

Aviation Rescue and Fire Fighting Services

Contestability Review

30 January 2015

TABLE OF CONTENTS

1. Executive Summary	3
2. Background	8
2.1 Role of ARFFS	9
2.2 History of the Regulatory Framework	12
3. Current Approach	15
3.1 Regulatory Framework	15
3.2 Airservices Australia – Current ARFFS Network and Pricing Structure	19
3.3 Costs	30
3.4 Interaction with other Airservices functions and other rescue and firefighting service providers.	38
3.5 Overseas ARFFS Framework and Provision	39
4. Identification of Options	41
5. Feasibility of options	46
5.1 What aspects of ARFFS are contestable?	46
5.2 Are there alternative ARFFS providers?	46
5.3 How providers would be regulated and managed?	49
5.4 Issues	49
Start-up Costs	49
Airservices future role – competitive tendering/neutrality	50
Legislative and Regulatory change	51
Natural Monopoly	51
Interaction with state/territory rescue and firefighting services	52
Transitional Issues	52
Training	53
Continuity of Service	53
5.5 Risks	54
Safety	54
Costs	54
Impact on Regional Aviation	54
Level, quality or loss of service	56
Impact on Regulator	57
Government’s Deregulation agenda	57

6. Regulatory Reform.....	58
6.1 International passenger criterion for the establishment of ARFFS	58
6.2 Establishment Criteria – Risk Assessment	59
6.3 Clarify ARFFS and non ARFFS Legal Roles and Responsibilities at Airports	59
6.4 Systems/Outcome based regulation.....	61
7. Findings/Recommendations.....	63
Attachments.....	65
Attachment A: Terms of Reference	65
Attachment B: Table of Eligible Providers	68
Attachment C: Airservices ARFFS Charges from 1 November 2014.....	69
Attachment D: International ARFFS provision.....	70
Glossary.....	73

1. Executive Summary

Overview

This pilot contestability review examines the key issues related to the suitability of the provision of a key safety function, Aviation Rescue and Fire Fighting Services (ARFFS) currently provided by a government statutory authority, for market contestability.

The review outlines the benefits and costs, advantages and disadvantages of contestability options, noting that internationally there are limited measures available on the measurement of the “efficiency” of the provision of ARFFS and that the individual cost of ARFFS overseas is often not contained within publicly available information, making benchmarking of ARFFS performance with Australia difficult.

This examination has concluded that the review of the ARFFS regulatory policy, already agreed to by the Government, should be the initial driver of efficiency and productivity gains in the delivery of ARFFS rather than contestability at this time.

Functions of ARFFS

The functions of ARFFS are to rescue persons and property from an aircraft that has crashed or caught fire during landing or take-off; and to control and extinguish, and to protect persons and property threatened by, a fire on the aerodrome, whether or not in an aircraft.

Having an ARFFS capability includes having a presence on the aerodrome (to comply with international requirements of a response time not exceeding three minutes), the provision of equipment (for example fire station, fire trucks, communications equipment, and extinguishing agents) and trained, specialist personnel.

The provision of ARFFS in Australia is regulated by the Civil Aviation Safety Authority (CASA) under the Civil Aviation Safety Regulations 1998 (CASR) and the associated Manual of Standards (MOS). The CASR currently require ARFFS at all international airports and at domestic airports through which more than 350,000 passengers passed during the previous financial year. The CASR does not place responsibility for the provision of ARFFS with any particular agency, although ARFFS is a designated function of Airservices Australia (Airservices) under the *Airservices Act 1995*.

To become an ARFFS provider, an organisation must be listed under the CASR as an eligible provider for an airport. The eligible provider must then be accredited by CASA in accordance with the CASR and the associated MOS. The current table lists Airservices and the Department of Defence as eligible providers for all airports, while the Norfolk Island Administration is listed for Norfolk Island Airport; Delta Fire Services Pty Ltd for Townsville Airport; and Broome Airport Services Pty Ltd at Broome International Airport. While still appearing on the list, neither Delta Fire Services Pty Ltd nor Broome Airport Services Pty Ltd provides ARFFS.

ARFFS is currently provided at 28 airports in Australia, Airservices is the provider at 26 airports; the Norfolk Island Administration the provider at Norfolk Island Airport and the Department of Defence the provider at RAAF Base Williamtown (Newcastle Airport).

Contestability Options and Issues

This review examined four main options:

1. continuation of Airservices' national ARFFS network, fully funded by the airlines, but with an improved policy and regulatory regime to promote efficiency gains and reduce costs to industry;
2. contestability introduced at all ARFFS locations by making individual airport operators legally responsible for arranging the provision of ARFFS at their airports;
3. contestability introduced at capital city airports only, with Airservices providing ARFFS at regional airports; and
4. contestability expanded by allowing additional applicants to be added to the current regulatory table of eligible providers upon request of airport operators.

The review recommends a regulatory policy review should be finalised in the first instance before contestability was examined in the future. Contestability would require an agency or body to be made legally responsible for ARFFS provision and that this entity could then test the market.

In this regard, the most likely regulatory approach would be to make airports legally obliged to provide ARFFS, as occurs overseas. However this approach, if introduced in Australia to facilitate contestability, would add a significant regulatory burden on airport operators. In addition, it would be difficult to demonstrate to the consumer of these services, the airlines, that they would receive a better service and price by being charged for ARFFS by airports rather than Airservices.

Overseas experience indicates some airport operators employ local fire services or establish their own service. Also, experience has shown that contestability does not deliver stand-alone viability, as in both Canada and the United States of America the Government provides funding for new, and upgrades to, ARFFS infrastructure and vehicles.

In Australia, Airservices would be well placed to compete under a contested model, given their expertise, asset base and economies of scale. Other possible service providers in a contested market might be private operators (most likely from overseas), state/territory fire authorities, or the airports themselves, all of which would have to meet CASA regulatory requirements, including infrastructure, vehicles and training.

s47G(1)(a), s47E(d)

Safety is of course of paramount importance in any assessment of the future provision of ARFFS. It is not just another consideration like efficiency, the Parliament has in fact legislated that safety is the most important consideration in the delivery of ARFFS.

While there is overseas experience that clearly validates that public and private ARFFS providers can provide a safe operation, establishing new ARFFS providers would require a stronger CASA oversight role and an increase in regulatory resources on the basis of potentially oversighting up to 27 providers in the future rather than essentially one Government operator as is currently the case.

It is difficult to determine what the benefit of contestability in ARFFS will be, as the ARFFS function has a number of core deliverables that do not naturally lend themselves to new “efficiencies” or “innovations” in reducing the cost of their provision, even with market competition, if they are to be performed in accordance with international safety standards.

Reduced costs from ARFFS competition may be possible through reduced salary costs i.e. using the same level of personnel but reducing total salaries paid through productivity gains or lower wages but the actual level of ARFFS manning is heavily dictated to by the function being performed.

The introduction of contestability will result in a move away from the provision of ARFFS on a national network basis. This would remove the economies of scale of the national network approach and would increase costs at smaller regional airports.

There would also appear limited benefits from the introduction of contestability through some form of tender process which led to a public monopoly simply being replaced by a private monopoly.

ARFFS Pricing

Pricing is not an impediment to contestability.

s47G(1)(a), s47E(d)

s47G(1)(a), s47E(d)

The difference between the two approaches is that:

- location specific pricing involves each location bearing all of its own costs of ARFFS; and
- network pricing involves the cost of service provision being averaged across the entire ARFFS network and each location bears its share of this average cost proportioned on the basis of volume.

The level of scrutiny of current ARFFS pricing is significant.

The provision of ARFFS is a declared service for the purposes of Part VIIA of the *Competition and Consumer Act 2010* and, accordingly, Airservices, which charges airlines directly for the provision of ARFFS, is subject to economic regulatory oversight by the Australian Competition and Consumer Commission (ACCC).

Network pricing has been adopted by Airservices and accepted by the ACCC, noting a large component of ARFFS costs are fixed.

The ARFFS regulatory framework (international and domestic) details how an ARFFS is to be provided and mandates a variety of requirements including the levels of staffing, the types and number of trucks, equipment and response times.

s47G(1)(a), s47E(d)



Summary of Findings

While contestability is possible in the provision of ARFFS in Australia, there is little evidence available at this time to support its introduction as the best initial vehicle for driving further efficiencies and cost savings for industry or passengers in the performance of this function.

There are no budget savings for the Government from introducing contestability in the provision of ARFFS, indeed there may be costs to Government that will be created if it was called upon to subsidise ARFFS provision at major regional airports.

These findings recognise that the current provision of ARFFS by Airservices has access to economies of scale and advantages in infrastructure, financing, equipment and trained personnel from the current ARFFS network and Government ownership.

There would likely be some market interest in providing ARFFS particularly from overseas providers seeking to perform ARFFS at major capital city airports working for the airport operator.

In relation to the six state and two territory fire authorities as potential ARFFS providers, it is unlikely they can bring efficiencies or cost savings in competing for the dedicated ARFFS role over the current national Airservices ARFFS operation.

If the ARFFS network was to be broken up, it is difficult to argue that a new ARFFS provider could deliver lower costs at any of the regional airport locations benefitting from network pricing used by Airservices and still meet CASA's safety regulatory requirements. Furthermore, contestability would require an increased regulatory and administrative burden to airport operators and CASA.

Fundamentally, the imposition of a new regulatory requirement on airport operators to arrange for the provision of ARFFS is not consistent with the Government's deregulation agenda, yet would be essential to introduce contestability into the provision of ARFFS in Australia.

Finally, the aviation industry's priority for ARFFS delivery, as demonstrated by their strong support of the Government's response to the Aviation Safety Regulation Review Report released in December 2014, is first through policy and regulatory reform rather than contestability.

Recommendations

After considering the options, there is a strong argument for continuing the provision of ARFFS by Airservices (Option 1).

However this should not be interpreted as a "status quo" option in terms of seeking efficiencies and cost savings for the industry and passengers from future ARFFS operations.

Rather, consistent with the Government's recently tabled response to the Aviation Safety Regulation Review Report, the Department of Infrastructure and Regional Development will be undertaking a regulatory policy review of ARFFS requirements later this year.

Issues to be examined as part of this ARFFS review are quite fundamental - the necessity to provide ARFFS at airports and current mandatory establishment criteria, the manual of standards which prescribes very detailed regulatory requirements and the role of ARFFS vis-à-vis state and territory fire authorities.

This contestability review also recommends that Airservices continue to develop efficiency measures as recommended by the ACCC in its Airservices 2014 pricing determination. It is expected that such measures will form a key part of the ACCC's consideration of Airservices next Long Term Pricing Agreement on which discussions will commence with industry later this year.

2. Background

The Australian Government, via the Efficiency through Contestability Programme (the Programme) is assessing government functions against a Contestability Framework to determine which functions may benefit from a contestable approach to their provision.

As part of the Programme the Government selected the provision of Aviation Rescue and Fire Fighting Services (ARFFS) as one of five pilot contestability reviews. The review provides the opportunity to investigate if it would be more efficient and effective to deliver ARFFS through alternative and contestable approaches.

The review is to consider potential alternative arrangements for the provision of these services (in whole or in part), including provision by alternative providers. In making recommendations, a paramount consideration will be to ensure that safety is maintained.

The Terms of Reference for the review are at Attachment A. As outlined in the Terms of Reference the principle objective of the Review is to report on:

- the role of ARFFS, interactions between international and domestic regulatory contexts, and the outcomes sought by Government and the Government's forward priorities;
- the current approach to providing ARFFS, including an evaluation of the benefits and costs of this approach and the interaction of ARFFS with other Airservices functions, CASA, other rescue and fire fighting service providers, the aviation industry and the community;
- the feasibility of other options for efficiently and effectively providing ARFFS including the use of alternative approaches by Airservices or the use of alternative providers e.g. a national private ARFFS network or individual private ARFFS providers at individual airports; and
- potential safety, efficiency improvements, other benefits, costs, risks and issues associated with proposed options including the impact on all stakeholders including regional airports and any legislative and regulatory changes required to implement different options.

The review was undertaken in consultation with Airservices Australia (Airservices) and the Department of Finance. The views of the aviation industry were obtained from previous ARFFS reviews and publicly available material such as responses to consultation on ARFFS pricing issues and the recent Aviation Safety Regulation Review Report which raised ARFFS-related issues.

The provision of ARFFS at airports is intended to optimise chances of survival of passengers and crew in the event of an accident. In general, the function of ARFFS is to rescue people from aircraft that have crashed or caught fire during landing or take-off and to control and extinguish fires relating to aviation activities on the airport site.

Airservices is currently the monopoly provider of ARFFS in Australia. Airservices is a legally and financially independent statutory authority established under the *Air Services Act 1995* (the AS Act). Airservices has independent corporate legal status (set up under section 7 of the AS Act as a Body Corporate), although 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 providing services for purposes relating to the safety, regularity or efficiency of air navigation. Two key services provided by Airservices are air traffic control and ARFFS.

The AS Act specifies that in performing its functions, Airservices must regard the safety of air navigation as the most important consideration.

Airservices ARFFS function is fully funded by the airlines on a national network basis.

2.1 Role of ARFFS

International Requirements

Australia is committed to adopting international aviation standards and recommended practices in the provision of aviation safety services. Not only is this consistent with Australia's membership of the International Civil Aviation Organization (ICAO) but also reflects the importance to the Australian economy of aviation particularly for trade and our tourism industry.

As a signatory to the *International Convention on Civil Aviation 1944* and a member of the International Civil Aviation Organisation (ICAO), Australia is required to adopt ICAO-established international standards and recommended practices. In the few circumstances where Australia does not adopt ICAO standards, Australia is required to formally lodge a difference with ICAO.

Annex 14 to the Convention sets the Standards and Recommended Practices (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.

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 aerodrome¹. The SARPs include the level of protection required²; the provision of extinguishing agents, rescue equipment and personnel; and require a response time not exceeding three minutes.

Australian Requirements

ARFFS requirements in Australia are set out in the Civil Aviation Safety Regulations (CASR) and the associated Manual of Standards (MOS) oversighted by the Civil Aviation Safety Authority, Australia's independent aviation safety regulator.

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

Under these regulations, the purpose of ARFFS is to rescue persons and property from aircraft which have crashed or caught fire at or near the aerodrome.

ARFFS are also expected to respond to other fires (not just aircraft fires) at the aerodrome.

In this regard, CASR Subpart 139.H, regulation 139.710 provides the functions of ARFFS for an aerodrome as follows.

139.710 Functions of ARFFS

- (1) The functions of ARFFS for an aerodrome are:
 - (a) to rescue persons and property from aircraft that have crashed or caught fire during landing and take-off; to control and extinguish fires on the airport site; and
 - (b) to control and extinguish, and to protect persons and property threatened by fire at the airport, whether or not they are in an aircraft.
- (2) Nothing in subregulation (1) prevents the ARFFS provider for an aerodrome from performing fire control services or rescue services elsewhere than on an aerodrome, but the provider must give priority to operations mentioned in subregulation (1).

The CASR and the associated MOS operates so that ARFFS must be provided at aerodromes:

- from or to which an international passenger air service operates; and
- any other aerodrome where the number of passenger movements has reached 350,000 in the previous financial year.

While the CASR Subpart 139.H broadly aligns with the ICAO requirements, in practice there are some differences, notably with respect of ICAO's standard that ARFFS be provided at all aerodromes with international passenger services.

Australia has lodged a difference with ICAO stating that ARFFS, in compliance with Annex Standards, are not available at some international and international alternate airports, noting that some locations only receive occasional international services.

Airline operators consult En Route Supplement Australia (ERSA) for details on the availability and level of services of ARFFS at airports. Airline operators use the information available in the ERSA to determine if they will operate at a particular airport, including if an ARFFS service is available. If ARFFS is not provided, or the ARFFS does not meet ICAO requirements, international airlines may decide not to operate to or from the airport citing operational and insurance risks to the airline.

Australia, like some other leading aviation countries uses ARFFS establishment criteria, in Australia's case a level of 350,000 passengers, to determine when ARFFS should be established at an aerodrome.

The 350,000 passenger number criterion was based on a policy decision in 2001 that ARFFS be provided at airports that cumulatively covered 90 per cent of passengers at that time.

The disestablishment of ARFFS may also be considered when the annual passenger number falls below 300,000 and remains below this level for a 12 month period. In such circumstances, under the regulatory framework the ARFFS provider must provide the regulator with a safety case to justify the closure of the ARFFS.

Under the current framework ARFFS are provided at 28 airports in Australia, with Airservices the provider at 26 airports³; the Norfolk Island Administration the provider at Norfolk Island International Airport and the Department of Defence (Defence) the provider at RAAF Base Williamtown/Newcastle Airport.

To be eligible to provide ARFFS an organisation must be listed in the Table of Eligible Providers in CASR Subpart 139.H. Listing on the table allows the organisation to apply to CASA for approval to conduct ARFFS. Currently, in addition to Airservices, Defence and Norfolk Island Airport; Delta Fire Services Pty Ltd (Delta) are listed as an eligible provider for Townsville Airport and Broome Airport Services Pty Ltd at Broome Airport. It should be noted that neither Delta - which no longer exists as the company designated in the schedule - nor Broome Airport provide ARFFS.

Under the AS Act and the Air Services Regulations 1995 it is legislated that the provision of ARFFS is a function of Airservices.

Part 4, Division 2 of the Air Services Regulations outlines the ARFFS function.

4.02 Functions of the Rescue and Fire Fighting Service

- (1) The functions of the Rescue and Firefighting Service are:
 - (a) to conduct operations to rescue persons and property from an aircraft that, as the result of an incident at, or in the vicinity of, an aerodrome, has crashed or caught fire; and
 - (b) to conduct operations to control and extinguish, and to protect persons and property threatened by:
 - (i) a fire at an aerodrome, whether in an aircraft or elsewhere; or
 - (ii) a fire in the vicinity of an aerodrome that is in, or that started in, an aircraft.
- (2) In carrying out its functions under subregulation (1), AA must give priority to operations that are conducted:
 - (a) at an aerodrome; or
 - (b) within 1000 metres of any boundary of an aerodrome.

Thus, Airservices has a specific, express statutory function of:

- rescuing people/property from aircraft which have crashed or caught fire at or near an aerodrome;
- responding to fires at 'aerodromes' (not just fires in, or caused by, aircraft); and
- responding to fires 'in the vicinity of an aerodrome' that started in, or are in, an aircraft.

While section 8(1)(j) of the AS Act permits Airservices to perform other services (e.g. first aid, alarm monitoring, building certification, assisting with bush fires) these services must not impede on Airservices' capacity to perform its core aerodrome-related rescue and fire fighting services.

In summary, ARFFS is a safety service function whose purpose is responding to aircraft-related incidents on-and-off the aerodrome and fires occurring on the aerodrome. As with other emergency services, its delivery by a government authority has been considered appropriate, benefitting and paid for by the airlines and ultimately the travelling public.

³ Sydney, Canberra, Melbourne, Hobart, Adelaide, Perth, Darwin, Brisbane, Townsville, Cairns, Rockhampton, Mackay, Gold Coast (Coolangatta), Sunshine Coast, Launceston, Alice Springs, Ayres Rock, Avalon, Hamilton Island, Broome, Karratha, Port Hedland, Gladstone, Newman, Coffs Harbour and Ballina.

2.2 History of the Regulatory Framework

The current framework in CASR Subpart 139.H and the MOS was established in 2002 to formalise ARFFS requirements and meet Australia's obligations under Annex 14 of the Chicago Convention.

At that time the then Government was unsuccessful in progressing a "contestability" policy through Parliament due to a successful disallowance motion.

In summary the disallowance action:

- removed an attempt to place the legal obligation on airport operators to ensure the provision of ARFFS. As a consequence, Airservices continues to step in and negotiate the provision of ARFFS with the airlines even though it is not legally obligated to do so. This practice arose from a written undertaking Airservices gave to the then Minister; and
- required an ARFFS provider wishing to enter the market, to be listed on the table of eligible providers before they have been certified by CASA as being capable of meeting the Subpart 139.H and MOS requirements.

Any additions to the table of eligible providers requires a regulatory amendment approved by the Minister, which is subject to Parliamentary scrutiny. In 2003, the providers were limited to Airservices Australia as the primary provider, except initially at Broome and Norfolk Island airports which provided their own ARFFS, an arrangement in place before CASR Subpart 139.H was made. The provision of ARFFS at Broome Airport subsequently moved to Airservices during 2007-2008.

In 2006, the then Government moved to a policy of partial contestability for the provision of ARFFS. Townsville Airport was identified as an initial possibility for contestability pending implementation of arrangements for contestability on a broader basis.

An amendment to the regulations in 2006 added Delta to the list of eligible providers in Table 139.925 of CASR Subpart 139.H, allowing Delta to apply to CASA for approval as an ARFFS provider at Townsville Airport only. This had the effect of facilitating contestability by allowing Delta to apply to CASA for approval as an ARFFS provider at Townsville Airport.

This addition to the list was however complicated by the fact that Townsville Airport is a joint user airport (Royal Australian Air Force base and commercial flights), with management shared between Queensland Airports Ltd and the Department of Defence through a Joint User Deed. Airservices provides ARFFS at the airport through an arrangement with Defence.

Following a change in Government in 2007, the Government decided that Airservices should be the provider of ARFFS, but the Government allowed Delta to remain on the table of eligible providers for Townsville Airport only.

However Delta withdrew its application to CASA for approval to commence ARFFS operations in 2008, as it was unable to meet CASA's regulatory requirements.

The company, which no longer exists as Delta Fire Service Pty Ltd, at the time cited high costs of establishing the service and insolvable conflicting interests with Airservices, whom Defence required to continue to provide specialised military ARFFS at Townsville, as key factors in its inability to take up the ARFFS role.

Previous ARFFS Reviews

2006 Discussion Paper

In 2006 the Government reviewed the policy and regulatory framework relating to the provision of ARFFS, in consultation with stakeholders. The key issues canvassed were the lack of a clearly defined legal responsibility for the provision of ARFFS; the appropriate establishment criteria; the timing for having an ARFFS in place; and issues associated with the proposed introduction of contestability.

Responses to the discussion paper indicated little demand or support for contestability and concerns about the potential impacts on pricing particularly at regional airports. Some larger capital city airports saw it as a mechanism to change the pricing model which might favour their specific operations.

Some airports stated that they did not wish to be responsible for ARFFS provision due to the additional effort and risks involved. Some respondents highlighted that ARFFS are an emergency service analogous to state based police, fire and emergency services which appropriately should be provided for by Government agencies and paid for by the airlines.

The United Firefighters Union expressed concern for safety and jobs in a contestable environment.

In summary while there was industry acceptance that contestability may be introduced, there was also support for the benefits of Airservices' economies of scale to continue; support for the quality and standards of service Airservices provides; and support for continued transparency and scrutiny of Airservices ARFFS proposed charges by the ACCC.

2008 Discussion Paper

In 2008, the Department circulated a further discussion paper to CASA, Airservices, the Department of Defence, the Australian Airports Association, Delta and the United Fire Fighters Union, seeking views on a number of ARFFS establishment criteria options to identify at what point ARFFS must be provided at an Australian Airport. Only CASA responded to the 2008 discussion paper.

Consequently, whilst it was acknowledged that the criteria issue was important, priority was given to the review of legal responsibility for providing ARFFS and the scope of ARFFS.

2009 Policy Paper

The Aviation White Paper "Flight Path to the Future" released in December 2009 set out the then Government's commitment to improve ARFFS through ensuring that the scope, roles and responsibilities of Airservices and other agencies in relation to ARFFS are clearly defined.

The ARFFS Policy Paper which accompanied the White Paper proposed to:

- make Airservices legally obliged to provide ARFFS for civil operations at civil and joint-user airports that meet the establishment criteria in the CASR; and
- clarify the scope of ARFFS so that it relates to areas of an airport which are used or intended to be used for aviation activities and/or for activities closely connected with aviation activities. This was to assist Airservices and relevant state or territory fire authorities regarding the coordination, and responsibility for, the provision of non-aviation rescue and fire fighting services at the airport, in consultation with airport operators.

The ARFFS Policy Framework set out the intended future arrangements for ARFFS, non-aviation rescue and fire fighting and other functions at airports and was developed in consultation with industry.

The Policy Framework included:

- Airservices being legally obliged to provide ARFFS, for civil operations at civil and joint-user airports that meet the establishment criteria in the CASR Subpart 139.H;
- clarifying the scope of ARFFS so that it covers responsibility for responding to aircraft incidents on and within 1000 metres of the aerodrome boundary and fire incidents that occur on the aerodrome – to be defined as areas of an airport which are used or intended to be used for aviation activities and/or for activities closely connected with aviation activities;
- the provision of alarm monitoring at non-aviation facilities and non-aviation fire fighting and rescue services, remaining within the scope of responsibility of the relevant state or territory fire authorities;
- Airservices being able to provide non-aviation services under an agreement with the relevant state or territory fire authorities, provided that it gives primacy to its core ARFFS function and maintains its required ARFFS category without compromise; and
- the airport operator/sub-lessees continuing to be subject to relevant requirements under applicable Commonwealth law, state/territory law and common law in relation to ensuring all buildings on airport land comply with relevant building, fire protection and occupational health and safety standards, (e.g. the provision of first aid) and to facilitate the provision of ARFFS by Airservices.

As a first step to implementing the Policy Framework, work commenced on clarifying the roles and responsibilities of Airservices and state and territory fire authorities, through the development of Memoranda of Agreement (MOA) between Airservices and state and territory fire authorities.

During discussions with some state and territory fire authorities concerns were raised about the legal ambiguity under current regulatory provisions as to whether in assisting Airservices in responding to an aviation incident, the state or territory fire authority would need to be approved as an ARFFS provider under the CASR.

While there was widespread support for a number of regulatory amendments to provide efficiency gains for Airservices and clarify the scope of ARFFS, these have not received regulatory priority and therefore have not progressed.

3. Current Approach

3.1 Regulatory Framework

In Australia, the CASR Subpart 139.H and the associated MOS require ARFFS at all international airports, and at domestic airports through which more than 350,000 passengers pass during the previous financial year. Airservices and CASA monitor passenger numbers through figures published annually by the Bureau of Infrastructure, Transport and Regional Economics (BITRE).

Part 14 (section 216) of the *Airports Act 1996* provides that airport operators must not provide or cause ARFFS to be provided unless they are provided by: a person approved or licensed by CASA, under regulations made under section 98 of the *Civil Aviation Act 1988* to provide the services; or the Australian Defence Force.

To be an ARFFS provider, an organisation must be listed on a CASR table of eligible providers, (table 139.925) and be approved by CASA in accordance with CASR Subpart 139.H and the MOS. In addition, Part 11 of the CASR gives CASA the power to seek evidence of the applicant's financial standing and financial capacity to determine if it is likely to be an adverse effect on the safety of air navigation if the applicant were granted the approval and either did not have the resources to carry out the functions or were afterwards unable to continue trading.

A copy of the table of eligible providers is at Attachment B.

The CASR Subpart 139.H establishes the safety regulatory framework for the entry and exit 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; and
- safety management system requirements.

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 the Part 139.H 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).

In line with ICAO requirements, 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.

The lowest category ARFFS in operation in Australia is a 6 and the highest is a 10. Information on Categories 6 to 10 is available in Table 1.

Table 1: Aerodrome ARFFS Categories

Aerodrome Category	Length of Aircraft	Maximum width of Fuselage	Aircraft Type	Current Location
6	28 m up to but not including 39 m	5 m	Airbus A320 Boeing 737-300	Alice Springs Avalon Ayers Rock Broome Gladstone Hamilton Island Norfolk Island Rockhampton Sunshine Coast Williamtown
7	39m up to but not including 49 m	5 m	Boeing 737-800 Airbus A310 Boeing 767-200	Canberra Hobart Karratha Launceston Mackay Newman Port Hedland Townsville
8	49 m up to but not including 61 m	7 m	Boeing 767-300 Airbus A330-200 Airbus A340-200	Cairns Gold Coast Darwin
9	61 m up to but not including 76 m	7 m	Boeing 767-400 Boeing 747 Airbus A330-300 Airbus A340-300 Airbus A340-500 Airbus A330-600	Adelaide Brisbane Perth
10	76 m up to but not including 90 m	8 m	Airbus A380	Melbourne Sydney

Higher category aerodromes require investment in progressively higher levels of ARFFS capability, the rationale being that the higher the category, the higher the risk of a major incident involving a large plane and many passengers. This in turn demands that ARFFS have capability to undertake a large scale emergency response involving the rescue of a large number of people simultaneously.

In accordance with the Part 139.H MOS, fire service protection is required for the duration of air transport operations, including delayed flights. Where coverage is less than 24 hours, the ARFFS must be fully operational for a minimum of 15 minutes before the first scheduled aircraft movement of the day, whether it is an arrival or departure. Crew must remain for 15 minutes following the last aircraft movement, whether it is an arrival or departure.

The ARFFS must be able to respond to an incident at either end of the runway and any part of the movement area in not more than three minutes.

This has impacts on the truck type, size and performance and ultimately costs. Apart from the fire station, trucks are the most expensive infrastructure and are purpose built to be able to deliver the required amounts of foam, water and fire fighters to the scene of an incident within the response time. The trucks must comply with an international standard and Australian Design Rules.

At aerodromes where the runway threshold is within 1000m of a body of water (for example Sydney, Brisbane, Gold Coast) a water rescue service is also required. A water service requires launching facilities, boats and sufficient rescue platforms (rafts) to cater for 50 per cent of passengers on board the largest aircraft operating at that airport.

The level of service required for each of the categories of aerodrome is outlined in Table 2.

Table 2: Core Regulatory Operational Requirements at Aerodromes

Category of aerodrome	Minimum Staff (per shift)	Fire Vehicles (minimum)	Water (L – Minimum)	Discharge rate (L per minute)
6	5	2	7,900	4,000
7	6	2	12,100	5,300
8	8	3	18,200	7,200
9	10	3	24,300	9,000
10	14	3	32,300	11,200

Notes:

1. Staffing - the number of staff are not prescribed by ICAO or CASR 139.H. For Airservices the staffing levels set out in Table 2 were determined via risk assessment and are approved by CASA.
2. Vehicles - for Category 10, Airservices provides a minimum of 4 vehicles (except Sydney) to enable it to meet the water capacity quantities set out in Table 2. At Sydney, 5 vehicles are provided to ensure the three minute response time can be met - this is due to the topography (layout) of the runways.

Legal Obligation to Provide ARFFS

There is not a clear legal obligation on Airservices or any other entity to ensure ARFFS are provided at an airport in Australia where it is warranted under the establishment criteria.

ARFFS is a designated function of Airservices, under paragraph 8(1)(a) of the AS Act. However, Airservices undertakes this role without any clear legal obligation to do so, as under paragraph 8(3) of the AS Act it has discretion over the extent to which it provides services and facilities.

CASA Oversight

CASA is responsible for regulating aviation safety in Australia, the safety of Australian aircraft overseas and for regulating and administering Australia's airspace. This is provided for through the Civil Aviation Regulations 1988 (CARs) and the CASR, which are both made under the authority of the *Civil Aviation Act 1988*, and through the *Airspace Act 2007* and its regulations.

In relation to ARFFS, CASA's role includes approval of ARFFS providers and accreditation of training providers for ARFFS under the provisions of the CASR Subpart 139.H.

CASA conducts ongoing compliance audits of civil ARFFS providers i.e. Airservices and Norfolk Island Administration, to ensure they comply with CASR Part 139.H and the associated MOS. Significant and continual non-compliance could result in approval being revoked under the Regulations. 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.

In addition, CASA audits the ARFFS training component of Airservices Learning Academy, ARFFS Maintenance and Logistics (Emergency Vehicle) management function and ARFFS refresher operational foam training workshops.

These audits typically involve one or two CASA auditors to be on site for approximately two to four days as well as prepare audit reports and follow up on any audit findings.

International Free Trade Agreements

Currently, services provided by Airservices, such as ARFFS, are excluded from the majority of Australia's Free Trade Agreements (FTAs), including ASEAN-Australia-New Zealand FTA; Australia-Chile FTA; Australia-Malaysia FTA; Australia-Singapore FTA; Australia-Thailand FTA; and Australia-USA FTA.

These FTAs recognise that Airservices is providing these services in the exercise of governmental authority within the territory of Australia. There are specific provisions in the FTA that carve out such services from having to comply with obligations in the Cross Border Trade Services and Investment chapters.

The Australia – Singapore FTA is slightly different in that the services provided by Airservices are listed as a Non-Conforming Measure. In listing such measures, Australia notes that the services are provided by a monopoly supplier and foreign investors are not allowed to establish such services in Australia, nor are services allowed to be provided on a cross-border basis.

The Australia-NZ Closer Economic Relations Agreement provides that New Zealand entities should have equal market access to Australian entities. However, if the New Zealand Government or private company wish to provide ARFFS they would need to be added to the table of eligible providers in CASR Part 139.H.

If it was decided to make ARFFS contestable and therefore no longer provided by Airservices as a monopoly provider, it would no longer be considered a service being provided in the exercise of governmental authority or a non-conforming measure and would be open to foreign competition, subject to the terms of the FTA.

3.2 Airservices Australia – Current ARFFS Network and Pricing Structure

The functions of Airservices, set out in Section 8 of the AS Act, include

8 AA's functions

- (1) AA has the following functions:
 - (a) Providing services and facilities:
 - (i) for the purposes of Australia or another country giving effect to the Chicago Convention; or
 - (ii) for the purpose of Australia or another country giving effect to another international agreement relating to the safety, regularity or efficiency of air navigation; or
 - (iii) otherwise for purposes relating to the safety, regularity or efficiency of air navigation, whether in or outside Australia.

In addition the AS Act (Section 8 paragraph (1)(j)) permits Airservices to provide services and facilities, whether or not related to aviation, for a purpose other than one that is mentioned or under section 8, if doing so:

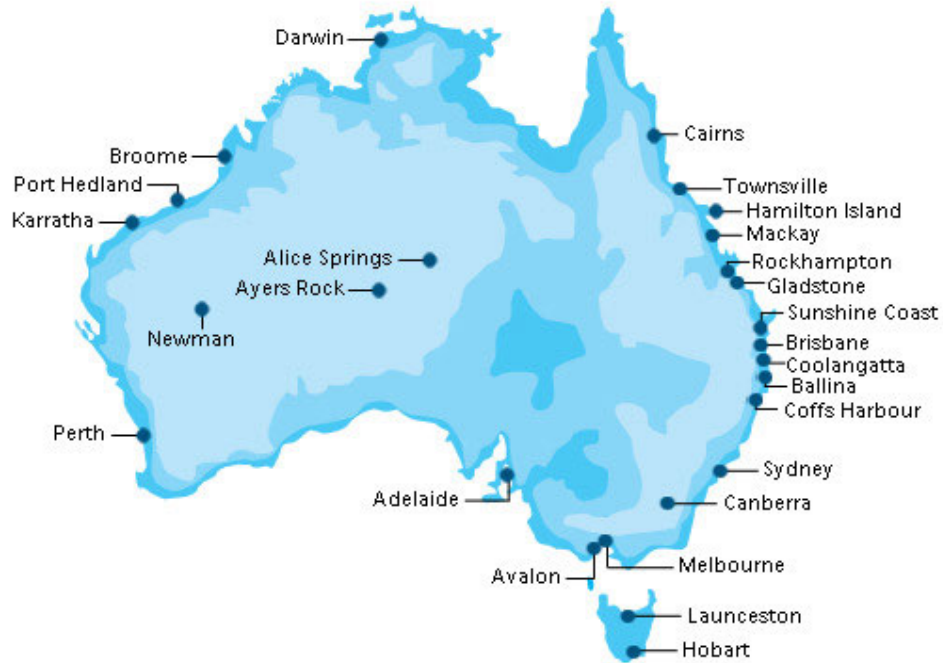
- (i) is within the executive or legislative powers of the Commonwealth; and
- (ii) utilises AA's spare capacity; and
- (iii) maintains or improves the technical skills of AA's employees; and
- (iv) does not impede AA's capacity to perform its other functions.

Under the Act (Division 2, Section 8 (1A)), the definition of services includes rescue and fire fighting services.

Airservices ARFFS Operations

The following information provides a snapshot of Airservices ARFFS function.

Airservices' current ARFFS operations are shown in Figure 1. In addition, two new services will open in 2015 at Coffs Harbour and Ballina. Eight locations operate 24 hours a day/seven days a week.

Figure 1: Airservices ARFFS Units (at 30 January 2015)**Category 10**

- Melbourne
- Sydney

Category 9

- Adelaide
- Brisbane
- Perth

Category 8

- Cairns
- Coolangatta
- Darwin

Category 7

- Canberra
- Hobart
- Karratha
- Launceston
- Mackay
- Newman
- Port Hedland
- Townsville

Category 6

- Alice Springs
- Avalon
- Ayers Rock
- Ballina
- Broome
- Coffs Harbour
- Gladstone
- Hamilton Island
- Rockhampton
- Sunshine Coast

Note: Locations underlined operate 24 hours

s47G(1)(a), s47E(d)

Airservices ARFFS charges are paid for by the airlines on a per landed tonne fee, based on the maximum take-off weight of each plane. Ultimately like other charges (e.g. air navigation, aviation excise or aviation security charges) it is a matter for the airlines to decide how much of these charges are passed on to the airline passenger in terms of ticket prices.

In the main, the majority of ARFFS responses are to runway, apron, hangar areas and the terminal and, as a consequence, the service provides protection to the airlines, in terms of business continuity, protection of aircraft, and protection of the airlines customers.

Airservices also provides other services when it has the capacity to do so. The other services include advice on building design; monitoring of fire alarms; first aid; and non-aviation rescue and firefighting.

⁴ The buildings at Newman, Gladstone, Ballina and Coffs Harbour were still classified as projects and had not been added to the asset register at 31 October 2014.

Typically, Airservices responds to a range of alarms, be they airport terminal, hangars or, more recently, business precincts and retail outlet areas. There are exceptions where fire alarms for some non-aviation related facilities terminate with the metropolitan fire service.

ARFFS callouts for non-aviation fire alarms are increasing, particularly at airports where there has been substantial non-aviation related development. To the extent that aviation charges are intended to recover the cost of aviation related activities, Airservices charges an alarm monitoring fee directly to building owner/tenants, with this fee ranging from approximately \$650-\$975 per fire alarm (per annum), depending on the hours of service. Additionally, false alarm responses incur a fee of \$550 per incident (discretionary).

Australian Competition and Consumer Commission – Long Term Pricing Agreement

As Airservices is a monopoly provider, ARFFS is a declared service for the purposes of Part VIIA of the *Competition and Consumer Act 2010* and, accordingly, is subject to strict economic regulatory control by the ACCC. Under these arrangements all price increases must be notified to the ACCC. The prices that Airservices can charge for ARFFS are calculated on the basis of the ACCC's estimate of efficient costs (including a return on capital employed) and an expected rate of return for a competitive firm operating in a competitive market.

The ACCC scrutinises Airservices ARFFS prices, considering a variety of relevant factors:

- whether capital investments are reasonable and efficient;
- whether the rate of return is reasonable; and
- whether the pricing structure is efficient and equitable.

In addition, under Section 13 of the AS Act, Airservices, in preparation of their Corporate Plan must consider “the need for high standards of safety and the need to maintain a reasonable level of reserves, having regard to estimated future infrastructure requirements” and “the expectation of the Commonwealth that Airservices will pay a reasonable dividend”.

Airservices sets its prices with airlines using a five year Long Term Pricing Agreement (LTPA). Negotiations with industry are undertaken prior to Airservices submitting a pricing proposal to the ACCC.

The ACCC can then conduct its own consultation process with industry including calling for public submissions and holding hearings where appropriate to help inform their determination.

The current LTPA covers the period from 1 July 2011 until the 30 June 2016. The pricing agreement, which includes projected price changes as appropriate, also implements risk sharing arrangements to reduce the impact of unforeseen changes (i.e. if revenue collected varies by more than five per cent of the projected figure, Airservices may refund revenue to airlines).

Airservices has maintained regular discussions with industry on pricing through its Pricing Consultative Committee (PCC) forum. These meetings have been important in helping to establish and agree pricing frameworks. The PCC comprises representatives from the major domestic and regional carriers, international airlines and associations, and general aviation operators.

The PCC played an important role in developing prices for the current LTPA and has discussed the core pricing inputs such as the forward capital works program; weighted average cost of capital; and forecast activity.

The meetings are held on a quarterly basis with standing discussions covering such things as service performance, capital works program delivery and cost efficiency. The PCC also reviews all capital works business cases greater than \$10 million in value, and those that are considered of industry importance, and relevant feedback is provided prior to these being submitted to the Airservices Board for their consideration.

Network Pricing

The major issue in ARFFS pricing raised largely by the overseas airlines and referred to in a number of reports to Government such as the draft Competition Policy Review released in September 2014, is in relation to the use of network rather than location specific pricing.

The criticism of network pricing is it provides a cross subsidy from capital city airports, where international airlines operate, to other domestic airports in Australia. It should be noted that based on BITRE data for the 2013-14 financial year the international aviation market in Australia represented only 20% of regular passenger transport flights and 35% of passengers carried.

In essence the difference between the location specific and network pricing approaches is that:

- location specific pricing involves each location bearing all of its own costs of ARFFS; and
- network pricing involves the cost of service provision being averaged across the entire ARFFS network and each location bears its share of this average cost proportioned on the basis of volume.

In 2004-2005 the ACCC objected to location specific pricing on the basis that a large component of ARFFS costs are fixed by regulation with the result that small, low volume airports (mainly regional) were inappropriately disadvantaged, and further that location specific pricing is less efficient in Airservices current operating environment.

The ACCC rejected the pricing arrangement stating that:

- the introduction of new ARFFS using location specific charging would likely have large impacts on particular user groups;
- it did not see location specific pricing as likely to be efficient for ARFFS for smaller operators whose operations did not appear to impact on Airservices costs; and
- it is important to avoid unwanted market distortions and cautioned against recovering 100 per cent of the costs of sunk ARFFS assets in a particular location where the distortions were inefficient.

To address these concerns Airservices undertook a comprehensive review of pricing and introduced, a “network/category” based pricing structure. This hybrid approach was endorsed by the ACCC who noted that “in the absence of competition in the provision of ARFFS, Airservices' proposal was a reasonable compromise between reducing the distortions to activity where costs are to a large extent fixed (marginal costs of additional landings are negligible) and signalling the cost of new investment (such as a category change) to users”.

Consequently on 1 January 2006, Airservices introduced a new pricing structure for ARFFS that moved away from the location specific pricing approach previously in place. The new network pricing model was endorsed by the ACCC in December 2005.

The inequity of location specific pricing for ARFFS was also raised in the House of Representatives Standing Committee on Transport and Regional Services' inquiry into regional aviation and island transport services (the Neville Inquiry). The then Government's response to the Committee's recommendations, tabled in May 2007, supported the continuation of common network pricing including in its response that it provides affordable aviation services at regional airports.

As a generalisation, location specific pricing is usually deemed to be a more "economically efficient" approach to pricing (on the basis of giving more accurate signals to the market about the real cost of using particular services). However, where costs are relatively fixed (as with ARFFS because of the regulatory regime), this pricing approach adversely affects smaller airports which do not have the traffic volume to offset the high costs of establishing and maintaining ARFFS.

Network pricing assumes that airports are all part of a network, as they are feeder routes for each other, and that each part contributes to the overall health of the whole system, even though some locations may have significantly lower volumes. This approach therefore shares the costs of service provision across the whole system, resulting in lowering the price in some locations below what it should be (particularly when new facilities are required) and slightly raising it at other locations above what it would otherwise be – the actual pricing effect being cushioned by the higher volume of traffic at the capital city airports.

Airports are a part of an aviation network although some argue that the network characteristics are less strong than in some other industries (e.g. international carriers argue that the domestic and international networks are separate and cater to essentially different markets/networks).

The aviation industry (i.e. most airline and airport operators) endorsed the use of network pricing, but two participants (i.e. Melbourne Airport and the Board of Airline Representatives of Australia (BARA), which represents most major international airlines, were critical of it on the basis that:

- Melbourne Airport regards the regime as creating a cross-subsidy between itself and nearby Avalon Airport, which Melbourne regards as a direct competitor in its own local market, principally due to Jetstar using Avalon as a base for flights into Melbourne; and
- BARA on the grounds that the current arrangements provide a cross subsidy from international to domestic passengers.

It is widely acknowledged that the ACCC agreed pricing structure for ARFFS contains inherent cross subsidies by slightly over recovering its costs at the major airports (such as Sydney and Melbourne) and under recovering its costs at the regional airports and smaller airports such as Avalon. It was noted in Airservices 2011 LTPA Price Notification that transfers reflected in a cross subsidy of approximately \$30 million per annum between the regional and capital city locations.

Revenue base – return on investments

To determine the amount of revenue required to recover the costs of its services, Airservices applies the ACCC building block model.

The building block model aims to estimate the revenue required to cover the costs of an efficient service. The approach calculates the aggregate level of revenue which is equal to the operating and maintenance expenditure, depreciation, return on capital and an allowance for tax. Infrastructure costs are recovered over the life of the asset through annual depreciation charges (which are calculated on a straight line basis) and returns on capital which reduce over time as the value of the asset decreases. The revenue is then translated into individual prices based on cost attribution, activity forecasts and transitional price paths.

In addition to the recovery of operating costs and depreciation, the ACCC's building block model provides for a return on capital. This provides a return to equity and debt holders for the opportunity cost of capital invested in the business. It is calculated by applying the weighted average cost of capital to the average written down value of assets.

It is important to note that the allowable revenue calculated by the ACCC is based on an estimate of efficient costs and an expected rate of return for a competitive firm with an optimised asset base operating in a competitive environment. That is, the regulatory pricing framework is designed to approximate competitive outcomes by creating incentives for the regulated services provider to provide an efficient quality service, to achieve cost efficiencies, and to charge prices that are consistent with a competitive outcome (irrespective of the provider's actual costs or required returns).

The present regime involves a common network based fee for what are known as Category 6 aircraft and below which represent a high proportion of regional airports' traffic. Charges of Category 7 and above are location specific and reflect the additional costs that are incurred at that location to service each larger category of aircraft. The price charged in any given instance is related to the category of aircraft, as there is close relationship between certain costs and the category of aircraft.

The base "network/category" charge is calculated by adding up all Category 6 costs across the network and dividing by the total traffic volume (for all categories). The result is that regional airports with low traffic volumes pay a lower base charge than would otherwise be the case and higher volume ports pay higher charges. There is then a separate location specific "category" charge for all other categories of service provided at each airport.

In adopting these charging arrangements "target" aircraft are also specified. This ensures that charges are recovered from the users driving the need for the introduction of the services i.e. users carrying fare paying passengers (aircraft with Maximum Take-off Weight (MTOW) >15.1 tonnes, or "target" aircraft with MTOW between 5.7 tonnes and 15.1 tonnes).

The aim was to balance the need to reduce the distortions to activity where costs are to a large extent fixed (marginal costs of additional landings are negligible), while signalling the cost of new investment (such as category change) to users.

These arrangements also minimise the chance that a new ARFFS will be introduced at a location, only to see demand for the service disappear when users are charged for it, (i.e. passenger numbers fall below 300,000), hence these arrangements cope well with asset stranding risks.

Under the current pricing arrangements, some of the new investment costs will be recovered from users at the respective locations and some will be recovered through broader “network” charges levied on users at other locations. The incremental investment costs of the new ARFFS will be recovered evenly over the 35 year lives of the assets in questions.

At locations where passenger levels fall dramatically in a short period of time (e.g. collapse in the resource sector at a particular location) there is a risk that the assets might be stranded before full cost recovery. The current ARFFS charges from 1 November 2014 are at Attachment C.

Economies of scale

The current national network approach to ARFFS in Australia allows Airservices to benefit from economies of scale in terms of purchasing infrastructure and equipment, training and the ability to redeploy assets/staff to meet shortfalls and maintain service continuity.

Airservices is able to leverage considerable purchasing power when acquiring the highly specialised and expensive equipment required to provide the service such as fire vehicles and other ancillary operational equipment. For example, over the past 10 years Airservices have purchased 90 new fire vehicles replacing retired fire vehicles and increasing fleet numbers to accommodate the opening of 11 new ARFFS and service level (category) increases. Airservices operates and maintains a fleet of 114 specialised fire vehicles, with an average fleet age of 7.4 years.

The economies of scale enjoyed by Airservices also extend to staff training costs and other operating costs such as insurance, which for an individual alternate provider could be significant.

In relation to staffing, there are economies of scale in the centralised approach to the delivery of training, the ability to move the workforce to meet system pressure points caused by staff absences, seasonal or other surges in demand and the ability to increase service level (category) or resource new ARFFS locations with skilled and experienced staff. For example, if there is an unforeseen shortage of staff at a location due to illness and the availability of backup staff at the location has been exhausted, Airservices has the ability to fly staff in from another location to cover the shift and maintain the category of operation required.

Similarly, Airservices can draw upon its national network of fire vehicles and fire fighters to accommodate temporary service level (category) increases associated with larger aircraft or international services e.g. if there was a significant event (Olympic Games, World Congress).

As maintaining staffing levels is critical to meeting the required performance standards for providing ARFFS at aerodromes, this is a natural advantage of the network approach vis-à-vis splitting ARFFS up into 26 separate operations at individual locations. It is noted however, that some of the advantages may still be achieved if the network was spilt up into smaller networks, for example on a state basis.

Airservices Performance Indicators/Drivers of Efficiency

Airservices is committed to improving ARFFS efficiency and service deliver and there are sound but still developing processes in place to ensure Airservices is providing ARFFS efficiently. The development of efficiency measures is a major international challenge as there is a scarcity of such measures for a function that is in essence an emergency service rarely called upon.

Airservices has developed specific key performance indicators (KPIs) (both external and internal) for the delivery of ARFFS. Airservices has two external key performance indicators pertaining to ARFFS delivery performance:

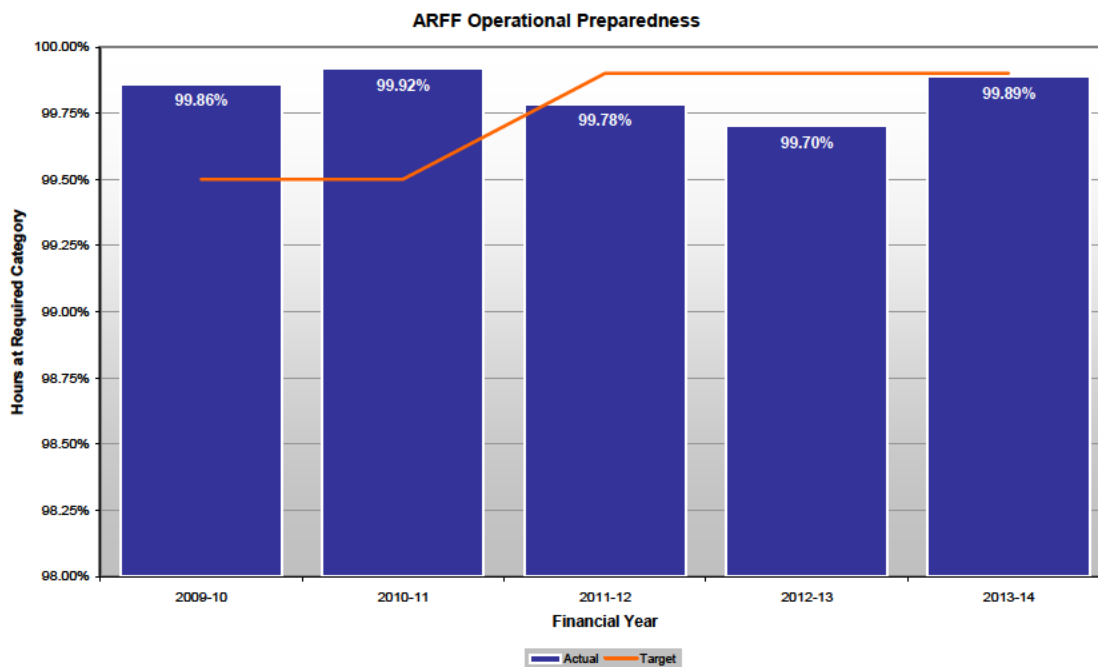
- ARFFS operational preparedness; and
- ARFFS response time.

These KPIs are included in Airservices Corporate Plan and performance against these KPIs is published in Airservices Annual Report.

ARFFS performance results for these KPIs are outlined in Figure 3.

Figure 3: Airservices ARFFS Operational Preparedness

Percentage of time ARFFS resources were available to meet required category according to the regulated service category for the aerodrome. (Target: >99.9 per cent)



Notes:

- 1) KPI target increased from 99.5% to >99.9% in January 2011.
- 2) ARFFS operational preparedness is largely impacted by staff availability (e.g. unplanned staff absences), highlighting the importance of the ability to “fly-in” additional staff as required.

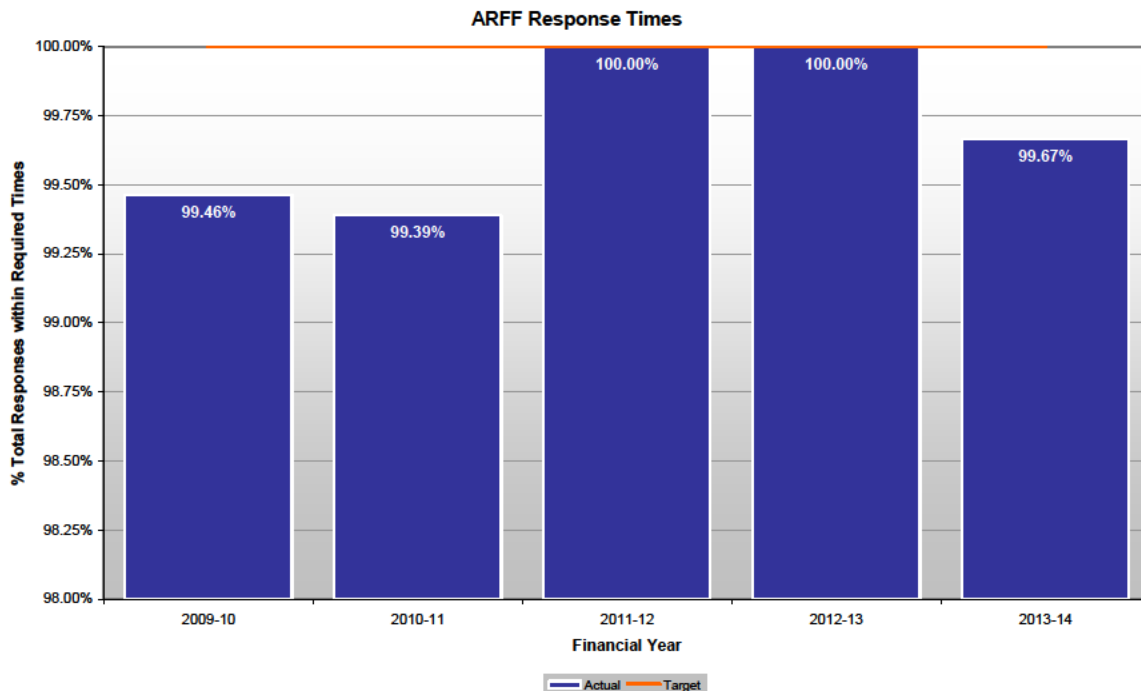
In addition to the above external KPIs, ARFFS operations are subject to a number of internal key performance indicators.

These KPIs include monthly review and monitoring of:

- financial performance (per cent spend within budget, staff productivity);
- staffing (attendance);
- safety (Lost Time Injury Frequency Rate, body stress incidents, Work Health and Safety incidents); and
- compliance (including operational documentation).

Figure 4: Airservices ARFFS Response Time

Percentage of total response to aircraft incidents on the aerodrome movement area within 3 minutes. (Target: 100%)



Notes:

- 1) ARFFS responses times can be impacted by delays associated with aircraft movements (e.g. cross runways or entering aircraft movement areas) and the location of operational staff (fire fighters) and fire vehicles at the time of an aircraft incident.
- 2) In 2013-14, ARFFS response times were impacted by one instance where staff and vehicles were participating in operational training when an aircraft incident occurred.

In 2014 the ACCC, while noting the work Airservices has undertaken to develop measures to assess its performance against KPIs, indicated that significant work was still to be done by Airservices to develop suitable internal drivers of efficiency through internal benchmarking and setting of explicit efficiency targets. The ACCC will continue to assess Airservices' work to improve its efficiency and performance measures.

Airservices capitals works program delivery and cost efficiency is also scrutinised by the industry PCC which is assisting Airservices in developing service performance measures and targets.

3.3 Costs

The ARFFS regulations detail how an ARFFS is to be provided and mandate a variety of requirements including the levels of staffing, the types and number of trucks, equipment and response times. This results in relatively fixed, inflexible costs.

The key elements of regulation that contribute to the costs are:

- the categories applied to aircraft/airports. These determine the level (and cost) of ARFFS service needed at an airport;
- the criteria which determine the threshold at which ARFFS must be established/disestablished; and
- the aviation safety regulations that detail the manner in which ARFFS must be provided.

Costs associated with building/extending a fire station are largely “sunk” costs. Once the fixed costs of installing an ARFFS has been incurred, they are no longer avoidable, even if the activity at that location fell to zero.

As the standard of ARFFS required at an airport is determined by the highest category of aircraft landing there, airports with high passenger volumes enjoy significant cost advantages over lower volume airports because the ARFFS establishment and operating costs can be spread across more passengers.

ARFFS generally account for a small share of Airservices total charges for aircraft operations and represent a small percentage of an airlines total operating costs. The percentage of costs depends on the airline and whether they are flying long or short haul but they are estimated to be less than one per cent of an airline’s total operating costs.

s47G(1)(a), s47E(d)

Table 4: Costs attributable to the delivery of ARFFS

Cost	s47G(1)(a), s47E(d)
Direct Operational Costs	
Asset maintenance and depreciation costs	
Operational & Corporate Support Costs	
Total	

The direct operational costs include fire fighters salaries and associated staff and supplier costs. Asset maintenance and depreciation costs include fire vehicle maintenance costs and depreciation relating to fire vehicles, fire stations and associated rescue equipment. Operational and corporate support costs include operations management, training, safety, finance, human resources and executive support.

The start-up cost of an ARFFS is largely dependent upon the locality and timeframe associated with establishment. Remote locations generally incur the greatest establishment costs due to the costs of materials and labour. Locations with significant competition for construction resources (e.g. remote resource sector locations) also incur greater costs.

Additional service requirements may arise from location specific factors such as runway configuration(s), on-airport location of the fire station, access road requirements and local topography that may require additional facilities and capability such as a water rescue service or difficult terrain capability.

In addition, ARFFS fire fighters are required to be trained to certain standards by the CASR. Airservices annual average costs to train fire fighters is s47G(1)(a), 47E(d)

Whilst staffing costs represent a large proportion of the ongoing costs for the provision of ARFFS, the training requirements and number of staff are required to ensure the core safety regulatory requirements are met.

Airservices staffing costs reflect Airservices Australia (Aviation Rescue and Fire Fighting) Enterprise Agreement 2013-17 which was negotiated on the basis that wage increases were offset by productivity measures.

The hours of operation and working rosters at all ARFFS locations are built around the aircraft activity at each location. Airservices monitors aircraft activity on an ongoing basis and rosters change from time to time to ensure alignment with aircraft activity and roster efficiency.

Annually Airservices also updates its workforce plan to maintain ARFFS workforce alignment with emerging trends in its workforce profile and with regard to likely future demands on Airservices ARFFS locations and any new locations likely to meet the safety regulatory passenger threshold.

In addition to the regulatory requirements, Airservices also provides a Domestic Response Vehicle (DRV) at Sydney, Melbourne, Brisbane and Perth. This vehicle is above the Category requirements and is available 24/7 with a staffing level of three fire fighters (per shift). The primary purpose of these vehicles is to attend to domestic related responses (e.g. first aid & fire alarm activations) – this additional capability enables Airservices ARFFS to maintain CASR 139.H aircraft and aviation related response requirements (responding within 3 minutes in the event of a major emergency).

The DRV service utilises small urban-style fire vehicles to primarily respond to non-aircraft related incidents such as fire alarm and first aid responses. s47G(1)(a), s47E(d)

s47G(1)(a), s47E(d)

s47G(1)(a), s47E(d)

Cost of ARFFS category changes:

All category increases require an increase in the number of staff per crew (shift). Some category changes also require additional fire vehicles to ensure minimum (regulatory required) water capacity requirements are met.

Additional operational capability is also required, as endorsed by a CASA-approved safety assessment, as part of Category 10 services.

s47G(1)(a), s47E(d)

s47G(1)(a), s47E(d)

Cost of Training Fire Fighters

CASA regulations specify that fire fighting staff must hold nationally recognised competencies prescribed by the Australian Qualifications Framework (AQF). Nationally recognised competencies/qualifications under the AQF can only be issued by a Registered Training Organisation (RTO) with those qualifications in their scope. Delivery of specific aviation fire service practical skills can only be achieved from a CASA accredited aviation fire training provider and an accredited training establishment must have facilities suitable to conduct training.

In December 2007 Airservices Board approved establishment of Airservices Learning Academy and implementation of a training program which included a centralised training function to improve the quality and capacity of workforce capability, with specific focus on operational service delivery streams including ARFFS.

ARFFS training was centralised and fully transitioned to Airservices Learning Academy in Melbourne by April 2009. ARFFS accredited training had previously been delivered through a partnership arrangement with Brisbane North Institute of TAFE, formerly Open Learning Institute. The model of delivery required utilisation of Airservices qualified ARFFS instructors and practical training facilities, with the administration and governance of training managed by the Brisbane North Institute of TAFE under its RTO registration.

ARFFS training was centralised to enable:

- nationalisation and standardisation of training management (design, development and delivery) across Airservices;
- improve training competency outcomes aligned to the operational environment; and
- economies of scale by leveraging from Airservices existing and well established RTO governance framework for accredited training, which was already (and remains) a CASA regulatory requirement for air traffic control operations, and the establishment of the hot fire training ground.

Airservices is the only provider of training in aviation specific skills with facilities to deliver effective and compliant training covering Australian airport operations to Category 10.

Utilising the Vocational and Education Training (VET) system enables Airservices to put in place a robust system of competency-based training that meets the regulatory scrutiny of both CASA and the Australian Skills Quality Authority, the national VET regulator. It is also consistent with the approach adopted by the broader emergency services industries (fire sector) which use the AQF framework and deliver VET qualifications as RTOs.

Table 9 outlines the volume of ARFFS training over the past four years, reflecting increased workforce and training demand. This demand is largely associated with service (Category) increases and increased operational staff numbers to support the opening of new ARFFS.

Table 9: ARFFS Training (number of staff)

Qualification	2014-15 Q1 Forecast	2013-14 Actuals	2012-13 Actuals	2011-12 Actuals	Annual Average 2011-15
Cert II – Recruits	72	118	43	36	67
Cert III	54	26	36	63	45
Cert IV	43	79	35	41	50
Diploma	41	32	18	10	25
Adv Diploma	0	9	11	4	6
Operational Workshops	391	170	68	0	157
ARFFS Driver Training	570	330	0	0	225
Total	1,171	764	211	154	575

Centralised ARFFS training has improved ARFFS operational capability and readiness through aligned standards, practices and quality training outcomes ensures flexibility to meet operational service demand.

The CASA certified fire training centre is capable of simulating full scale emergencies for all common aircraft types that delivers environmental benefits including reduction of dark smoke pollution and water recycling capability saving approximately 30 million litres of water per annum. It also assists in maintaining Airservices' obligations under the Stockholm Convention to reduce the use of Persistent Organic Pollutants.

This model is used by other emergency services throughout Australia including Melbourne Fire Brigade, Country Fire Authority, Department of Defence and Maritime (Australia Maritime Safety Authority – National Search and Rescue School).

s47G(1)(a), s47E(d)

s47G(1)(a), s47E(d)

Outstanding environmental obligations – Perfluorooctane sulphonate (PFOS)

Perfluorooctane sulphonate (PFOS) and perfluorooctanoic acid (PFOA) are classes of chemical known as Perfluorinated chemicals (PFCs). PFCs are manufactured substances which do not breakdown readily in the natural environment (are persistent) and are widely used in a range of applications including textiles, food packaging, cosmetics, paints, polish, hydraulic oil for aeroplanes and fire-fighting foams.

It is now well recognised that PFCs have an impact on the environment and human health due, in part, to their persistence. Many countries, including Australia, have either banned or restricted the use of PFC-containing fire-fighting foams, particularly those containing PFOS. In Australia, the use of existing stocks of PFOS-based foams is still permitted.

Airservices and its predecessor organisations used fire-fighting foams containing PFCs in ARFFS activities from the early 1990s. Airservices ceased using these foams for most Australian airports in 2010 following the 2009 listing of PFOS on the Persistent Organic Pollutant register of the Stockholm Convention. Airservices now uses a biodegradable operational foam at most locations. At the request of the Australian Department of Defence (Defence), Airservices continues to use PFC-containing fire-fighting foams at Darwin and Townsville airports which are used jointly by Defence and civil operators. The chemical is used only for emergency responses and not for training purposes.

PFOS or PFOA contamination of soil and/or surface or ground water from fire-fighting foams has been confirmed at fifteen airports around Australia and is assumed to be present at a further twenty two airports - most are likely to have multiple contamination zones within a site.

There are currently no Australian standards for PFC exposure or contamination. There are no known practical remediation measures for contaminated soil or water nor are there specific regulations related to fluorosurfactants. Similarly, there are no Commonwealth or state/territory guidelines about acceptable levels of PFCs in the environment.

The Department of Infrastructure and Regional Development and Airservices are working with the Department of Environment to identify a whole of government approach to PFOS management including measures to limit offsite movement of PFOS, waste and contaminated sites. In the interim, Airservices has developed and implemented an environmental management plan which provides guidance on the management of PFC contaminated sites on a site by site basis.

s47G(1)(a), s47E(d)

3.4 Interaction with other Airservices functions and other rescue and firefighting service providers.

Section 8(1)(j) of the AS Act permits Airservices to perform other services (e.g. first aid, fire alarm monitoring, advice on building design certification); however these services should not impede Airservices' capacity to perform its core aerodrome-related rescue and fire fighting services function and maintain category as detailed in the MOS Part 139.H.

Furthermore, as stated in CASR regulation 139.710 (2) Airservices may perform other fire control services or rescue services elsewhere than on an aerodrome, but the provider must give priority to its ARFFS functions.

The increasing amount of non-aviation development on airport land (e.g. retail outlets and business parks), has raised issues over Airservices capacity, as the primary provider, to continue to provide services to these developments, while maintaining the required ARFFS category of service for aircraft incidents. Under current practice, Airservices will provide a first response to these incidents until the metropolitan fire brigade can arrive at the destination, and may hand over control.

In accordance with CASR regulation 139.780, Airservices has entered into Memorandums of Agreement (MOAs) with state and territory fire authorities to formalise and confirm established protocols for joint operational activities and mutual aid at airports. The agreements aim to avoid unnecessary duplication of resources by providing clear responsibilities to each agency for rescue and fire fighting services at designated aerodromes and the surrounding vicinity. Airservices is progressively revising the MOA's to clearly set out which agency is responsible for providing fire and rescue services at aviation and non-aviation facilities at airports.

The revised agreements, stipulate that Airservices is responsible for aircraft rescue and firefighting, monitoring existing fire alarms and responding to fires at aviation facilities on airport land. state and territory fire authorities are responsible for responding to hazardous material incidents and rescue and firefighting, alarm monitoring at non-aviation sites on airport land. Non-aviation sites include retail outlets, car-parking lots and business parks/ facilities and freight operators established on airport land.

However, Airservices may provide assistance to the state and territory fire authorities at non-aviation related facilities (e.g. first response and alarm monitoring) and off airport (e.g. bush fire fighting assistance), provided that it gives primacy to its core ARFFS function and maintains its required ARFFS category without compromise.

The MOAs aim to set out how Airservices ARFFS assists other fire services to manage off airport emergencies and how domestic fire services assist ARFFS at airports. Request for Airservices ARFFS assistance are assessed on a case by case basis and during the 12 months, 2013-14, Airservices provided assistance on 36 occasions in seven different states.

The most significant emergency assistance response was in early 2014 (February-March 2014) when Airservices ARFFS assisted the Country Fire Authority (CFA) in Victoria to extinguish a fire at the Morwell coal mine in Victoria. At the request of the Fire Services Commissioner Victoria, Airservices assistance included the provision of 5 specialist ARFFS vehicles and rotated over 12 fire fighters continually over a 37 day period.

The unique capability of ARFFS vehicles, combined with the specialist training of ARFFS fire fighters, was greatly acknowledged by the CFA as a major contributor to bringing the emergency under control.

In instances where the assistance is protracted, under the MOAs Airservices are reimbursed for the cost of providing assistance.

First Aid

Airservices currently provide first aid services in conjunction with its ARFFS function. However, as in the case of the provision of non-aviation rescue and fire fighting services, this is classed as a discretionary function of Airservices and Airservices must ensure that it has sufficient resources to maintain the required ARFFS level of service.

Building Certification

Airservices also provide advice for building certification at airports. However, the state/territory fire authority is the authority responsible for providing the certification for all fire related components.

3.5 Overseas ARFFS Framework and Provision

ARFFS frameworks were examined in the United Kingdom (UK), Canada, the United States of America (USA), and New Zealand.

The provision of ARFFS varies overseas with a mix of public authority and private contractors engaged in providing the service. There are also different establishment criteria used by some countries to determine when ARFFS should be established.

For example in New Zealand ARFFS is required during operations by aeroplanes with a seating capacity of more than 30 passengers, while in Canada an airport operator must provide ARFFS if the total of number of passengers is more than 180,000 per year.

The USA requires ARFFS for certified airports and the UK requires ARFFS for licenced aerodromes servicing public transport flights and flights for instruction in flying.

Most countries have a history of adopting a service model that legally requires the airport operator to provide an ARFFS. Most airport operators provide their own ARFFS or contract the service to private ARFFS providers or state fire authorities.

Airport operators recover ARFFS costs through aircraft landing charges although unlike Australia there is generally little transparency in the costs of these arrangements.

The provision and management of ARFFS overseas can vary depending on the airport and its ARFFS requirements under legislation.

For example the following service provisions models are used in America:

- airport operator owns ARFFS assets and provides ARFFS personnel;
- airport operator owns ARFFS assets and state fire authority provides ARFFS personnel;
- airport operator owns ARFFS building and state fire authority provides and manages ARFFS equipment and personnel;
- state fire authority owns ARFFS assets and provides ARFFS personnel;
- airport operator owns ARFFS assets and a private contractor provides ARFFS personnel; and
- airport operator owns ARFFS building and private contractor provides and manages ARFFS equipment and personnel.

Furthermore, there can be differences in the types of service provided, based on airport size, ARFFS requirements and location/proximity to emergency services.

For example, some airports or private contractors provide additional services to their ARFFS function such as medical response, police services, alarm monitoring and assistance for passengers with reduced mobility.

However, some only provide the ARFFS airside, with no additional services and the state emergency services are required to respond to all fires and medical emergencies at the airport terminal and other buildings on airport land.

Further information on current overseas practices can be found at Attachment D.

4. Identification of Options

Option 1 – Airservices National Network with Regulatory Reform

Under this option Airservices would remain as the public monopoly national ARFFS provider and would continue to be fully funded from charges to the airlines.

However this is not a “status quo” option as a major ARFFS regulatory policy review has recently been agreed to by the Government. The review will be pursued irrespective of any consideration of contestability options and has been given the highest priority as part of the Government’s response to the Aviation Safety Regulation Review Report tabled in Parliament in December 2014.

The review will be undertaken to examine a number of operational and regulatory improvements aimed at enhancing efficiencies, providing greater clarity about the ARFFS function and reducing costs to industry, while ensuring robust aviation safety measures remain in place.

There is a strong case for regulatory reform both in terms of the establishment criteria governing where ARFFS are needed and the level of ARFFS service required and the regulations governing the detail of what is required in the provision of ARFFS which affect the costs of ARFFS once established.

Regulatory reform could include:

- removing the automatic international air services criterion and using a passenger threshold criterion as a trigger for undertaking a risk review for the provision of an ARFFS at the individual location rather than an automatic ARFFS requirement;
- clarifying legal responsibility for the provision of ARFFS;
- clarifying ARFFS and non-ARFFS roles and legal responsibilities at airports; and
- replacing some of the prescriptive requirements in the regulations and the MOS with an outcomes-based approach.

Further details of regulatory reform initiatives are outlined in section 6 of this report.

Under this option either the current network pricing model or the location specific pricing model can be adopted noting the ACCC will be reviewing Airservices next long term pricing agreement which needs to be finalised by 30 June 2016.

Under Section 11 of the AS Act, Airservices may provide any facility or service in “cooperation with another person” or “by arranging for another person to do so on its behalf”.

Airservices, therefore, already has the option of contracting out its ARFFS function and may choose to do so, if it found that it was a more efficient or effective way of delivering the service.

The advantages of this option are:

- maintains a legislative requirement for safety as the highest ARFFS priority
- maintains an efficient, highly skilled, experienced operator (Airservices);
- maintains a nationwide capability to deploy resources ensuring continuity of services;
- state/territory emergency services interface with one agency (Airservices);
- pricing oversight by the ACCC is transparent and restricts Airservices ability to increase prices;
- can adopt either network or location specific pricing;
- the current network pricing model could be maintained which would benefit regional airports;
- the five year pricing agreement with airlines provides certainty for industry and airlines negotiate prices with one provider – Airservices;
- no cost to Government – fully industry funded;
- economies of scale – benefits accrue in terms of purchasing, ability to redeploy assets/staff;
- lower ARFFS regulatory costs for CASA ; and
- centralised and consistent national training of ARFFS staff.

The disadvantages of this option are:

- reduces scope for efficiency gains from potential competition;
- reliance on ACCC and consultation with industry during five year long term pricing agreement determinations to drive Airservices continued increased productivity and efficiency and reduced costs to industry; and
- airlines operating at capital city airports are subject to slightly higher prices if network pricing is maintained.

Option 2 – Airport operators responsible – full contestability

ARFFS are an integral part of the aeronautical functions of the airport, as with runways, runway lighting and maintenance etc. The availability of ARFFS could therefore be considered to be the responsibility of the airport operator who has a duty of care to airport users.

Under this option full contestability would be introduced at all ARFFS locations by making individual airport operators legally responsible for arranging ARFFS provision at their airports, an approach not dissimilar to what happens in many other countries. The provision of ARFFS would be funded by airport operators with costs passed on to the airlines and passengers.

Airports would either establish their own or contract out the provision of ARFFS. Airports would include charges for ARFFS in their airport landing charges and potentially also charge sub-lessees of the airport (e.g. commercial tenants such as factory outlets) for firefighting, alarm monitoring or first aid services to their businesses outside what was considered ARFFS.

This option places legal responsibility on airport operators for ensuring that ARFFS are provided at their airports which meet the CASA regulatory establishment criteria.

While this is an effective form of regulation, it will impose a regulatory burden on airport operators, discussed further below, at a time when the Government is seeking to reduce regulatory burdens and cost on industry.

It should also be noted that for the 21 federally leased airports operating on Commonwealth land, the operators were granted long term leases (50 years initially with an option to extend a further 49 years). These leases did not include the provision of ARFFS and there could be some push back from operators if required to provide a service that is not in the lease agreement.

The advantages of this option are:

- alternative providers could provide ARFFS more efficiently, without compromising standards;
- ARFFS becomes one part of a package of services the airports are required to provide;
- gives airports responsibility for the provision of a key service required for airport operations;
- is consistent with overseas practice; and
- provides competition that may encourage ARFFS providers to increase efficiency and productivity as a means of successfully tendering for ARFFS at major airports.

The disadvantages of this option are:

- there is a limited market of specialist ARFFS providers domestically while overseas interest would depend on their scope for seeing a “return” on an investment from performing a tightly regulated safety service function that traditionally achieves low returns;
- airports do not support increased regulatory responsibilities and costs being placed on them;
- airlines likely to oppose further regulatory and charging power being given to airport operators who they argue would not pass on any cost savings to the airlines but likely increase charges;
- creates a potentially more complicated pricing regime (ARFFS provider - airport- airline);
- high establishment/market entry costs likely to discourage new competitors;
- requires location specific pricing which is likely to generate higher ARFFS charges at regional airports with lower traffic volumes;
- no guarantee regional airports would attract an ARFFS operator (given likely loss makers);
- loss of economy of scale benefits of national network;
- increased costs to airport/community for private provision of other services allied to ARFFS, such as alarm monitoring and first aid;
- joint operational activities and mutual aid with state/territory fire authorities could be reduced;
- no guarantee of competitive neutrality for public versus private providers; and
- increased costs to the regulator as CASA would need to do more certification and ongoing monitoring and auditing of regulatory compliance with more ARFFS providers in the market.

It is possible that some of these disadvantages could be addressed if a successful ARFFS provider picked up a network of ARFFS airports that had a mixture of both high volume and low volume airports within them.

However the formation of smaller networks may be problematic as, for example, Queensland, Western Australia and the Northern Territory have a disproportionately large number of the low volume ARFFS airports. The different airport owners would also not allow the ARFFS provider to network price if this was at the expense of their specific airport.

As part of this option (and for options 3 and 4) an employee-owned , public sector mutual organisation either managing and/or providing ARFFS functions could also be considered with such an organisation able to tender for ARFFS provision.

Significant start-up and ongoing costs and regulatory requirements, would not encourage the formation of such organisations. If airports were to choose to manage the infrastructure required and only tender out the service provision then this would reduce start-up costs. However, it is also noted a number of existing public service mutuals operate under a government grant whereas no Government funding is provided for ARFFS.

Overseas, public sector mutuals seem to have been successful in industries where the experts and professionals have a degree of freedom to make their own judgements as to how to provide a good service; where they can exercise discretion in making decisions; when they can act entrepreneurially, and can innovate independently.

In summary, the provision of a prescribed safety regulatory function like ARFFS does not appear particularly conducive to this type of service delivery model.

Option 3 – Partial contestability at Capital City Airports

This option is similar to Option 2 except contestability would be introduced at just capital city airport locations with Airservices continuing to provide ARFFS at regional airports.

From a commercial perspective, the capital city airports are most likely to potentially attract external market interest from overseas in the provision of ARFFS given they have the traffic volumes best placed to generate a return on investment.

Airservices would need to, without the national network, significantly increase the cost of ARFFS at regional airports to ensure that it recovered the costs of the provision of these services at lower volume, higher cost remote locations.

The advantages of this option are:

- similar to Option 1, but with increased efficiency and reduced costs focussed on capital city airports;
- ensures the provision of ARFFS at regional airports is not compromised; and
- focusses contestability on where it is most likely to have a contestable market.

The disadvantages of this option are:

- similar concerns to Option 2;
- inconsistent approach to legal responsibility for ARFFS between airport operators and Airservices across the national network;
- potentially significant adverse commercial impact on Airservices from loss of higher return and higher volume capital city airports including personnel and value of assets; and
- increased ARFFS charges at regional airports, or requirement for a government subsidy.

Option 4 – Applicants added to Table of Eligible Providers

Under this option contestability is maintained by allowing the Minister for Infrastructure and Regional Development to add new ARFFS providers to the current CASA regulatory table of eligible providers.

Under this option the ARFFS providers, rather than the airports, would be responsible for the provision of ARFFS, through the establishment of a contract for the provision of the services with all airline ARFFS users at the airport and with the support of the airport operator.

Under this option potential ARFFS providers can approach the Minister seeking approval to be added to the table of eligible providers (table 139.925) under Subpart 139.H of CASR, nominating at which airports it envisages providing the services.

However for this option to be sustainable, the Minister would need to be assured that the provider had CASA, airport and airlines agreement to be able to undertake ARFFS at a particular airport location and that a handover arrangement with Airservices for an existing ARFFS location had been agreed by CASA. In this regard criteria for getting on to the table of eligible providers should be established.

CASA approval would be subject to the ARFFS provider meeting all the necessary standards and requirements, outlined in Sub-regulation 139.925 and the MOS for Subpart 139.H, including the provision of a fire station, fire fighting vehicles and staff. In addition, Part 11 of the CASR gives CASR the power to seek evidence of the applicant's financial standing.

Advantages of this option are:

- opportunity to test market but without major disruption to aviation industry;
- enables partial contestability at particular locations;
- maintains oversight on who can enter the market against aviation safety regulations;
- opportunity to put conditions on future ARFFS arrangements potentially allowing, for example, an ARFFS provider to operate at several airports enhancing their economies of scale.

Disadvantages of this option are:

- previous use of this approach did not resolve high start-up costs or meet regulatory standards;
- requires a degree of regulatory complexity for new competitors and would require increased risk to Minister in determining "appropriate" providers unless reinforced by regulatory criteria to determine ARFFS applicants eligibility;
- no competitive process to encourage efficiency and productivity gains;
- could allow price setting at individual locations outside ACCC scrutiny with potentially increased prices; and
- more providers result in increased CASA regulatory oversight costs.

5. Feasibility of options

5.1 What aspects of ARFFS are contestable?

As outlined earlier, the ARFFS function is to rescue persons and property from aircraft which have crashed or caught fire at or near the aerodrome and responding to other fires (not just aircraft fires) at the aerodrome.

The ARFFS function can be segmented into:

- response to aircraft crashes or incidents on or in the vicinity of an aerodrome;
- monitoring building alarms for all aviation-related building and facilities in the vicinity of the aerodrome;
- monitoring alarms for other buildings and facilities on the aerodrome;
- responding (where it is reasonable to do so, or on the request of another emergency response agency) to alarm and/or fires that are non-aviation-related that occur in the vicinity of aerodrome; and
- responding (where it is reasonable to do so, or on the request of another emergency response agency) to first aid emergencies that are not aviation related that occur in the vicinity of the aerodrome.

In terms of contestability, it is impractical and significantly increases risk to consider each segment individually or have multiple providers at the airport. The service as a whole needs to be contestable.

It is noted that Airservices is a registered training organisation and it has been suggested that this aspect could be considered for contestability.

However the provision of training is already contestable and new ARFFS providers could become registered training organisations. It was a commercial decision for Airservices to establish its own training facility and provide training for its firefighters noting that it is already operating at capacity and hence is currently not able to take on other trainees.

5.2 Are there alternative ARFFS providers?

If the provision of ARFFS is opened up to contestability, a market would be created by making airport operators responsible for ensuring ARFFS is provided. Airport operators would need to source an ARFFS provider and enter into a contract for service provision, or provide the service themselves.

There is no Australian market for the provision of ARFFS, as ARFFS is currently provided by a government statutory authority, Airservices.

The best prospects for creating a market would be through Australian airport operators contracting overseas ARFFS providers. There are a number of international organisations which can provide ARFFS services, however to establish individual operations in Australia would involve significant start-up costs.

While these are inevitable in any new operation, what would be of most contention is whether an overseas ARFFS provider could actually reduce ongoing operating costs to industry compared with Airservices. The major challenges for the overseas provider to do so would be to find additional productivity and efficiency gains from a tightly regulated function or to reduce salary costs.

In relation to contestability, there are three broad categories of possible ARFFS providers, airport operators, state fire authorities, or private providers.

Airport Operators

If airport operators decided to provide their own ARFFS in Australia, they would need to supply all facilities, equipment and staff to meet the required ARFFS category and CASA regulatory requirements.

The most likely way to do this would be for the airport operator to either purchase or lease the assets from Airservices and hire Airservices staff.

State/territory Fire Authorities

As with some airports in the United States, an airport operator could contract ARFFS provision to the state/territory fire authority.

This could involve the airport operator owning the facilities and equipment and just contracting state/territory fire staff to provide the service component.

However, the state/territory fire authority would need to have a dedicated, on-airport ARFFS operation to meet the mandated three minute response time; it could not simply use a local fire brigade to attend airport fires. Hence the state/territory fire authorities would need to increase their staffing levels and training to meet ARFFS category and CASA regulatory requirements. Again the most likely avenue for this to occur would be through acquiring current Airservices equipment and personnel.

State/territory fire authorities have shown little willingness to provide ARFFS in the past, with their resources often stretched to meet requirements off airport. Additionally, the use of state/territory fire authorities alone would do little to promote contestability as each state/territory authority could only operate in their own state/territory.

Private Providers

No current private aviation firefighting providers were identified in Australia for commercial aviation operations. However, as previously discussed, there is an option of the formation of a public sector mutual by the ARFFS employees (fire fighters) through the establishment of an employee cooperative or employee governed business.

A number of private overseas ARFFS providers were identified and these are outlined below.

A Danish company called Falck claims to be the world's largest international firefighting operator, with activities in 18 countries. Falck currently provide ARFFS at Copenhagen Airport.

Falck has a presence in Australia and after acquiring a majority interest in Australian-based Hostile Environment Services, Falck will provide ambulance and fire-fighting services and medical clinics for mines and other facilities in remote areas of Australia and Papua New Guinea.

In North America, Pro-Tec Fire Services has offered contract ARFFS and Emergency Response services for more than 35 years to numerous commercial airports and airparks across North America. It is understood to currently provide ARFFS to 19 airports throughout the United States.

In South Africa, Indiza Fire and Training Services (Pty) Ltd (Indiza FTS) is a subsidiary of Indiza Airport Management, specialising in the training and provision of airport rescue and firefighting services. Indiza FTS provides airport rescue and firefighting services under contract to Richards Bay Airport (Category 6) and Virginia Airport (Category 2) in the United States.

Serco Integrated Services provide airport management, air traffic control services in Europe, the Middle East and America. Serco provides ARFFS at some UK airports and is an ARFFS training provider in the UK.

Based on initial research undertaken by the Department examining arrangements in the United Kingdom, Canada, the USA, and New Zealand, it is difficult to ascertain the cost of ARFFS provision overseas as airport operators include ARFFS charges within their general airport prices and not separately.

In addition, the cost and prices agreed between airport operators and private contractors are rarely released due to commercial sensitivities.

There is also little comparative up to date data on ARFFS manning levels internationally although based on a US study back in 2009, Australian ARFFS manning levels compared favourably.

As overseas airport operators are required to provide ARFFS, they are generally able to access government funding for ARFFS facilities and equipment. Since 2004, the American Federal Aviation Administration, under its Airport Improvement Program has provided approximately \$400 million to airports for ARFFS facilities and equipment. This can include the building of new fire stations or purchasing new trucks and other equipment.

Transport Canada provides funding for safety related airside projects, which includes ARFFS equipment and shelters, under its Airports Capital Assistance Program.

The program's eligibility criteria for airport funding are that they are not owned or operated by the federal government; they meet certification requirements; and they have at least 1,000 regularly scheduled commercial passengers per year. s47G(1)(a), s47E(d)

s47G(1)(a), s47E(d)

5.3 How providers would be regulated and managed?

CASA would have two important roles in a contestable market; firstly to consider applications by prospective providers for certification to become ARFFS providers, and secondly to monitor and audit compliance by ARFFS operators with the CASR.

In assessing applications CASA is required under the regulations to take into account an applicant's financial standing and an applicant is required to provide evidence of this in their application, as well as details about managers and organisational structure. CASA's principal function is to ensure that whoever provides the service is compliant with the safety regulations and associated MOS.

If the airport has responsibility for the provision of ARFFS, CASA would have regulatory oversight of the airport operator to ensure that ARFFS is provided when required under the establishment criteria and that the ARFFS meet the CASR requirements. Under this model CASA would require the airport only to engage providers that have been certified by CASA. The nature of the service delivery model adopted (e.g. who provides the infrastructure and/or personnel) will determine who CASA audits.

The introduction of contestability would result in an increased work load and costs for CASA, who currently regulate one national provider that has considerable expertise and knowledge of the regulatory system. Potentially CASA would need to change from overseeing one main national ARFFS provider to between two and 27 different ARFFS providers.

Under CASA's cost recovery model, industry would need to bear the cost of this certification and of any auditing process undertaken by CASA to check compliance.

5.4 Issues

Start-up Costs

Neither the requirement for the establishment of an ARFFS nor the use of ARFFS arises out of an explicit voluntary demand by users at a particular location. Rather, as outlined above, the incursion of ARFFS costs is determined by government regulation.

High fixed costs (specialised and expensive equipment), and significant capital intensive infrastructure is required for service delivery. For example, it is an ICAO requirement that ARFFS be able to respond to an aviation incident, anywhere on the airfield, within three (3) minutes and have capacity to discharge water at a certain rate; this dictates the type of vehicle ARFFS providers must use.

As noted earlier, the average cost of establishing a category 6 ARFFS is estimated to be over s47G(1)(a). This would be a disincentive for a number of potential providers. In addition the ongoing costs, including personnel and ongoing training requirements, are estimated to be over s47G(1) 47E(d) per annum.

()

The costs to a new provider would be greater unless they took over the entire network (introducing a private monopoly), or at least a significant segment of the network, as they would not benefit from Airservices economies of scale.

Start-up costs are an inevitable part of establishing a new operation vis-à-vis an incumbent operator and do not preclude contestability. However they are likely to be a factor in reducing the potential number of new overseas entrants that might consider taking on the provision of ARFFS in Australia particularly at regional airports.

To alleviate the impact of start-up costs, Airservices or the Government could maintain ownership of the assets and pay for the infrastructure required when new services are established, leasing the assets to the ARFFS provider or airport at a fair market price. However this option adds another layer of complexity to the provision of ARFFS and a better contestability approach would not continue to require Government involvement in the service.

Airservices future role – competitive tendering/neutrality

Competitive neutrality policy requires that government businesses do not enjoy competitive advantages over private competitors by virtue of their public ownership. In the light of Airservices' monopoly, there are a number of issues that would need to be addressed to ensure a level playing field in a contestable environment.

For private providers to be able to compete with Airservices for ARFFS contracts, Airservices' charges would need to be based on the real costs of operation at the particular airport. That means that it should not be able to offset costs at one airport by cross subsidising from others in its network and that it should pay commercial rates for facilities at airports comparable to those that private providers would have to pay. This would mean the adoption of location specific pricing.

If contestability is introduced, in situations where Airservices owns ARFFS infrastructure (fire stations and firefighting equipment) at an airport and is replaced by another provider, the new provider may wish to buy or lease some or all of those assets.

It could be necessary for the Government or the ACCC to intervene to ensure that infrastructure is transferred, at market prices, where Airservices cannot make out a case for their retention.

An alternative model would be to give airport operators control over the provision of ARFFS infrastructure. Airports could be given the option of buying new infrastructure or acquiring existing on site infrastructure from Airservices at fair market value.

Airport operators could then provide the assets to whoever they selected to provide ARFFS (which could be Airservices or another provider). The airports would recover their costs in managing the assets from the airlines through their landing fees. This model would be contingent on making airport operators legally responsible for the provision of ARFFS.

The Government could include price regulation under a contestable model by the ACCC, i.e. the provision of ARFFS could require the ACCC to monitor or approve prices.

Legislative and Regulatory change

Regardless of which service delivery option is implemented, the issue of legal responsibility should be addressed. As mentioned, the current regulatory framework does not place a clear obligation on Airservices or any other entity to ensure ARFFS is provided at an airport where it is required under the establishment criteria.

There are two main options:

- legal obligation on Airservices to ensure ARFFS are provided. This option has merit if Airservices continues to be the primary ARFFS provider; or
- legal obligation on airport operator. This option has merit if contestability is to be introduced.

Without the legal obligation there is no party to which an ARFFS provider would contract to provide the service or which can run an open competitive process for alternate ARFFS providers. In the absence of such an obligation, a provider may have a problem negotiating directly with airport operators given they have generally indicated an unwillingness to date to assume responsibility or liability for ARFFS at their airports.

If the airport operators have the obligation to provide ARFFS, they could also explore whether other on-airport functions could be performed by an ARFFS provider to maximise value.

As outlined earlier the possibility of subjecting airport operators to a legal obligation to provide ARFFS has been attempted previously but was subject to a successful disallowance motion in 2002. Opponents highlighted legal liability issues for airport operators if they were made legally responsible for ARFFS and questioned the appropriateness of allowing contestability for the provision of a safety emergency service.

A model of contestability requiring airports to be legally obliged for ARFFS provision (rather than organisations approved under the CASR) would require an amendment to Part 14 (section 216) of the *Airports Act 1996* (the Airports Act). The Airports Act currently provides that airport operators must not provide or cause ARFFS to be provided unless they are provided by, a person approved or licensed, by CASA under regulations made under section 98 of the *Civil Aviation Act 1988* to provide the services, or the Australian Defence Force. Legislation would also need to be introduced to cover the non-Federal airports not included in the Airports Act such as Cairns.

If Airservices were to be made legally responsible for the provision of ARFFS they could, as they can now, engage others to execute that function. This option would be a matter for the Airservices Board to consider.

Natural Monopoly

The provision of ARFFS at any airport is clearly a natural monopoly as it is not feasible to have more than one provider on any site. However, at the network level there can be many providers. The providers can compete with each other, but only in the sense that the most efficient ones will be able to provide (monopoly) services at individual airports. The greater number of airports a provider can service, the greater will be their economies of scale.

It follows then, that the most efficient provider would serve all airports. This could be done for the minimum cost, provided that suitable regulations were in place to prevent price gouging or “gold plating”.

To maintain the cross-subsidy to smaller airports at no cost to the tax payer, the provider will need to be in the public sector, unless regulations can be imposed to mandate the cross-subsidy arrangements.

Consequently, the introduction of contestability may still result in a monopoly market and if so, mechanisms should be in place to ensure efficiency, pricing and regulatory oversight is retained.

Interaction with state/territory rescue and firefighting services

Airservices provides a number of discretionary services in conjunction with their ARFFS function and has agreements with state/territory fire authorities for joint operational activities and mutual aid at airports. If ARFFS was made contestable, the new ARFFS provider would have to make new arrangements with the state/territory fire authority for joint operational and mutual aid at airports.

The MOAs are currently negotiated between the state/territory fire authorities and Airservices. If ARFFS is provided on a contestable basis, the states and territories could potentially have to negotiate the MOAs with multiple providers. For example in Queensland ARFFS is currently provided at nine locations which could equate to nine different agreements and potentially nine different arrangements.

A private operator should be willing to provide these discretionary functions at an airport albeit charging for these services, resulting in a likely small increase in costs to the airport operator, airlines and ultimately the passenger.

Transitional Issues

As mentioned previously, Airservices currently operates ARFFS at 26 airports. Some of those airports are on land leased from the Commonwealth and Airservices has built stations on land it sub-leases from airport lessee companies. Airservices also owns infrastructure (such as fire stations) at non-federally leased airports.

Airservices’ assets would need to be dealt with in the event that an alternative provider successfully tendered against Airservices at locations where Airservices is currently operating. Possible scenarios include:

- Airservices retaining the assets and infrastructure and leasing them to the airport operator or the ARFFS provider;
- Airservices selling assets (for fair market value) to the airport operator or ARFFS provider, and
- Airservices retaining movable assets for use at other locations and the ARFFS provider/airport purchasing the required items.

If the airport operator owns or leases the infrastructure, they could then engage an ARFFS provider to provide the firefighters to deliver the service. The firefighters could be a group of ex-Airservices staff through the formation of a public sector mutual, or an overseas provider.

If contestability is introduced, over time losses would accrue to Airservices' business associated with loss of revenue, the disposal of assets and the cost of staff redundancies at locations where Airservices is not successful in retaining the contract for service delivery.

Airservices holds over ~~s47G(1)(a)~~ in ARFFS assets (written down value) and employs 943 staff and is scheduled to invest over ~~47G(1)(a)~~ over the next five years in new and upgraded services and vehicles.

Training

To meet ARFFS training requirements outlined in the MOS, Airservices made the commercial decision to become a registered training organisation. Moving forward in a contestable environment, Airservices would need to make a decision on whether to continue with this function, especially if they had a reduced number of fire fighters requiring training.

Airservices could continue to be a training provider for other operators on a fee for service basis.

Airservices originally commenced training their own personnel in ARFFS, and became an RTO, as there was no other provider that could provide training to the required standard at an economical price. CASR Sub Part 139.H mandates that any training institution delivering aviation rescue and fire fighting competencies must provide for the theoretical and practical components of any given qualification.

There are approximately 17 private RTOs listed on the national training register (www.training.gov.au) approved to deliver accredited qualifications under the Public Safety Training Package. This excludes enterprise based RTOs who, like Airservices, primarily deliver training directly to their own employees.

Of the registered private RTOs, none have the facilities (high fidelity hot fire training ground, fire trucks and relevant operational equipment) to train and assess against the aviation specific skills required by Airservices that covers Australian airport operations to Category 10.

Continuity of Service

It is essential to ensure that in any hand over from Airservices to a new provider of ARFFS there is no disruption or interruption to services. The new provider would need to be ready to go, with all facilities and equipment in place, before Airservices ceased any particular ARFFS operation.

The regulations require a provider to have in place the necessary buildings and facilities at the aerodrome, and a transition plan signed off by all interested parties, before CASA approval can be granted.

It takes time to establish an ARFFS (potentially up to two years based on recent experience at regional airports) because of the need to acquire specialised equipment and trucks, obtain planning approvals, construct infrastructure and train firefighting personnel.

This means that the transitional period could be quite long, requiring Airservices to maintain ARFFS for some time after it had lost a contract.

5.5 Risks

Safety

Consideration of the introduction of contestability must ensure that there can be no suggestion that contestability is associated with trying to lower costs at the expense of aviation safety. The travelling public and people working at airports rightly expect that the provision of ARFFS must meet the level of safety standards appropriate to the ARFFS categories (as set out by ICAO and adopted by CASA) irrespective of who is the provider.

There should be no reason why contestability should impact on safety standards provided CASA maintains a proper regulatory oversight regime and airport operators select ARFFS operators who establish and maintain an ARFFS operation that continues to meet safety regulatory requirements.

Costs

ARFFS is a regulated service with established and relatively inflexible costs and there is limited scope for new providers to reduce costs other than through improved productivity or lower salary costs.

Unlike other service functions where competition can clearly bring efficiency gains, there appears little available evidence overseas that contestability can achieve major efficiency and cost savings in the performance of this quite specialised and regulated emergency service function in Australia.

As indicated in the discussion of the Options in Chapters 4 and 5 there are a range of factors as to why contestability may have limited benefits and potentially additional costs for the aviation industry and passengers in Australia.

These factors include:

- diminished economies of scale in relation to infrastructure, equipment and personnel;
- airport costs of having to manage contracting process and service delivery;
- higher cost of capital for new providers by comparison with Airservices;
- airports set a higher rate of return to be recovered from industry (and passengers) due to increased risks from being made legally responsible for ARFFS; and
- high number of fixed costs due to regulatory requirements.

To maintain the current level of cost and pricing transparency for airlines and the consumer, contestability would also likely need airport ARFFS price regulation. This however conflicts with the current “light touch” approach to airport pricing regulation.

Impact on Regional Aviation

The most likely airport locations for contestability are at the larger passenger volume airports, such as Sydney, Brisbane and Melbourne.

However this would leave Airservices to carry the smaller passenger volume regional airports such as Rockhampton, Mackay and Launceston.

This would likely lead to an increase in the price at regional airports if these services are to at least commercially break even as current prices are lower than the market would charge due to network pricing. If the price at regional airports is to be maintained at current levels, a Government subsidy would be required, as is the case in some countries overseas, for a function that is currently fully funded by industry.

A pricing system such as network pricing which involves cross-subsidies between different locations can only work in a contestable framework for service provision if ARFFS were offered to the market as a national or at least a major network of airports. This would potentially transfer the current public ARFFS monopoly to a private monopoly; an outcome which does guarantee better economic or operational outcomes for industry or the travelling public.

The ACCC has noted that users of smaller, low volume airports are much more price sensitive (have higher price elasticity of demand) than those of larger airports because of characteristics of the services consumed in these locations.

Based on the ACCC's findings about price sensitivities, a small increase in price at a regional location will result in a disproportionately large decrease in patronage by comparison with the effect of a similar price increase at a large airport. This is particularly so in the case of low cost airlines servicing the leisure market as this type of travel is more discretionary and price-sensitive.

s47G(1)(a), s47E(d)

Contestability and a return to location specific pricing would create pressure on the Government to subsidise airlines for higher costs of ARFFS at regional airports, to ensure the continuation for services in regional Australia. Potential efficiencies from competition and regulatory reform resulting in less costly compliance would partly offset this higher cost, but would not appear likely to overcome the problem of high start-up costs at airports with relatively small movement numbers.

An important feature of the provision of ARFFS is that there can be large step changes in service delivery and costs when activity levels at individual airport locations cross particular mandatory regulatory thresholds. CASA currently requires the provision of particular ARFFS when passenger or aircraft movements exceed certain thresholds.

For instance, an increase in activity may lead to a large increase in costs if ARFFS and the associated facilities are required at an airport where these services were not previously required. The large step changes in costs create an issue where traffic levels just exceed a threshold requiring a higher class of ARFFS.

In such cases, setting charges at that location so as to recover the cost of the higher level service can result in very high charges, passed on to the consumer in the ticket price, which would be likely to lead to a significant loss in activity with the potential that the higher class of service is no longer required. Indeed, a very high charge may dramatically curtail activity at these smaller airports.

Level, quality or loss of service

Whilst the regulatory framework sets out the level of ARFFS to be provided, a national provider has ensured the provision of a uniform service across Australia. The travelling public and the state/territory fire authorities would expect ARFFS to always meet minimum safety regulatory requirements irrespective of the location.

A prospective new ARFFS provider must be reasonably capable of establishing and maintaining an ARFFS service on a financially viable basis, consistent with the standards required under the CASR and the associated MOS.

If the legal obligation for ARFFS is placed with the airport operator, the operator would be required to ensure ARFFS were provided in accordance with the standards set by CASA, whatever the cost. The airport operator must have the capacity to manage the initial contracting process and service delivery.

Continuity of service is a key issue when considering contracting out emergency services such as ARFFS. It is essential for contingencies to be established in the event that the service is interrupted for some reason, such as industrial action, equipment failure, commercial failure or enforcement action by CASA, such as suspension of the operator's licence, due to a breach of the regulations. Should an alternative provider be put in place and for whatever reason, they are unable to provide the service, arrangements will need to be in place to ensure that airport operations are not duly affected – if the airport is responsible for the provision of ARFFS, this would ultimately be the commercial responsibility of the airport.

In such cases of service failure, there are several options that would address the impact on service provision:

- a Notice to Airmen (NOTAM) could be issued advising of a service failure, industrial action, or a suspended service due to CASA enforcement action, and it would be up to the discretion of aircraft operators as to whether or not they would fly to the affected airport;
- if there was a complete service failure and there were several providers operating in the market, the Airport could engage the services of an alternative provider. However, there may be a time lag and reduced ARFFS coverage at the airport providing the back-up service;
- the Minister could direct Airservices under Subsection 16 (1) of the AS Act to be the provider of last resort if the service had totally ceased due to a circumstance such as commercial failure. If the Minister was satisfied that Airservices had suffered a financial detriment as a result of such a direction, it would be entitled to financial reimbursement under Subsection 16 (4) of the AS Act; and
- a local fire service could be asked to provide back up. However, this may not be possible as they may not meet the regulatory requirements and would require specialised training, equipment and specific fire trucks that a local fire service may not be able to provide.

It is important to note that some international airlines are unable to land at airports that do not have an ARFFS due to regulations in place in their country of origin, operational policies adopted by some airlines or insurance requirements.

The regulations relating to ARFFS require CASA to take into account an applicant's financial standing, as well as its operational capability. This cannot, of course, offer any guarantee against market or operational failure.

Contestability at smaller regional airports is problematic. Without bids for an ARFFS contract, regional airports could be faced with no option but to issue a NOTAM that they do not provide an approved ARFFS which will likely lead to the suspension of regular public transport services.

Risks to continuity of service should service providers be unable to meet their obligations, raises the question of the need for a provider of last resort, where no other provider is available. If Airservices were to be made the provider of last resort, this would require it to hold in reserve staff, equipment and facilities from which it receives no revenue.

Such an obligation could involve compensating Airservices, either through direct funding by Government or some form of levy on airports or airlines. If Airservices is to be a provider of last resort, the options for how staff and assets would be managed would need to be further explored.

Impact on Regulator

CASA's principal function in ARFFS is to ensure that whoever provides the service is compliant with the safety regulations and associated MOS.

The introduction of contestability could result in multiple ARFFS providers – up to 27 different providers, with all the providers subject to the requirements under the CASR and associated MOS. Additional resources would be required by CASA for certification and audit processes, costs which would be passed onto industry and passengers.

Government's Deregulation agenda

Making airports legally obliged to provide ARFFS, will add a significant regulatory burden on airport operators.

Airports, in providing the services themselves or contracting out the provision of ARFFS would need to meet the regulatory requirements set out in the CASR and the associated MOS. This would include meeting the requirements for the level of services, infrastructure, equipment and personnel.

The Government has committed to reduce the burden of red and green tape for businesses, individuals and community organisations by at least a \$1 billion a year. A key principle is that: the cost burden of new regulation must be fully offset by reductions in existing regulatory burden. As this would be the introduction of a completely new function, and no other function has been made redundant, it is unlikely that any offsets could be found.

The Government considers that regulation should only be imposed where absolutely necessary and should not be the default position in dealing with public policy issues. Consequently, it is considered that making airports responsible, without offsetting benefits, would be contrary to the Government's deregulation agenda.

6. Regulatory Reform

A number of amendments to the regulatory framework have been identified that would improve the efficiency of the provision of ARFFS. In addition the prescriptive nature of the regulations constrains the ability of Airservices, or indeed any future alternative providers, to be innovative in the way in which it delivers ARFFS so as to reduce costs or improve services to its customers.

While the majority of regulations relate to safety and the provision of services in accordance with international standards, there are a number of administrative regulations that could be reviewed with a view to creating further efficiencies for the ARFFS provider.

As outlined previously there is a need to establish a legal basis for the provision of ARFFS. There is also a strong case for moving to risk based establishment criteria for ARFFS and to have more flexible airport-specific regulations that focus on safety outcomes, rather than prescriptive rules.

The 2014 Aviation Safety Regulation Review Report identified a number of ongoing aviation policy issues related to aviation safety that will be reviewed by the Department of Infrastructure and Regional Development, including the ARFFS establishment criteria, this year.

The Government has tasked the Department to provide it with policy advice on a range of potential improvements to the efficiency and clarity of ARFFS requirements including the use of risk assessments. The regulatory policy review will include consultation with the aviation industry.

6.1 International passenger criterion for the establishment of ARFFS

The ICAO requirement of having ARFFS at all aerodromes with an international passenger air service raises specific issues for Australia, as the low volume and frequency of flights at some international aerodromes is not conducive for a cost effective, permanent ARFFS capability.

Consequently, Australia has lodged a difference with ICAO, stating that ARFFS are not available at some international and international alternate airports, noting that an aerodrome throughput of 350,000 passengers per year is currently used as the benchmark for the provision of ARFFS.

This difference should be reflected in the CASR. The CASR should be amended so that the operation of international flights to or from an aerodrome does not automatically trigger a requirement for ARFFS to be provided at that aerodrome.

If implemented this amendment would mean, for example, that Norfolk Island Airport which currently has passenger traffic below the 350,000 passenger threshold would not be required under the CASR to have an ARFFS but could still provide ARFFS at their own discretion.

6.2 Establishment Criteria – Risk Assessment

Whilst the existing establishment criteria are based on passenger numbers, an alternative mechanism/criteria could be based on an alternative factor or a combination of factors such as types of aircraft, flight frequency, location/geography of airfields, and proximity to other fire services.

Rather than using criteria to trigger the requirement for an ARFFS, thresholds (either the passenger number of 350,000, or an alternative figure) could be used to trigger the requirement for a risk review to determine if an ARFFS should be established. A risk assessment process modelled on CASA's approach to Airspace studies on a location by location basis, could be considered. The risk review could be undertaken by Airservices or CASA before a final determination was made by CASA for the provision of ARFFS at the required category.

Consideration could also be given to whether some other type of fire fighting and rescue capability should be provided at domestic airports as part of a graduated establishment process. Again ARFFS requirements would need to be in line with the type of aircraft using the airport.

Given the current pace at which the passenger numbers are growing at some airports, consideration should be given to the timeliness of establishment decisions.

The current establishment criteria are retrospective, requiring an ARFFS to be established when more than 350,000 passengers have passed through during the previous financial year.

As the service must be fully established on site before it can be approved, the establishment of an ARFFS may have a lead time of two years or more after the threshold has been reached. This is mainly because fire trucks are specifically manufactured for aviation fire fighting purposes; infrastructure needs to be constructed (e.g. ARFFS facility at the aerodrome location); and aviation fire fighting personnel need to be specifically trained.

6.3 Clarify ARFFS and non ARFFS Legal Roles and Responsibilities at Airports

The current regulatory settings are not clear as to whether some activities constitute ARFFS or are non-ARFFS. Helping clarify the respective responsibilities between Airservices (as the ARFFS provider) and state and territory fire authorities (as the provider for non-ARFFS) has been done through the development of MOAs. These agreements set out the respective roles and responsibilities of each agency at an airport. While useful operationally, the underlying lack of clarity as to ultimate legal responsibility still exists and some jurisdictions have requested this be resolved before their MOAs are finalised.

The confusion arises because of a lack of clarity as to where ARFFS can be carried out i.e. at an 'airport', 'aerodrome' or 'airside'. The increasing amount of non-aviation development on airport land (e.g. retail outlets and business parks) challenges traditional concepts about what constitutes an aerodrome. The provision of ARFFS could be linked to 'aviation related infrastructure and facilities'.

Approval of state and territory fire authorities as an ARFFS provider

The current regulatory requirements can be improved by providing greater clarity as to whether state and territory fire authorities, in responding to a call for assistance from Airservices or providing services within a leased airport, would be considered to be performing an ARFFS function and therefore would require approval as an ARFFS provider by CASA under the CASR.

Under Regulation 4.05 of the Airservices Regulations, Airservices is authorised to make an arrangement with a state or territory for the use of the local fire brigade for the purposes of “an operation under this Division”. Hence, Airservices has the power to make arrangements under which state or territory fire authorities perform or assist in performing Airservices ARFFS function.

However, CASR 139.711 states it is an offence for a person to provide ARFFS at an aerodrome unless the person is approved under Division 5 of CASR as an ARFFS provider.

It is implicit in the arrangements for the provision of ARFFS in the current regulatory framework, that it was never the intention that the state and territory fire authorities provide a full ARFFS service, but rather they assist the ARFFS provider.

Hence, there is some ambiguity under the current arrangements as to whether state and territory fire authorities may need approval from CASA to assist Airservices in providing ARFFS services and this will be examined as part of the Department’s regulatory policy review.

Airservices providing other (non-ARFFS) fire and rescue services at an airport

The current regulatory settings allow the ARFFS provider to provide other services at airports.

The current CASR 139.710 (2) states:

Nothing in subregulation (1) prevents the ARFFS provider from performing other fire control services or rescue services elsewhere on the aerodrome, but the provider must give priority to operations mentioned in subregulation (1).

Airservices has traditionally provided, in combination with its ARFFS role, “other” services at airports, such as: advice on building design/certification; monitoring of fire alarms at non-aviation facilities; first aid services and non-aviation rescue and firefighting.

The Government’s policy is that rescue and firefighting services not on the aerodrome or not aviation-related on the aerodrome, remain the responsibility of the local fire authority. However, local fire authorities may seek to enter into an arrangement with Airservices as to the performance of these non-aviation fire and rescue services at the airport.

The focus of the CASR should be the provision on ARFFS services, backed by the maintenance of the appropriate level or category of ARFFS as included in CASR 139.770 and the MOS if required.

Clarifying the role of airport operators

The role of the airport operator in facilitating the provision of ARFFS is not clear from the current regulations. It is important that airport operators facilitate the provision of ARFFS because Airservices requires access to airport land and associated infrastructure and equipment.

The current regulation (139.772) also requires Airservices to ensure that necessary buildings and facilities are available on the aerodrome, including appropriate emergency roads and facilities for replenishing water supply. However, the airport operator is responsible for roads on an airport and is also likely to be responsible for facilities for “replenishing water supply”. The role of the airport operator should therefore be clearly identifiable in the regulations.

6.4 Systems/Outcome based regulation

ARFFS is a highly regulated industry and its costs are significantly affected by the requirements of the relevant regulations. The ARFFS regulations and MOS are highly prescriptive detailing such requirements as the levels of staffing, the types and number of trucks and their equipage for each category of ARFFS service.

While many of these requirements are essential due to the nature of the ARFFS function and to meet international standards, a more systems and outcome based approach can provide scope to allow efficiency and productivity gains in the delivery of ARFFS without compromising safety.

Care will be needed to ensure that ARFFS at international airports continue to comply with Annex 14 of the Chicago Convention, otherwise some international airlines would not be able to operate at Australian airports due to their regulators’ requirements.

The level of prescription in the current regulations is also a key cost related issue for the industry.

The prescriptive nature of the Subpart 139.H regulations and associated MOS is a barrier to the entry of new ARFFS providers due to the costs of compliance that are driven by the amount of detail that must be learned, understood, demonstrated, promulgated and monitored. The level of prescription also prevents innovation which can lower costs and improve service delivery. For example, the requirements for training facilities, and particular staff competencies.

A number of the technical standards and requirements contained within CASR 139.H are both very prescriptive and not reflective of other current best practice. Airservices has a number of exemptions to the requirements of CASR 139.H from CASA in recognition of both the financial and operational inefficiencies.

The prescriptive nature of the regulations relate to:

- training and qualification levels;
- processes to amend the Operations Manual;
- facilities required to support ARFFS; and
- provision of training grounds.

Airservices is currently pursuing a number of exemptions to the requirements of CASR 139.H with CASA in recognition of both the financial and operational inefficiencies, and environmental issues associated with a number of CASR 139.H technical standards and requirements. These exemptions are significant to the ARFFS delivery model and, in turn, the cost base of the ARFFS.

The requirement to provide certain facilities such as hot fire training grounds at each ARFFS location, the specification of the frequency and standard of operational training practices such as 90 day foam application and limitations regarding the introduction of new generation more efficient fire fighting impose significant operational and financial costs on an ARFFS provider.

7. Findings/Recommendations

Findings

The regulatory policy review of ARFFS recently agreed to by the Government should be the initial driver of efficiency and productivity gains in the delivery of ARFFS rather than contestability. This position is fully consistent with the aviation industry's strong support for the Government's response to the Aviation Safety Regulation Review Report released in December 2014 which included the announcement of an ARFFS regulatory policy review.

This contestability review concludes that external market testing would likely reveal some providers, particularly those from overseas, interested in contesting for ARFFS at our capital city airports, working under contract to the airport operator rather than the airlines.

While contestability in ARFFS is therefore possible in the future, the potential benefits of contestability (such as increased efficiency, reduced costs and better service delivery) are usually realised where there are low barriers to entry and exit for alternate providers.

These market conditions, even with regulatory reform, are not clearly evident for ARFFS, which is highly regulated, has high fixed costs, and needs specialised capital and personnel investment to deliver an emergency service that meets core safety standards.

Furthermore the two key potential beneficiaries of contestability; the aviation industry and passengers, are likely to raise a number of significant concerns which would need to be addressed in the future consideration of the introduction of contestability in ARFFS.

Most airport owners are not likely to support a new regulatory burden on their operations as is necessary to facilitate contestability by making airports legally responsible for ARFFS. Regional airports will also likely face increased costs, leading to calls for Government subsidisation of the provision of ARFFS which is currently fully funded by industry through network pricing.

While overseas airlines may support the removal of network pricing through contestability, all airlines will not welcome a "third party" approach to the provision and charging of ARFFS whereby the airline may not have a direct relationship with the actual service provider but rather is charged by the airport for the provision of the service. Airlines are already concerned by airport "control" and charging of other services without the ACCC scrutiny that currently comes with ARFFS.

Australia's domestic and regional airline operators will also likely face increased ARFFS charges and, along with other cost increases, consider withdrawal of services to some regional airports.

These findings recognise that the current Government authority monopoly provider, Airservices, has access to economies of scale and advantages in infrastructure, financing, equipment and trained personnel from the current ARFFS network and its current ownership structure, albeit that these benefits are difficult to accurately quantify without an in-depth and detailed cost benefit analysis.

Recommendations

After considering the options, it is recommended Airservices continues to provide ARFFS at the airports at which it currently provides ARFFS.

However, consistent with the Government's response to the Aviation Safety Regulation Review Report, the Department of Infrastructure and Regional Development should complete a regulatory policy review of ARFFS and make recommendations for consideration by the Minister for Infrastructure and Regional Development's future consideration.

The review will make recommendations on improvements to current ARFFS policy and regulatory settings including efficiency and cost savings for the industry and the travelling public while ensuring the maintenance of appropriate safety standards.

The review also recommends that Airservices continue to develop measures to assess its performance against Key Performance Indicators (KPIs) as recommended by the ACCC in its Airservices 2014 pricing determination.

It is recommended that the KPIs form part of the consideration of Airservices next Long Term Pricing Agreement (LTPA) on which discussions with industry will commence later this year. The LTPA will be the subject of ACCC consideration before it comes into effect from 1 July 2016.

These recommendations have no implications for the 2015-16 Budget.

Attachments

Attachment A: Terms of Reference

Contestability Review Terms of Reference: Aviation Rescue and Fire Fighting Services

October 2014

Background to the Review

The Government's Contestability Programme (the Programme) is focused on improving the performance of government by systematically assessing government functions to ensure that they are provided by the organisations most able to do so efficiently. For each function, the Programme is assessing how the function is currently provided, whether there are alternative providers of the function (either within government or outside) and whether they can provide the function, in whole or in part, more efficiently.

Contestability Reviews are a key part of the Programme. They investigate in detail the options to provide a government function and make recommendations to Government on the most efficient means of future provision.

In agreeing to the Programme, the Government agreed that five functions would be subject to initial contestability reviews including aviation rescue and fire fighting services (ARFFS) provided by Airservices Australia (Airservices).

Aim of the Review

The purpose of this Contestability Review is to assess the appropriateness and efficiency of current arrangements to provide aviation rescue and fire fighting services and provide recommendations to Government on the future provision of these services.

The review is to consider potential alternative arrangements for the provision of these services (in whole or in part), including provision by alternative providers. In making recommendations to the Government, a paramount consideration will be to ensure that safety is maintained.

Review Methodology

The review is to report on:

- a) The role of ARFFS, interactions between international and domestic regulatory contexts, in relation to the outcomes sought by Government and the Government's forward priorities.
- b) The current approach to providing ARFFS, an evaluation of the benefits and costs of this approach and the interaction of ARFFS with other Airservices functions, the Civil Aviation Safety Authority, other rescue and fire fighting service providers, the aviation industry and the community.
- c) The feasibility of other options for efficiently and effectively providing ARFFS including the use of alternative approaches by Airservices or the use of alternative providers e.g. a national private ARFFS network or individual private ARFFS providers at individual airports.
- d) Potential safety, efficiency improvements, other benefits, costs, risks and issues associated with proposed options including the impact on all stakeholders including regional airports and any legislative and regulatory changes required to implement different options.

In making recommendations to the Government on the most efficient arrangements for the future provision of ARFFS, ensuring that safety will be maintained is a paramount consideration. The review will also take into account the costs, benefits, risks and other considerations involved with future ARFFS arrangements in the context of the Government's specific entity objectives and forward priorities.

The review of ARFFS will be guided by the Contestability Guidelines and Framework.

Scope

The review is to cover the current national provision of ARFFS by Airservices as carried out at international and major domestic regular public transport airports, taking into account any potential impact on future needs.

Governance

The Department of Infrastructure (Infrastructure), in consultation with Airservices, will be responsible for undertaking the Contestability Review, with guidance and assistance from the Contestability Steering Committee and the Department of Finance (Finance). Finance will maintain oversight of the Review to ensure the inclusion of an adequate level of analysis consistent with the Contestability Framework and Guidelines.

The Review will be supported by Finance and the Contestability Steering Committee (chaired by Finance and including representatives of the Department of the Treasury, the Department of Human Services, the Department of Industry and the Department of Immigration and Border Protection).

Resourcing

Infrastructure, Airservices, and Finance will provide appropriate resourcing to the review commensurate with the issues considered and detail required to draw sound recommendations within the timeframe.

Reporting

Infrastructure will report regularly on progress of the Review to the Contestability Steering Committee (via the Committee Secretariat). Details of reporting will be resolved between Infrastructure and Finance and will reflect the progress and status of the review. Regular reporting will provide assurance the review is progressing as agreed and will provide an opportunity for the Steering Committee to provide feedback and guidance.

Finance will regularly brief the Minister of Finance on the progress of the Contestability Programme (including the ARFFS Review). Infrastructure will brief the Minister for Infrastructure and Regional Development on the progress of the review.

Affected parties and consultation

Infrastructure will consult with other parties, including affected stakeholders as appropriate during the review. Infrastructure or Finance may request that the review be validated by an external party prior to finalisation. Details of the external validation will be agreed by Infrastructure and Finance if required.

Review Timing

Consistent with the Government's desire to consider the outcomes of the review prior to the 2015-16 Budget, Infrastructure will conclude the review and report back to the Contestability Steering Committee by 31 January 2015.

s22(1)(a)(ii)

Chair, on behalf of

Contestability Steering Committee

Attachment B: Table of Eligible Providers

Civil Aviation Safety Regulation, Subpart 139.H Aerodrome Rescue and Fire Fighting Services

Table 139.925		
Item	Applicant	Aerodrome
1	the Commonwealth	any aerodrome
2	AA	any aerodrome
2A	Delta Fire Service Pty. Ltd.	Townsville Airport
3	Broome Airport Services Pty Ltd	Broome International Airport
4	Administration of Norfolk Island	Norfolk Island International Airport
5	a person who is to provide an ARFFS at a particular aerodrome: (a) in cooperation with AA, in accordance with paragraph 11(3)(b) of the <i>Air Services Act 1995</i> ; or (b) by arrangement with AA, in accordance with paragraph 11(3)(c) of the <i>Air Services Act 1995</i>	the aerodrome mentioned in column 2
6	a person who is to provide an ARFFS in accordance with an arrangement mentioned in paragraph 216(1)(e) of the <i>Airports Act 1996</i>	the aerodrome specified in the arrangement mentioned in column 2

Attachment D: International ARFFS provision

Country & Governing Body	Legislation Defining ARFFS & Requirements	ARFFS Operators
USA – Federal Aviation Administration	Title 14: Aeronautics and Space PART 139—CERTIFICATION OF AIRPORTS § 139.319 Aircraft rescue and firefighting: Operational requirements. (a) <i>Rescue and firefighting capability.</i> Except as provided in paragraph (c) of this section, each certificate holder must provide on the airport, during air carrier operations at the airport, at least the rescue and firefighting capability specified for the Index required by §139.317 in a manner authorized by the Administrator. (c) <i>Reduction in rescue and firefighting.</i> During air carrier operations with only aircraft shorter than the Index aircraft group required by paragraph (a) of this section, the certificate holder may reduce the rescue and firefighting to a lower level corresponding to the Index group of the longest air carrier aircraft being operated. § 139.317 Aircraft rescue and firefighting: Equipment and agents. Unless otherwise authorized by the Administrator, the following rescue and firefighting equipment and agents are the minimum required for the Indexes referred to in §139.315 Source: http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&SID=8313bccee050ec81d7e8fb3377331177&rgn=div5&view=text&node=14:3.0.1.1.14&idno=14#se14.3.139_1319	ARFFS provision is the responsibility of the airport operator ARFFS providers appear to be a mixture of specific state fire department and a few private contractors. Specifically defines no barrier to gaining Part 139 compliance with a private contractor, beyond meeting ARFFS requirements under inspection. FAA allows firefighters to perform multiple duties.

New Zealand – Civil Aviation Authority	Part 139 CAA Consolidation Aerodromes – Certification, Operation and Use 139.111 Rescue and firefighting – operational requirements (a) Except as provided in paragraph (c), each holder of an aerodrome operating certificate shall provide on the aerodrome, during operations by aeroplanes having a certified seating capacity of more than 30 passengers that are engaged in regular air transport operations, the rescue and firefighting capability meeting the minimum requirements of 139.61 and 139.63. (b) Except as provided in paragraph (c), if an increase in the movements or a change in the type of air transport aeroplanes using the aerodrome results in an increase in the category applying under 139.59, the certificate holder shall increase its rescue and firefighting capability to the minimum required for that higher category under 139.61 and 139.63. Source: http://www.caa.govt.nz/rules/Part_139_Brief.htm	ARFFS provision is the responsibility of the aerodrome operator. The operator must show that ARFFS is being provided as part of the certification requirements. Private contractors are able to perform the services.
Canada – Transport Canada	Canadian Aviation Regulations Part III Aerodromes, Airports and Heliports Subpart 3 - Aircraft Rescue and Fire Fighting at Airports and Aerodromes General Requirements 303.03 (1) The operator of a designated airport shall provide the aircraft fire-fighting vehicles and the personnel required under this Subpart to respond to an aircraft emergency at the airport Source: http://laws-lois.justice.gc.ca/eng/regulations/SOR-96-433/FullText.html#s-303.03	ARFFS provision is the responsibility of the airport operator. Appears same model as US with onus of compliance of the airport owner, with no explicit barrier to private contractors evident.

United Kingdom-UK <i>Civil Aviation Authority</i>	Civil Aviation Publication (CAP) 168: Licensing of Aerodromes Chapter 8 Rescue and Fire Fighting Service (RFFS) 1.1 Condition 2 in the Public Use and Ordinary aerodrome licences makes it mandatory for licence holders to provide a Rescue and Fire Fighting Service (RFFS) appropriate to their aerodrome and as detailed in this Chapter. Appendix 1A Aerodrome Licence ‘Public Use’ The Civil Aviation Authority (in this licence referred to as ‘the CAA’) in exercise of its powers under Article 128 of the Air Navigation Order hereby licences the above named aerodrome as an aerodrome to be used as a place of take-off and landing of aircraft engaged in flights for the purpose of the public transport of passengers or for the purpose of instruction in flying, subject to the following conditions: 2 No aircraft shall take-off or land at the aerodrome unless such fire-fighting and rescue services and such medical services and equipment as are required in respect of such an aircraft in the CAA’s publication CAP 168 (Licensing of Aerodromes) are provided there. Such services and equipment shall at all times when the aerodrome is available for the take-off or landing of aircraft be kept fit and ready for immediate turnout. Source: http://www.caa.co.uk/application.aspx?catid=33&pagetype=65&appid=11&mode=detail&id=232	ARFFS to be provided by the aerodrome license holder. Allows private contractors, where responsibility for the provision of ARFFS ultimately left to airport licence holder
--	---	---

Glossary

ACCC	Australian Competition and Consumer Commission
AS Act	<i>Air Services Act 1995</i>
ARFFS	Aviation Rescue and Fire Fighter Service
AQF	Australian Qualifications Network
BARA	Board of Airline Representatives Australia
BITRE	Bureau of Infrastructure, Transport and Regional Economics
CAPEX	Capital Expenditure
CASA	Civil Aviation Safety Authority
CASR	Civil Aviation Safety Regulations 1998
CFA	Country Fire Authority
DRV	Domestic Response Vehicle
ERSA	En Route Supplement Australia
FTA	Free Trade Agreement
ICAO	International Civil Aviation Organization
KPI	Key Performance Indicator
LTPA	Long Term Pricing Agreement
MOA	Memoranda of Agreement
MOS	Manual of Standards
MTOW	Maximum Take-off Weight
NOTAM	Notice to Airmen
PCC	Pricing Consultative Committee
PFCs	Perfluorinated Chemicals
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulphonate
PGPA Act	<i>Public Governance, Performance and Accountability Act 2013</i>
RTO	Registered Training Organisation
UK	United Kingdom
USA	United States of America
SARPs	Standards and Recommended Practices
VET	Vocational and Educational Training