Australian Government
Department of Infrastructure, Regional Development and Cities

Submission to the Senate Rural and Regional Affairs and Transport References Committee Inquiry into the Provision of Rescue, Firefighting and Emergency Services at Australian Airports

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Introduction

Australia has an enviable record in aviation safety, and the safety of passenger transport services in particular has long been afforded the highest priority in aviation safety regulation.

Australia's aviation safety arrangements, like those of comparable countries, operate in accordance with a systems-based approach which has as a central principle the notion that safety outcomes are best achieved by putting in place multiple layers of assurance. The provision of an Aviation Rescue and Fire Fighting Services (ARFFS) is one element in a range of safety measures deployed within and across the civil aviation system.

The current ARFFS regulatory framework (established through international comittments and domestic standards) sets how ARFFS is to be provided and mandates a variety of requirements including the types and number of trucks, equipment and response times.

There have been a number of views expressed over what should be the right regulatory and policy framework for ARFFS, in particular the establishment and scope of activities of ARFFS at different aerodromes.

The Department continues to have a lead role in the management of ARFFS regulatory policy. The Department has an important role working with Airservices and CASA to monitor the delivery of ARFFS and determine whether further changes are required. The aim of this paper is to provide context and to report on outcomes following the 2015 Regulatory Policy Review.

Background

Policy Framework

Purpose of ARFFS

The provision of ARFFS at airports is intended to maximise the chances of survival of passengers and crew in the event of an accident. At its most basic level, the primary function of ARFFS is to rescue people from an aircraft that has crashed or caught fire during landing or take-off on or in the vicinity of an aerodrome and to control and extinguish fires relating to aviation activities on the airport site.

International Obligations

Australia generally adopts International Civil Aviation Organization (ICAO) standards and recommended practices relating to provision of aviation safety services. As a signatory to the International Convention on Civil Aviation 1944 (Chicago Convention), Australia also generally adopts ICAO Standards and Recommended Practices (SARPs) including those for rescue and fire fighting as set out in Chapter 9 of Annex 14 to the Chicago Convention. Australia formally lodges a difference with ICAO in circumstances where Australia has not adopted ICAO standards because they are not suitable for local circumstances.

Annex 14 to the Convention sets the SARPs for the provision of ARFFS. The introductory note in Annex 14 to the Convention Chapter 9.2 states that:

> The principal objective of a rescue and fire fighting service is to save lives in the event of an aircraft accident or incident occurring at, or in the immediate vicinity of, an aerodrome. The rescue and fire fighting service is provided to create and maintain survivable conditions, to provide egress routes for occupants and to initiate the rescue of those occupants unable to make their escape without direct aid. The rescue may require the use of equipment and personnel other than those assessed primarily for rescue and fire fighting purposes.
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> The most important factors being an effective rescue in a survivable aircraft accident are: the training received, the effectiveness of the equipment and the speed with which personnel and equipment designated for rescue and fire fighting purposes can be put into use.

The SARPs pertaining to ARFFS require that rescue and fire fighting equipment and services shall be provided at an aerodrome[1]. The SARPs include the level of protection required[2]; the provision of extinguishing agents, rescue equipment and personnel; and require a response time not exceeding three minutes.

Whilst most countries are ICAO signatories, many countries have specific legislation that differs to the ICAO SARPs and have adopted different ARFFS establishment criteria. It is up to each ICAO member state to determine how they implement the SARPs and there is no common approach adopted overseas in the provision of ARFFS.

The ICAO standard that an ARFFS be provided at all international passenger air service airports raises specific issues for Australia as the low volume and frequency of flights at some of our airports is not conducive to providing a cost effective and permanent ARFFS capability at the airport. On the other hand, Australia operates ARFFS at some airports at a level that exceeds ICAO requirements.

Some other restricted use or alternate designated international airports with low volumes of passengers where ARFFS is not provided include Learmonth, Lord Howe Island, Kalgoorlie, Horn Island, Christmas Island and Cocos (Keeling Island). Airports that do not have an ARFFS presence receive fire services from the relevant state or territory fire authority.

Australia has lodged a difference with ICAO that ARFFS are not available at these international alternate airports. Additionally for some locations CASA has granted exemptions from certain operational requirements that would normally apply.

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[1] International aerodrome

[2] appropriate to the category of airport which is based on the overall length and fuselage width of aeroplanes using the aerodrome

History of Establishment of ARFFS

Prior to 1991, ARFFS were provided in Australia at domestic airports (those with passenger-carrying aircraft operations) when annual passenger numbers exceeded 150,000, and at general aviation (GA) capital city secondary airports (such as Jandakot, Moorabbin, Bankstown and Archerfield airports) when annual aircraft movements exceeded 175,000. This at one stage resulted in ARFFS provision at approximately 50 Australian airports.

ARFFS were removed from the smaller domestic airports and GA capital city secondary airports in 1991 at the request of aerodrome operators and the GA sector, following industry consultation and the development of a safety case justifying the removal.

From that point until 2002, Airservices provided ARFFS at airports (counted in descending order by traffic volume) that cumulatively accounted for approximately 90 per cent of all domestic passengers travelling on scheduled passenger services in Australia over a year.

The 90 per cent passenger coverage criteria resulted from the application of the principle that the total number of passengers effectively covered by ARFFS should be maximised to the extent of available financial and human resources. In effect, the coverage represented what was possible at that time within available resources.

When ARFFS regulations were introduced into the *Civil Aviation Safety Regulations 1998 (*CASR) in 2002, there was no change made to these arrangements. Hence, as 90 per cent coverage equated to a criteria of approximately 350,000 passengers per year at an individual airport, using 2000-01 financial year data, 350,000 passengers per year was adopted as the trigger for requiring the establishment of an ARFFS. A list of ARFFS Airports and passenger numbers is at Attachment A.

Based on passenger movement data for 2017-18, the 350,000 threshold now captures 96 per cent of passengers.

Current Standards

Existing ARFFS Regulatory Framework

ICAO (Chicago Convention) ARFFS requirements are implemented in Australia through the CASR Regulation Subpart 139.H and the associated Manual of Standards (MOS) which was published in 2002.

The current regulatory framework operates so that ARFFS must be provided at:

- an aerodrome from, or to which an international passenger air service operates
- any other aerodrome through which more than 350,000 passengers passed on air transport flights during the previous financial year.

The disestablishment of ARFFS may also be allowed when the annual passenger numbers for an airport falls below 300,000 and remains below this level for a

12 month period[3]. In such circumstances, the ARFFS provider must provide the regulator with a safety case to justify the closure of the ARFFS. It is important to note that to date no ARFFS services have been disestablished due to passenger numbers falling below the threshold; for example, the aerodrome at Newman (see Attachment A).

While the CASR broadly aligns with ICAO requirements, in practice there are some differences in terms of how ARFFS is delivered in Australia to suit the local context, notably with respect of the ICAO requirement to provide ARFFS at all aerodromes. In this regard, Australia has lodged a difference with ICAO stating that ARFFS, in compliance with Annex Standards, are not available at some international and alternate international aerodromes and outlines the establishment criteria adopted by Australia.

Under the current framework ARFFS is provided at 28 airports in Australia, with Airservices Australia (Airservices) the provider at 26 airports[4]; the Norfolk Island Administration the provider at Norfolk Island International Airport and the Department of Defence (Defence) the provider at Royal Australian Air Force Base Williamtown (also operating as Newcastle Airport). Airservices is currently working with the CASA to settle the requirements and timetable for the establishment of ARFFS at Whitsunday Coast (Proserpine) Airport because it has now moved through the 350,000 threshold.

The CASR Subpart 139.H establishes the safety regulatory framework for the establishment and disestablishment provisions, and the minimum safety standards, for ARFFS providers. The CASR cover:

- procedures for approval of providers
- obligations of approved providers
- services to be provided
- qualifications, health requirements and competency of fire fighters
- requirements and standards to be complied with by providers, including: types and stocks of extinguishing agents: extinguishing equipment and vehicles protective clothing and equipment; qualifications, training and medical standards of firefighters
- contents to be included in a provider's Operations Manual
- safety management system requirements.

[3] A buffer of 50,000 passengers between establishment and disestablishment was introduced to reduce the cycle of establishment/disestablishment/establishment due to fluctuations in passenger numbers.

[4] Sydney, Canberra, Melbourne, Hobart, Adelaide, Perth, Darwin, Brisbane, Townsville, Cairns, Rockhampton, Mackay, Gold Coast (Coolangatta), Sunshine Coast, Launceston, Alice Springs, Ayers Rock, Avalon, Hamilton Island, Broome, Karratha, Port Hedland, Gladstone, Newman, Coffs Harbour and Ballina.

The MOS provides detailed requirements including: ARFFS vehicle performance; response times; hours of operation; competency level of fire fighting staff; staffing and training requirements, and ARFFS qualification training establishments.

In line with Annex 14 of the Chicago Convention, the standard of ARFFS required at aerodromes is dependent on the aerodrome category. These standards have been adopted in Subpart 139.H and the associated MOS. The aerodrome category is determined by the type of aircraft (based on the aircraft's length and fuselage width) operating at the airport (based on the busiest consecutive three month period of the previous twelve months and identifying the largest aircraft over 700 movements). Further information of ARFFS categories is at Attachment B.

In line with ICAO standards, the category of the aerodrome at a particular aerodrome can be reduced (dropped) during periods of reduced activity (for example night operations), to no less than that needed for the highest category of aircraft planned to use the aerodrome during that time.

Regulatory Policy Review

The 2014 the independent Aviation Safety Regulation Review, chaired by Mr David Forsyth, considered future aviation safety structure and regulatory development approaches in Australia. In relation to ARFFS, the Review noted that the threshold trigger for requiring an ARFFS is unique to Australia and there are a range of different perspectives among government agencies on whether the trigger should be changed. The Review recommended that as the matter required a clear policy judgement, the Department should take a lead in providing policy guidance.

The Australian Government response to the Aviation Safety Regulation Review in December 2014 tasked the Department in 2015 to provide policy advice on a range of potential improvements to the efficiency and clarity of ARFFS requirements, including introducing the use of risk assessments rather than the current hard trigger requirement for establishing an ARFFS presence (once passenger levels reached 350,000 passengers).

The Department developed a Discussion Paper during 2015, in consultation with other aviation agencies, which considered a range of possible improvements to current requirements, including the circumstances in which it would be appropriate to require the provision of ARFFS at airports, and regulatory improvements aimed at enhancing efficiency in the delivery of ARFFS.

On 18 December 2015 the Department released a Regulatory Policy Review discussion paper for industry and public consultation. Eleven submissions were received from a range of industry, government agencies and individuals.

Establishment of ARFFS

The regulatory policy review considered the appropriate criteria for the establishment of an ARFFS, including both higher and lower passenger numbers.

The review included an examination of the arrangements in comparable countries including the United States of America (US), the United Kingdom (UK), New Zealand

and Canada. It was evident that a number of different approaches have been adopted, for example in the US, the provision of ARFFS is linked to scheduled flights in aircraft with particular seating capacity (more than nine seats for scheduled flights and more than 30 seats for unscheduled flights whilst in the UK the provision is linked to aircraft maximum total weight (more than 2,730kg) or aircraft training activities.

There are currently over 190 airports that are certified (having regular public transport or frequent charter flights with more than 30 passengers per flight) by CASA. With limited ARFFS resources, the review concluded that it is not economically feasible to have an ARFFS presence at all of these aerodromes and that resources should be allocated at airports where there is higher risk of an accident/incident and high consequences in terms of injuries.

A lower number of passengers as a trigger for consideration of ARFFS (i.e. lower than the existing 350,000) was not supported by the review as it was considered that available ARFFS resources should be targeted to the major passenger airports. In addition, lowering the passenger threshold, for example to 250,000, would only marginally improve ARFFS coverage across the system (as there would be a relatively small increase in the total percentage of passengers covered) but there would be a significant cost imposition on regional airlines which could adversely affect the level of airline services to regional airports.

The review recommended that passenger numbers should be used as a trigger for a risk review, rather than for the automatic requirement for the provision of ARFFS. This was the preferred approach as the current measures do not allow for consideration of the likelihood or consequence of an incident occurring at a particular location for determining whether ARFFS resources should be deployed. Factors such as safety measures already in place (e.g. the nature of air traffic control services), the variety of operations undertaken at the location and geographic factors affecting access to the site are not currently considered, and as a result resources are not allocated according to safety risk.

ARFFS responsibility within aerodromes

The review also recommended updating the regulations to address the confusion created by the ARFFS role currently being designated by the definition of an “aerodrome” under the Australia aviation safety regulatory framework. The increasing amount of non-aviation related development on airport land over the last decade (e.g. stand-alone retail outlets away from airport terminals, business parks etc.) challenges the notion of what should be considered the ‘aerodrome’ in determining the exact role of ARFFS.

The review recommended that the current regulations be updated to better reflect what activities constitute core ARFFS activities at an airport. This would make it easier for ARFFS providers and state and territory fire authorities to settle operational agreements that delineate their respective roles and responsibilities at airports which require ARFFS.

The review recommended that a narrower, “activity-based” concept in relation to ARFFS responsibility be introduced that moves away from reliance on the term “aerodrome”. Under such an approach, ARFFS could be aligned to areas or facilities at an airport which are used or intended to be used for aviation activities and/or for activities closely connected with aviation activities. Under this model, ARFFS would still be able to assist with fire fighting services on other, non-aviation related parts of the aerodrome, but this would not be their primary responsibility.

Recommendations

The agreed recommendations from the Regulatory Policy Review were announced by the Government on 16 December 2016.

The main elements of the regulatory reform package arising from the Review included:

- the use of risk reviews to determine whether to establish an ARFFS at airports, using the introduction of scheduled international passenger air services and total number of passenger movements (500,000 over rolling 12 months) as triggers for undertaking the risk review
- the use of risk reviews to determine whether to disestablish ARFFS at airports, with passenger movements falling below 400,000 and remaining below this level for 12 months, or the withdrawal of scheduled international passenger services, used as triggers for the risk review
- improving and modernising the regulatory framework, including the regulations and the associated MOS, by replacing prescriptive requirements with a systems and outcome-based approach underpinned by the ARFFS provider having a Safety Management System approved and audited by CASA
- clarifying roles and arrangements with the state/territory fire services and the airport operator in relation to the provision of ARFFS
- maintaining arrangements at existing ARFFS locations, including that it would not be necessary to undertake a disestablishment risk review for an existing ARFFS unless the total number of passengers falls below the existing disestablishment threshold of 300,000 in the twelve month period.

In June 2018, the Deputy Prime Minister and Minister for Infrastructure and Transport, the Hon Michael McCormack MP, adjusted the regulatory policy reforms, such that the passenger number trigger for a risk assessment for the establishment of ARFFS remained at 350,000 (rather than 500,000) and for disestablishment, 300,000 (rather than 400,000).

The agreed recommendations from the Regulatory Policy Review are at Attachment C.

The Department is working with CASA and Airservices to implement the outcomes of the Review by amending the CASR and MOS. Interested stakeholders will have the opportunity to comment on draft regulations and the MOS. It is expected that the draft regulations will be released this year.

Non ARFFS Airports

The existing regulatory footprint provides for a possible regulatory role for CASA in oversighting the provision of ARFFS at airports that are not required by the current passenger threshold of 350,000 passengers to have an ARFFS. These requirements are outlined in the current MOS as Level 2 ARFFS coverage.

The arrangements for Level 2 ARFFS coverage have never been activated because ARFFS has not been sought to be provided at an airport at which an ARFSS presence is not required by the regulations. This lack of activation likely reflects both the lower risk profile at airports which are below the passenger number thresholds that trigger an ARFFS and that there is no demand by aircraft operators for an ARFFS especially when it comes at a cost to those operators.

One of the outcomes of the Regulatory Policy Review included updating the framework to provide that where a "fire related service" is provided at an airport that is not required to have an ARFFS, that service is not an 'ARFFS' within the meaning of the civil aviation safety regulations and therefore not subject to the regulatory framework or regulation by CASA.

This would ensure the boundaries of CASA's regulatory role are well defined while at the same time creating greater flexibility for the provision of "fire related services" at airports that are not required to have a regulated ARFFS. These services could be at a lower categorisation and cost to industry.

Airport locations that are not required to have an ARFFS are served by local fire brigades.

Airport operators are required, under CASR Part 139 and associated MOS to prepare aerodrome emergency plans that detail the activation, control and coordination of the emergency service organisations for airport emergencies.

ARFFS Providers – Airservices Australia

Airservices is an independent statutory authority established under the *Air Services Act 1995* (the AS Act). Airservices has independent corporate legal status (established under section 7 of the AS Act as a Body Corporate), although it is wholly owned by the Commonwealth. Airservices' reporting and accountability requirements are prescribed by the *Public Governance, Performance and Accountability Act 2013* (PGPA Act), and the AS Act.

Under section 8 of the AS Act, Airservices core function is to provide services for purposes relating to the safety, regularity or efficiency of air navigation. The two key services provided by Airservices are air traffic control and ARFFS. Airservices ARFFS function is fully funded by the airlines on a national network basis

Airservices provides ARFFS in accordance with the CASR. The provision of ARFFS requires a significant investment by Airservices in buildings, vehicles, technical equipment, personnel and the development and implementation of operations manuals and a safety management system at each location. Airservices also incurs

administrative costs to demonstrate its compliance with the regulations. Airservices charges airlines for the provision of ARFFS and is subject to economic regulatory oversight by the Australian Competition and Consumer Commission (ACCC) as the provision of ARFFS is a declared service for the purposes of Part VIIA of the *Competition and Consumer Act 2010*. Airservices sets its prices with airlines using a five-year Long Term Pricing Agreement (LTPA). While the current LTPA expired on 30 June 2016, charges are forecast to remain at 2016 levels for the foreseeable future.

Section 8(1)(j) of the AS Act empowers Airservices to perform additional services where these services utilise spare capacity and maintain or improve the technical skills of Airservices' employees. Additional services performed by Airservices include: emergency first aid, alarm monitoring, building certification, and assisting other fire and police services under mutual aid arrangements. Airservices is not required to provide these additional services, and they must not impede on Airservices' capacity to perform its core ARFFS function and maintain its required ARFFS category without compromise. The AS Act specifies that in performing its functions, Airservices must regard the safety of air navigation as the most important consideration.

CASA – Regulator

CASA is an independent statutory authority, established under the *Civil Aviation Act 1988*. CASA's primary function is to conduct the safety regulation of civil air operations in Australian territory and the operation of Australian aircraft outside Australian territory.

ARFFS requirements in Australia as set out in CASR Subpart139.H and the associated MOS are oversighted by CASA.

CASA is responsible for the approval of an ARFFS provider and for overseeing the provision of ARFFS in accordance with the CASR Subpart 139.H and associated MOS. This includes the initial approval of the ARFFS at the location (certification) and undertaking surveillance of the provision of ARFFS at each location. The frequency of CASA's surveillance is based on the category of ARFFS.

CASA conducts ongoing audit and surveillance of civil ARFFS providers i.e. Airservices and Norfolk Island Regional Council, to ensure they comply with CASR Subpart Part 139.H and the associated MOS. Significant and continual non-compliance could result in approval being revoked under CASR. An ARFFS provider is required to provide an up to date operations manual to CASA that complies with the MOS and have a Safety Management System (SMS) which defines the policies, procedures and practices for managing the safety of the provision of services and any changes in their provision.

Attachment A

Aerodromes by passenger numbers 2017-18

Rank	Airport	Passenger numbers 2017-18	ARFFS Presence
1	SYDNEY	44,078,512	Yes
2	MELBOURNE	36,473,128	Yes
3	BRISBANE	23,281,614	Yes
4	PERTH	12,473,118	Yes
5	ADELAIDE	8,274,243	Yes
6	GOLD COAST	6,565,534	Yes
7	CAIRNS	5,001,663	Yes
8	CANBERRA	3,179,490	Yes
9	HOBART	2,596,096	Yes
10	DARWIN	2,029,758	Yes
11	TOWNSVILLE	1,679,977	Yes
12	LAUNCESTON	1,363,126	Yes
13	NEWCASTLE	1,279,392	Yes
14	SUNSHINE COAST	1,189,166	Yes
15	MACKAY	813,870	Yes
16	ALICE SPRINGS	615,058	Yes
17	ROCKHAMPTON	563,935	Yes
18	BALLINA	526,806	Yes
19	PROSERPINE	469,958	No
20	KARRATHA	433,459	Yes
21	BROOME	418,086	Yes
22	HAMILTON ISLAND	416,364	Yes
23	COFFS HARBOUR	413,231	Yes
24	AYERS ROCK	380,266	Yes
25	PORT HEDLAND	363,986	Yes
26	NEWMAN	294,361	Yes
27	ALBURY	268,111	No
28	KALGOORLIE	266,768	No
29	GLADSTONE	265,777	Yes
30	MILDURA	263,882	No
31	DUBBO	229,747	No
32	WAGGA WAGGA	225,327	No
*	AVALON	Not available	Yes

Attachment B

ARFF levels of service

Airservices Australia's (Airservices) level of service ranges from the provision of Category 6 to Category 10 services, as determined by Civil Aviation Safety Authority (CASA) and International Civil Aviation Organization (ICAO) regulations, at 26 of Australia's busiest airports.

Categories dictate the required amount of water and foam that is needed to be carried, the response times, water discharge rates and the number of personnel.

The table below outlines some aspects of the level of service provided at the 26 busiest airports in Australia.

	Category 6	**Category 7**	**Category 8**	**Category 9**	**Category 10**
Airports	Avalon Ayres Rock Ballina Broome Coffs Harbour Gladstone Karratha Newman Port Hedland Rockhampton	Alice Springs Hamilton Is Hobart Launceston Mackay Sunshine Coast Townsville	Cairns Canberra Darwin Gold Coast	Adelaide	Brisbane Melbourne Sydney Perth
Water (Litres)	7,900	12,100	18,200	24,300	32,300
Discharge Rate (foam/litres per min)	4,000	5,300	7,200	9,000	11,200
Dry Chemical Powder (kgs)	225	225	450	450	450

Category levels are determined by aircraft overall length and maximum width of the fuselage as adjusted for their frequency of operations. Aircraft movements are counted in the busiest consecutive three months of the year. Examples of the types of aircraft for each category are: **Category 6** – Airbus A320, Embraer 190, **Category 7** - Boeing 737-900ER, **Category 9** - Boeing 747-400, Airbus A350-900 and **Category 10** - Boeing 747-8, Airbus A380.

Attachment C

Aviation Rescue and Fire Fighting (ARFFS) Regulatory Policy Review

Agreed Reforms

Following a regulatory policy review it is agreed that amendments be made to the Civil Aviation Safety Regulations (CASR) Subpart 139.H and the associated Manual of Standards to implement the following approach:

1. ARFFS be required to be established at a location where a relevant trigger event occurs and where the Civil Aviation Safety Authority (CASA) decides, following its conduct of a risk review, that ARFFS is required at that location.

2. Two measures constitute a trigger event for the conduct of a risk review relating to the establishment of an ARFFS - the receipt of scheduled international passenger air services, or 350,000 passengers on scheduled commercial air services passing through the airport during a rolling twelve-month period.

3. ARFFS be required to be disestablished at a location where a relevant trigger event occurs and where CASA decides, following the conduct of a risk review by the ARFFS provider and the receipt of advice from the ARFFS provider, that ARFFS should not be required at that location.

4. Two measures constitute a trigger event for the conduct of a risk review relating to the disestablishment of an ARFFS - withdrawal of scheduled international passenger air services or passenger numbers on scheduled commercial air services falling below 300,000 and remaining below this level for a twelve-month period.

5. CASA and the ARFFS provider, consult as appropriate, with industry, the public and relevant government agencies during the conduct of risk reviews.

6. CASA must complete a risk review relating to the possible establishment of an ARFFS within six months of receiving advice from the Department that scheduled international passenger air services have been approved to commence at an airport which currently does not have an ARFFS, or data becomes available from the Bureau of Infrastructure, Transport and Regional Economics (BITRE) confirming the passenger number trigger of 350,000 passengers has been met at an airport.

7. The ARFFS provider must complete a risk review relating to the possible disestablishment of an ARFFS within six months of the withdrawal of scheduled international passenger air services or the BITRE confirming that passenger numbers have remained below 300,000 for a twelve-month period.

8. Australia adopts the ICAO classification/terminology of scheduled commercial air transport services, which would include regular public transport and charter operations, noting this would require a change in the current BITRE ARFFS reporting.

9. Where the outcome of an establishment risk review is a decision that ARFFS is not required at a location, CASA is required to monitor activities at the location to determine whether a further risk assessment is required. If after twelve months passenger numbers continue to be above 350,000 or the airport continues to receive scheduled international passenger air services, a further risk review is to be undertaken. However, a risk review should be undertaken earlier if there are significant changes in other safety risk factors.

10. Where the outcome of the risk review is a decision that ARFFS is required at a location, CASA is to determine, in consultation with the ARFFS provider, the timeframe in which the ARFFS should be established. CASA may permit some kind of graduated service arrangements to be in place prior to the establishment of full operations.

    A graduated service could include the initial provision of ARFFS at a category lower than the final ARFFS category of services required. Alternatively, other measures to enhance safety could be adopted in the first 12-18 months including the training of the local fire brigade, and the provision of some personnel and firefighting equipment at the airport.

11. Where the outcome of a disestablishment risk review indicates that the ARFFS should remain at the location, and if twelve months after CASA's decision, passenger numbers remain below the disestablishment trigger or the airport does not receive a scheduled international passenger air service, a further risk review should be undertaken by the ARFFS provider, for consideration and decision by CASA.

12. A "fire-fighting related service" provided at an airport that is not required to have an ARFFS under the CASR is not an "ARFFS" within the meaning of the CASR. A "fire-fighting related service" could still be provided at an airport but would not be subject to the regulatory framework or regulation by CASA.

13. The provision of ARFFS is aligned to areas or facilities at an airport which are used or intended to be used for aviation activities and/or for activities closely connected with aviation activities. Such aviation-related infrastructure would include:
    - taxiways, runways, aprons, airside roads, airside grounds and aircraft parking areas;
    - airside freight handling and staging areas;
    - air traffic control towers;
    - airport terminals; and
    - aircraft hangars, on-airport maintenance facilities and aviation fuel storage/refueling facilities.

14. That aviation-related infrastructure may also include infrastructure that is identified as such in an agreement (Memorandum of Agreement) between an ARFFS provider and a state and territory fire authority, in relation to the provision of rescue and fire services at a particular airport. Such agreements should be developed in consultation with the airport owner/operator.

15. State and territory fire authorities are not required to hold separate CASA approval to assist an ARFFS provider in the provision of ARFFS where they are providing the service under an agreement with the ARFFS provider.

16. The responsibilities of the airport operator in facilitating the provision of ARFFS are clarified, such that the airport operator should be required to facilitate the provision of:
    - access for the ARFFS provider to on airport utilities to meet service delivery requirements;
    - adequate facilities for rapidly replenishing water supply for fire vehicles;
    - appropriate emergency roads, including sealed roads capable of supporting immediate response of ARFFS vehicles that provide direct access from the fire station to the movement area;
    - crash gates for off airside that enable immediate response by ARFFS vehicles;
    - suitable arrangements for regular communication with the ARFFS provider about the provision of services at the airport, and
    - access for the ARRFS provider to a reasonable area on the airport for storage, training and other ARFFS related uses.

17. Where possible, prescriptive requirements relating to training and equipment provisions be replaced with a more systems and outcomes-based approach supported by the regulatory requirement for the ARFFS provider to establish a safety management system which is approved and audited by CASA.