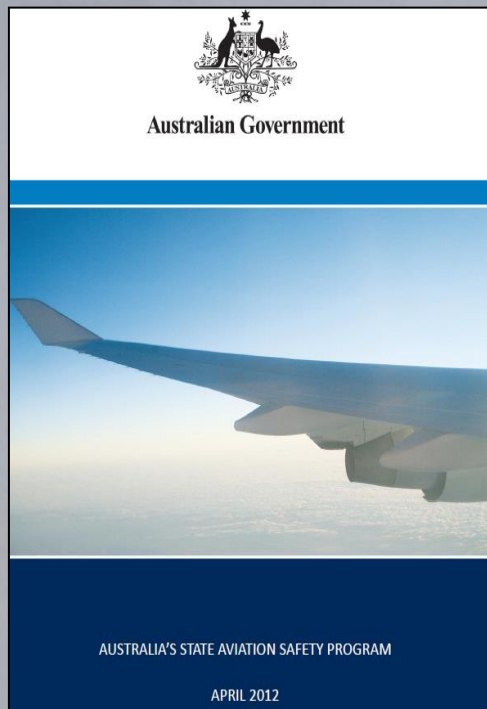


Australia's State Aviation Safety Program

APRAST 6, Bangkok, April 2015

John Thynne, CSC, Manager Safety Systems Office



safe skies for all

SSP

- State Safety Programme (ICAO)
- State Safety Program (Various states...)
- State Aviation Safety Program (Australia)
 - Department of Infrastructure and Regional Development has overall responsibility for managing Australia's SSP
 - Other players include
 - Australian Transport Safety Bureau (Accident Investigation Agency),
 - Airservices Australia (ANSP and ARFF Provider), and
 - Civil Aviation Safety Authority (Regulator)

SSP requirements

Current:

2014-2016 Global Aviation Safety Plan (GASP)

Annex 19 – Safety Management (1st ed 2013)

Doc 9859 – Safety Management Manual (3rd ed 2013)

Previous:

Annex 1, 6,8,11,13 and 14

Doc 9859 – Safety Management Manual (2nd ed 2009)

2014-2016 Global Aviation Safety Plan (GASP)

The **mid-term** GASP objective is for all States that have not done so, to fully implement the SSP components no later than 2022. Additionally, RASGs should continue to mature with regional monitoring and safety management programmes.

In the **long term**, States will build upon safety management practices within the SSP to develop predictive risk controls necessary to support real-time collaborative decision-making processes that will become integral to future aviation systems. The objectives are sequenced to advance the implementation of SSP and SMS proactive safety management principles as a foundation for the introduction of predictive risk-modelling capabilities necessary to support the aviation systems of the future.

Safety information exchange initiatives at the safety management level include:

- a) **Support of safety management implementation.** ICAO, States and industry support initiatives that propagate programmes to share information regarding proactive safety measures, best practices and lessons learned so as to facilitate and further enhance SSP and SMS implementation;

Safety management Standardization initiatives include:

- a) **Consistent implementation of State safety programmes.**

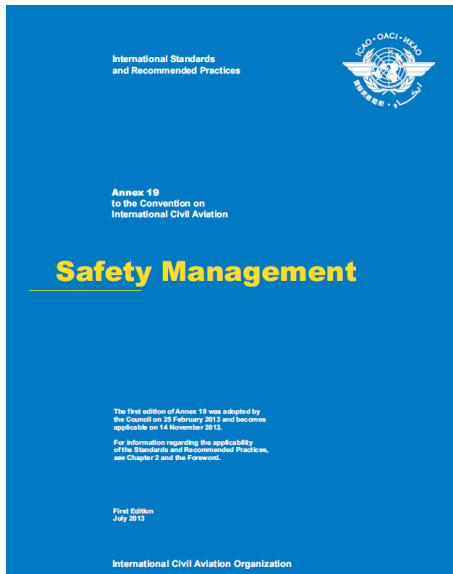
States implement the SSP in accordance with ICAO provisions and related guidance material to achieve acceptable levels of safety performance. This includes the application of risk management principles by establishing indicators and targets to determine acceptable levels of safety performance within their aviation systems;

Safety management collaboration initiatives include:

- a) **Coordination of regional safety management implementation programmes.**

ICAO, States and industry support and promote collaborative initiatives intended to promote implementation of SSP and SMS including the development of safety policies as well as safety risk management, safety assurance and safety promotion activities;

Annex 19 (First Edition 2013)



CHAPTER 3. State safety management responsibilities

- 3.1 State safety programme (SSP)
- 3.2 State safety oversight

CHAPTER 4. Safety management system (SMS)

- 4.1 General
- 4.2 International general aviation — aeroplanes

CHAPTER 5. Safety data collection, analysis and exchange

- 5.1 Safety data collection
- 5.2 Safety data analysis
- 5.3 Safety data protection
- 5.4 Safety information exchange

APPENDIX 1. State safety oversight system

- 1. Primary aviation legislation
- 2. Specific operating regulations
- 3. State system and functions
- 4. Qualified technical personnel
- 5. Technical guidance, tools and provision of safety-critical information
- 6. Licensing, certification, authorization and/or approval obligations
- 7. Surveillance obligations
- 8. Resolution of safety issues

APPENDIX 2. Framework for a safety management system (SMS)

- 1. Safety policy and objectives
- 2. Safety risk management
- 3. Safety assurance
- 4. Safety promotion

ATTACHMENT A. Framework for a State safety programme (SSP)

- 1. State safety policy and objectives
- 2. State safety risk management
- 3. State safety assurance
- 4. State safety promotion

ATTACHMENT B. Legal guidance for the protection of information from safety data collection and processing systems

- 1. Introduction
- 2. General principles
- 3. Principles of protection
- 4. Principles of exception
- 5. Public disclosure
- 6. Responsibility of the custodian of safety information
- 7. Protection of recorded information

Annex 19 *(First Edition 2013) p. 3-1*

3.1 State safety programme (SSP)

3.1.1 Each State shall establish an SSP for the management of safety in the State, in order to achieve an acceptable level of safety performance in civil aviation. The SSP shall include the following components:

- a) State safety policy and objectives;
- b) State safety risk management;
- c) State safety assurance; and
- d) State safety promotion.

Note 1.— The SSP established by the State is commensurate with the size and the complexity of its aviation activities.

Note 2.— A framework for the implementation and maintenance of an SSP is contained in Attachment A, and guidance on a State safety programme is contained in the Safety Management Manual (SMM) (Doc 9859).

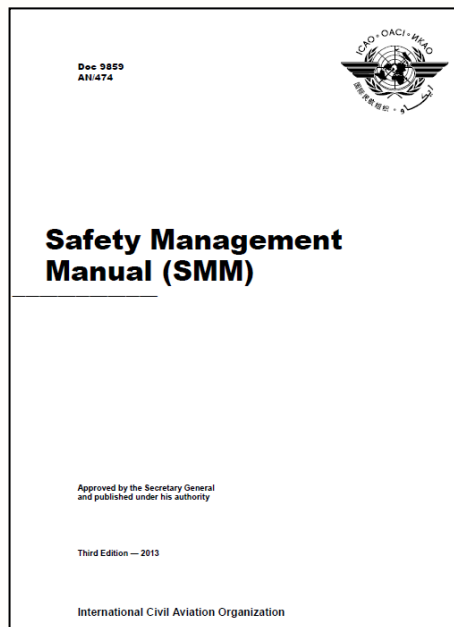
3.1.2 The acceptable level of safety performance to be achieved shall be established by the State.

Note: This was previously identified as ALoS (Acceptable level of Safety)

Note.— Guidance on defining an acceptable level of safety performance is contained in the Safety Management Manual (SMM) (Doc 9859).

Doc 9859 (Third edition 2013)

Chapter 4. State Safety Programme (SSP)



The SSP framework includes the four components and its related eleven elements (1.x).

4.1	Introduction.....
4.2	SSP framework
	SSP Component 1. State safety policy and objectives
	SSP Element 1.1 State safety legislative framework
	SSP Element 1.2 State safety responsibilities and accountabilities
	SSP Element 1.3 Accident and incident investigation
	SSP Element 1.4 Enforcement policy
	SSP Component 2. State safety risk management.....
	SSP Element 2.1 Safety requirements for the service provider's SMS
	SSP Element 2.2 Agreement on the service provider's safety performance
	SSP Component 3. State safety assurance
	SSP Element 3.1 Safety oversight
	SSP Element 3.2 Safety data collection, analysis and exchange
	SSP Element 3.3 Safety-data-driven targeting of oversight of areas of greater concern or need
	SSP Component 4. State safety promotion
	SSP Element 4.1 Internal training, communication and dissemination of safety information.....
	SSP Element 4.2 External training, communication and dissemination of safety information.....
4.3	SSP implementation planning
	4.3.1 General.....
	4.3.2 Regulatory system description.....
	4.3.3 Gap analysis.....
	4.3.4 SSP implementation plan
	4.3.5 Safety indicators
4.4	SSP implementation — Phased approach
	Phase 1
	Phase 2
	Phase 3
	Phase 4

SSP Gap/Assessment tools

- ICAO SSP Gap Analysis Checklist and Implementation Plan [Doc 9859 3rd ed Appendix 7 to Chapter 4]
- SM ICG State Safety Program Assessment Tool
 - http://www.skybrary.aero/index.php/SSP_Assessment_Tool
 - v1.0 October 2014
- ICAO SPACE/iSTARS 2.0 SSP Gap Analysis Application Tool (link to USOAP CMA activities; wef: 1 January 2016)
 - [http://cfapp.icao.int/tools/SMikit/story_content/external_files/SSPGAPAnalysis%20\(2\).pdf](http://cfapp.icao.int/tools/SMikit/story_content/external_files/SSPGAPAnalysis%20(2).pdf)

Australia's State Aviation Safety Program

- January 2011
- April 2012
- Addendum – February 2014

Addendum to Australia's Aviation State Safety Program
February 2014

Introduction

Australia released its first Aviation State Safety Program (SSP) in February 2011 and a second edition in April 2012. These documents set out how aviation safety is managed in Australia, with a focus on safety systems.

Since the release of the second edition of Australia's SSP, more recent aviation safety statistics have become available. This addendum provides supplementary information and is to be read in conjunction with the existing SSP.

Australia's aviation safety performance

This section provides an update of Australia's aviation safety performance with respect to civil aviation operations. It reports the latest statistics on air traffic accidents as collated by the Australian Transport Safety Bureau (ATSB) for the period 2002 to 2011. The figures below extend and replace the figures in the section with the same heading in Chapter 3 of the second edition of Australia's SSP.

The ATSB collects a range of aviation safety information to assess safety performance and trends, and to highlight areas of emerging risk. Along with aviation activity data compiled by Australia's Bureau of Infrastructure, Transport and Regional Economics (BITRE), the ATSB regularly publishes aviation accident rates in Australia.¹

Australia adopts ICAO's definition of an aviation accident, which includes when:

- a person is seriously or fatally injured; or
- an aircraft sustains damage or structural failure (except for engine failure or damage); or
- an aircraft is missing or completely inaccessible;

as a result of the operation of an aircraft from the point of embarkation to disembarkation.

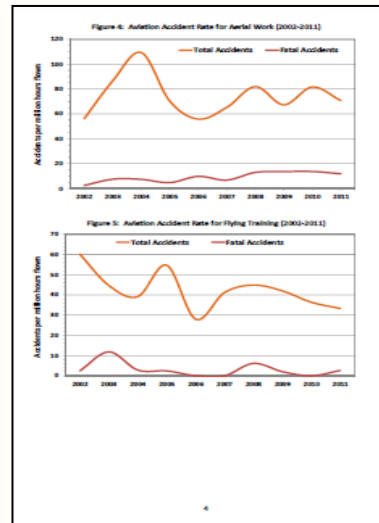
Commercial air transport

Commercial air transport refers to scheduled and non-scheduled commercial operations used for the purposes of transporting passengers and/or cargo for hire or reward. Specifically, this includes:

- high capacity regular public transport or RPT (maximum aircraft capacity exceeding 38 seats or a maximum payload exceeding 4,200 kg);
- low capacity RPT (38 seats or less, or a maximum payload of 4,200 kg or less); and
- non-scheduled charter flights.

Figures 1 to 3 below show the total accident and fatal accident rates per million aircraft departures for commercial air transport operations in Australia from 2002 to 2011. Figure 1 shows that the total number of accidents involving high capacity RPT has remained below 7 per million departures since 2002, with no recorded fatalities during the period. Figure 2 shows that low capacity RPT, the total accident trend has

¹ Australia's State Aviation Safety Program, April 2012
(<http://www.infrastructure.gov.au/aviation/safety/ssp/index.aspx>)
² ATSB annual publication of Aviation Occurrence Statistics
(<http://www.atSB.gov.au/publications/2013/01-2013-06T.aspx>)



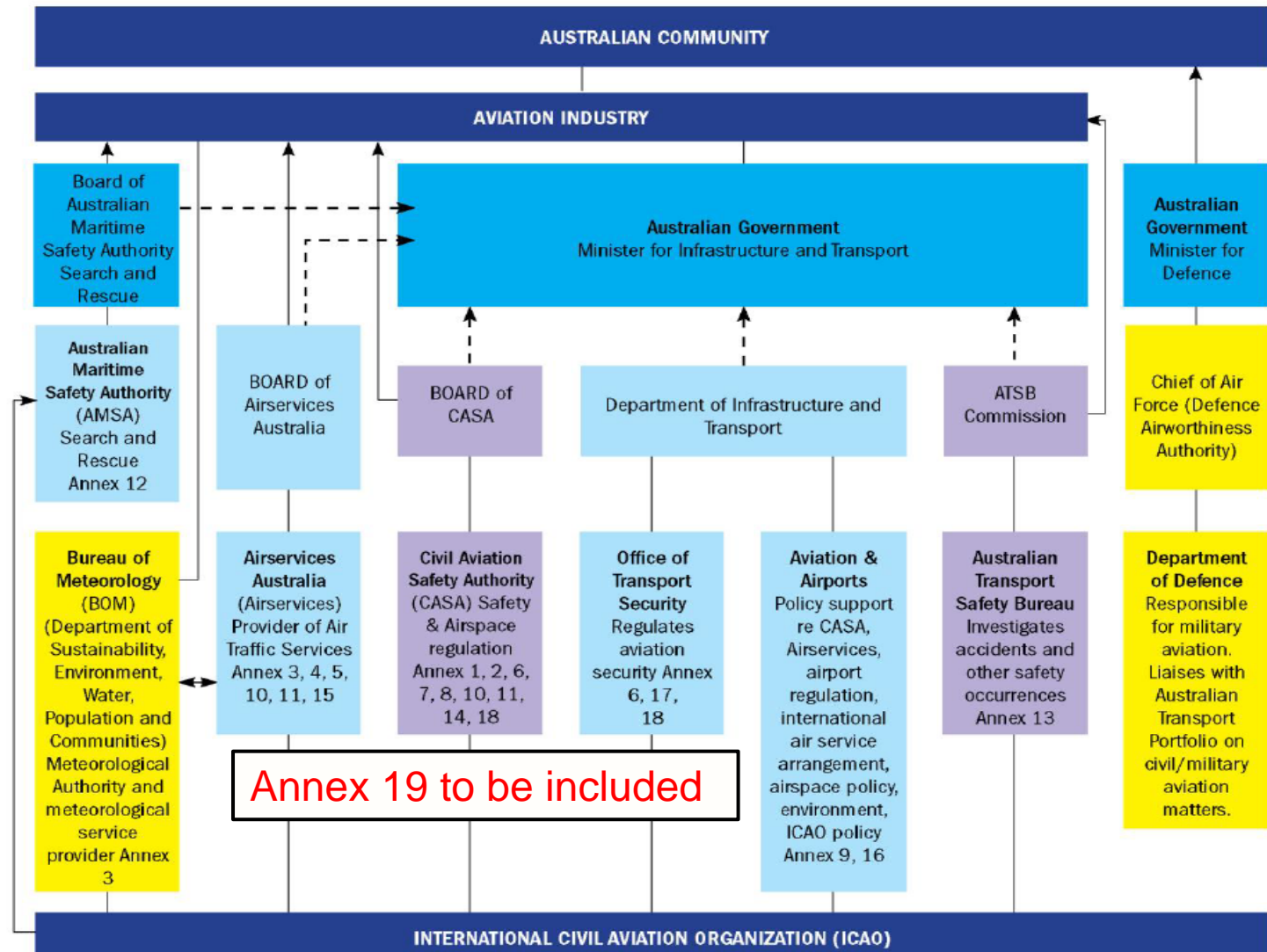


Figure 1.7: SSP Framework for the Australian Government's aviation system.

Recent Developments

- 3 June 2014 - Aviation Safety Regulation Review
 - Recommendation 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
- 27 Feb 2015 - CASA published Regulatory Safety Management Program (RSMP) v2.0

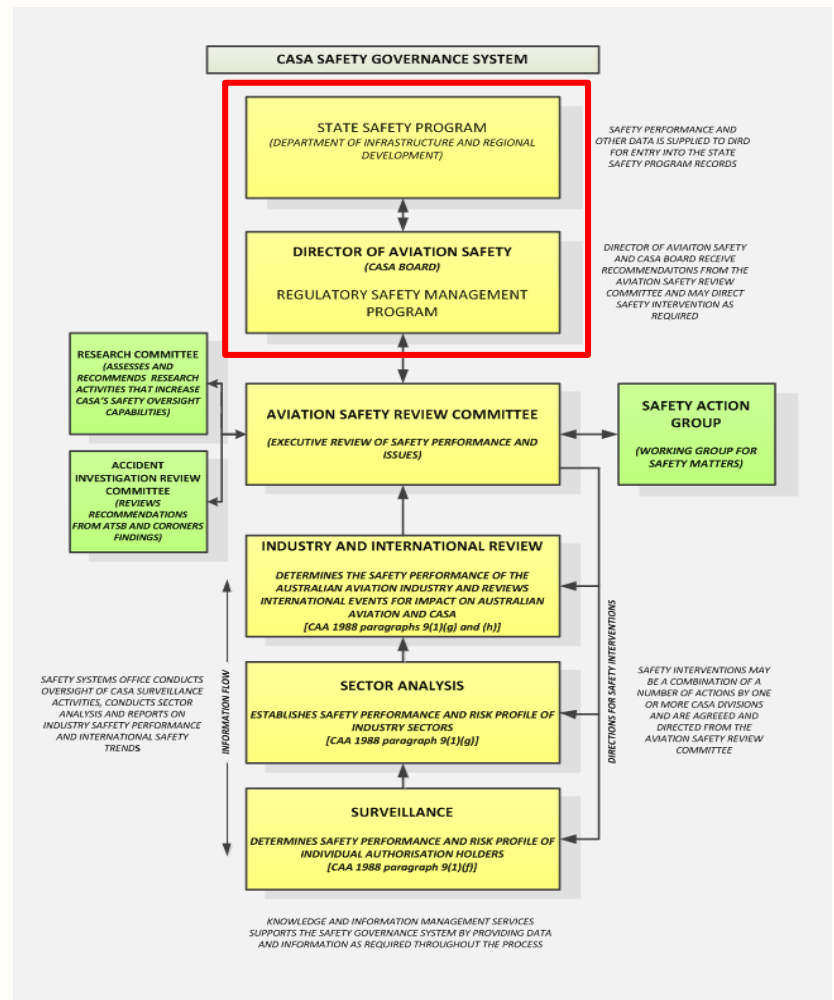
RSMP

The purpose of CASA's Regulatory Safety Management Program (RSMP) is to document the internal management program used by CASA to conduct its aviation safety activities and to provide further detail as to how it carries out the functions and responsibilities referred to in Australia's State Aviation Safety Program (SSP).

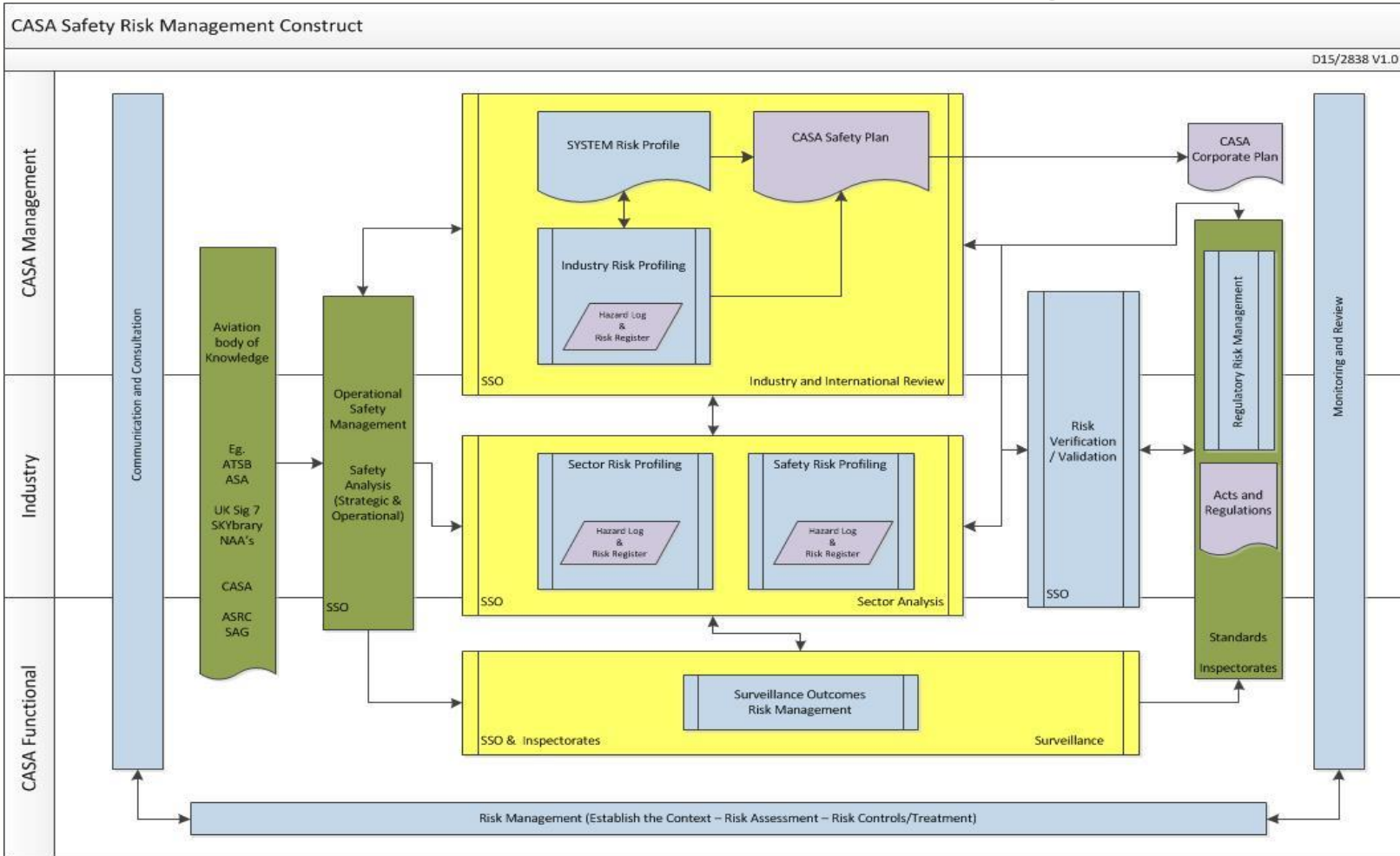
- Version 1.1 July 2011
- Version 2.0 February 2015

The RSMP contains:

1. Introduction
2. Safety Policy and Objectives
3. Safety Risk Management
4. Safety Assurance
5. Safety Promotion



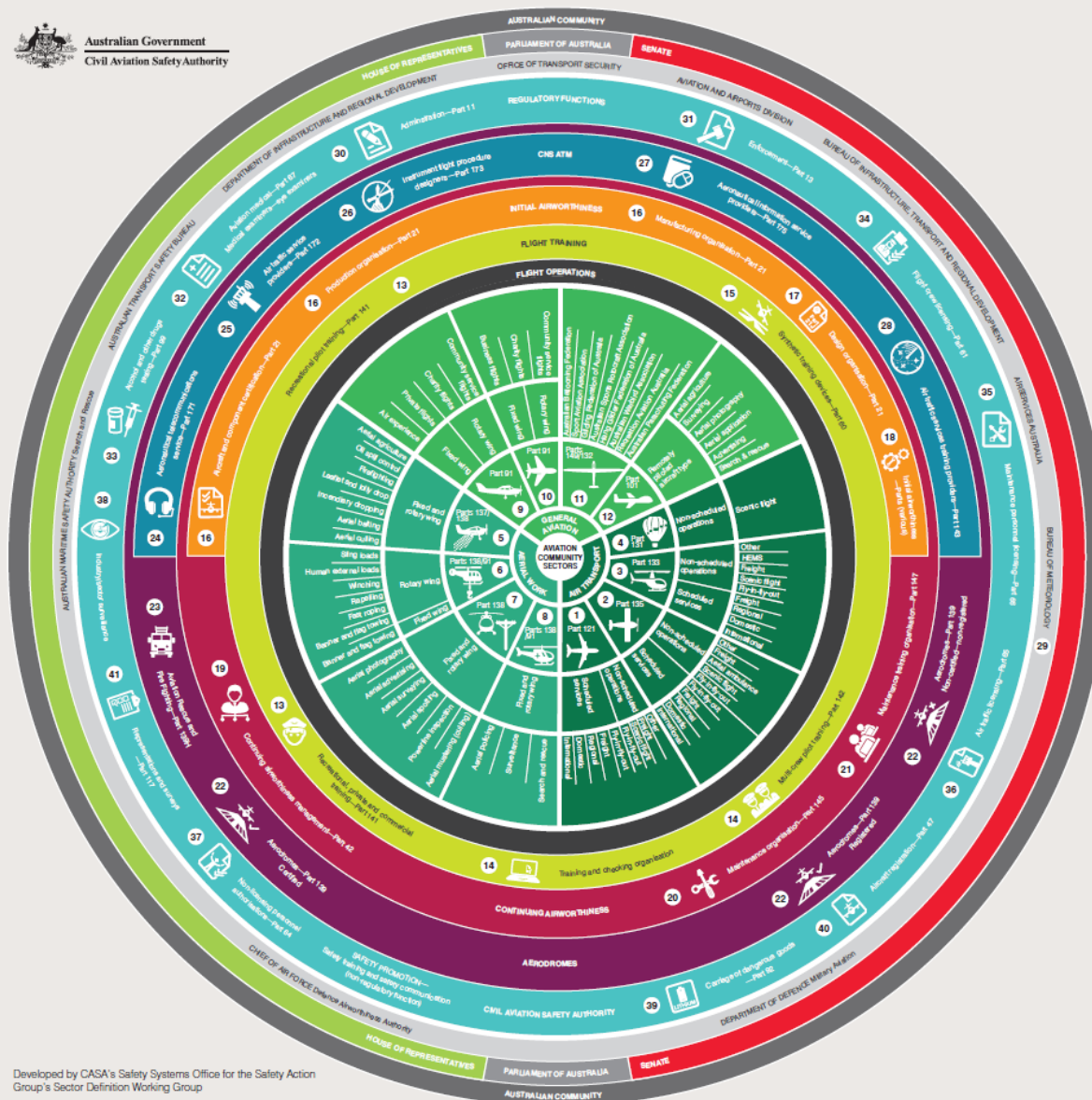
CASA Safety Risk Management



Australia's Aviation Community Sectors



Australian aviation community sectors



- FLIGHT OPERATIONS**
 - COMMERCIAL AIR TRANSPORT SERVICES**
 - 1 Air Transport Operations – Large Aeroplanes – Part 121
 - 2 Air Transport Operations – Small Aeroplanes – Part 135
 - 3 Air Transport Operations – Helicopters – Part 133
 - 4 Air Transport Operations – Balloons – Part 131
 - AERIAL WORK**
 - 5 Dispensing and Aerial Application Operations – Parts 137/138
 - 6 External Load Operations – Fixed wing and Rotary wing – Parts 138/91
 - 7 Task and/or Role Specialist Operations – Part 138
 - 8 Emergency Service Operations (other than HEMS and Ambulance) – Parts 138/91
 - GENERAL AVIATION**
 - 9 Private Flying – Part 91
 - 10 Business Aviation – Part 91
 - 11 Self-Administered Organisations – Part 149 and Warbirds – Part 132
 - 12 Remotely Piloted Aircraft Systems – Part 101
- FLIGHT TRAINING**
 - 13 Recreational, Private and Commercial Pilot Training Organisations – Part 141
 - 14 Multi-crew Training Organisations – Part 142
 - 15 Synthetic Training Devices – Part 60
- AIRWORTHINESS MANAGEMENT**
 - AIRWORTHINESS**
 - 16 Aircraft/Component Manufacturing Organisation – Part 21
 - 17 Design Organisation – Part 21J
 - 18 Initial Airworthiness – Parts 22, 23, 25, 26, 27, 29, 31, 32, 33, 35, 39, 90
 - CONTINUING AIRWORTHINESS**
 - 19 Continuing Airworthiness Management – Part 42
 - 20 Maintenance Organisation – Part 145
 - 21 Maintenance Training Organisation – Part 147
- INFRASTRUCTURE AND SERVICES**
 - AERODROMES**
 - 22 Certified, Registered and Other Aerodromes – Part 139
 - 23 Aviation Rescue and Fire Fighting Service – Part 139 sub-part H
 - COMMUNICATION, NAVIGATION, SURVEILLANCE AND AIR TRAFFIC SERVICES**
 - 24 Aeronautical Telecommunication and Radio Navigation Services – Part 171
 - 25 Air Traffic Services – Part 172
 - 26 Instrument Flight Procedure Designers – Part 173
 - 27 Aeronautical Information Services – Part 175
 - 28 Air Traffic Services Training – Part 143
 - METEOROLOGICAL SERVICES**
 - 29 Meteorological Services (not regulated by CASA)
- REGULATORY FUNCTIONS**
 - 30 Regulation Administration – Part 11
 - 31 Regulation Enforcement – Part 13
 - 32 Aviation Medical Examinations – Part 67
 - 33 Alcohol and Other Drugs Testing – Part 99
 - 34 Flight Crew Licensing – Part 61
 - 35 Maintenance Personnel Licensing – Part 66
 - 36 Air Traffic Services Licensing – Part 65
 - 37 Authorisations for Non-licensed Personnel – Part 64
 - 38 Industry/Sector Surveillance – Civil Aviation Act 1988
 - 39 Consignment and Carriage of Dangerous Goods by Air – Part 92
 - 40 Registration of Aircraft and related matters – Part 47
 - 41 Representations and surveys – Part 117
- AVIATION INSURANCE – not shown**

QUESTIONS?