Australia’s aviation safety related regulations when benchmarked against comparable overseas jurisdictions
- any other safety related matters.

Outcomes

The report of the review will:

- examine and make recommendations as required on the aviation safety roles of CASA and the Australian Transport Safety Bureau (ATSB) and other agencies as appropriate
- outline and identify any areas for improvement in the current interaction and relationships between CASA and the ATSB, as well as other agencies and Infrastructure
- examine and make recommendations as required on the appointment process and criteria applied for key aviation safety roles within CASA and the ATSB
- examine the current processes by which CASA develops, consults on and finalises changes to aviation safety regulations and other legislative instruments (such as civil aviation orders) and make any proposals for improving these processes such that new regulations are best practice in safe operations for each relevant sector of the aviation industry
- review the implementation of the current aviation safety regulatory reform programme and assess the effectiveness of the planning and implementation of regulatory changes, including cost impacts on industry
- examine and make recommendations on options for improving future aviation safety regulatory reform having regard to international experience and stakeholder views, and the Government’s objective of reducing the cost of regulation to business
- provide advice to Government on priorities for future regulatory development and implementation strategies
- provide advice to Government on options for improving oversight and enforcement of aviation regulations, including rights of review.

Consultation

The review will seek the views of the CASA Board and senior management and staff, and the ATSB Commission and senior management and staff in developing its advice to Government on the review's objectives, and consult closely with:

- international, domestic, regional, general aviation, sport and recreational aircraft and maintenance operators and organisations
- federal, regional and local airport operators
- other relevant Government agencies including Infrastructure, Airservices Australia, the Department of Defence and the Office of Parliamentary Counsel (OPC)
- other industry and public stakeholders.

Background

Australia's aviation safety governance structures and processes have continued to evolve since the initial establishment of the *Civil Aviation Act 1988* (covering the operations of CASA), the *Air Services Act 1995* (covering the operations of Airservices) and *Transport Safety Investigation Act 2003* (covering the operations of the ATSB).

In addition the establishment of an Aviation Safety Regulatory Development Taskforce in March 2010, comprising dedicated resources from CASA and OPC, was specifically aimed at helping expedite the completion of the regulatory drafting work for an aviation safety regulatory reform program.

The current regulatory reform program involves completion of three main regulatory suites covering aircraft maintenance, aircraft operations and flight crew licensing. The maintenance and licensing suites are largely completed with the operations suite scheduled to be completed next year.

The aviation industry and CASA are in the process of implementing the maintenance and licensing regulatory changes already made and in which significant investment in improved systems, training and education is completed or under way.

Work on updated regulations for areas affecting general aviation such as amendments to Civil Aviation Safety Regulations - Part 42 (Continuing Airworthiness - amendments for charter and aerial work), Part 132 (Limited Category Aircraft Operations — Warbirds), Part 138 (Aerial Work Operations) and for sport and recreational aviation (Parts 103, 105 and 149) are scheduled to be progressed in the next twelve months.

Earlier this year a Senate report into Aviation Accident Investigations highlighted a range of issues with the regulation and governance of aviation safety within Australia.

It is therefore timely to consider future aviation safety structures and regulatory development approaches and processes in Australia by evaluating the effectiveness of the current approach, looking at international experience and possible options for future improvements and bearing in mind the commitment of the Australian Government to reduce the burden of regulation on the economy.

It is also timely to look at which areas should be priorities for future regulatory development to meet continued growth in aviation demand.

Review Membership and Timing

The review panel will comprise Mr David Forsyth (chair), Mr Don Spruston and Mr Roger Whitefield. The panel will be assisted by a Secretariat established within Infrastructure, and will be supported as required by specialist advisers.

The review will report to the Minister for Infrastructure and Regional Development in May 2014.

Appendix A2

Confidentiality and personal information

This disclaimer was published on the website of the Department of Infrastructure and Regional Development where submissions to the Review were received, in order to satisfy legal obligations regarding privacy and the collection and use of personal information and explain how the Review would protect confidential submissions.

Your submission, including any personal information supplied, will be provided by the Department of Infrastructure and Regional Development (the Department) to the Aviation Safety Regulation Review Panel and its specialist advisers (as required) for the purpose of undertaking the review and preparing their report. Your personal information will not be disclosed to any other third parties, except in the circumstances outlined below.

Submissions (in part or full), including the name of the author may be published on the Department's website (private addresses and contact details will be removed) or in the final report of the Review Panel unless the submission is confidential. Confidential submissions (including author name) will not be published.

Submissions will only be treated as confidential if they are expressly stated to be confidential. Automatically generated confidentiality statements or disclaimers appended to an email do not suffice for this purpose.

If you wish to make a confidential submission, you should indicate below and ensure your submission is marked confidential.

Confidential submissions will be kept securely and will only be disclosed in the following circumstances:

- a. in response to a request by a Commonwealth Minister
- b. where required by a House or a Committee of the Parliament of the Commonwealth of Australia or
- c. where required by law.

In limited circumstances, confidential submissions may also be disclosed within the Commonwealth of Australia, including with other Commonwealth agencies, where necessary in the public interest.

Appendix A3

Conduct of the Aviation Safety Regulation Review

During the 2013 election campaign, the Coalition committed to establishing an external review of aviation safety and regulation in Australia. Subsequently on 14 November 2013 the Deputy Prime Minister and Minister for Infrastructure and Regional Development, the Hon Warren Truss MP, announced the Aviation Safety Regulation Review (ASRR) and members of the review panel.¹⁸¹

The Review was conducted in six phases, between November 2013 and May 2014:

- In December 2013 the Panel convened in Australia for briefing, initial discussions, and targeted consultations to draw out the issues for the Review, undertaking a broad range of consultative meetings.
- A public submissions process was undertaken through December 2013 and January 2014.
- Through January and February 2014, the Panel worked remotely, analysing submissions and identifying issues for further investigation.
- The Panel reconvened in Australia in March 2014 for further targeted discussions, building on initial consultations and themes drawn from public submissions.
- Overseas benchmarking discussions were undertaken through March and April 2014.
- Following drafting through March and April the Panel finalised their report in May 2014 for presentation to the Deputy Prime Minister.

Review Panel Members

The Australian Government decided to appoint a review panel, rather than a single expert, to provide ‘a broad and complementary range of aviation experience across technical, operational, regulatory and management roles in both the public and private sectors’. This approach would ensure a balanced view, delivering a greater sense of independence and international view points, than a single aviation expert could provide. The Panel members are:

- Mr David Forsyth AM, former chairman of Safeskiies Australia, and former chairman of Airservices Australia, chaired the Review Panel, bringing over thirty years of experience in safety management and aviation business. Mr Forsyth has held executive and board positions across the aviation industry, government, and academic sectors in Australia.
- Mr Don Spruston, a former Director General of Civil Aviation at Transport Canada, and former Director General of the International Business Aviation Council, was involved in the development and implementation of criteria for reviewing aviation safety regulatory performance as part of the ICAO Universal Safety Oversight Audit Programme.
- Mr Roger Whitefield, a former UK Civil Aviation Authority Board member for nine years, Mr Whitefield has 39 years’ experience working for UK airlines as a pilot and in safety-related executive roles.

¹⁸¹ Ministerial Statement by Deputy Prime Minister the Hon Warren Truss MP, 14 November 2013.

Additional advisers and secretariat support

To assist the Panel, the Deputy Prime Minister appointed Mr Phillip Reiss as a specialist adviser on General Aviation (GA) matters, given his extensive experience as a pilot and as President of the Aircraft Owners and Pilots Association of Australia. Mr Reiss, while President of AOPA, was appointed to assist the Review Panel in a private capacity and not as a representative of AOPA; in this role Mr Reiss was able to provide the Panel with assistance in engaging the GA industry, and in understanding some of the concerns of the GA industry.

To assist with expert advice on regulatory reform issues, the Panel elected to retain Mr Bruce Gemmill as an adviser. Mr Gemmill's experience as a senior executive with CASA provided valuable perspectives and first-hand knowledge on delivering regulatory reform.

To assist the Panel with logistics and preparation of the report, a small secretariat was established within the Department of Infrastructure and Regional Development. The secretariat was kept operationally separate, and housed in a discrete office space. Confidentiality protocols, over and above standard non-disclosure obligations applying to the Australian Public Service, were signed by all Secretariat staff.

Appendix A4

Hawke, Miller and Senate Recommendations implementation status

Miller Review 2007 – Recommendations		Agency response
# 1 – TSI Act objects	A subtle but important amendment to the objects in the <i>Transport Safety Investigation Act 2003</i> (TSI Act) is warranted. The TSI Act should be amended to make it clear that the primary object of the Act is to contribute to improved transport safety. The tasks referred to as current objects in section 7(1) should be a statement of the outcomes the Act is directed to in order to achieve that object.	Complete – replaced with a functions clause in section 12AA
# 2 – TSI Act objects: requirement for co-operation	TSI Act section 7(2) is inappropriately limited. It should provide that, in the performance of the Executive Director’s powers and duties under the Act, the Executive Director is required to co-operate, in the interests of improved transport safety, with CASA, regardless of whether CASA has powers or responsibilities under another law of the Commonwealth to also investigate the matter under investigation by the ATSB. Furthermore, the objective of co-operating with CASA should not be limited to the period during which the ATSB is conducting an investigation.	Complete – section 12AA(2) of the TSI Act refers
# 3 – Policy statements	Consideration should be given to including in the TSI Act a provision to the effect that the Minister may issue policy statements from time-to-time setting out the Government’s policy in relation to the administration of the TSI Act and its role in the Australian transport safety system. Any such policy statement should be general in nature and not relate to a specific investigation. If the ATSB remains a Division of the Department the policy statements should be directed to the Portfolio Secretary and the Executive Director should be required to act in accordance with them. If the Commission model is adopted the Minister’s policy statements should be directed to the Commission.	Complete – s12 AE of TSI Act
# 4 – Policy development	Primary responsibility for policy in relation to proposed amendments to the TSI Act and for Australia’s policy positions at ICAO should be assumed by a policy Division within the Department, with that Division seeking input from the Executive Director and all other relevant stakeholders.	Agreed and continues to be the case

Miller Review 2007 – Recommendations	Agency response
<p># 5 – ATSB governance</p> <p>If the current ATSB governance arrangements remain, there is merit in resolving ambiguities over the ATSB’s roles and responsibilities within the Department. This should include:</p> <ol style="list-style-type: none"> a. the Executive Director, with the agreement of the Portfolio Secretary, appointing an expert peer review panel to review each draft and final investigation report and advise the Executive Director before the reports are issued. The TSI Act could subsequently be amended to provide for this if necessary; b. administrative arrangements changing so that the position of Executive Director is filled for a fixed term, thereby reinforcing the autonomy and impartiality of that office in relation to accident and incident investigations; and c. the memorandum setting out the Portfolio Secretary’s expectations of the Executive Director being replaced with a new memorandum taking account of the matters set out above. 	<p>Not applicable. ATSB was made independent of Department</p>
<p># 6 – Alternative ATSB governance</p> <p>Although there are good reasons for the ATSB to remain in the Minister’s portfolio, consideration should be given to changing the Executive Director’s statutory role and responsibilities and improving the status of the ATSB by establishing an Australian Transport Safety Commission, based on the International Air Services Commission model. The Commission should have the following attributes:</p> <ol style="list-style-type: none"> a. the Commission should consist of three part-time commissioners with broad safety related experience, not all in the aviation field; b. the Executive Director should be appointed by the Portfolio Secretary, after consultation with the commissioners, for a term of 3 years; c. the Commission should be responsible for approving all draft and final investigation reports, but with power to delegate approval of less significant reports to one commissioner; d. the current powers of the Executive Director in the TSI Act should reside in the Commission, with the normal power to delegate to appropriate levels within the ATSB; and e. staff of the Commission, including the Executive Director, should be provided by the Department. 	<p>Complete – 2009</p>

Miller Review 2007 – Recommendations	Agency response
<p># 7 – Information sharing in the interests of safety</p> <p>The sharing of information between the Executive Director and CASA, where it is appropriate to do so in the interests of aviation safety, should be facilitated by:</p> <ol style="list-style-type: none"> a. recasting the definition of the term ‘restricted information’ in the TSI Act to limit its scope to the types of information referred to in Annex 13. As presently drafted the term is expressed in significantly broader terms than is appropriate in the interests of aviation safety because it results in information that should be available to CASA to take protective action (but not criminal or civil proceedings against individuals who provided information compulsorily). As defined the term ‘restricted information’ is also significantly broader than the Annex 13 standard (5.12) provides; b. requiring the Executive Director to disclose restricted information to CASA where the Executive Director has reason to believe that there is a serious and imminent risk to air safety and the information is evidence of that risk. TSI Act section 61 should be amended accordingly; c. entitling CASA, where it receives evidence from the Executive Director, to use the information as evidence to take protective action where there is a serious and imminent risk to air safety, but not for any other purpose. The CA Act should be amended accordingly; and d. providing that, in cases where restricted information is disclosed to CASA to take protective action that requires CASA to present evidence to a court, the court should limit publication of that information to the parties and their representatives. 	<p>Complete – Provisions outlined in MOU and in June 2013 by release of joint ATSB/CASA safety information policy statement.</p>
<p># 8 – Inadmissibility of compelled evidence</p> <p>Evidence not publicly available, obtained by the Executive Director compulsorily under section 32 of the TSI Act, should continue to not be admissible against the individual providing the information in any civil or criminal proceedings but should otherwise be available in accordance with other recommendations in this Report.</p>	<p>Complete – s27 TSI Act</p>

Miller Review 2007 – Recommendations	Agency response
<p># 9 – Court access to information</p> <p>The TSI Act should be amended to make it clear that:</p> <ol style="list-style-type: none"> section 7(3)(b) does not inhibit the Executive Director from sharing ‘restricted information’ with the Department and CASA, in the interests of safety; the court is entitled to consider whether restricted information should not be disclosed on the basis that it is likely to interfere with an active investigation, rather than the Executive Director being required to give the certificate provided for in section 60(4)(c)(i) before the court can consider the matter. 	<p>Complete – See #7 above</p>
<p># 10 – Section 32 Notices</p> <ol style="list-style-type: none"> Except in exceptional circumstances or when requested by CASA, the Executive Director should request information required from CASA for an investigation and expect CASA’s full co-operation in identifying what is required and providing the information in a timely manner without the need for a Section 32 Notice. CASA should co-operate fully in identifying what is required and providing the information in a timely manner where the ATSB advises CASA that it requires information from CASA in the course of an investigation into an aircraft accident or incident. Where a Section 32 Notice is to be issued it should, except in exceptional circumstances, only be issued after discussion between the Executive Director and the Director of Aviation Safety. 	<p>Completed through ATSB/ CASA MOU</p>
<p># 11 – Building inter-agency understanding</p> <p>The ATSB and CASA should:</p> <ol style="list-style-type: none"> hold regular seminars involving ATSB and CASA staff at the operational level to consider agreed aviation safety issues, including the presentation of research outcomes; exchange personnel with the main objective being that officers from both agencies obtain the benefit of the training and experience the other agency can offer; and co-operation with joint research initiatives on matters relating to aviation safety. 	<p>a) Joint Agency Safety Analysis Coordination Group’ (JASACG) was established in June 2011 and meets quarterly</p> <p>b) Not progressed – but staff able to attend training from either organisation</p> <p>c) Complete - see a)</p>

Miller Review 2007 – Recommendations	Agency response	
# 12 – ATSB/CASA executive meetings	The ATSB and CASA should institute quarterly meetings at Executive level, with a positive agenda. Although the meetings should be strategic and forward-looking, they should also deal with emerging issues between the two agencies.	Complete – biannual Executive meetings held
# 13 – ATSB Investigations and Reports	<ul style="list-style-type: none"> a. During an investigation, where CASA has expertise that might be brought to bear on the likely causes of an accident or incident, the ATSB should utilise that expertise as its investigation progresses, whether by including CASA experts on the investigation team or by regular inter-agency consultations. b. Before including safety recommendations in a draft report directed to regulatory changes CASA should make, the ATSB should discuss the proposed recommendations with CASA and take account of CASA’s views, in order to ensure that the ATSB has taken account of all relevant issues that may impact on the relevance and practicality of its proposed recommendation. c. Where CASA or any other interested party provides a substantive response to a draft report, the final report should contain a balanced explanation of substantive information or comments provided and the facts supporting them and should set out the Executive Director’s reasons for accepting or rejecting the views expressed. d. ATSB reports should speak for themselves. The ATSB should not continue the practice of including press releases in its reports and should give careful consideration to not issue substantive press releases on its reports. e. Where the ATSB proposes to issue a substantive press release on an investigation report that refers to another portfolio agency it should provide a copy of the draft press release to the Department and the relevant agency in advance for comment. 	<ul style="list-style-type: none"> a) Complete b) Complete – the ATSB formally advises CASA of any emerging safety issue relevant to CASA as soon as they are identified. ATSB draft reports do not contain draft recommendations c) Complete – the ATSB aims to reflect the comments on the draft report in the final report regardless of whether a comment is accepted or not. d) Complete – media releases are not included in final reports. e) Complete – advance copies of media release provided to any organisation or agency that is referred to in a media release.

Miller Review 2007 – Recommendations	Agency response
<p># 14 – CASA’s co-operation with ATSB investigation</p> <p>CASA should develop an internal system to ensure that it appropriately monitors and co-operates with ATSB investigations relevant to its regulatory functions and adequately resources those responsible for the system. If this is done there is no need for the Minister to issue a direction to CASA in that regard, but the opportunity exists to do so if required.</p>	<p>Complete – ATSB/CASA MoU covers CASA approach.</p>
<p># 15 – Monitoring ATSB safety recommendations</p> <p>a. Responsibility for registering, monitoring and reporting on progress with ATSB aviation safety recommendations should be assigned to another Division in the Department.</p> <p>b. The Portfolio Secretary, or the appropriate Deputy Secretary, should convene a bi-annual meeting of the Executive Director of ATSB, the CEO/Deputy CEO of CASA and the CEO of AMSA to:</p> <ul style="list-style-type: none"> i. receive reports on progress with all active safety recommendations; ii. note the reasons for closure of recommendations, including those found by the appropriate regulatory agency to be impractical or unfeasible; iii. share, to the extent desirable, information on current investigations and, perhaps, the safety research programs of CASA, AMSA and ATSB; and iv. report to the Minister on the ‘state’ of ATSB safety recommendations so that he can form a view on the degree to which the regulatory agencies are pursuing implementation of safety recommendations and the degree to which ATSB is contributing to the improvement of transport safety. 	<p>Complete –</p> <p>(a) responsibility rests with ATSB and agencies concerned.</p> <p>(b) Portfolio Secretary meets with portfolio executives.</p>

Miller Review 2007 – Recommendations	Agency response
<p># 16 – Coronial inquests</p> <ul style="list-style-type: none"> a. Recognising that it is the Commonwealth, rather than the ATSB, that is entitled to seek leave to intervene in coronial inquests, decisions to retain counsel to appear for the Commonwealth in coronial enquiries should be the exception rather than the rule. The decision to do so should be made by a senior departmental officer, taking account of the views of the Executive Director and the Department’s Legal Counsel. b. Before CASA decides to instruct counsel to appear for it at a coronial inquest CASA should be required to inform the Portfolio Secretary. The Director of Aviation Safety should take account of the Portfolio Secretary’s views in making the decision to seek leave to intervene or not. c. CASA should regard itself as obliged to inform ATSB of any view it has, or evidence it proposes to present, suggesting that the ATSB may have overlooked relevant evidence or come to an incorrect expert opinion, prior to presenting the evidence or making the relevant submission to the coroner. 	<p>Complete – CASA has acted in accordance with this recommendation.</p>

Miller Review 2007 — Recommendations	Agency response
<p># 17 — MOU</p> <p>The agencies should negotiate a new MOU and include matters such as:</p> <ul style="list-style-type: none"> a. a means of encouraging more day-to-day interaction between the agencies when serious accidents and incidents occur; b. a review as to whether the current time periods for CASA responses to ATSB reports and safety recommendations should be more flexible, taking account of the need for timely investigation outcomes; c. ways of enabling CASA personnel to obtain greater value from participation in ATSB investigations; d. a mechanism for developing common safety messages in cases where the agencies have come to different expert views on the causes of the accident or incident; e. provision for regular seminars involving the ATSB and CASA staff at the operational level to consider agreed aviation safety issues, including the presentation of research outcomes; f. exchanges of personnel between the ATSB and CASA with the main objective being that officers from both agencies obtain the benefit of the training and experience the other agency can offer; g. improved co-ordination of research initiatives and education programs on matters relating to aviation safety; h. the information that CASA can expect to have disclosed to it the ATSB's confidential voluntary reporting scheme (REPCON); i. guidance on the circumstances in which the Executive Director might be expected to provide information to CASA under the TSI Act and a mechanism for that to occur; j. reviews of information holdings of both agencies to see whether greater sharing of data would be beneficial and feasible; k. a review of the principles applied by the ATSB in seeking information from CASA (including a reduction in the number of requests for information under section 32 of the TSI Act); l. discussion of legislative proposals in areas of interest to both agencies; and m. provision for annual reviews of the MOU. 	<p>Complete — current MOU remains in place pending outcomes from the ASRR.</p>
<p># 18 — CASA protocols</p> <p>CASA should develop clear internal protocols setting out the mechanisms for active co-operation with the ATSB, including clear lines of responsibility. CASA should allocate the necessary resources to ensuring that it co-operates fully with the ATSB, provides timely and appropriate feedback to ATSB draft investigation reports and safety recommendations.</p>	<p>Complete — CASA has developed clear internal protocols.</p>

Miller Review 2007 – Recommendations		Agency response
# 19 – Inter-agency meetings	<p>The ATSB and CASA should institute quarterly meetings at the Executive level, with a positive agenda including matters such as:</p> <ul style="list-style-type: none"> a. presentations on each agency’s strategic direction and business/operational plans; b. approval of operating protocols; c. review of ATSB’s research program; d. review of CASA’s progress in implementing or otherwise dealing with ATSB safety recommendations; e. international visitor and staff exchange programmes; and f. review of joint and individual research projects. <p>Although the meetings should be strategic and forward-looking, they should also deal with emerging issues between the two agencies.</p>	Complete – Executive meetings held ‘regularly’
Hawke Report 2007 – Recommendations		Agency response
#1	The Minister and CASA commit to achieving completion of the development of the priority Regulatory Parts by submitting all drafting instructions to the Office of Legislative Drafting and Publishing (OLDP) by the end of 2008 and full implementation of these Parts by 2011.	Ongoing with more realistic timetable established
#2	CASA continue its practice of an initial one-year post implementation-review for each Civil Aviation Safety Regulation (CASR) Part or on an as-needs basis after the Regulatory Reform Programme has been completed.	Ongoing
#3	<p>OLDP finalise the recruitment of two additional senior drafters for a two-year period to focus solely on drafting of CASA regulations to assist with the completion of the CASA regulatory reform programme. The Department and</p> <p>CASA to settle remaining arrangements for these positions, and OLDP to consider other options to increase its productivity and reduce legal drafting timeframes.</p>	Complete – CASA/Office of Parliamentary Council (OPC) Taskforce established March 2010
#4	The Government’s aviation agencies review and enhance existing consultation arrangements and implement new procedures where warranted to ensure transparency and adequate industry awareness of new initiatives.	Complete
#5	The Minister note the revised 10-step consultation process now implemented by CASA.	Complete – noted by Minister
#6	CASA monitor the regulation development process using joint CASA/ industry project teams and continue to review the role of the Standards Consultative Committee (SCC) in this process, in order to achieve further effectiveness and efficiency gains.	Complete – agreed and ongoing

Hawke Report 2007 – Recommendations		Agency response
#7	Consistent with its general obligations in relation to regulatory changes, CASA needs to ensure that airspace procedural changes are subject to risk and cost benefit assessments and that accessible progress reports are provided to industry. In cooperation with the other Government aviation agencies, CASA needs to lead, facilitate and ensure that industry training and education programmes are implemented for all airspace reform initiatives.	Complete – agreed and ongoing
#8	CASA review the industry submissions on the post implementation-review of NAS 2c as part of its review of Common Traffic Advisory Frequency-Radio, subject to the agreement of those that had originally lodged the submissions.	Complete
#9	Airservices Australia and CASA complete a full review of the Unicom trial and brief the Minister early in 2008 on the results of the trial and include an options paper for progressing the Unicom initiative.	Completed – 2009
#10	The Minister for Infrastructure, Transport, Regional Development and Local Government raise concerns about air traffic and airspace management at Williamtown and other military aerodromes with the Minister for Defence, to ensure that safe and reasonable practices are implemented to protect civilian aircraft and fare paying passengers in accordance with existing safety principles.	Complete – with subsequent increase in air traffic services at airport.
#11	The Government work across its aviation, education, industry, immigration and workplace relations portfolios to consider further initiatives to assist the aviation industry address skills shortages.	Complete – agreed. Government outlined initiatives in Aviation White Paper.
#12	CASA urgently consider additional and alternative approaches to accepting foreign qualifications for maintenance licence issue in Australia.	Complete – CASA has progressed as part of maintenance reforms.
#13	CASA commit to the adherence to the principles of CEO Directive 1/2007 and to review its requirements on a regular basis	Review process is ongoing
#14	CASA provide regular updates to the Minister and industry on the progress of its Australian Airworthiness Directives review process.	Complete – agreed and CASA has provided ongoing reports to Minister and industry at SCC.

Hawke Report 2007 – Recommendations		Agency response
#15	The Taskforce agreed that Australia should continue to benchmark and harmonise with other leading aviation countries in relation to new technologies, subject to risk and cost-benefit considerations. Consideration should also be given to the ability of operators to absorb the costs associated with these technologies and what initiatives might be available to minimise cost impacts.	Agreed and ongoing.
Senate Inquiry into CASA administration 2008 – Recommendations		Agency response
# 1	The committee recommends the Australian Government strengthen CASA's governance framework and administrative capability by: <ul style="list-style-type: none"> – introducing a small board of up to five members to provide enhanced oversight and strategic direction for CASA – undertaking a review of CASA's funding arrangements to ensure CASA is equipped to deal with new regulatory challenges. 	Complete – 2009
# 2	The committee recommends, in accordance with the findings of the Hawke Taskforce, that CASA's Regulatory Reform Program be brought to a conclusion as quickly as possible to provide certainty to industry and to ensure CASA and industry are ready to address future safety challenges	Agreed but some regulatory parts delayed in response to industry requests
# 3	The committee recommends that the Australian National Audit Office audit CASA's implementation and administration of its Safety Management Systems approach.	Complete – 2010

Appendix A5

Scope of TSB independent objective peer review of ATSB

Proposed Objectives

To provide the ATSB with an independent objective peer review of its investigation process/ methodology, and of the application of its methodology to at least two selected occurrences (including the Norfolk Island occurrence).

To identify best practices from both organizations that would be shared to improve existing processes and methodologies.

Proposed Scope of Work

1 – Exclusions

The TSB will not re-investigate the Norfolk Island occurrence and will not provide an ‘investigation report’ specific to this occurrence.

This review will be internal to the TSB and ATSB only. The TSB will not communicate with, or interview, any persons external to the ATSB as part of this review.

2 – Review of the Investigation Methodology

The TSB will collect information and conduct a comparative analysis of the ATSB and TSB investigation methodologies, including the approach for the risk assessment of safety issues. The analysis will also include a comparison the two methodologies to the relevant provisions of Annex 13 to the Chicago Convention. This benchmarking analysis will identify the strengths (best practices) and the weaknesses (gaps) of each methodology.

3 – Application of the Investigation Methodology

The TSB will review the Norfolk Island investigation and at least one other ATSB investigation to assess whether the investigation methodology was properly applied. The review team will ask questions such as: Was the process followed? Were the proper tools, systems and resources in place and effectively used? Was the investigation conducted in a thorough manner? Was all significant information adequately considered and analysed? Were organizational and human factors adequately considered? Would we have done things differently? This review will identify any best practices and any issues or gaps in the application of the existing methodology.

4 – Management and Governance of the Investigation

The TSB will review the Norfolk Island investigation and at least one other ATSB investigation to assess the ATSB’s approach to the management and governance of the investigation process. The review team will ask questions such as: How was the investigation managed? How were key decisions made and by whom? Was there adequate documentation and guidance to support decision-making? Were the key decisions based upon solid factual information and robust analysis? Would we have done things differently? Are there any legislative impediments to the conduct of ATSB investigations? This review will identify any best practices and any issues or gaps in the governance and management of the investigations.

5 – Investigation Report Process

The TSB will review the ATSB investigation report process and how it was applied in the case of the Norfolk Island investigation and at least one other ATSB investigation to assess its effectiveness at achieving the desired outcome. The review team will ask questions such as: Was the process followed? Was the report review conducted in a thorough manner and was it effective? Is the analysis contained in the report complete and thorough? Are the findings and recommendations well supported by facts and robust analysis? Were the comments received from directly involved parties adequately considered and was the disposition of these comments fully communicated? Would we have done things differently? This review will identify any best practices and any issues or gaps in the investigation report review process.

6 – External Communications

The TSB will review the ATSB approach to external communications (i.e. vis-à-vis the media, public, stakeholders and politicians) throughout the investigation and report production process, upon the release of the final report, and in the weeks following the report publication to assess its effectiveness at achieving the desired outcome. The review team will ask questions such as: What was the methodology and was the process followed? Was information provided in a proactive manner? Were messages crafted with the anticipated stakeholder reaction in mind? After looking at the business process, the TSB will look into the communications issues specific to Norfolk Island and its aftermath. The review team will ask further questions such as: Was the reaction appropriate in response to the television show Four Corners? Why was the ATSB unable to convince the Senate Committee and possibly the public of the validity of its processes? Would we have done things differently? This review will identify any best practices and any issues or gaps in the external communications process.

7 – Deliverables

The TSB will prepare and submit a detailed written report to the ATSB summarizing the results of its review, its findings and its recommendations. The report will contain the following sections:

- Introduction
- Description of the review process and methodology
- Analysis and findings for each section
- Review of the Investigation Methodology
- Application of the Investigation Methodology
- Management and Governance of the Investigation
- Investigation Report Process
- External Communications
- Conclusion and recommendations

The TSB will provide a draft report to the ATSB for review and comments. The ATSB comments will be considered by the TSB and the report will be finalized.

8 – Independence

The TSB will carry out the work described in the preceding sections in an independent and objective manner. The TSB will be fully responsible for the conduct of the review and for the analysis of the information collected. The final report will present the independent views of the TSB.

In the interest of transparency and accountability, the TSB will make its final report public (i.e. post it on its web site). Advanced notification of the release and advanced copies of the report will be provided to the ATSB. Once the report is public the ATSB will be able to reference the report and disseminate it as it sees fit without any restrictions.

The ATSB will provide full cooperation and access to the necessary files, manuals, policies, procedures, and personnel.

Appendix A6

Sample of redrafting of CASR Part 42

Having received a number of submissions arguing for the reintroduction of a three-tier regulatory structure, the Panel undertook a trial with representatives of OPC and CASA, to ascertain the practicality of taking a revised approach. The trial used an excerpt from CASR Part 42 as an example. Part 42 was selected because it is a long and detailed Part that, on the surface, provides significant potential for the use of a third tier document.

The Panel was appreciative of the cooperation of OPC and CASA in the trial. While only a limited effort to test the concept, the trial exhibited the potential of the approach to significantly reduce the volume of Regulations and offence provisions through the use of third tier documents.

The portion of Part 42 utilised for the trial include some 70 pages of regulations containing 213 sub-paragraphs (out of a total of 193 pages in the complete Part 42). The outcome was a reduction in the length of the portion utilised to around 29 pages of regulations containing 98 sub-paragraphs — less than half the volume of the existing regulations.

To illustrate the reduction, the revised Division 42.C.3 is set out below. The original of this Division, which is some 13 pages in length, is available in full here: http://www.comlaw.gov.au/Details/F2014C00612/Html/Volume_1#_Toc386707121

Division 42.C.3—Continuing airworthiness records—all aircraft

Subdivision 42.C.3.1—Continuing airworthiness records system

42.170 Continuing airworthiness records system

- (1) The person responsible for continuing airworthiness for an aircraft must, at all times, have a continuing airworthiness records system for the aircraft that complies with the Part 42 Manual of Standards.

Penalty: 50 penalty units.

- (2) An offence against this regulation is an offence of strict liability.

42.171 Recording information and updating records

- (1) The person responsible for continuing airworthiness for an aircraft must record information in relation to the aircraft in accordance with the Part 42 Manual of Standards.

Penalty: 50 penalty units.

- (2) The person responsible for continuing airworthiness for an aircraft must update records of information in relation to the aircraft in accordance with the Part 42 Manual of Standards.

Penalty: 50 penalty units.

- (3) An offence against this regulation is an offence of strict liability.

42.172 Keeping substantiating documents

- (1) The person responsible for continuing airworthiness for an aircraft must keep substantiating documents as required by the Part 42 Manual of Standards.

Penalty: 50 penalty units.

Note: For how long records must be retained, see regulation 42.260.

- (2) An offence against this regulation is an offence of strict liability.

Subdivision 42.C.3.4—Flight technical log**42.220 Flight technical log**

- (1) The person responsible for continuing airworthiness for an aircraft must, at all times, have a log for the aircraft that complies with the Part 42 Manual of Standards.

Penalty: 50 penalty units.

- (2) An offence against this regulation is an offence of strict liability.

42.225 Availability of flight technical log

- (1) The person responsible for continuing airworthiness for an aircraft must ensure that the flight technical log for the aircraft is available to a person who is the pilot in command of the aircraft while the person is the pilot in command of the aircraft.

Penalty: 50 penalty units.

- (2) The person must ensure that the flight technical log for the aircraft is available to a person who is carrying out maintenance on the aircraft while the person is carrying out the maintenance.

Penalty: 50 penalty units.

- (3) An offence against subregulation (1) or (2) is an offence of strict liability.

Appendix A7

CASA Enforcement Action Trends

Statistics on CASA enforcement actions over a period from 2006 to 2013 (year ended 30 June) were obtained from CASA annual reports and are shown in Figure A7-1 and A7-2 normalised against the total number of aircraft registered and total hours flown. In addition Figure A7-3 is a comparison between NZ CAA and CASA for the number of prosecutions, warnings and infringement notices normalised against the total number of aircraft registered in the respective countries.

Figure A7-1: CASA enforcement actions normalised to number of aircraft registered

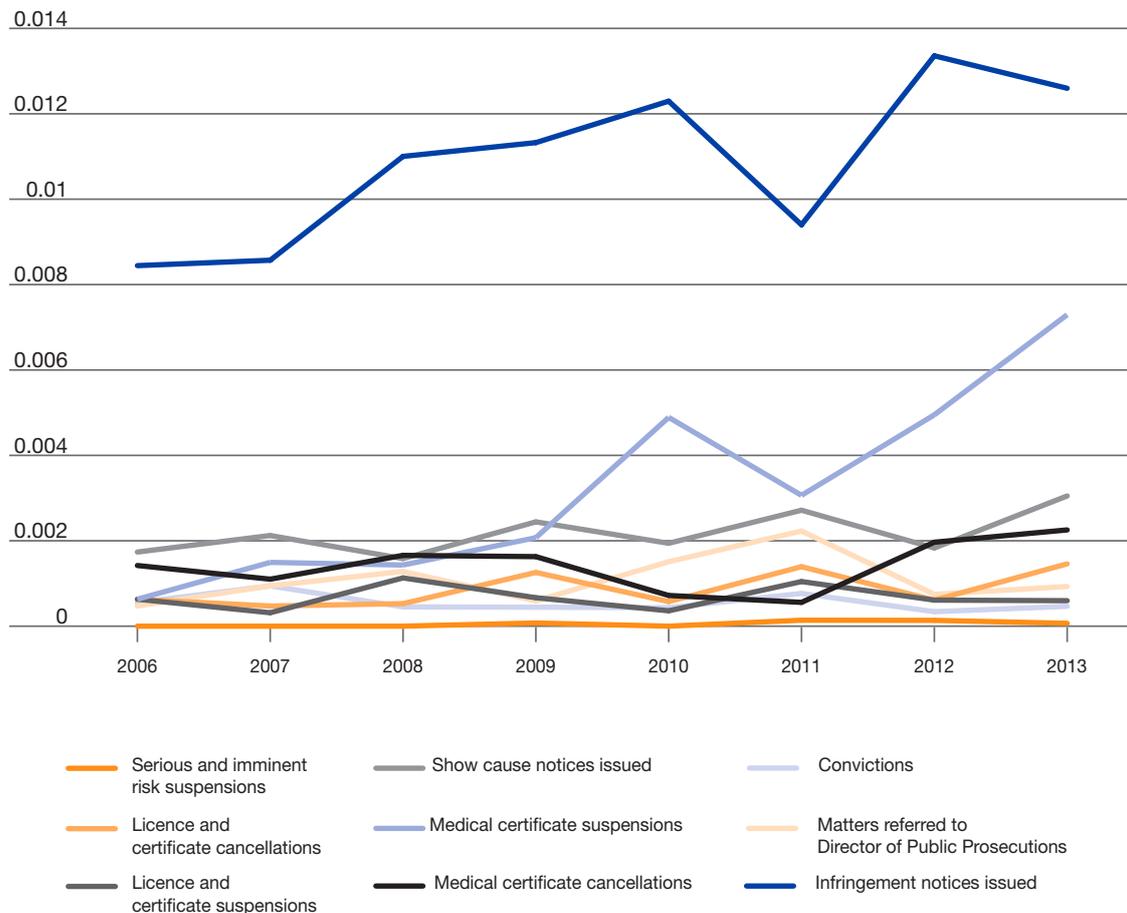


Figure A7-2: CASA enforcement actions normalised against total hours flown

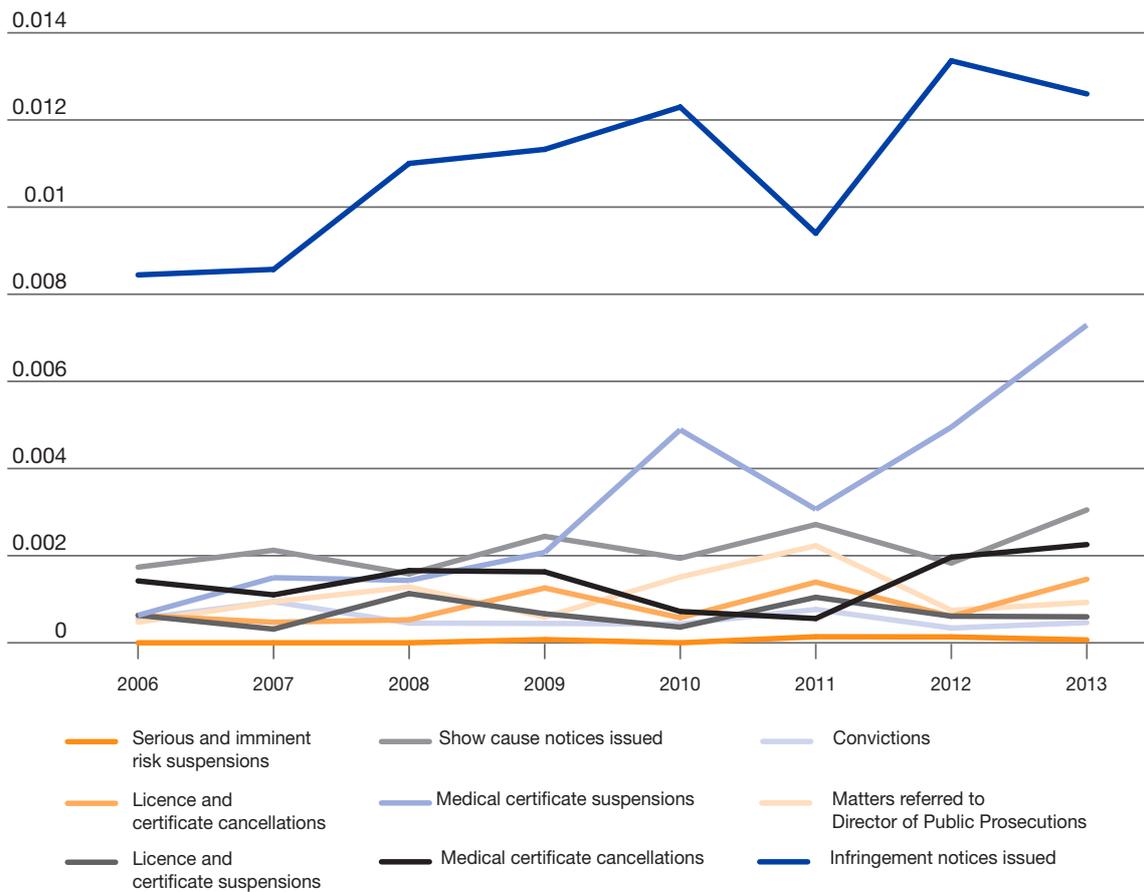
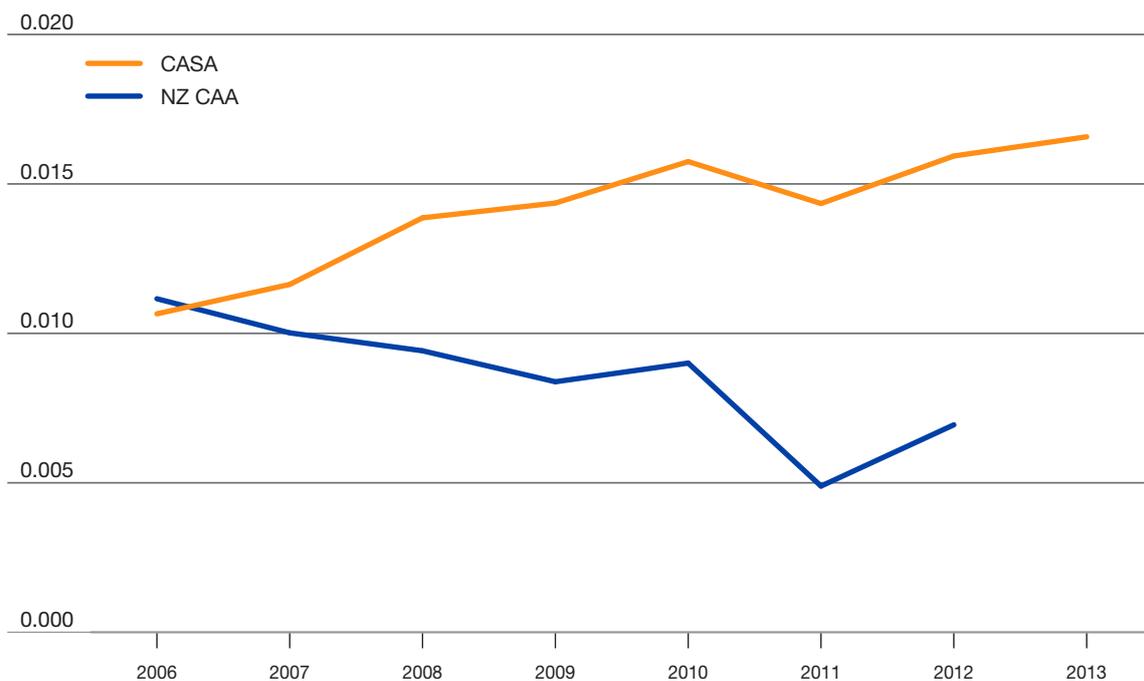


Figure A7-3: Prosecutions, warnings and infringement notices normalised against number of aircraft registered



Appendix A8

Definitions of accident/serious incident/incident

Annex 13 to the Chicago Convention defines the following terms thusly:

- Accidents — An occurrence associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down, in which:
 - a. a person is fatally or seriously injured as a result of:
 - being in the aircraft, or
 - direct contact with any part of the aircraft, including parts which have become detached from the aircraft, or
 - direct exposure to jet blast, *except* when the injuries are from natural causes, self-inflicted or inflicted by other persons, or when the injuries are to stowaways hiding outside the areas normally available to the passengers and crew; or
 - b. the aircraft sustains damage or structural failure which:
 - adversely affects the structural strength, performance or flight characteristics of the aircraft, and
 - would normally require major repair or replacement of the affected component, *except* for engine failure or damage, when the damage is limited to a single engine (including its cowlings or accessories), to propellers, wing tips, antennas, probes, vanes, tires, brakes, wheels, fairings, panels, landing gear doors, windscreens, the aircraft skin (such as small dents or puncture holes), or for minor damages to main rotor blades, tail rotor blades, landing gear, and those resulting from hail or bird strike (including holes in the radome); or
 - c. the aircraft is missing or is completely inaccessible.
- Incidents — An occurrence, other than an accident, associated with the operation of an aircraft that affects or could affect the safety of operation.
- Serious Incidents — An incident involving circumstances indicating that there was a high probability of an accident and associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked, or in the case of an unmanned aircraft, takes place between the time the aircraft is ready to move with the purpose of flight until such time as it comes to rest at the end of the flight and the primary propulsion system is shut down.

Further examples of a serious incident can be found at Attachment C to Annex 13.

Appendix A9

Accident analysis and comparison: General Aviation and RA-Aus

(data and analysis: ATSB)

To gain an understanding of the differing accident rates between general aviation (GA), both commercial and private, and recreational aviation, the Review Panel sought the assistance of the ATSB. The ATSB undertook a comparison of accident rates (both fatal and non-fatal accidents) between commercial GA and private GA and recreational aviation:

- Commercial GA includes VH-registered flying training and aerial work (agriculture, mustering, fire control, aeromedical, survey and photography), and includes only aeroplanes and helicopters (excludes balloons)
- Private GA includes VH-registered private, business, and sport operations, and includes only aeroplanes and helicopters (excludes gliders and balloons)
- Recreational aviation includes only Recreational Aviation Australia (RA-Aus) registered aircraft. Only aeroplanes and ultralights were included (excludes weight-shifting aircraft and gyrocopters).

Accident data was obtained from the ATSB occurrence database, which is populated by reporting from industry. The ATSB does not have reliable accident data for recreational aircraft before 2008, so a comparison was made for the period 2008-2013. Incidents were not included because incident reporting by both GA and recreational aviation is limited, highly variable and unreliable.

Accidents and fatal accidents are shown as a count per year, and as a rate per million flying hours per year:

- Flying hours for GA were provided by the Bureau of Infrastructure, Transport and Regional Economics (BITRE) for 2008 to 2012
- Flying hours for GA 2012 is preliminary data
- Flying hours for GA 2013 was estimated based on 12-year trends
- Flying hours for RA-Aus aircraft was supplied by RA-Aus for 2008 to 2012
- Flying hours for RA-Aus aircraft for 2013 was estimated using 2012 numbers.

1. Number of accidents

Across the six years 2008 to 2013, there were twice the number of fatal accidents in private GA compared to RA-Aus recreational aviation, and about 1.5 times the fatal accidents in commercial GA compared to RA-Aus.

For all accidents, GA had only slightly more accidents than RA-Aus aircraft, with private GA having 1.3 times, and commercial GA having 1.1 times more accidents.

Table A9-1 Total accidents 2008–13 for General Aviation and RA-Aus

	Commercial GA	Private GA	RA-Aus
Fatal accidents	37	56	23
All accidents	289	328	259

Figure A9-1 Fatal accidents 2008–13 for GA and RA-Aus

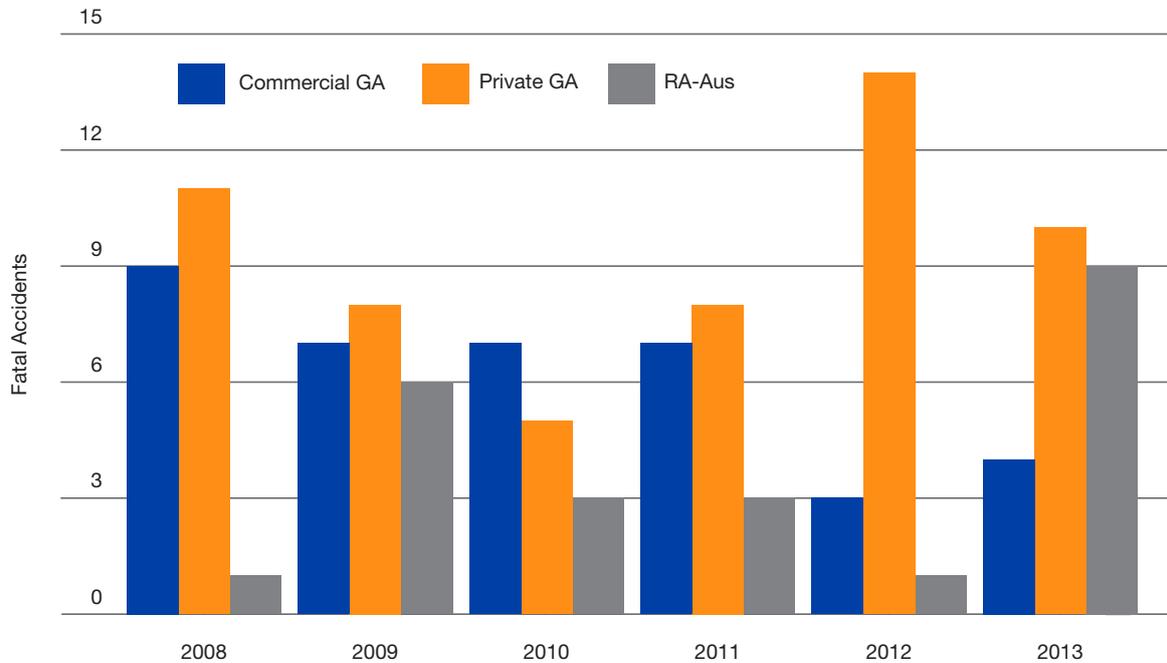
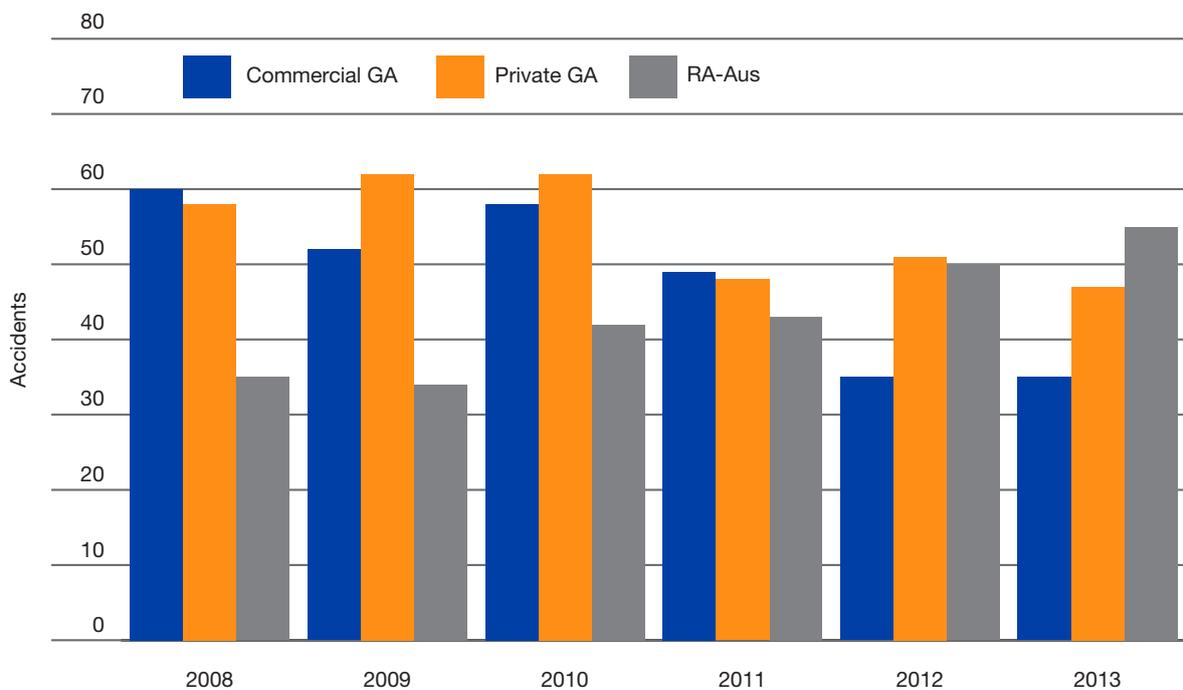


Figure A9-2 Accidents 2008–13 for GA and RA-Aus



2. Accident rate per million flying hours

For the six-year period 2008–13, the fatal accident rate (per million flight hours) was similar between RA-Aus (22.6) and private GA (24.6), which were both about three times higher than commercial GA (7.0).

The total accident rate for RA-Aus (254.3) was 1.7 times higher than for private GA (144.3) and 4.7 times higher than commercial GA (54.4).

Figure A9-3 Fatal accidents per million flying hours 2008-2013 for GA and RA-Aus

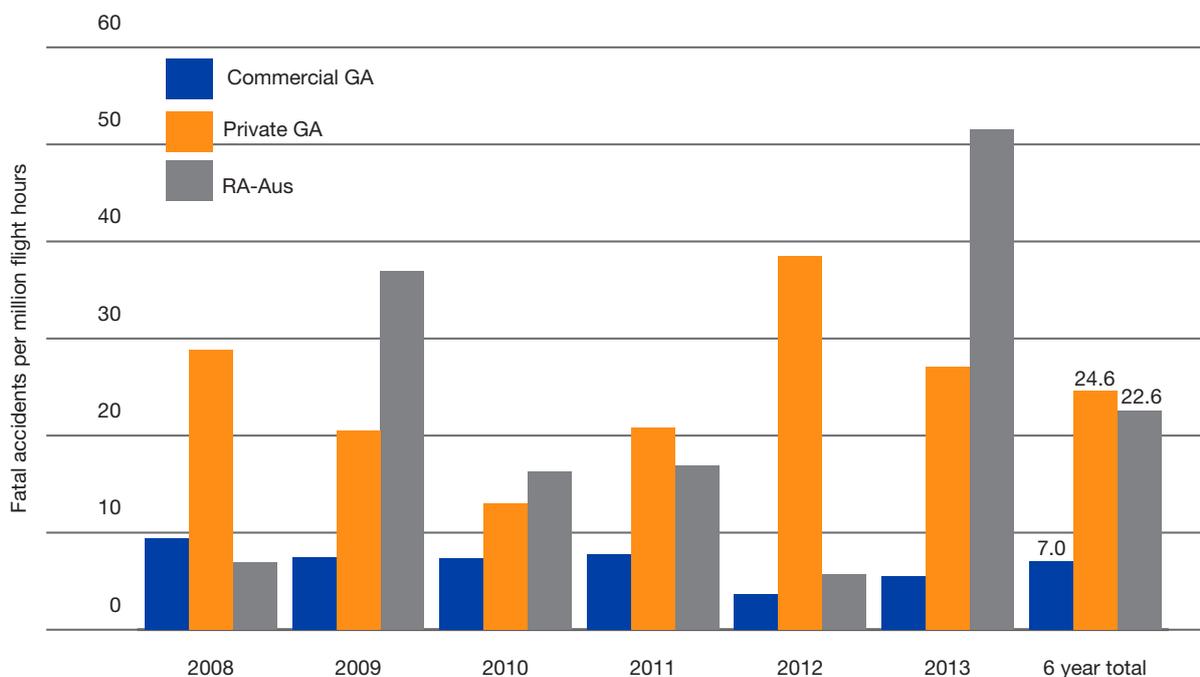
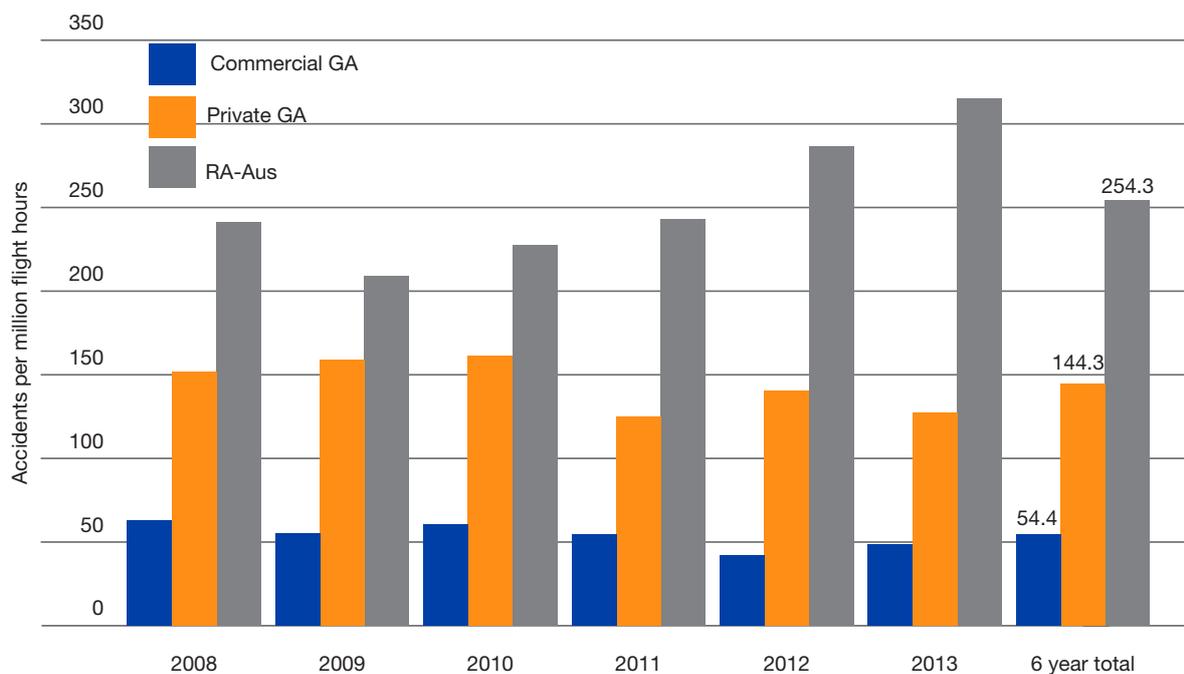


Figure A9-4 Accidents per million flying hours 2008-2013 for GA and RA-Aus



Appendix A10

Examples of complex US and NZ regulations

FAR 21.50 (US)

§21.50 Instructions for continued airworthiness and manufacturers' maintenance manuals having airworthiness limitations sections.

- a. The holder of a type certificate for a rotorcraft for which a Rotorcraft Maintenance Manual containing an 'Airworthiness Limitations' section has been issued under §27.1529 (a)(2) or §29.1529 (a)(2) of this chapter, and who obtains approval of changes to any replacement time, inspection interval, or related procedure in that section of the manual, must make those changes available upon request to any operator of the same type of rotorcraft.
- b. The holder of a design approval, including either the type certificate or supplemental type certificate for an aircraft, aircraft engine, or propeller for which application was made after January 28, 1981, must furnish at least one set of complete Instructions for Continued Airworthiness to the owner of each type aircraft, aircraft engine, or propeller upon its delivery, or upon issuance of the first standard airworthiness certificate for the affected aircraft, whichever occurs later. The Instructions must be prepared in accordance with §§23.1529, 25.1529, 25.1729, 27.1529, 29.1529, 31.82, 33.4, 35.4, or part 26 of this subchapter, or as specified in the applicable airworthiness criteria for special classes of aircraft defined in §21.17(b), as applicable. If the holder of a design approval chooses to designate parts as commercial, it must include in the Instructions for Continued Airworthiness a list of commercial parts submitted in accordance with the provisions of paragraph (c) of this section. Thereafter, the holder of a design approval must make those instructions available to any other person required by this chapter to comply with any of the terms of those instructions. In addition, changes to the Instructions for Continued Airworthiness shall be made available to any person required by this chapter to comply with any of those instructions.
- c. To designate commercial parts, the holder of a design approval, in a manner acceptable to the FAA, must submit:
 1. A Commercial Parts List;
 2. Data for each part on the List showing that:
 - i. The failure of the commercial part, as installed in the product, would not degrade the level of safety of the product; and
 - ii. The part is produced only under the commercial part manufacturer's specification and marked only with the commercial part manufacturer's markings; and
 3. Any other data necessary for the FAA to approve the List.

CAR 21.191 (NZ)**21.191 Standard and restricted category requirements**

An applicant for a standard category, restricted category, or provisional category airworthiness certificate for an aircraft must provide the Director with evidence that—

1. the aircraft, its engines, and propellers if applicable conform to applicable current—
 - i. type certificates issued in accordance with Subpart B; or
 - ii. type acceptance certificates issued in accordance with Subpart B; or
 - iii. provisional type certificates issued in accordance with Subpart F; and
2. every modification and repair to the aircraft conforms to a design change approved in accordance with acceptable technical data under Subpart N for the aircraft type; and
3. every airworthiness directive that is applicable to the aircraft has been complied with in accordance with Part 39; and
4. the aircraft is issued with —
 - i. the appropriate flight manual; and
 - ii. the appropriate logbooks, repair and alteration forms and documents; and
5. the aircraft is a New Zealand registered aircraft and, in accordance with Part 47, displays an identification plate and 1 of the following forms of marking:
 - i. the nationality and registration marks:
 - ii. Police marks:
 - iii. an approved identifiable paint scheme and markings; and
6. the aircraft, its engines, propellers, and propeller hubs and blades are identified by the means specified in Subpart Q; and
7. the aircraft conforms with every applicable additional airworthiness requirement prescribed in Part 26; and
8. the aircraft has, within 60 days before the application for the airworthiness certificate, undergone —
 - i. a 100-hour, or equivalent, inspection in accordance with the manufacturer's maintenance schedule; or
 - ii. a scheduled inspection in accordance with an applicable maintenance programme of an air operator certificated in accordance with Part 119 or an air transport operator certificated by an ICAO Contracting State; or
 - iii. an equivalent inspection acceptable to the Director; and
9. the aircraft has been weighed within the last 5 years prior to the application under rule 21.175; and
10. the aircraft is in a condition for safe operation; and
11. the aircraft and each modification and repair to the aircraft complies with the applicable aircraft noise and engine emission standards specified in Appendix C.

