





Aviation Security Service

Kaiwhakamaru Rererangi =



Message from the Chairman

The Aviation Security Service (Avsec) is the security service delivery arm of the Civil Aviation Authority (the Authority). Avsec provides aviation security services at security designated airports, in accordance with the requirements of the Civil Aviation Act 1990 and applicable Civil Aviation Rules.

Avsec is currently primarily funded by domestic and international passenger security charges, which are paid by airlines on a per screened passenger basis.

Consistent with policy across the transport sector, every three years the Authority undertakes a review of the funding for Avsec. The 2018/19 review is considering the principles of the funding framework — who should pay for aviation security services, how should they pay, and how much should they pay. The objective is to effectively and efficiently fund Avsec so that it can continue to ensure New Zealand is a safe place to fly and continues to meet its international obligations in relation to aviation security.

Avsec needs to be adequately funded in order to respond to the current dynamic security environment. Being prepared requires significant investment in people, technology and capabilities. The Authority has taken a balanced approach in ensuring expenditure is reasonable and necessary in order to achieve desired security outcomes.

The Authority is proposing an updated cost recovery framework to ensure Avsec is adequately funded for the next triennium. Following analysis informed by guidance from Treasury, the proposed changes to the Avsec funding framework are:

- Change from Passenger Security Charge to Passenger Security Levies;
- Charge airlines the International Passenger Security Levy for transit passengers;
- Introduce a stepped pricing structure with provision for flexibility;
- Amend the rates/prices;
- Introduce a requirement that an airport pays the reasonable setup costs to establish or re-establish Avsec capacity to process flights at a domestic airport.
- Introduce a requirement that an airline conducting a charter operation requiring passenger screening from a location at which Avsec has no capacity to process flights, to pay the reasonable costs of establishing and performing the security service required for the charter flight.

The Authority's reasoning in proposing these changes is outlined in this document. We look forward to hearing your feedback on the proposal. Please send your comments to consultation@caa.govt.nz. Consultation will finish at 9 am on Wednesday 12 September 2018.

When consultation is complete, the Authority has considered submissions and developed final proposals, recommendations for change, if any, will be made to the Minister of Transport. The target date for implementation of any changes is 1 July 2019.



Nigel Gould Chairman Civil Aviation Authority

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Background Information

Purpose of the Funding Review

- The Civil Aviation Authority (the Authority) routinely reviews the funding for its regulatory and security service delivery activity to ensure its cost recovery remains effective and efficient. The reviews are conducted based on guidance from the New Zealand Treasury¹ and Office of the Auditor-General and in the normal course of events are undertaken every three years².
- 2. The Authority's approach is to complete a comprehensive funding review every second triennium, which considers the policy and underlying principles of the funding framework as well as the prices. The remaining funding reviews are typically pricing reviews only. The 2018/19 review considers who should pay, how should they pay, and how much should they pay.
- The last comprehensive review of the funding framework for the Aviation Security Service (Avsec) was completed in 2012/13. Since 2013, a number of pricing changes have been consulted on and implemented as a result of increasing passenger numbers and to deliver the recommendations of the 2016 Domestic Aviation Security Review.
- 4. The purpose of this principles-based review is to revisit whether the existing cost recovery framework is still fit to fund Avsec so it can deliver its statutory functions effectively and efficiently. Focusing on Avsec's statutory functions has limited this review to only its core activities and not third party contracted services.
- 5. Consideration of which activities are classified as core services, or whether any additional activities should be funded using the regulated charges, is also not within the scope of this review. This review does not include any assessment of Avsec's operations or business model. A comprehensive review of such matters was conducted at the last triennial review.

About the Aviation Security Service

- 6. Civil aviation plays a crucial role in the New Zealand economy, to facilitate tourism and business connections, as well as transport goods. It is essential that the public, international trading partners, and tourists have confidence in New Zealand as a safe place to travel to, from and within by air. History has demonstrated that aviation security incidents can have significant social and economic impacts.
- 7. Aviation security threats persist in the international and domestic context. A recent example includes the aviation terror plot in Sydney, Australia in 2017. Changes to the volume and sophistication of terror threats, and/ or changes in terrorist methodologies creates challenges in monitoring the integrity of aviation security.
- 8. International standards require States to have an aviation security organisation in place to ensure passenger air services are secure. To meet this obligation, the Civil Aviation Act 1990 (the Act) requires the Authority to establish and continue an aviation security service Avsec. Avsec and the New Zealand Police are jointly responsible for preventing aviation crimes at security-designated aerodromes³ and air navigation facilities. Avsec currently operates at five airports Auckland, Wellington, Christchurch, Dunedin, and Queenstown.
- 9. In accordance with the Act⁴ Avsec is required, amongst other activities⁵. to:
 - screen international air passenger services;
 - screen domestic air passenger services conducted by aircraft with a certificated maximum seating capacity of more than 90 passenger seats;
 - screen persons, items, substances, or vehicles entering or within 'security areas', and undertake reasonable searches if necessary; and
 - carry out airport security patrols⁶.
- 10. To deliver these services, Avsec utilises a range of methodologies including the use of walk-through and handheld metal detectors, pat-down and other physical searches, x-ray screening, explosive trace detection, explosive detector dogs, and airport identity card checks⁷.

¹ Treasury Guidelines on Setting Charges in the Public Sector. See www.treasury.govt.nz/publications/guide/guidelines-setting-charges-public-sector-2017-html

² Office of the Auditor General guidance on Charging Fees for Public Sector Goods and Services. See www.oag.govt.nz/2008/charging-fees/docs/charging-fees.pdf.

³ Section 76 of the Civil Aviation Act 1990.

⁴ Which includes Screening Direction Notices made under section 77A & 77B.

⁵ Section 80 of the Civil Aviation Act 1990 lists all the activities Avsec is required to undertake.

⁶ This references the current Civil Aviation Act 1990. An Act Review project is currently underway being led by the Ministry of Transport. This project is based on current legislation.

⁷ For more information on Avsec as a whole, visit www.avsec.govt.nz.

Funding the Aviation Security Service

- 11. Avsec is currently funded almost entirely by passenger security charges paid by airlines, on a per-departing passenger basis. International and domestic flights are cost-recovered separately there is an international passenger security charge, and a domestic passenger security charge. These charges are provided for under regulations 20 and 20A of Civil Aviation Charges Regulations (No2) 1991 (the Regulations)⁸.
- 12. At present, the international passenger security charge is \$10.01 (incl GST) or \$8.70 (excl GST), and the domestic passenger security charge is \$5.81 (incl GST) or \$5.05 (excl GST). The charges are different due to the different costs involved in the provision of domestic and international screening requirements. Costs for common equipment used for both international and domestic operations are allocated between the two. There are also different volumes of passengers and hours of operation between international and domestic across the airport network which contributes to the difference between the two charges.
- 13. The passenger security charges were established in 2004 as part of a broad funding review of all passenger clearance services aviation security, customs, and immigration. That review determined that aviation security services are a private good, in which passengers and airlines are the primary beneficiaries.
- 14. In 2013, the Authority introduced a policy whereby cash reserves gained from the passenger security charges can fluctuate within certain bounds before triggering a pricing review. The principle underpinning this approach is to ensure that Avsec neither over- nor under-recovers its costs for an unreasonable period of time. It also allows for sufficient funding to enable Avsec to rapidly respond to a 'shock' of some sort: either a surge in demand (for example, as a result of the need to respond quickly to a security threat or a surge in passenger volumes), or a sudden downturn in passenger volumes. The current reserves policy provides for funding to operate within a range equivalent to six to nine weeks of operating expenditure (which at present equates to \$10.8 million to \$16.2 million).
- 15. In part, these reserves limits were also set as 'trigger points' to initiate a review of pricing in an attempt to address industry concerns about the inflexibility of the process and costs involved in adjusting pricing.

 The objective of the 2018/19 Funding Review is to ensure Avsec's funding framework continues to be effective and efficient. This means:

OBJECTIVE	ELEMENTS	EXPLANATION
Effective	Sustainable	Provides an adequate level of funding so that service levels can be maintained; and relatively consistent pricing over time
	Flexible	Provides a framework that can respond to rapid changes in the security environment (i.e. adapt to immediate changes in Avsec activities)
	Equitable	The right parties pay, and those with similar benefits/risks are treated the same, and those with different benefits/risks are treated differently
	Reliable	Payment is easy to do and hard to avoid which creates a reliable funding source
	Transparent	Liable parties understand what functions are funded through the cost recovery
Efficient	Economical	Costs are allocated and recovered in a way that ensures maximum benefits (including positive passenger experience) are delivered at minimum costs (transactional and operational)
	Productive	Imposition does not lead to undesirable changes in behaviour

17. The cost recovery mechanisms must also be consistent with Government guidelines on setting fees, charges, and levies⁹; and with wider Government policy on transport, security and regulation.

⁹ Refer Treasury Guidelines on Setting Charges in the Public Sector at www.treasury.govt.nz/publications/guide/guidelines-setting-charges-public-sector-2017-html

Aviation Security Service 2019-2022

- 18. Avsec's mission is to protect aviation. It is focused on delivering required security outcomes; enhancing the passenger experience and increasing operational efficiency whilst striving to achieve value for money.
- 19. International experience suggests that aviation remains an attractive target for terrorists. Threats to aviation security are ever changing and thus Avsec must remain flexible in its ability to respond, and respond appropriately.
- Due to the security sensitive nature of Avsec's business plans, only a limited amount of information regarding business planning can be shared in this consultation document.
- 21. There are a number of changes underway which impact Avsec during this funding review. These changes fall into three broad categories: maintaining/enhancing security standards, the introduction of 'smart security', and a predicted increase in passenger volumes.
- 22. Smart security is a global initiative to improve the security screening process for passengers, airlines, and airports whilst still achieving required security outcomes. Avsec will be introducing advanced screening technologies and process innovations as part of its work on the introduction of smart security. All of this will be done with a view to minimise cost growth due to the ongoing increase in passenger numbers and a requirement to introduce new technology and processes due to the evolving security environment. It allows Avsec to weaken the link between growth in passenger numbers and costs, making the security service more effective and efficient.
- 23. One example of a smart security initiative includes the introduction of automated specialist Cabin Baggage Screening capabilities, also known as Smart Lanes. Six Smart Lanes process an equivalent number of passengers per hour as nine regular lanes.

- As passenger numbers grow, Avsec must expand operations to keep pace with the growth in demand. Smart Lanes require less capital investment overall, fewer staff, and provide better security outcomes in comparison with regular lanes. This investment provides Avsec with the capacity to manage future growth in passenger numbers, and maintain security outcomes, without a linear increase in staffing and equipment costs. It is noteworthy that Smart Lanes also provide the potential for Local Area Network (LAN) and Wide Area Network (WAN) screening that could provide further staff efficiencies as part of future development.
- 24. Avsec is required to invest in more advanced technology, capabilities and its personnel to ensure the continued security of New Zealand's skies. Despite predicted efficiency gains via smart security, the additional expenditure results in the current cost recovery framework no longer being adequate to ensure Avsec is appropriately resourced into the future.
- 25. Avsec also has a capital expenditure programme through to 2024/25 of at least \$120 million, of which \$77.3 million is forecast to be incurred during the period of this review. \$12.49 million is expected to be incurred prior to 1 July 2019 and the rest is expected to be incurred in the years after this review.
- 26. The financial modelling in this document has been prepared on the assumption the additional capital will be funded from Crown equity contributions from 2019/20 onwards. This would trigger a capital charge at 6% on all Crown equity funding to Avsec (including Avsec's existing \$14.9 million of Crown funding). The Authority wishes to minimise the cost of the required capital investment and is currently investigating alternative funding options which may result in either reduced costs or enhanced asset risk management outcomes (e.g. through leasing). If the outcome of that work delivers a cheaper capital funding mechanism it may reduce the pricing proposed very slightly.

Table 1: Predicted Avsec Capital Expenditure

	CURRENT YEAR	BUDGET	Funding Review Period		
	2017/18 (\$MILLION)	2018/19 (\$MILLION)	2019/20 (\$MILLION)	2020/21 (\$MILLION)	2021/22 (\$MILLION)
Total Capital Expenditure	5.15	7.34	25.17	20.80	31.34

27. The passenger forecast projects continued strong growth for the period of the funding review (2019/2020 – 2021/22). Forecasts over this three year period predict annualised growth of 3.6% for international passengers and 3.2% for domestic passengers. (This translates to a 15% increase in passenger screening by 2022.)

Table 2: Passenger forecasts

	CURRENT YEAR	BUDGET	Funding Review Period			
	2017/18	2018/19	2019/20	2020/21	2021/22	
International	6,726,239	7,007,564	7,257,302	7,520,412	7,802,546	
Transit	636,358	661,176	681,011	701,442	723,186	
Domestic	7,389,537	7,656,264	7,907,501	8,152,178	8,408,119	
	14,752,134	15,325,004	15,845,814	16,374,032	16,933,851	

- 28. A number of assumptions have been applied when developing these forecasts. These are:
 - a. the introduction of any new airlines to the NZ market will not have a material effect on the above passenger growth forecasts;
 - b. there will be no major incidents or events causing material changes in requirements placed upon Avsec or large scale disruption to the NZ civil aviation market; and
 - c. major events such as APEC 2021 and the America's Cup will not have a material impact on projected passenger numbers.

These assumptions are further detailed in Appendix 1.

- 29. The costs of smart security, enhanced security requirements and a predicted increase in passenger volumes are outlined in the table below.
- 30. Whilst significant expenditure is predicted, every effort has been made to minimise cost growth.

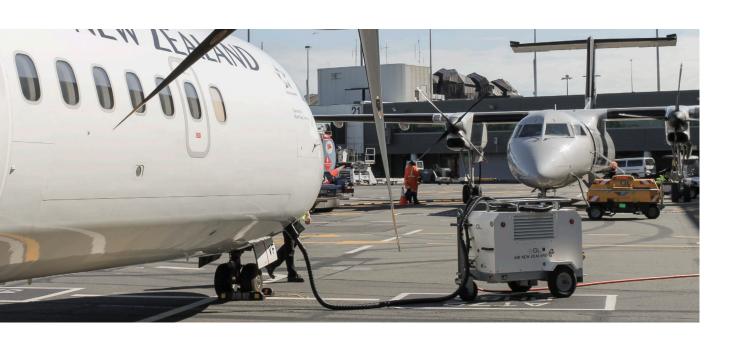
Table 3: Avsec estimated expenditure

	CURRENT YEAR	BUDGET	Funding Review Period				
Estimated Expenses	2017/18 (\$MILLION)	2018/19 (\$MILLION)	2019/20 (\$MILLION)	2020/21 (\$MILLION)	2021/22 (\$MILLION)		
Personnel Costs	78.1	86.3	105.1	119.3	125.8		
Depreciation & amortisation	3.3	3.5	6.9	9.4	12.9		
Finance costs	0.8	0.8	3.0	4.3	6.3		
Other expenses	17.4	20.6	23.1	24.7	25.3		
Total expenses	99.6	111.3	138.2	157.7	170.3		

Summary of proposed funding framework

- 31. The Authority proposes that the current domestic and international passenger security charges be amended to domestic and international levies. It is proposed that airlines will continue to pay on a per screened passenger basis. The levy prices will be updated to ensure Avsec is adequately funded for the next triennium.
- 32. The Authority is also proposing to:
 - a. Charge airlines the International Passenger Security Levy for transit passengers;
 - b. Create a pricing structure with stepped increases over the period of the review which also provides a greater degree of flexibility to prevent unreasonable over-or-under recovery of costs;
- c. Introduce a requirement that an airport pays
 the reasonable setup costs for Avsec to establish
 operations at any airport introducing new domestic
 operations requiring passenger
 screening; and
- d. Introduce a requirement that an airline conducting a charter operation requiring passenger screening from a location at which Avsec is not established pay the reasonable costs of establishing and performing security screening for the charter flight.

A summary of the proposed changes to Avsec's funding framework can be found on the next page:



	CURRENT FRAMEWORK	PROPOSED FRAMEWORK
COST RECOVERY FOR	Passenger Security Charge	Passenger Security Levy
AVSEC'S SERVICES	International	International
	\$8.70 excl GST (\$10.01 incl GST)	From 1 July 2019: \$11.98 excl GST (\$13.78 incl GST)
		From 1 July 2020: \$12.59 excl GST (\$14.48 incl GST)
		From 1 July 2021: \$13.12 excl GST (\$15.09 incl GST)
	Domestic	Domestic
	\$5.05 excl GST (\$5.81 incl GST)	From 1 July 2019: \$6.28 excl GST (\$7.22 incl GST)
		From 1 July 2020: \$6.47 excl GST (\$7.44 incl GST)
		From 1 July 2021: \$6.64 excl GST (\$7.64 incl GST)
TRANSIT PASSENGERS	Cost currently subsidised by the international passenger security charge	International Passenger Security Levy
		From 1 July 2019: \$11.98 excl GST (\$13.78 incl GST)
		From 1 July 2020: \$12.59 excl GST (\$14.48 incl GST)
		From 1 July 2021: \$13.12 excl GST (\$15.09 incl GST)
PRICING STRUCTURE FOR COST RECOVERY OF AVSEC'S SERVICES	Fixed	Stepped over three years with flexibility for the Minister of Transpo to adjust for under recovery, to adjust for over recovery to a maximum of:
		International \$13.12 excl GST (\$15.09 incl GST)
		Domestic \$6.64 excl GST (\$7.64 incl GST)
RECOVERING COSTS FOR AVSEC ESTABLISHING / RE-ESTABLISHING CAPACITY TO PROCESS FLIGHTS AT A DOMESTIC AERODROME	Cost would be funded out of reserves established from the domestic passenger security charge.	Actual & reasonable costs recovered from aerodrome operator
RECOVERING SET UP COSTS FOR CHARTER FLIGHTS AT AERODROMES WHERE AVSEC HAS NO CAPACITY TO PROCESS FLIGHTS	Cost not fully recovered but partially covered by passenger security charge.	Actual & reasonable costs for providing service recovered from airline operating the charter flight

- 33. The paragraphs below explain the reasoning for each component of the proposed framework;
 - A. Continue to cost recover from airlines on a per screened passenger basis;
 - B. Charge airlines the International Passenger Security Levy for transit passengers;
 - C. Maintain separate cost recovery for domestic and international activity;
 - D. Change from a charge to a levy;

- E. Create a regulated stepped pricing structure with flexibility;
- F. New rates/prices to provide adequate funding;
- G. Establish a new mechanism to allow Avsec to recover reasonable set up costs from a domestic airport at which Avsec is required to establish or re-establish capacity to process flights.
- H. Establish a new mechanism to allow Avsec to recover reasonable costs for set up of screening services for charter flights from airports where it does not have capacity to process flights.

Passenger Security Charges – Justification for proposals

- 34. The review has considered three principle questions:
 - Who should pay for aviation security services?
 - How should they pay?
 - How much should they pay?

Who should pay for aviation security services?

A: Continue to cost recover from airlines on a per screened passenger basis

- 35. As per the Treasury Guidelines, options about who should pay for a good or service are fundamentally provided by those who benefit from the output (beneficiaries) and the individuals or groups whose actions make it necessary for the good or service to be provided (risk exacerbators). The cost recovery mechanism should match as closely as possible to the beneficiaries and risk exacerbators to foster fair competition and low rates. This review has considered both the beneficiaries and risk exacerbators as potential payees of aviation security services.
- 36. Airlines and their passengers are the primary beneficiaries of aviation security services. This is difficult to refute, given that aviation security services exist to keep air transport aircraft secure so that passengers and crew are safe from aviation crime.
- 37. Risk exacerbators are individuals or organisations whose actions make it necessary for the government to become involved. Passengers are both beneficiaries and the risk exacerbators. This is because as passenger numbers increase, so does the risk and cost to society from a security incident. Airlines and airports also present some risk via insider threats.
- 38. This is why the current framework is a charge on airlines, using the passenger as a proxy for the charge. Since there has been no change to the purpose of aviation security service, the beneficiaries, or the risk exacerbators, there is no justification for change.

39. It is recognised that there are other beneficiaries of aviation security services, namely airports and their leaseholders, particularly for the benefits they receive in respect of bulk duty-free screening; and the New Zealand public, from the economic and social benefits of New Zealand being a safe place to fly. However, it is not feasible to tax the public, and it is not economically efficient to charge airports for parts of the service they benefit from. This is because of the likely pass through of costs. The Authority assumes that airports will pass costs on to airlines and leaseholders (their customers) who will subsequently pass on to their customers (the passengers). This means that the passenger will essentially pay twice for the same benefit.

B: Charge airlines the International Passenger Security Levy for transit passengers

- 40. In accordance with the current Regulations¹⁰, airlines are not charged the international passenger security charge for transit passengers. This is despite transit passengers being subject to the same security screening as other international passengers before boarding their next flight.
- 41. A dedicated transit area is set aside and serviced at specific times at Auckland International Airport and Christchurch International Airport. The cost of this is essentially funded by all other departing international passengers. The number of transit passengers at Auckland International Airport in 2016/17 was 675,752. Proportionally, this equates to 10.67% of total international passengers departing from New Zealand, or \$6.8 million in foregone revenue that was funded by non-transit departing international passengers.
- 42. Whilst the Authority already absorbs the costs for transit services (so it makes no difference to the baseline/revenue gains), explicitly requiring transit to be counted as international passengers will provide equity and transparency.

- 43. These passengers, from the perspective of the receiving state, exacerbate the same cost and risk as other international passengers and are subject to the same level of security screening. Therefore the Authority proposes airlines pay the International Passenger Security Levy for transit passengers.
- 44. The Authority proposes that airlines are required to self-declare the number of transit passengers and that the appropriate framework is set out in the regulations to facilitate this process.
- 45. Financial calculations for the proposed levies have included transit passengers. If the final cost recovery framework does not include transit passengers, then the international passenger security levy rate would be more expensive.

How should they pay?

C: Maintain separate cost recovery for domestic and international activity

- 46. There continues to be a substantial cost difference between domestic and international services. This is due to the additional security requirements imposed on Avsec for international travellers, for example, screening of liquids, gels and aerosols, explosive trace detection, and screening of bulk duty-free items. Mobile patrols and non-passenger screening airside are also undertaken for international passengers.
- 47. On this basis, and in consideration of the efficiency and effectiveness objectives, it is proposed to maintain the status quo of separate cost recovery for domestic and international.
- 48. Whilst a single cost recovery mechanism for both domestic and international may be more efficient and flexible, it is also not equitable or transparent.
- 49. A modular approach, in which discrete Avsec activities (for example, hold baggage screening) have their own individual rate and are 'stacked' to form an overall price, was also considered. This option would provide flexibility in terms of responding to changes in security services. However it was ruled out as a preferred option due to its complexity and because the advantages of this approach would only be fully realised if Avsec were required to provide a different level of service at other types of security designated airports.
- 50. The Authority intends to align legislation for international passenger declaration requirements with section 9(6) of the Civil Aviation (Safety) Levies Order 2002 to require airlines to maintain, and make available to the Authority on request, records of international passengers departing from New Zealand. The Authority recognises that the current process of using New Zealand Customs Service data provides both operational and commercial benefits for airlines and the Authority and intends to continue using this existing process.

D: Change from a charge to a levy

- 51. Treasury Guidelines recommend understanding the economic characteristics of a good or service in order to determine which method of cost recovery (i.e. a fee/charge, levy, or tax) is most appropriate¹¹. The Authority is proposing to change to a levy because it is a better fit for the economic characteristics of the service that Avsec provides, and because a levy has significantly more flexibility to fund a range of security activities as security threats develop and change over time (including landside protections, which will benefit the wider public).
- 52. Based on the economic characteristics of excludability and rivalry, goods and services can be categorised into the following groups private good, club good, merit good, common good, or public good.
- 53. Excludability refers to whether people can be prevented from using the good or service. The premise of the current funding framework is that persons or groups other than passengers, airline staff, and airport staff, can be prevented from using aviation security services (by the requirement for boarding passes or airline tickets, or airport identity cards), which means it is excludable
- 54. Rivalry means that if one person uses the good or service, it reduces another person's enjoyment or use of it. When a passenger is being screened at a screening point, even when a number of lanes are open, there is often a queue. This means that other passengers are prevented from using the service at this time, which could be the difference between catching a flight, or missing it. This is because there are a finite number of screening lanes to process a large number of passengers, and increasing the screening capacity will require more resource. This is why aviation security services have typically been classified as rivalrous.
- 55. At present, aviation security services are considered a private good on the basis that they are excludable and rivalrous. Private goods are typically funded by fees or charges, hence the current passenger security charges
- 56. However, one person's use of a screening service point does not reduce another person's enjoyment or use of it because the screening of oneself is for the benefit of others, not the person being screened. This means aviation security services can be considered inherently non-rivalrous. Refer example below:

Passenger A and Passenger B are proceeding through the same screening point before boarding the same flight.

Passenger A is being screened, and like any other passenger or authorised person, may present a security risk (they may be an acutely disaffected person, for example, intending to unlawfully interfere with the aircraft). Whilst Passenger A is being screened, Passenger B is waiting in the queue.

Who in this example is 'enjoying' the screening service?

- 57. In the example above, Passenger B is benefiting from Passenger A (and other passengers, crew, and staff) being screened. Likewise, Passenger A is not receiving benefits from their own screening, particularly given the inconvenience of the screening procedures (for example, removing jackets and items from bags) they benefit that the people ahead of them in the queue were screened¹². The passengers are not competing for the screening service. Furthermore, when a person is screened, this does not prevent the non-flying public from simultaneously benefiting from the social and economic benefits of the service. In this respect, aviation security services can be considered non-rivalrous.
- 58. A service that is excludable and non-rivalrous, is categorised as a club good. A common way to charge for the use of a club good is a levy applied to a group of users. A levy best fits the characteristics of a club good because of the ability to exclude and where the benefits are not specific to one person to use for their own personal use.
- 59. A levy is also more appropriate for cost recovering for aviation security services because it can fund a range of activities for a specific purpose, unlike a fee or charge which should only fund a specific activity (for example, walkthrough metal detector screening). If the nature of the screening must change in order to respond to present security threats, this can be funded accordingly. This means a levy is far more flexible than a charge to respond to changes in the security environment, which will have benefits for the travelling public and the wider community.
- 60. A levy is therefore the preferred cost recovery option. Authority to develop a levy for Avsec's cost recovery is provided by section 42A of the Civil Aviation Act.
- 61. The levy approach is not out of step with cost recovery for other passenger clearance services. For example, the New Zealand Customs Service is funded via a Border Clearance Levy.
- 62. Airlines are currently subject to a Passenger Safety Levy, which recovers the costs of the Authority's regulatory activity from a safety (rather than security) perspective. Whilst it may be more convenient for the industry to have one 'Passenger Safety and Security Levy', the Authority is required under section 72B of the Act to maintain separate financial accounts for its regulatory functions and for Avsec. The Authority would be unable to adequately and transparently demonstrate how the costs of its activities translate to the price of a single 'safety and security' levy. No revenue received via the Passenger Security Levy can fund any part of the regulatory arm of the Authority.

How much should they pay?

E: Create a regulated stepped pricing structure with flexibility

- 63. At present, the Regulations are required to be adjusted each time a pricing review is triggered by Avsec either grossly over-recovering or grossly under-recovering its costs of operations, as indicated by a draw on reserves and their levels. Avsec's income, based on passenger numbers, is susceptible to fluctuations in demand within the volatile aviation industry. Price adjustments are a regular occurrence, and subject to full consultation and government process. The amended price can quickly become out of date, triggering another pricing review and adjustment.
- 64. For Avsec to maintain an effective and efficient service, it must be able to adapt to change quickly. The funding framework that supports Avsec also requires this adaptability. Due to the volatile industry Avsec operates in, the Authority is proposing a combination of two pricing structures; stepped & flexible.
- 65. A stepped price structure sets prices in the Regulations on a per year basis, increasing or decreasing over a three year period to match with Avsec's business planning. This assumes that passenger forecasts and planned expenditure will be relatively accurate and the stepped prices remain relevant over time (to avoid too much drawdown of reserves and regular price reviews as per the status quo). A stepped price outlined in the regulations has a particular benefit of providing medium term price stability and certainty, as opposed to a flexible pricing model which does not provide total price stability.
- 66. Avsec is anticipating significant increases in expenditure across the funding review period (see table 3 on page 3). For this reason, a stepped price across the three years is considered more appropriate than an averaged price. An averaged price would result in over-recovery of costs for the first year, then under-recovery in the third year, resulting in an urgent price increase to prevent reserves being quickly depleted after 30 June 2022.

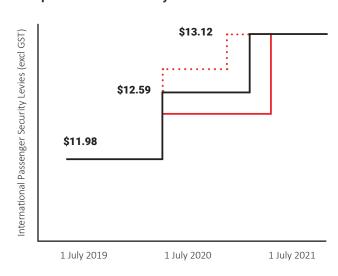
Table 4: Proposed Passenger Security Levies

				Funding Review Pe	riod	
Financial Yea GST	r	2017/18	2018/19	2019/20	2020/21	2021/22
Domestic Passenger	Excl	\$5.05	\$5.05	\$6.28	\$6.47	\$6.64
Security Levy	Incl	\$5.81	\$5.81	\$7.22	\$7.44	\$7.64
International Passenger	Excl	\$8.70	\$8.70	\$11.98	\$12.59	\$13.12
Security Levy	Incl	\$10.01	\$10.01	\$13.78	\$14.48	\$15.09

- 67. This stepped price approach would provide a smoother cost profile for airlines in the longer term when compared with an averaged price. An averaged price would likely result in a significant increase in passenger levy rates the first year of the next funding review cycle (2022/23).
- 68. Flexible pricing allows for the levies to be set within a range and increases or decreases to be made without the need for a full pricing review. This allows for fluctuations in the price, providing the Authority with the flexibility it needs, but within reasonable, and agreed upon limits. It also provides the benefit that the reserves are maintained for the purposes of responding to shocks, rather than operational changes.
- 69. Avsec faces uncertainty around a number of critical assumptions related to the timing of the introduction of new capabilities (which could be either accelerated or deferred), as well as passenger forecasts over the three year period. Therefore the Authority is proposing flexibility on top of stepped pricing. This flexibility would enable, with 6 months' notice to airlines, the planned price increase to be reduced or deferred (e.g. in the event that actual expenditure was less than that currently budgeted).

70. Should there be an evidenced and justified need to increase the levy prices earlier, such as accelerating the introduction or enhancement of capabilities, or realised passenger numbers not matching forecasts, the stepped price could be introduced sooner. Any stepped price increase would be subject to the Authority and Minister of Transport approval, with 6 month's notice for airlines. Any increase would be limited to the maximum price over this funding review period (International \$13.12 excl GST, domestic \$6.64 excl GST).

Graph 1: Example of the stepped pricing with provision for flexibility



Proposed stepping policy
 Moderated levy increase
 Accelerated levy increase

Please note, 6 months notice will be provided to airlines with any changes to levy price.

F: New rates to provide adequate funding

- 71. The new rates have been developed whilst taking into account Avsec's predicted expenditure over the course of the funding review period. Table 5 below details the breakdown of the total maximum price across the three broad categories of cost drivers; maintaining/enhancing security standards, the introduction of 'smart security', and a predicted increase in passenger volumes.
- 72. This table demonstrates how Avsec's total costs have been calculated. As per Treasury guidance, levies can be used to fund a variety of goods and services. While the overall expenditure has been calculated using itemised activities, funds recovered by levies would not necessarily be allocated in the amounts stated.
- 73. A summary of Avsec's predicted total revenue and expenses (assuming implementation of the pricing proposals in this review) is detailed in Table 6.

74. A number of new capabilities are being introduced in the 2018/19 financial year ahead of any pricing changes arising from this funding review. The cost of these increased capabilities accounts for the majority of the budgeted \$7.0m deficit in the 2018/19 financial year. This deficit significantly reduces Avsec's reserves, and as a consequence, the proposed stepped pricing has been set to deliver a surplus in the 2020 financial year (\$10.5 million) that restores these reserves to the mid-point of the policy target range of 7.5 weeks of operational expenditure¹⁴. The smaller budgeted surpluses in the following two years are what is required to maintain reserves at this policy level.

Table 5 Breakdown of proposed maximum Passenger Security Level

	Current Price	Maintaining/ enhancing security standards	'Smart Security' Enhancements	BAU Cost Pressures	Rebuild/ Maintain Reserves	Max Proposed (2021/22)
International (assuming transit passengers also pay)	\$8.70	\$3.44	\$0.43	\$0.43	\$0.12	\$13.12
Domestic	\$5.05	\$1.20	\$0.21	\$0.15	\$0.03	\$6.64

Table 6 Avsec statement of revenue and expense

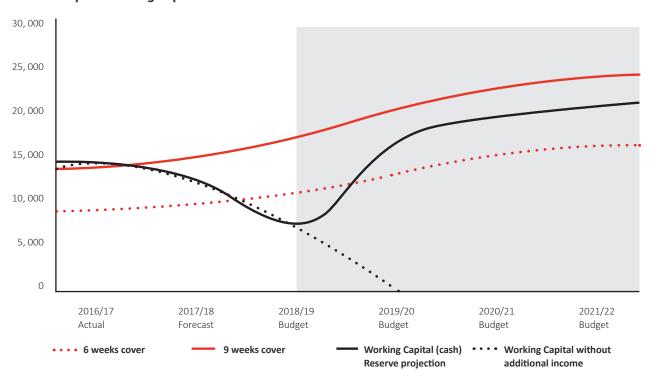
			Funding Review Period		
	2017/18 (\$MILLION)	2018/19 (\$MILLION)	2019/20 (\$MILLION)	2020/21 (\$MILLION)	2021/22 (\$MILLION)
Passenger Security Income International	58.5	61.0	95.1	103.5	111.8
Passenger Security Income Domestic	37.3	38.7	49.6	52.7	55.8
Crown Funded Income	0.1	0.1	0.1	0.1	0.1
Third Party Income & Miscellaneous	4.6	4.5	3.8	3.8	3.8
Total revenue	100.6	104.3	148.7	160.2	171.6
Total expenses ¹³	99.6	111.3	138.2	157.7	170.3
Surplus / (Deficit)	1.0	(7.0)	10.5	2.5	1.3

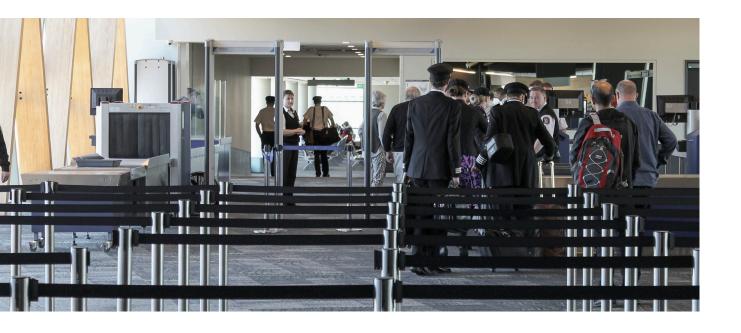
¹³ See Table 3 Avsec estimated expenditure for breakdown in expenses.

¹⁴ Excluding depreciation.

75. The graph below demonstrates the impact of the new Passenger Security Levy rates on Avsec's reserves, compared with if no price adjustment was made.

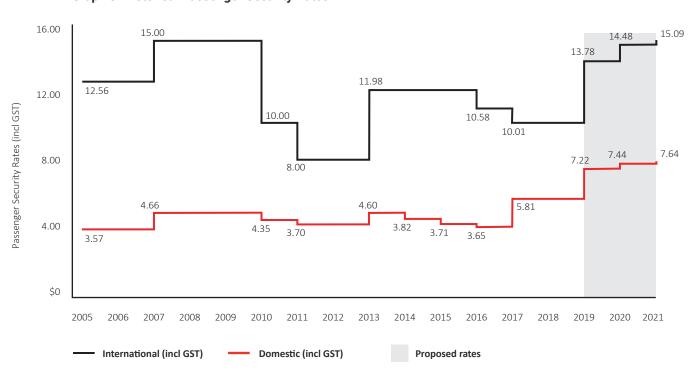
Graph 2: Working Capital Reserve





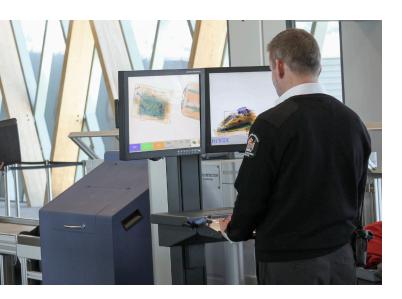
- 76. It is proposed that any future legislation state the levy prices as excluding, but subject to GST. By expressing the prices at GST exclusive rates, Avsec does not face a possibility of under recovering if there is a future change in GST rates (or the need to go through a process to revise the legislation to adapt to a changed GST rate whilst maintaining Avsec's previously approved funding levels). All GST inclusive rates provided in this document are based on GST remaining at 15%.
- 77. The proposed Passenger Security levies (inclusive and exclusive GST) can be found in table 4 on page 14. The graph below illustrates the passenger security rates since 2005. Rates are shown inclusive of GST.
 Note Prices are shown post 1 July 2019 are based on including transit passengers, whereas historical prices exclude transit passengers.
- 78. Financial calculations for the proposed levies have included transit passengers. If the final cost recovery framework does not include transit passengers, then the international passenger security levy rate would be more expensive.
- 79. A number of assumptions have been made in order to calculate the Levies, these are detailed in Appendix 1.

Graph 3: Historical Passenger Security Rates



Cost recovery for set up costs

- 80. Under section 80 of the Civil Aviation Act 1990, Avsec has a duty to screen all international flights. Avsec is also required to screen domestic flights where the aircraft has a capacity of 90 seats or more in accordance with a Direction issued under section 77B of the Act
- 81. Avsec can face set up costs in two specific scenarios:
 - Establishing / re-establishing capacity to process flights at a domestic aerodrome
 - A charter flight by an aircraft of 90 seats or more where Avsec has no capacity to process flights
- 82. Avsec currently has no specific means of recovering the costs of setting up temporary screening services for charter flights; or recovering the set-up costs for establishing or re-establishing capacity to process flights on a permanent basis at domestic aerodromes. The costs are effectively funded from Avsec's reserves, which is considered an inappropriate use of Avsec's reserves.



G: Establish a new mechanism to allow Avsec to recover reasonable set up costs from a domestic airport at which Avsec is required to establish or re-establish capacity to process flights.

- 83. For international regular air services, establishment costs can be recovered via charges set under the Airports (Cost Recovery for Processing of International Travellers) Act 2014. Section 38(4B) of the Civil Aviation Act expressly prohibits the creation of new fees or charges where this Act applies. No regulated charges have been made under the Airports (Cost Recovery for Processing of International Travellers) Act 2014 to date, which is administered by the Ministry for Primary Industries.
- 84. In the case of domestic regular air services, the Civil Aviation Act provides the authority to establish fees, charges, or levies, or recover the costs of establishing screening services.
- 85. A new security designated aerodrome has not been established in the last five years. However, Avsec estimates that the one-off security screening equipment costs associated with establishing a smaller regional airport would be approximately \$1.54m \$1.64m¹⁵. Additional set up costs will include recruitment, training and could include other costs dependent on airport location. Ongoing costs would need to be recovered by the proposed levy.
- 86. The Authority is proposing to establish a new regulation to recover reasonable Avsec establishment costs. This is based on the principle that it is more effective and efficient for Avsec to fully cost recover its services, than absorb these additional costs. In particular, it is more equitable and transparent than the status quo.
- 87. This proposal includes the re-establishment of Avsec at aerodromes that have, in the past, had Avsec services but do not any longer.

- 88. Airports have been chosen as the more appropriate party to cost recover from because:
 - cost recovery from the public via tax or Government funding is not feasible;
 - direct cost recovery from the passengers will require new methods of identification and charging which is likely to be difficult and far more inefficient than charging aviation document holders;
 - if airlines are charged for establishment costs, in the case of regular air services, the first airline would essentially be subsidising subsequent airlines that introduce services to that airport.
- 89. The Authority notes one disadvantage of cost recovering from airports is that it could result in adverse consequences to regional development (for example, because the flights could not go ahead if the airport is too small to absorb the costs or cannot pass the costs on).
- 90. Recovering 'reasonable costs' is preferred over prescribing a fixed price because establishment costs are variable based on the aerodrome, so it is not equitable to establish a charge or levy that is fixed. A fixed charge or levy could result in gross under or over recovery. Instead, reasonable and actual costs should be recovered on a case-by-case basis. There is precedent for this type of regulation in section 21 of the current Civil Aviation Charges Regulations 1991, which relates to cost recovery when Authority staff are required to travel outside of New Zealand.



H: Establish a new mechanism to allow Avsec to recover reasonable costs for set up of screening services for charter flights from airports where it does not have capacity to process flights.

- 91. Similar to domestic regular air services, the Civil Aviation Act 1990 provides the authority to establish fees, charges, or levies to recover the costs of establishing screening services for international and domestic charters.
- 92. Costs to set up temporarily at a new airport includes staffing (provided from alternative locations, including accommodation, meals, and travel) as well as freight to get the screening equipment to the location.
- 93. Avsec estimates that it absorbs between \$3,000 and \$14,000 per annum to provide services for domestic charter flights. For example, a recent charter that carried 500 passengers in total required 10 staff and one explosive detector dog. The service, including screening, cost \$16,400 in total. The domestic passenger security charge at \$5.81 provided \$2,905. The shortfall in revenue that was required to be drawn from reserves was \$13,495. This means that the passenger security charge covered only 17% of the actual costs to establish and provide the service.
- 94. As in the case of a new domestic airport screening service, the Authority is proposing to establish a new regulation to recover reasonable Avsec establishment costs for charter services.
- 95. Airlines have been chosen as the more appropriate to cost recover from for charter flights because:
 - cost recovery from the public via tax or Government funding is not feasible;
 - direct cost recovery from the passengers will require new methods of identification and charging which is likely to be difficult and far more inefficient than charging aviation document holders;
 - airlines are a main beneficiary and cost driver for charter flights: and
 - airports do not receive ongoing benefits from the temporary establishment of Avsec for charter flights, thus there is no concern around one airline subsidising subsequent airlines.
- 96. Again, recovering 'reasonable costs' on a case-by-case basis is preferred over prescribing a fixed price.

 Establishment fees for charter flights varies on location (economies of scale, distance for freight and staff to travel), and the setting of a fixed charge or levy (such as a fixed rate based on passenger numbers, number of aircraft screened, or an hourly rate of an Aviation Security Officer) is not deemed equitable.

Feedback & next steps

- 97. The Authority would like to hear your views on this proposal for how Avsec can efficiently and effectively cost recover its activities. The various elements of the proposed framework can be found below:
 - A. Continue to cost recover from airlines on a per screened passenger basis;
 - B. Charge airlines the International Passenger Security Levy for transit passengers;
 - C. Maintain separate cost recovery for domestic and international activity;
 - D. Change from a charge to a levy;
 - E. Create a regulated stepped pricing structure with flexibility;
 - F. New rates/prices to provide adequate funding;
 - G. Establish a new mechanism to allow Avsec to recover reasonable set up costs from a domestic airport at which Avsec is required to establish or reestablish capacity to process flights.
 - H. Establish a new mechanism to allow Avsec to recover reasonable costs for set up of screening services for charter flights from airports where it does not have capacity to process flights.
- 98. Please complete the feedback form and send to consultation@caa.govt.nz. Consultation will finish at 9 am on Wednesday 12 September 2018.
- 99. If you have any questions or would like to organise a meeting with Avsec to discuss elements of this document, please email consultation@caa.govt.nz.
- 100. Please note that all submissions become public information that can be requested under the Official Information Act 1982. Please indicate clearly if any parts of your submission are commercially sensitive, or if for any other reason you would not want that information to be disclosed.



Next steps

- 101. Following consultation and consideration of submissions from affected parties, a final proposal will be presented to the Minister of Transport, who may present that proposal to Cabinet for approval.
- 102. If the proposal is approved by Cabinet, the Regulations will be amended via an Order in Council, with the new framework and pricing taking effect from the specified date. The desired implementation date is 1 July 2019.

Appendix 1: Predictions for Passenger Numbers 2019-2022

The total passenger growth rates have been based on the specific growth rates for each airport. These are aligned to airports' publically quoted targets or forecasts where available.

Other assumptions when forecasting passenger numbers include:

- Avsec will continue to only screen aircraft over 90 seats flying domestically
- Calculations assume transit passengers will be charged the same as other international passengers.
- Transit passengers have been calculated based on the rolling 12 month transit passenger total from Auckland Airport International Airport Limited (March 2018 report). Growth projections have been applied as found in the recent Commerce Commission forecast.
- The Authority notes that passengers may also transit at Christchurch. Currently the only transit service is seasonal and operates for a six weeks each year, therefore transit passenger estimations have been based solely on AIAL projections.
- Infants under 2 years old and relocating aircrew will continue to not be charged
- Aircraft Replacement Programmes Calculations have not specifically reflected these aircraft replacements

- within our passenger forecast. However, they will be a contributory driver in delivering the overall growth rates assumed in the international growth forecasts.
- New Airlines No new airlines or new services by existing carriers have specifically been included in this forecast.
 Any new services are expected to be accommodated within existing projected growth factors.
- Events specifically included within the Forecast The effect of major events on passenger volumes is difficult to predict. Event organisers and tourism bodies often estimate visitor numbers, which may not reach predicted levels and/or may displace other visitors that would otherwise have come, but choose to delay visits due to clashes with the event. No major events during the span of the forecasted period have been specifically included.
- Economic Factors The level of growth in the domestic, Australian, Asian and the broader global economy, the exchange rate and fuel prices, may all affect airlines' pricing strategies, thus affecting passenger volumes.
- Business Disruption A major incident, terrorist event or natural disaster could both disrupt flight schedules and adversely affect demand. It has been assumed that no material business disruption will occur over the life of this forecast.

Appendix 2: Avsec Predicted Expenditure for 2019-2022

The Authority has used the following assumptions when calculating Avsec's predicted expenditure:

- Implementation Date it has been assumed that the implementation date of 1 July 2019 will be met.
- Personnel Costs
 - o It has been assumed that salary increases will be in line with the latest HYEFU information from Treasury (Fiscal Strategy Model HYEFU 2017, Issue date: Thursday, 14 December 2017) but that they will be timed to be 12 months later.
 - o Increases have also been included due to the length of service of Aviation Security Officers (sometimes referred to as scale progression), these follow contractual employment agreements.
- Capital Charge It has been assumed that capital injections will be required to fund the proposed capital expenditure. Treasury currently charges 6% on all Crown funded capital once a \$15 million threshold has been exceeded. Avsec's current Crown capital is \$14.9 million, so it is assumed that Avsec will need to commence paying a capital charge from the 2020 financial year to fund its capital program. These expenses have been included.
- Shared Services Charges A number of vital support services are provided to Avsec by CAA staff; the charge for these has been allowed for at a maximum 9% of Avsec's directly incurred expenses (excluding depreciation and capital charge). This is lower than the current ratio of support services to direct incurred expenditure (9.8% in the 2019 financial year).





