

Note: Since this document was prepared, the closing date for submissions has been extended to 14 Feb 2020.

CIVIL AVIATION AUTHORITY

# DISCUSSION DOCUMENT

REVIEW OF AVIATION FEES,  
LEVIES AND CHARGES

NOVEMBER 2019

# Contents

<b>INTRODUCTION FROM THE INTERIM CHAIR</b>	<b>5</b>
<b>CONTEXT AND PURPOSE OF THE FUNDING REVIEW</b>	<b>6</b>
The current review of aviation fees, levies and charges	6
The Civil Aviation Authority's Role in the Aviation Sector	7
Funding the Core Functions	8
<b>FUNDING PRESSURES AND IMPLICATIONS FOR AUTHORITY FUNDING OVER THE 2020/21 – 2022/23 PERIOD</b>	<b>10</b>
Authority Funding Sources and the Reserves and Funding Policy	10
Projected Expenditure for the 2020/21 – 2022/23 period	10
Replacement of Regulatory Technology Platform (EMPIC – EAP)	11
Additional Project Costs/Budgetary Provisions for CAA Capability	11
Inflation	11
Additional Regulatory Responsibilities	12
Projected Expenditure Decreases: Cessation of One-Off Programmes	12
Assumptions of Revenue from 2020/21 to 2022/23	13
Summary of The Authority's Financial Position from 2020/21 to 2022/23	14
Overview of Financials	14
Proposed Changes to the Authority's Fees, Levies and Charges	17
<b>CONSIDERATION OF TWO SPECIFIC POLICY ISSUES</b>	<b>18</b>
Review of Pricing for Drones	18
Background	18
Funding the Regulatory Oversight of Drone Participation in the Aviation System	19
Designing the Future Regulatory Oversight System for Drones in the Civil Aviation System	19
Review of the Agricultural Operations Safety Levy	21
Development and Introduction of the Current Levy	21
Reviewing the Rationale for a Tonnage-based Levy	21
The current Agricultural Operations Safety Levy	24
Investigating Characteristics of the Agricultural Levy Activity Measure	27
Investigating the Redistribution of the Levy across Aircraft Type	28
Summary/Conclusion	29

<b>COST RECOVERY OF REGULATORY FUNCTIONS UNDER THE HAZARDOUS SUBSTANCES AND NEW ORGANISMS ACT 1996</b>	<b>30</b>
Background	30
Funding the 'Discharge of Hazardous Substances from an Aircraft' Obligation	30
Options to Fund the Regulatory Oversight of HSNO Dispersal Function	31
<b>REVIEW OF THE AIRPORT IDENTITY CARD (AIC) FEES</b>	<b>34</b>
Background	34
Permanent AICs	34
Temporary AICs	34
Costs of Running the AIC System	35
Cost Recovery for the AICs from 2020/21 to 2022/23	36
AICIS System/Support Cost Attribution Options	36
<b>REVIEW OF REGULATED AIR CARGO AGENT SECURITY VETTING FEES</b>	<b>38</b>
RACA Vetting Process	38
Background	38
Cost Recovery for RACA	38
RACA Pricing	38
<b>FEEDBACK AND NEXT STEPS</b>	<b>39</b>
<b>APPENDIX 1 CURRENT AND PROPOSED CHANGES TO CAA FEES, LEVIES AND CHARGES</b>	<b>40</b>
Current and proposed changes to Civil Aviation Levies	40
Current and proposed changes to Civil Aviation Fees	42
Current and proposed changes to Civil Aviation Charges	44





# Introduction from the Interim Chair

This discussion document outlines the Civil Aviation Authority's proposed changes to aviation safety fees, levies and charges for the three-year period from 1 July 2020 to 30 June 2023.

The proposed changes are based on the principles and policies of the Authority's existing funding framework. This was adopted in 2017. The Authority has carefully managed its operating costs to ensure New Zealand's aviation sector is efficiently regulated in a cost effective manner. In addition to the Authority's normal operating expenses, it is planning significant capital investment to overhaul its regulatory technology and intelligence platform. This long-overdue technology upgrade is essential to ensure the safety of the New Zealand aviation sector in the years to come is protected by intelligence-led and risk-based regulation.

The changes proposed in this discussion document are considered necessary to ensure the Authority is able to efficiently and effectively conduct its regulatory duties during the 2020/21 to 2022/23 period.

This discussion document outlines specific proposals. These include:

- revised pricing levels for CAA safety fees, levies and charges;
- the establishment of a funding stream to support replacement of the CAA's obsolete regulatory technology and intelligence platform;
- consideration of two specific policy issues relating to unmanned aircraft operations and the Agricultural Operations Safety Levy respectively;
- consideration of how the CAA may recover the ongoing costs of its functions under the Hazardous Substances and New Organisms Act 1996;
- a review of Airport Identity Card fees and associated possible changes in costs of operation; and
- a review of Regulated Air Cargo Agent security vetting fees.

Through this consultation process we seek your advice on the impacts of our proposals. Our objective in making these proposals is to carry out our role effectively and so ensure New Zealand's aviation system is safe and secure, at a cost that is fair and reasonable to participants in that system.

We look forward to your evaluation of our proposals and to receiving your response. When consultation has been completed, the Authority will consider all submissions and develop final proposals. Recommendations for change, if any, will be made to the Minister of Transport, for subsequent consideration by Cabinet. It is expected that any changes will be implemented in mid-2020.

Please send your feedback on the proposed changes to [consultation@caa.govt.nz](mailto:consultation@caa.govt.nz). The consultation period will close at 5.00pm on Friday, 7 February 2020.



**Don Huse**  
Interim Chairman  
Civil Aviation Authority  
23 November 2019

# Context and Purpose of the Funding Review

1. The Civil Aviation Authority (the Authority) routinely reviews the funding for its regulatory functions and service delivery activities to ensure it can fulfil its statutory obligations in the aviation sector while also ensuring its cost recovery remains effective and efficient. In accordance with Ministry of Transport policy, the Authority's approach is to complete a comprehensive funding review every six years, which considers the policy and underlying principles of the funding framework as well as the associated prices. The funding reviews half-way through the six year period (including this review) are typically pricing reviews only.
  2. Since 2012, the Authority has undertaken one funding review. The first phase of this review considered a number of funding principles and policies and subsequently proposed a funding framework based on those.
  3. A second phase of that funding review utilised the approved funding framework to establish the pricing for fees, levies and charges over the 2016-2019 period. When considering the pricing for that period, the Authority looked to ensure that prices were set at levels that would enable the full scope of its work to be carried out. These reviews were conducted based on guidance from the New Zealand Treasury<sup>1</sup> the Office of the Auditor-General<sup>2</sup> and the Ministry of Transport<sup>3</sup>.
  4. The new funding framework was adopted by the Authority and the associated fees, levies and charges were implemented in 2017.
- levies and charges for set levels of service delivery to be calculated and medium-term financial plans to be developed.
6. The focus of this pricing review is to assess the current levels of fees, levies and charges to ensure they are set at appropriate levels to allow the Authority to carry out the full scope of its work over the 2020/21 to 2022/23 years. The scope of this review includes:
    - a review of current pricing levels of CAA fees, levies and charges;
    - the establishment of a funding stream to support the replacement of the CAA's obsolete regulatory technology platform;
    - consideration of two specific policy issues relating to unmanned aircraft operations and the Agricultural Operations Safety Levy, respectively;
    - consideration of how the Authority might recover the ongoing costs of its functions under the Hazardous Substances and New Organisms Act 1996;<sup>4</sup>
    - a review of Airport Identity Card fees and associated possible changes in costs of operation; and
    - a review of Regulated Air Cargo Agent security vetting fees.
  7. Any changes to fees, levies and charges arising from this current pricing review are targeted to come into effect on 1 July 2020. Should the projected growth rates for passenger numbers outlined in this document prove too optimistic (i.e. should they reduce below the projected figures) this would need to be taken into account when the final proposals are developed following consultation.
5. The current pricing review follows on from the work implemented in 2017 and considers the Authority's fees, levies and charges predominantly as they apply to its safety regulatory business units from 2020/21 to 2022/23. This review also uses the funding framework adopted in 2017 and financial models that have been developed to enable the actual fees,

## The current review of aviation fees, levies and charges

<sup>1</sup> Treasury Guidelines on Setting Charges in the Public Sector. See [here](#).

<sup>2</sup> Office of the Auditor General guidance on Charging Fees for Public Sector Goods and Services. See [here](#).

<sup>3</sup> Transport Regulatory System: Funding principles, September 2018. See [here](#).

<sup>4</sup> An amendment to the Hazardous Substances and New Organisms Act 1996 resulted in the Authority being assigned additional duties under that Act with effect from 1 December 2017. These relate to matters such as 'spray drift' from agricultural aircraft. The Crown agreed to fund the performance of those duties until 30 June 2020.

## The Civil Aviation Authority's Role in the Aviation Sector

8. As a signatory to the International Convention on Civil Aviation, New Zealand is required to have aviation safety arrangements in place. The requirements are set out in the Convention, which is maintained by the International Civil Aviation Organization (ICAO). Within New Zealand, the Civil Aviation Act 1990 is the foundation legislation for aviation safety regulation.
9. The role of the Authority is to:
  - set a minimum standard of safety behaviour through Civil Aviation Rules and by placing conditions on aviation documents;
  - allow entry into the civil aviation system to those operators and participants who meet the required minimum standard for certification and the conditions placed on their aviation documents (certification);
  - provide information and advice to operators and participants to help them comply with the Civil Aviation Rules;
  - monitor operator and participant adherence to the safety standards and their aviation documents, including identifying action that the participants need to take to ensure that they comply with the safety standards (surveillance); and
  - where necessary in the interests of safety, impose conditions on, or suspend or revoke, the aviation document issued to the operator or participant.
10. It is the Authority's surveillance oversight of the aviation system, and any subsequent administrative or compliance action that may arise, that enables the Director of Civil Aviation, the Board, the Minister of Transport and ultimately the New Zealand public and international visitors, to be assured of the integrity of the civil aviation system in New Zealand.
11. The Authority's primary objective, mandated in the Civil Aviation Act 1990, is safety and security. It carries out 'safety, security and other functions in a way that contributes to the aim of achieving an integrated, safe, responsive and sustainable transport system'<sup>5</sup>.
12. This objective is achieved through the two divisions of the Authority: the aviation safety and regulatory function (the regulatory agency) under the Director of Civil Aviation, and the Aviation Security Service by the General Manager of Aviation Security.
13. The aviation safety and regulatory function of the Authority delivers four core functions:
  - **Policy and regulatory strategy** – Working to ensure that New Zealand's civil aviation system is robust and responsive to the continually changing aviation community; is respected internationally; and provides an appropriate level of safety and security for the New Zealand public. Civil aviation in New Zealand has minimum safety and security standards that must be met by participants. Standards are developed in consultation with the aviation community and the Ministry of Transport. The standards are detailed in the Civil Aviation Rules, which are made by the Minister of Transport.
  - **Outreach** – Supporting civil aviation participants with aviation safety publications, courses, seminars and advice. Safety education is focused on the greatest safety concerns, and its aim is to influence attitudes, change behaviour and encourage aviation participants to operate well above safety minimums.
  - **Certification and licencing** – Using certification and licencing to control entry and exit to the New Zealand civil aviation system. To operate within the civil aviation system, a participant (an individual or organisation) must be granted an aviation document. These include a pilot licence, operating certificate, aircraft registration, engineer licence, air traffic control licence, or aerodrome certificate.
  - **Surveillance and investigation** – Monitoring compliance with safety and security standards, investigating and analysing accidents and incidents, and carrying out corrective action and enforcement. The Authority's monitoring role includes inspecting and auditing participants in the civil aviation system. The level of risk that each operator poses to aviation safety is assessed and this level of risk is used to decide the degree of surveillance and monitoring attention applied to the operator. The Authority also administers the provisions of the Health and Safety at Work Act 2015 for aircraft in operation.

<sup>5</sup> Civil Aviation Act 1990 s72AA.

## Funding the Core Functions

14. Very little of the Authority's activity is discretionary. Almost all activities can be traced back to an international or New Zealand legislative or regulatory requirement. These different layers of legislation define and shape what the Authority does and how the New Zealand aviation system operates.
15. In fulfilling its core function, the Authority operates to a consistently applied Regulatory Operating Model<sup>6</sup>, which is founded in the Civil Aviation Act. This model outlines the principles that underpin the regulatory approach.
16. At present, the Authority is funded almost entirely by a mixture of fees, levies and charges collected from participants in the aviation sector, including airlines, passengers, pilots and others, and aviation related organisations. Aviation is a volatile industry, with sometimes dramatic and unexpected changes in passenger volumes, yet a relatively inflexible pricing mechanism is needed to ensure that all regulatory responsibilities can be fulfilled.
17. The third-party funding payments collected by the Authority are called fees, levies and charges. However, a levy differs from a fee or charge for a specific good or service — it is more akin to a tax, but one that is charged for a specific purpose and to a specific group. It is usually compulsory to pay a levy.<sup>7</sup>
18. Common definitions for 'levies' and 'fees and charges' established by the Legislation Advisory Committee, the Office of the Auditor-General and the Treasury<sup>8</sup> are as follows:

- **Levy (money for specific purpose):** A cost-recovery payment for a specific purpose, for example - a function or an area of activity (rather than a product or service) provided by a public entity to a group where there is an indirect connection between the cost, the purpose and the benefit across the group;

- **Fee or charge (money for product or service):** A cost-recovery payment for a specific product or service provided by a public entity to an individual where there is a direct connection between the cost, the product or service and the benefit to the individual.

19. The complete list of fees, levies and charges currently charged by the Authority (effective from 1 July 2017) are summarised in Appendix 1.
20. The approach adopted in this pricing review is consistent with the Government's 'cost recovery' objectives and complies with the public sector guidance material on the setting of fees and charges for services delivered to third parties by Government agencies (Treasury<sup>9</sup>, the Office of the Auditor General<sup>10</sup> and the Ministry of Transport<sup>11</sup>).

<sup>6</sup> The Authority's Regulatory Operating Model can be found [here](#).

<sup>7</sup> Office of the Auditor-General (OAG) Good practice guide: Charging fees for Public Sector Goods and Services June 2008.

<sup>8</sup> Legislation Advisory Committee (LAC) Guidelines on Process and Content of Legislation 2001 (2012 edition); Office of the Auditor-General (OAG) Good practice guide: Charging fees for Public Sector Goods and Services June 2008; and the Treasury Guidelines for Setting Charges in the Public Sector Dec 2002.

<sup>9</sup> Guidelines for Setting Charges in the Public Sector, The Treasury, December 2002.

<sup>10</sup> Guidelines on Costing and Charging for Public Sector Goods and Services, The Audit Office, 2008.

<sup>11</sup> Transport Regulatory System: Funding principles, September 2018.





# Funding Pressures and Implications for Authority Funding over the 2020/21–2022/23 period

## Authority Funding Sources and the Reserves and Funding Policy

21. The Authority's principal source of revenue for its regulatory safety function are the levies on airlines charged per international departing passengers (International Passenger Safety Levy) and departing domestic passengers (Passenger Levy - charged per passenger carried on each domestic sector)<sup>12</sup>, and fees and charges on its regulatory activities. The fees, levies and charges are set in the Civil Aviation Safety Levies Order 2002 and the Civil Aviation Charges Regulations (No2) 1991 respectively.
22. The Authority also receives Crown funding for various services to government, contract revenue for the development of Civil Aviation Rules for the Ministry of Transport, and funding for discharging its designation to enforce the Health and Safety at Work Act 2015 with respect to aircraft in operation.
23. The Authority has a Reserves and Funding Policy that sets the reserve thresholds for accumulated funding that needs to be maintained at any point in time. This ensures that the Authority operates in a financially responsible manner and prudently manages its assets and liabilities to maintain its long-term viability.

It also means that in the circumstances of a catastrophic event, the accumulated reserves will support the Authority's regulatory activities until such time as Crown support can be obtained.

24. The Reserves and Funding Policy sets the maximum and minimum reserve limits for both the CAA and Avsec. In particular, it sets reserve amounts for Working Capital (WC) and Capital Expenditure (Capex) for both operating arms.
25. Under the policy, the CAA should maintain Working Capital cash reserves equivalent to 75 percent of six to nine weeks of operating expenditure.

## Projected Expenditure for the 2020/21–2022/23 period

26. The Authority has assessed the likely expenditure to occur over the 2020/21 – 2022/23 period. Table 1 outlines the key expenditure that the Authority anticipates over that period.
27. The total expenditure over the period covered by the pricing review is estimated at \$155.3 million. The most significant contributors to the total expenditure over that three-year period are explained in more detail below.

**Table 1: Estimated Expenditure over the Pricing Review Period**

ESTIMATED EXPENSES	BUDGET	PRICING REVIEW PERIOD		
	2019/20 \$000	2020/21 \$000	2021/22 \$000	2022/23 \$000
Personnel Costs	40,633	41,795	41,907	42,664
Depreciation & amortisation	727	792	825	1,465
Finance Costs	-	240	440	480
Other expenses	8,494	8,681	8,824	7,220
<b>Total Expenses</b>	<b>49,854</b>	<b>51,508</b>	<b>51,996</b>	<b>51,829</b>

<sup>12</sup> Airlines with greater than 20,000 passengers/annum are exempt from this levy.

## Replacement of Regulatory Technology Platform (EMPIC – EAP)

28. The Authority's current regulatory technology platform (required to support its core regulatory activity) is now over thirty years old. This poses a significant business risk in that the platform can no longer be modified to meet changing regulatory requirements or to provide the range of intelligence and information analysis options needed by the Authority and aviation operators to support improved safety performance. The overly administrative business processes it currently imposes also restrict the Authority's abilities to fulfil regulatory requirements and contribute to improved safety performance.
29. To replace the current platform, the Authority has selected an aviation specific technology platform: EMPIC–EAP, a purpose-built aviation regulation technology platform. This is a comprehensive, modular and fully integrated system that addresses every aspect of aviation safety oversight. Implementation of the new system will require a significant capital investment and ongoing operating costs in the form of software licensing and maintenance fees.
30. The implementation and operating costs of the new EMPIC–EAP investment are included in operating and capital expenditure projections from February 2020. It is assumed that the capital costs of \$16.3 million for EMPIC–EAP will be partially met from the Authority's existing cash reserves in addition to \$12 million of capital funding. For modelling purposes, this has been assumed to be a Crown loan at four percent interest per annum repayable over a ten-year period.
31. A Crown loan is the funding option that delivers the lowest possible price increase to the aviation sector.

## Additional Project Costs/Budgetary Provisions for CAA Capability

32. Further budgetary expenditure to ensure the CAA's capability and capacity to continue critical regulatory functions through the period to June 2023 has also been identified. This includes:
  - Additional regulatory personnel to undertake more regular oversight and surveillance activities across a wider range of operators (according to risk) in the growing aviation sector. These personnel will provide increased oversight of the aviation system and will be aligned with recent organisational design changes to drive ongoing improvement of the Authority's regulatory practice and performance. For the purposes of budgetary provision, it has been assumed that a proportion of the costs associated with increased personnel will commence from the beginning of the 2020/21 financial year (with an associated cost of \$0.7 million) and the remaining costs will commence from the beginning of the 2021/22 financial year (with an associated cost of \$1.5 million in 2021/22 and 2022/23);
  - An additional \$0.5 million per annum for future new initiatives (including ongoing development of tools and guidance for regulatory staff as well as information and education initiatives for industry) focussed on driving improvements in the Authority's regulatory practice and performance, from 2021/22 onwards (with \$0.2 million in 2020/21); and
  - Provision for an increase of \$0.08 million per annum to proposed Board members' and Medical Convenor fees, subject to approval by the Cabinet Appointments and Honours Committee and Cabinet.

## Inflation

33. For this pricing review, wage inflation was set at levels broadly in line with the Treasury's economic forecast update information (Budget Economic Forecast Update, Issue 30 May 2019).

## Additional Regulatory Responsibilities

34. Crown funding for capability to administer additional responsibilities assigned (effective 2018) to the Authority under the Hazardous Substances and New Organisms (HSNO) Act 1996, ceases on 30 June 2020. The Authority is required to maintain this regulatory capacity, for which the Crown has previously provided funding of \$0.52 to \$0.55 million per annum. In the absence of further Crown funding, for the purposes of the pricing review, it has been assumed that the function will need to be funded from levies (which is consistent with signals from Government).
35. After consideration was given to potential costs recovery for this additional ‘discharge of hazardous substances from an aircraft’ HSNO obligation (see later section for full details), it is proposed to:
- increase the Agricultural Operations Safety Levy rate by a figure equating to ninety percent of the oversight costs of the additional ‘discharge of hazardous substances from an aircraft’ obligation; and
  - apportion the remaining ten percent of the oversight costs of the additional ‘discharge of hazardous substances from an aircraft’s obligation’ across all fees, levies and charges (which, along with other costs drivers, requires a 5.3 percent increase on all fees, levies and charges)<sup>13</sup>.
38. **The Safety Management Systems (SMS) programme** is an ICAO-mandated, formal risk management system designed to improve aviation safety. Since February 2015, Civil Aviation Rule 100: Safety Management has required commercial operations to implement and maintain a comprehensive and scalable SMS. All Group 1 operators (larger operations) now have an approved SMS in place. All other operators are expected to have an approved SMS in place by 1 February 2021, after which the Authority’s activity and expenditures in the programme will decline substantially. The Authority’s activities will move to a more ‘monitoring and inspection’ mode in this area which means that the use of the levy for cost recovery will become more important over time.
39. Expenditure associated with these programmes will, therefore, reduce by around \$1.6 million annually.

## Projected Expenditure Decreases: Cessation of One-Off Programmes

36. The following Authority work programmes are in the process of being phased out or are expected to be completed over 2020/21 – 2022/23. They align most directly to ‘Other Expenses’ in Table 1.
37. **The New Southern Sky (NSS) programme** is a three stage, benefits-led programme to modernise New Zealand’s airspace and air navigation systems. Spanning a decade of activity, the programmes work to deliver a new airspace surveillance system, satellite-based, performance-based navigation procedures and a new air traffic management system. The NSS programme is expected to extend out to 2023 however the Authority’s proportion of the work and expenditure in that area will decline and be phased out in 2021.

<sup>13</sup> If HSNO was Crown funded, the likely impact on the proposed 5.3 percent general increase would be negligible and the Agricultural Operations Safety Levy would be subject solely to the same 5.3 percent increase as the other fees, levies and charges.

## Assumptions of Revenue from 2020/21 to 2022/23

40. The Authority has estimated the likely revenue to be obtained over the 2020/21 to 2022/23 period. Table 2 outlines the projected revenue streams over that period, based on the Authority's current pricing.
41. The total estimated revenue over the 2020/21 to 2022/23 period under the current pricing regime, therefore, is \$147.5 million.

**Table 2: Projected Revenue from 2020-21 to 2022/23<sup>14</sup>**

	BUDGET	PRICING REVIEW PERIOD		
	2019/20 \$000	2020/21 \$000	2021/22 \$000	2022/23 \$000
International Levy	11,180	11,292	11,404	11,519
Domestic Non ANZA	18,883	19,401	19,936	20,483
Domestic ANZA	4,010	4,120	4,233	4,350
Operator Safety Levy	1,595	1,595	1,595	1,595
Participation Levy	502	502	502	502
Crown Funding	3,706	2,980	2,980	2,980
Ministry Contracted Revenue	1,600	1,560	1,544	1,488
Fixed Fee & Hourly Charge	6,981	6,620	6,298	6,293
Other	670	593	563	563
<b>Total</b>	<b>49,127</b>	<b>48,663</b>	<b>49,055</b>	<b>49,773</b>

## Projected Revenue from Passenger Safety Levies from 2020/21 to 2022/23

42. As can be seen above, the Authority's major revenue streams are safety levies from international passengers and domestic passengers. Forecasting future passenger volumes, however, is inherently problematic in that actual volumes can be relatively volatile depending on the prevailing economic conditions and the response of carriers in a competitive aviation market. The projected numbers of international and domestic passengers are outlined below in Table 3.

**Table 3: Projected Passenger Numbers from 2020/21 to 2022/23**

	PRIOR YEAR	BUDGET	PRICING REVIEW PERIOD		
	2018/19	2019/20	2020/21	2021/22	2022/23
International	6,859	6,987	7,057	7,128	7,199
Domestic Non ANZA	11,466	11,801	12,126	12,460	12,802
Domestic ANZA	2,501	2,554	2,624	2,696	2,770

<sup>14</sup> Based on current pricing and one percent projected growth in international passengers and 2.75 percent in domestic passengers.



43. These projections have assumed growth in international passenger numbers of 1 percent and growth in domestic passenger numbers of 2.75 percent. These are lower than previous projections to match emerging market trends. The estimated revenue at current prices from passenger levies for these projected passenger numbers is outlined in Table 4 as follows:

**Table 4: Estimated Revenue from Projected Passenger Safety Levies from 2020/21 to 2022/23**

	2019/20 \$000	2020/21 \$000	2021/22 \$000	2022/23 \$000
International	11,180	11,292	11,404	11,519
Domestic Non-ANZA	18,883	19,401	19,936	20,483
Domestic ANZA	4,010	4,120	4,233	4,350
<b>Total</b>	<b>34,073</b>	<b>34,813</b>	<b>35,573</b>	<b>36,352</b>

44. In summary therefore, the projected revenue from passenger safety levies at current pricing is estimated at \$106.7 million over the three years covered by the pricing review.
45. Should the projected growth rates for passenger numbers prove too optimistic (i.e. should they reduce below the projected figures) this would need to be taken into account when the final proposals are developed following consultation.

### Question 1

Do you have any comments/suggestions on the Authority's projected passenger numbers or are you aware of any alternative projections?

### Projected Revenue from Other Funding Sources from 2020/21 to 2022/23

46. For the purposes of estimating the projected revenue over the 2020/21 to 2022/23 period, it has been assumed that revenue from other funding streams that are driven by volumes (e.g. operations safety levy, participation levy, license applications and certification) as well as the level of Crown funding, will remain consistent with previous years.

## Summary of The Authority's Financial Position from 2020/21 to 2022/23

### Overview of Financials

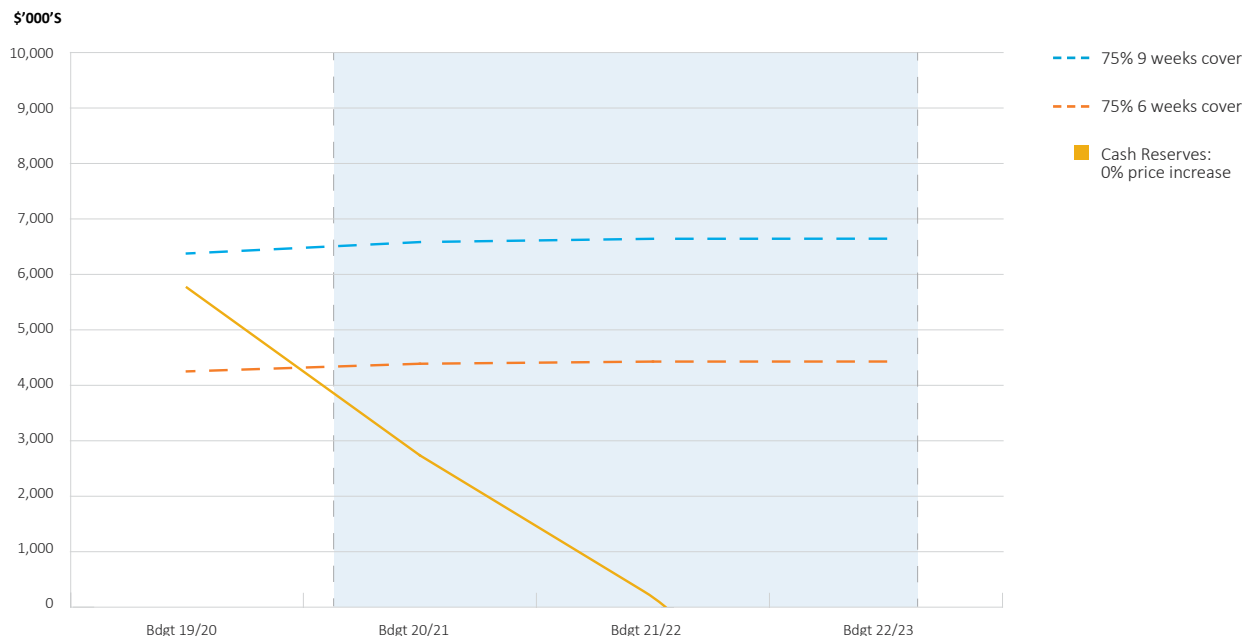
47. Based on the Authority's projected expenditure and the total projected revenue (including revenue from passenger numbers and other sources) the Authority's financial position over the next three years can be summarised as shown in Table 5 below. These figures assume no change in the Authority's current pricing of fees, levies and charges.

**Table 5: The Authority's Estimated Financial Position from 2020/21 to 2022/23**

	BUDGETED		PROJECTED	
	2019/20 \$000	2020/21 \$000	2021/22 \$000	2022/23 \$000
Total Revenue	49,127	48,663	49,055	49,773
Total Expenses	49,854	51,508	51,996	51,829
Total Deficit	(727)	(2,845)	(2,941)	(2,056)

48. From these projections, a total deficit of \$7.8 million (cumulative over the period of the review) can be anticipated if the current pricing regime is maintained. The consequential impact on the CAA cash reserves, can be observed in Figure 1.

**Figure 1: Total Cash reserves with \$12m crown loan for EMPIC – at a finance cost of 4 percent:**



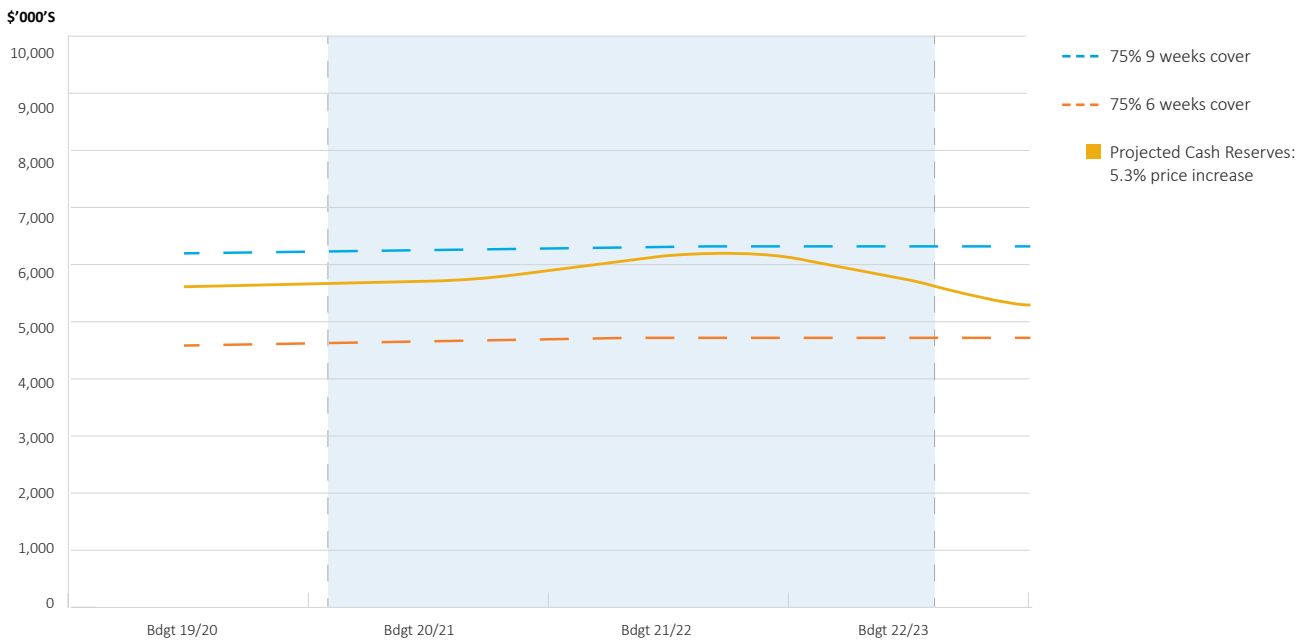
49. If it retained the status-quo pricing for its fees, levies and charges, the Authority would be unable to sustain its statutory functions and regulatory activities for the New Zealand aviation sector. Neither would the Authority be able to comply with the CAA cash reserve limits outlined in its Reserves and Funding Policy<sup>15</sup>.
50. From a practical perspective, for the Authority to meet its statutory obligations (and to remain financially sustainable as well as complying with the CAA Reserves and Funding Policy), all of the Authority's existing fees, levies and charges would need to increase by 5.3 percent from 1 July 2020. The costs associated with the additional HSNO obligation would also need to be recovered. This would lead to a projected financial projection as shown in Table 6 and Figure 2.

**Table 6: Financial projections based on recommended 5.3 percent general increase (plus HSNO apportion)**

	BUDGETED		PROJECTED	
	2019/20 \$000	2020/21 \$000	2021/22 \$000	2022/23 \$000
Total Revenue	49,127	51,463	51,879	52,637
Total Expenses	49,854	51,508	51,996	51,829
Total Surplus/(Deficit)	(727)	(45)	(117)	808

<sup>15</sup> Where the range is 75 percent of 6 to 9 weeks of standard operating expenditure, and where the mid-point is 75 percent of 7.5 weeks of operating expenditure.

**Figure 2: Total Cash Reserves with \$12m crown loan for EMPIC – at a finance cost of 4 percent, and with a 5.3 percent increase to fees, levies and charges**



51. The proposed increase is in line with the forecast annual rate of inflation for the period (1.7 percent in the second quarter of 2019). The key drivers for this increase are:
  - a. replacement of the obsolete regulatory technology platform;
  - b. additional budgetary provision for CAA capability and project costs; and
  - c. forecast growth in wages and salaries.
  
52. Given that wages and salaries are 72.1 percent of the CAA’s total expenditure, a significant portion of the proposed 5.3 percent increase can be attributed to these forecast wage growth pressures which Treasury projects to grow closer to 3 percent per annum over the review period.

## Proposed Changes to the Authority's Fees, Levies and Charges

53. The Authority is, therefore, proposing to:
- increase its fees, levies and charges by 5.3 percent (an annual adjustment of just over 1.77 percent per annum over the three year period); and
  - to further increase the Agricultural Operations Safety Levy by 71 percent to recover the costs associated with the additional 'discharge of hazardous substances from an aircraft' obligation<sup>16</sup>.
54. If oversight costs for the additional 'discharge of hazardous substances from an aircraft' obligation were recovered from all fees, levies and charges, a general increase of 6.4 percent would be required, (equivalent to an implied annual adjustment of 2.13 percent per annum over three years).

### Question 2

Do you think that the cost estimates and the resulting proposed 5.3 percent price increase are fair and reasonable given the circumstances outlined in this document?

(Yes / Substantially / Partially / No?)

### Question 3

Do you think that this proposed increase (and the 90:10 split of HSNO costs) is the most appropriate option of the three outlined to recover these costs?

(Yes / Substantially / Partially / No?)

### Question 4

Can you suggest any other potential options to recover the costs of regulating the 'discharge of hazardous substances from an aircraft' that the Authority could have considered?

### Question 5

The Authority recognises that the proposed 5.3 percent increase to the current fees, levies and charges will have a financial impact on the commercial aviation sector. Can you provide some evidence of the potential impact this might have on your business?

<sup>16</sup> See later section 'Cost Recovery of Regulatory Functions under the Hazardous Substances and New Organisms Act 1996' for details.

# Consideration of Two Specific Policy Issues

## Review of Pricing for Drones<sup>17</sup>

55. This section of the pricing review examines the growing impact of drones in New Zealand and regulatory work underway around the oversight of unmanned aircraft operations. The unmanned aircraft sector is growing rapidly and generating increasing oversight requirements (and, therefore, associated oversight costs).

## Background

*The number of drones and drone operators/pilots in the aviation system is increasing*

56. Since 2015, there has been a significant increase in drone use and the number of associated participants entering the aviation system with research suggesting there are up to 77,600 drones<sup>18</sup> and 281,428 drone users in New Zealand.<sup>19</sup>
57. A key driver for the increased numbers is the low price of entry. Drones are an order of magnitude cheaper than other, more traditional, aircraft in the New Zealand aviation system. Drones of varying capability can be purchased from between \$50 (for basic drones) to \$2000 or more (for more sophisticated drones used for film production, photography, engineering, agriculture, power line inspections, etc.) from online or physical retailers. In future, larger drones may also be used for delivery and passenger transport.
58. The significant number of new entrants to the New Zealand aviation system is a concern in that most of them have no prior knowledge or understanding of the system, the associated laws and regulatory requirements or the risks associated with their activity in New Zealand airspace. This has resulted in the introduction of new types of risk and new levels of risk across

New Zealand's aviation system and a corresponding increase in drone-related incident reports to the CAA since 2015 (outlined in Table 7 below).

**Table 7: Total drone-related incident reports to the CAA 2015 - May 2019**

YEAR	2015	2016	2017	2018	Jan - May 2019
Incident Numbers	119	200	370	506	226

59. These include reports of drones operating in controlled airspace without clearance, 'hazardous operations'<sup>20</sup>, operating within four kilometres of an aerodrome, air proximity concerns, night flying, breaches of the Civil Aviation Rule's consent provision, or crashes. Many of these incident types have potential to lead to serious safety and security consequences including mid-air collisions or loss of an aircraft causing injury or death.
60. Drones were initially regulated under Civil Aviation Rules, Part 101<sup>21</sup> which addressed safety risks associated with the use of gyrogliders and parasails, unmanned aircraft (e.g. moored balloons, free balloons), model aircraft etc. In August 2015, in response to concerns related to the increased activity of drone operators, a number of minor changes were made to Part 101 to better define the threshold between operations under Part 101 (which are considered to be low risk) and the introduction of Part 102: Unmanned Aircraft Operator Certification.<sup>22</sup>
61. Part 101 only applies to Remotely Piloted Aircraft Systems (RPAS) of 25 kg and under that can fully comply with the rules in Part 101. To operate any RPAS over this weight, and for operations that cannot comply with Part 101, the operator must be certificated under Part 102. Under Part 102 there are approximately 360 drones linked to 105 CAA-certificated operators.<sup>23</sup>

<sup>17</sup> For the purposes of this document, the term 'drone' is used to capture Unmanned Aircraft Systems (UAS), Unmanned Aerial Vehicles (UAVs), Remotely Piloted Aircraft (RPA), Unmanned Aircraft (UA), Small Unmanned Aircraft (SUA), or Remotely Piloted Aircraft Systems (RPAS).

<sup>18</sup> Drone Benefit Study, Market Economics Limited, prepared for the Ministry of Transport, 2019.

<sup>19</sup> RPAS Use in New Zealand – Colmar Brunton, prepared for the Civil Aviation Authority, 2017.

<sup>20</sup> CAA defines 'hazardous operations' as 'general or other concerns about drones relating to safety – e.g. complaints or allegations about drones operating above 400 feet'.

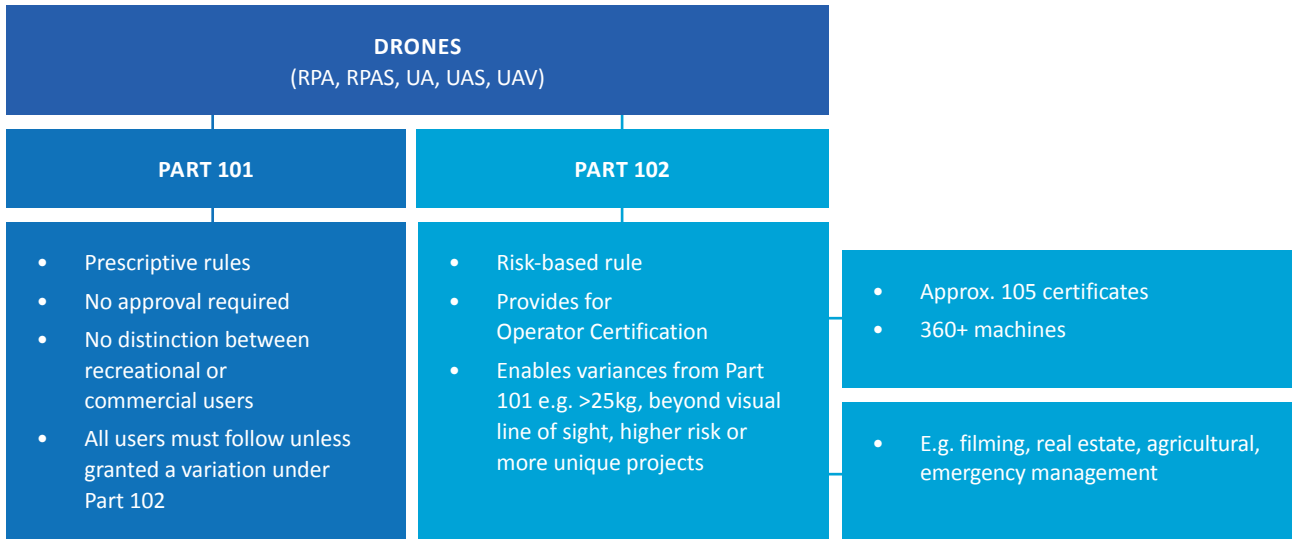
<sup>21</sup> Civil Aviation Rules, Part 101: Gyrogliders and Parasails, Unmanned Aircraft (including Balloons), Kites, and Rockets – Operating Rules.

<sup>22</sup> Part 101 applies to operations that do not need CAA approval as long as they remain within the rule's prescriptive limitations. Part 102 is a risk-based rule that applies to drone operations that cannot adhere to Part 101 requirements, present a higher risk due to the aircraft characteristics and/or the type of operation they conduct.

<sup>23</sup> Part 102: Unmanned Aircraft Operator Certification. As a result of the certification process, the Authority is aware of the total number of drones and the specific characteristics and capabilities of each drone.



Figure 3: Drone Parts 101 and 102



### Funding the Regulatory Oversight of Drone Participation in the Aviation System

62. The Authority has three primary sources of revenue to fulfil its statutory functions:
  - Aviation participant fees and charges – for licensing and certification;
  - Passenger levies and charges – for civil aviation regulatory functions and security screening; and
  - Crown funding – for policy advice, rules and standards development and the administration of the Health and Safety at Work Act 2015 designation for the Civil Aviation Authority (CAA).<sup>24</sup>
63. Despite the large number of drone operators now participating in the New Zealand aviation system (predominantly operating under Part 101), few contribute to the oversight for safety support like other aviation participants do. At present, cost recovery for regulatory activities related to drones is limited to a small number of Part 102-certificated operators (approximately 105). This occurs via the CAA’s standard hourly rate for drone-related chargeable certification services (or any other relevant rule) carried out by operational units such as Special Flight Operations and Recreational Aviation and the Airworthiness Unit.<sup>25</sup>
64. New Zealand’s civil aviation regulatory framework focuses on managing the risks associated with aircraft use. This is why, unlike other jurisdictions, it makes no distinction between recreational or commercial use of drones (e.g. those conducting hire or reward activities).

The prescriptive rules of Part 101 capture most lower-risk drone activity, while the performance-based rules of Part 102 accommodate more complex or riskier activities not accommodated under Part 101. For example, under the current Part 102 regulatory framework, the CAA is certifying more complex drones and operations that may potentially carry passengers in the future.

65. While the CAA has a mechanism to recover the costs associated with drone certification activity (whether that is of an operation, or a drone or related drone product or component) through Part 102; it does not have a mechanism to recover ‘oversight’ costs, (e.g. work related to monitoring and education, safety promotion/outreach work as it pertains to drones). Oversight costs are increasingly associated with drones operating under Rule 101.

### Designing the Future Regulatory Oversight System for Drones in the Civil Aviation System

66. Given the increasing amount of Authority oversight work linked to drones, there is a need to consider how this work will be funded into the future (particularly if it continues to grow) and how the new participants can contribute to the costs of managing the new risks associated with their participation in the aviation system. Although some form of financial contribution for related aviation safety oversight from drone operators is anticipated, part of the problem with determining how this might work relates to the overall nature and the maturity of the ‘drone aviation sector’ compared to traditional aviation, particularly for Part 101 participants.

<sup>24</sup> The Authority funds policy and regulatory strategy activities through a mix of Crown Funding, (via Ministry of Transport contract revenue for rules development), fees, levies and charges. Outreach activities are funded via levies and other revenue, while surveillance and investigation activities are funded through the Crown, fees, levies and charges, and other revenue.

<sup>25</sup> CAA’s current hourly charge is \$284 per hour (GST inclusive), e.g. for Part 102 certification, and other aircraft certification services.

67. Because the ‘drone aviation sector’ is still at an early stage of development, limited information exists on the different operators and the different risks associated with them. As a result, options for related safety oversight fees and charges are also limited. The Authority could, however, use levy funding to enable its civil aviation safety oversight functions<sup>26</sup> for drones.
68. The use of levy funding for drone-related work does not imply a cross-subsidy by other users or sectors. The concept of levies for funding purposes is that they can be applied broadly, without the need to specifically reflect the precise costs associated with oversight of a single sector (e.g. drones). In other words, using a levy to fund certain regulatory activities envisages some degree of flexibility will be required, usually because there are a range of different beneficiaries from that regulatory oversight, not just one specific group (for example, regulatory activity for drones can benefit not only drone users but other airspace users as well).<sup>27</sup>
69. When addressing this problem, the following principles could underpin the Authority’s future consideration and approach:
- a. **Fairness** – While other participants benefit from the CAA’s current oversight of drone operators and operations, having drone users contribute to the maintenance and development of a safe and secure aviation system may be the right thing to do;
  - b. **Integration** – It recognises that drones operate in an established aviation system, and like a number of other participants, must be integrated into that system in a manner that aligns with those other participants and their activity; and
  - c. **Safety** - The Director of Civil Aviation needs assurance that the system is safe - to achieve desired safety outcomes and address risk/potential risk, the CAA can spend revenue however it deems fit to achieve the desired and necessary safety outcomes.
70. The Authority is working closely with the Ministry of Transport (MoT) to support its work to update New Zealand regulations relevant to drones. This work focuses on a short to medium-term programme to address current and emerging issues. It could result in decisions and future interventions that impact on the Authority’s approach to the safety oversight system and how drones might be incorporated into its funding system.
71. The policy objectives of this joint Authority-MoT work are to:
- a. maintain appropriate standards of safety and security;
  - b. enable drone innovation and development;
  - c. lay the early groundwork for future integration of drones into the transport system; and
  - d. foster social licence, including managing public concerns about drones’ use (safety and security, and national security, privacy and nuisance).
72. In this regard, MoT and the CAA have agreed to explore a package of policy initiatives to achieve the above objectives which include:
- a. updating Part 101 to improve clarity and make requirements as flexible and permissive as possible while also managing safety and security risks;
  - b. revising the subcategories under Part 101, based on assessment of risks; and
  - c. potentially introducing new requirements for drones and/or drone operators. For example, requiring:
    - compulsory registration for some drones;
    - e-identification/remote identification capability;
    - geo-awareness functionality; and
    - pilot competence testing.
73. Initial policy work to date suggests a variety of the above elements may be appropriate to address the identified problems related to the regulation of drones, including system sustainability. MoT (with CAA support), is currently engaging with government departments and agencies and other stakeholders on this work programme. This engagement (including future sector engagement) and further analysis will help refine the policy options and influence other ongoing work.

### Drone regulatory work underway will influence the nature of the future system

70. The Authority is working closely with the Ministry of Transport (MoT) to support its work to update New Zealand regulations relevant to drones. This work focuses on a short to medium-term programme to address current and emerging issues. It could result in decisions and future interventions that impact on the Authority’s approach to the safety oversight system and how drones might be incorporated into its funding system.

<sup>26</sup> The Civil Aviation Act 1990 allows the Governor-General to impose levies, and further identifies the basis upon which those levies may be established and applied. The Authority may use these levies to enable it carry out its functions under this Act and any other Act.

<sup>27</sup> A recent example of this was the drone safety promotion campaign carried out over the 2017/18 summer and the development and ongoing support of the ‘Fly Your Drone’ campaign.

## Review of the Agricultural Operations Safety Levy

### Development and Introduction of the Current Levy

74. The previous review of the funding framework (as adopted by the Authority and implemented in 2017) was a comprehensive review of the rationale for setting levies and fees. The first phase of that review concerned the overall financial framework (in terms of fundamental principles and approaches used by the Authority to recover costs of regulatory oversight activities).
75. The second phase of that funding review considered the appropriate level of regulatory levies and fees and resulted in a number of proposals, including one to replace participation levies on 'Other Commercial Aircraft' (fully or partially) with four Operations Safety Levies (including a new Agriculture Operations Safety Levy).
76. Up to that point, the 'Other Commercial Aircraft' operators, had paid an hourly surveillance fee<sup>28</sup> and charges for other functions. The resulting revenue from those fees and charges did not meet the costs of the associated oversight, however.
77. During the second phase of the review, consideration was also given to the practical means of calculating and applying the newly proposed levies. With respect to the levy for Part 137 Agricultural Aircraft Operators, (the 'Agricultural Operations Safety Levy'), activity measures were considered an effective proxy for risk and, thus, the risk exacerbation the operators imposed (and the impost they generated with respect to over-sight to mitigate the risks).
78. As a result, it was proposed to use a levy based on the weight (in tonnes) of agricultural product (both solid and liquid) applied or dispersed from the air during the conduct of an agricultural aircraft operation. In choosing to base the Agricultural Operations Safety Levy on tonnage, a variety of factors were considered, including:
  - information on tonnage was already being collected, and that information was likely to be accurate and verifiable as it reflected the amount of fertiliser that farmers were paying for;
  - it didn't incentivise unsafe behaviour, such as overloading to reduce flight time;
  - it was the most equitable measure.
79. During the consultation process for the second phase of the review, some Agricultural Aviation Sector operators objected to the proposed Agricultural Operations Safety Levy. These operators felt that tonnage was an unfair proxy upon which to base the levy because they believed it shifted the airline sector/general aviation sector cross-subsidisation to cross subsidisation within the general aviation sector (i.e. the larger operators would end up subsidising the smaller operators).
80. Following consideration of sectoral feedback, the Authority introduced graduated rates for the levy which meant that the more tonnes of agricultural product an operator carried, the lower the rate per tonne they would pay. In addition, in order to mitigate the immediate impact of the new levies upon operators, the levy was phased in over the first two years of the three-year period to give operators time to adjust their business models.
81. Following concerns raised by the agricultural aviation sector with respect to the use of 'tonnes of agricultural product' as the basis for calculating the levy, the Authority undertook to re-examine alternatives during the next pricing review to assess whether the levy could be improved.

## Reviewing the Rationale for a Tonnage-based Levy

### Scope of the Current Review of the Agricultural Operations Safety Levy

82. The purpose of the current review is to consider whether an alternative proxy to 'tonnage' should be used as the basis for the Agricultural Operations Safety Levy. The current review does not revisit the underlying policy decision in the funding review (approved in 2017) to use an activity-based levy to fund the regulatory oversight of the agricultural sector.
83. Neither does the current review consider the balance of funding between airlines and the General Aviation sector.

### Context – The Agricultural Aviation Sector

84. The aerial application of agricultural products (agrichemicals, fertilisers and Vertebrate Toxic Agents applied where ground-based application is not possible or not the most efficient or effective means of application) is the dominant commercial activity in the Agricultural Aviation Sector. Aerial operations can be from either fixed wing aircraft or helicopters.

<sup>28</sup> Except air transport operators under part 125 or part 121 who carried greater than 20,000 passengers annually and paid a passenger levy as well as hourly charges for CAA audit and certification activities.

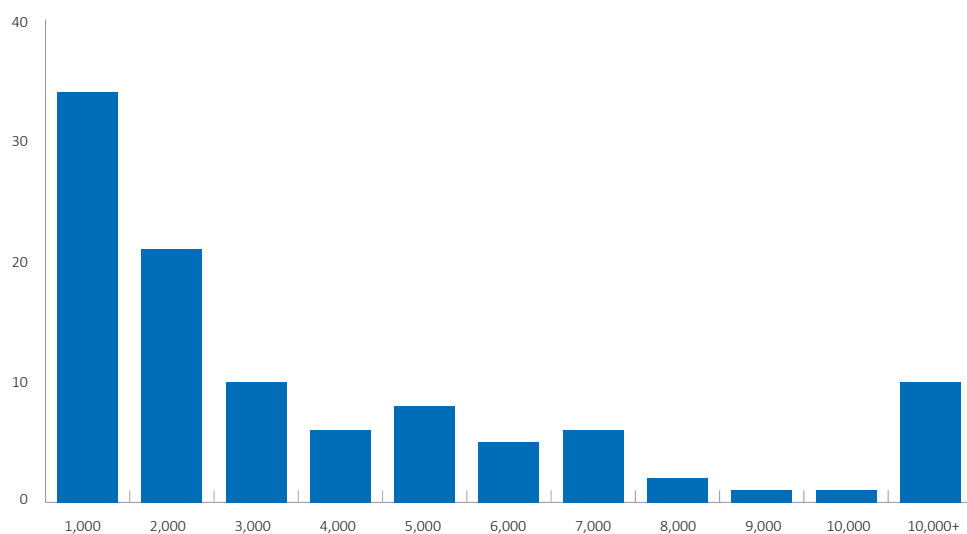
85. As of 18 August 2019, there were 105 Part 137 agricultural aircraft operator holders in New Zealand. The number of operators has been relatively stable over recent years. (The breakdown of craft type is shown in Table 8).

**Table 8: Agricultural statistics 2016-2018**

YEAR	AIRCRAFT CLASS	AIRCRAFT REPORTING AG PRODUCT	PERCENT OF TOTAL AIRCRAFT REPORTING	TOTAL AG TONNES REPORTED	PERCENT TOTAL TONNES
2016	Helicopters	234	74%	147,233	24%
2016	Fixed wing	82	26%	462,346	76%
<b>2016</b>	<b>Total</b>	<b>316</b>	<b>-</b>	<b>609,579</b>	<b>-</b>
2017	Helicopters	245	75%	198,077	28%
2017	Fixed wing	80	25%	497,446	72%
<b>2017</b>	<b>Total</b>	<b>325</b>	<b>-</b>	<b>695,523</b>	<b>-</b>
2018	Helicopters	238	75%	199,058	27%
2018	Fixed wing	80	25%	539,384	73%
<b>2018</b>	<b>Total</b>	<b>318</b>	<b>-</b>	<b>738,442</b>	<b>-</b>

86. In 2016, 2017 and 2018, these operators dispersed 609,579, 695,523 and 738,442 tonnes of agricultural products respectively.
87. A key characteristic of the New Zealand agricultural aviation sector is that a small number of larger agricultural aircraft operator holders account for the largest proportion of agricultural activity across the sector. There is also a large number of other, smaller agricultural aircraft operator holders that tend to carry out far more limited agricultural aviation activity. Some of these operators run a diversified business, combining limited amounts of agricultural aviation work with other operations such as air transport, tourism etc.
88. This aspect is illustrated in Figure 4 which outlines the number of operators dispersing agricultural products and the total amount of agricultural product dispersed (in tonnes) in 2018. Figure 4 indicates that ten agricultural operators (approximately 10.5 percent of the total number of operators) were each responsible for dispersing more than 10,000 tonnes of agricultural product whereas the remaining ninety-four agricultural operators each dispersed between 1000 and 10,000 tonnes of agricultural product. Fifty-five of these (approximately 52.9 percent of the total number of operators) only dispersed up to 2000 tonnes each.

**Figure 4: Number of agricultural operators by tonnes in 2018 (total 104)**

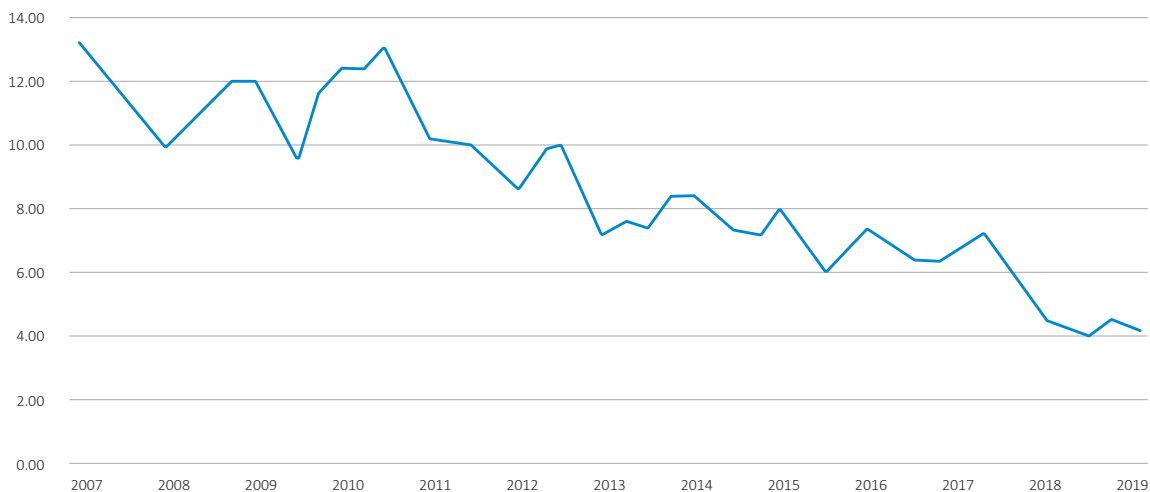


89. The type of aircraft used for the dispersal of agricultural product depends both on the nature of the task and the area being targeted. Helicopters generally undertake more targeted work where there is a need for greater manoeuvring ability and application of product (for example, when following complex boundaries or operating on setbacks from streams or watercourses). They can also be used where no suitable airstrip infrastructure exists within economical flying distance.
90. Fixed wing aircraft are generally more suited to broadcast application of larger treatment areas (e.g. applying products such as lime and superphosphate to pastoral land).

### Risk profile in the agricultural aviation sector

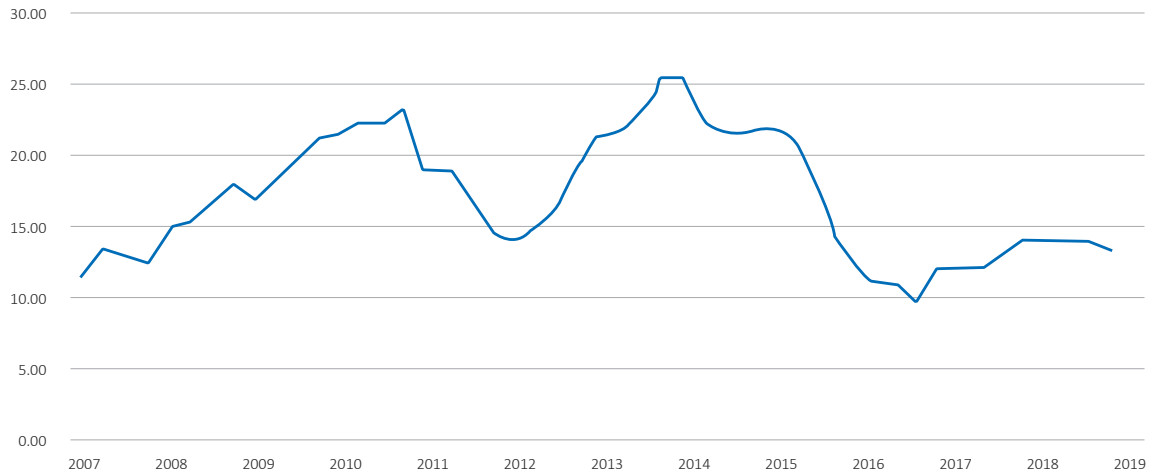
91. New Zealand's topography and operating environment pose unique challenges for agricultural aviation operators who are responsible for the aerial application of agricultural products. Agricultural aviation involves very low-level flying, a high workload and associated fatigue, and is particularly subject to the negative impacts of the weather, terrain and obstacles. The competing pressures of productivity over safety and degraded aircraft performance due to overloading are other industry risks identified in the sector.
92. The high number of agricultural aviation operators also creates significant competition across the sector. High operating costs, low profit margins and other market tensions resulting from such competition can create price pressure which has the potential to affect the safety of some operators if corners are cut on safety requirements to remain competitive.
93. In terms of safety trends, there has been a decreasing trend in agricultural helicopter accidents per 100,000 flying hours over the last decade (see Figure 5). A similar pattern was not observed with agricultural fixed wing aeroplanes however (see Figure 6).

**Figure 5: Three-yearly accidents per 100,000 hours – Helicopter Agricultural Operations<sup>29</sup>**

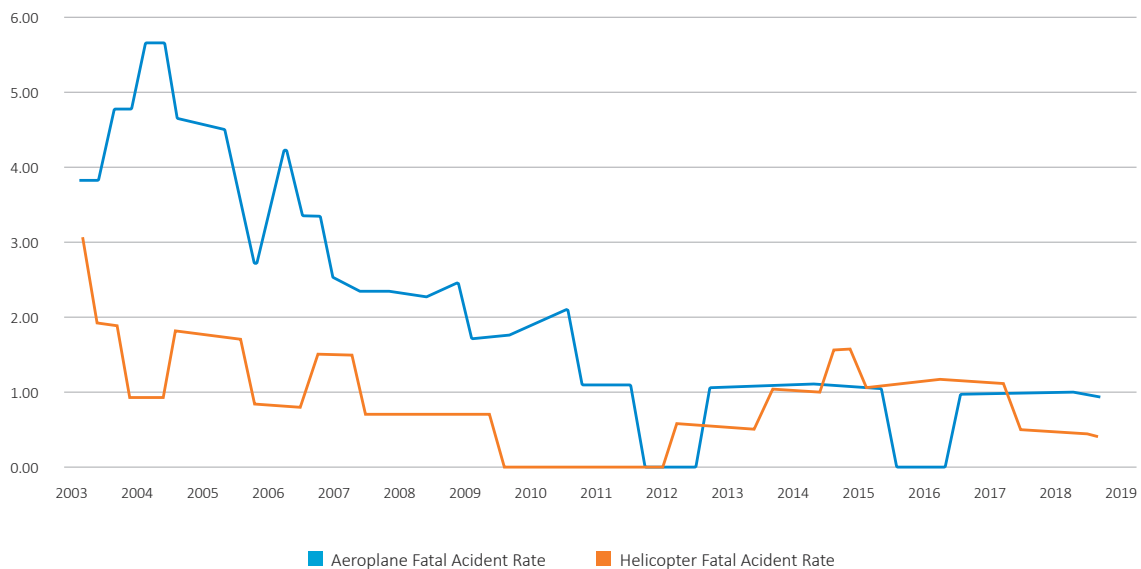


<sup>29</sup> Although the CAA also publishes accident rate data with the data points representing the 12-monthly accident rates for different aviation operation types, the use of 3-yearly accident rate charts (based on the rolling average number of fatal accidents every three years for every 100,000 hours flown) enables a better understanding of the trends. They are easier to interpret, and the data points depict a more detailed account of safety performance.



**Figure 6: Three-yearly accidents per 100,000 hours – Agricultural fixed wing Operations**

94. Figure 7 below shows the fatal accident rates for both fixed wing and helicopter operations in the agricultural aviation sector (based on the rolling average number of fatal accidents every three years for every 100,000 hours flown). The current rate for fixed wing agricultural operations is 0.96, while for helicopters it is 0.43.

**Figure 7: Agricultural Aviation three-yearly Fatal Accidents per 100,000 Hours Operations**

## The current Agricultural Operations Safety Levy

95. The current Agricultural Operations Safety Levy is calculated against the total weight of agricultural product an operator applies per annum (using figures based on the previous year). This levy, paid quarterly, applies to all Part 137 agricultural aviation operations (involved in the application of agricultural products intended for plant nourishment, soil treatment, propagation of plant life, or pest control). Table 9 outlines the current levies.

**Table 9: Current Agricultural Levies**

TONNES PER YEAR	RATE PER TONNE
0 to 10,000 tonnes per annum	applied at \$0.87 per tonne (excl. GST) or \$1.00 (incl. GST)
10,001 - 50,000 tonnes per annum	applied at \$0.73 per tonne (excl. GST) or \$0.84 (incl. GST)
50,001 tonnes and over per annum	applied at \$0.65 per tonne (excl. GST) or \$0.75 (incl. GST)

96. The impact of Authority funding arrangements on individual operators is monitored through their statistical returns in order to observe any changes in activity related to the Agricultural Operation Safety Levy. To date, no evidence has been found to cause concern or to suggest incorrect reporting in relation to the levy.

#### Other potential measures on which the Levy could be based

97. In general, it is preferred to base any levy – wherever possible – on data that is already collected and provided by operators. The reason for this is that introducing new requirements to collect and supply more information can add additional administrative and compliance burdens on operators, an outcome the Authority seeks to avoid.
98. At present, the Authority's rules require agricultural operators to provide statistical returns on their activity every quarter<sup>30</sup>. Based on the data supplied in those statistical returns, the following were identified as proxies that could be potentially used as a basis for applying the agricultural levy against an agricultural activity<sup>31</sup>.
- number of loads (loads)
  - hectares covered
  - number of hours flown (hours flown)
  - tonnage of product dispersed (tonnage)

#### Analysis of the other activities on which the Agricultural Operations Safety Levy could be based

99. When analysing the activities on which the Agricultural Operations Safety Levy could be based, the following criteria were considered:
- a. the levy should not incentivise poor or unsafe behaviour;
  - b. the levy should adequately reflect the amount of activity undertaken;
  - c. the levy data collected should be accurate and robust;

#### a. The levy should not incentivise poor or unsafe behaviour

100. It's important to ensure that any levy introduced does not incentivise poor or unsafe behaviour.
101. Basing the levy on 'number of loads' could incentivise operators to fit as much product as possible into each load to reduce the overall number

of loads, thereby increasing the risk of overloading. Within the agricultural aviation sector, overloading is already a recognised safety concern and a levy based on 'number of loads' could increase that risk.

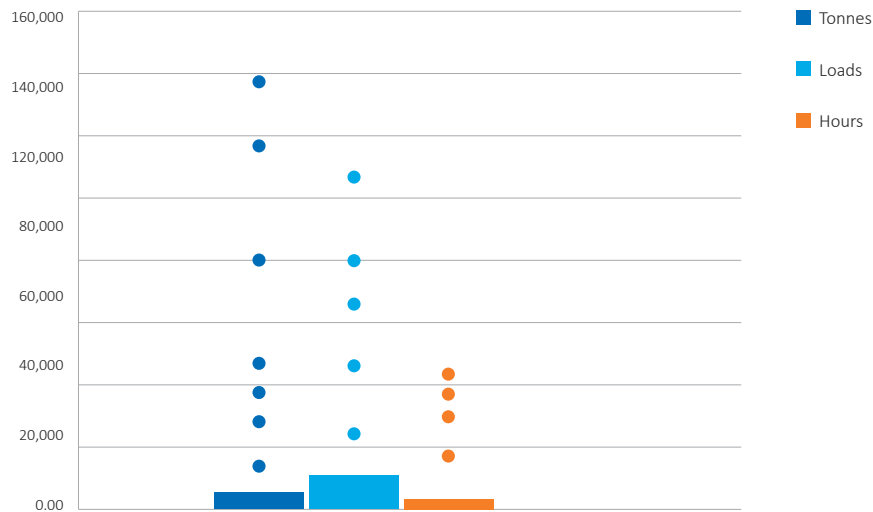
102. Basing the levy on 'hectares covered' is essentially basing the levy on the size of the property/land where the agricultural product was dispersed. Given that this will always be a constant (i.e. the land size to be treated will not change), this is unlikely to lead to poor or unsafe behaviour.
103. Basing the levy on 'hours flown' has the potential to incentivise under-reporting of the number of hours flown and could indirectly encourage the risk of overloading in an attempt to reduce overall flight times. Basing a levy on 'total hours flown' might also disincentivise flight time spent planning and undertaking reconnaissance.
104. Even in situations where total savings through overloading or incorrect reporting of an activity is minimal (i.e. where the cost per unit is so small), the overall perception of charging per number of hours or per load (flight) could negatively impact behaviour. Basing the levy on 'tonnage of product dispersed' however, does not appear to incentivise poor or unsafe behaviour as operators can take as many flights and loads as required. This is because it's the amount of product dispersed that is levied, not the number of loads or the flight time required to do so.

#### b. The levy should adequately reflect the amount of activity undertaken

105. The levy amount due from an agricultural aviation operator is related to the amount of flight activity undertaken by that operator to disperse an agricultural product. Where less activity is undertaken (for example, during a 'lull' or a quiet season), the levy paid would also be expected to reflect that decline in activity. A strong correlation between the flight activity (dispersal of agricultural product) and the levy measure ('tonnes', 'loads', 'hours flown', 'hectares covered') is, therefore, essential.
106. When comparing the impact of a levy based on different measure types (units) across the sector ('tonnes', 'loads' and 'hours flown'), where each unit is charged equally, 'tonnes' is seen to produce the widest distribution of activity and 'hours flown' to produce the most contained distribution of activity. This is demonstrated in Figure 8 based on 2018 activity returns.

<sup>30</sup> Part 19.103 and 12.151 (hours flown).

<sup>31</sup> The maximum certificated take-off weight (MCTOW) of the aircraft on the operations specification was also initially considered but subsequently rejected as it related more to aircraft capacity than aircraft activity (i.e. if the levy were related to MCTOW, it would mean the levy cost would be the same, irrespective of the amount of activity undertaken).

**Figure 8: Distribution of the numbers of units of agricultural product dispersed by tonnes, loads and hours**

107. The distribution of the activity across the sector reflects the amount of activity undertaken by the various operators in the sector. This confirms the obvious characteristic of an activity-based levy: the more activity that occurs, the higher the associated levy amount paid. In effect, this also means that operators who undertake the highest amounts of flight activity also contribute more through the levy than those who undertake less activity. This was one of the reasons the original 'tonne' activity was introduced with a graduated rate (operators with a higher activity paid a 'discounted' rate per tonne).
108. The 'loads', 'hours flown' and 'hectares covered' approaches provide some indication of the activity related to the dispersal of agricultural product however the relationship is not felt to be sufficiently direct to adequately reflect the amount of activity undertaken. 'Hectares covered' for example, uses a relatively static measure in that the activity of dispersing agricultural product would be related to the size of the section being treated. Larger sections would likely require more flight activity than smaller sections but beyond such a general approach, it would be difficult to delve deeper and correlate actual aviation activity with these approaches in a way that was sufficiently effective or accurate for a levy.
109. Similar problems arise with 'number of loads' and 'hours flown'. Both of these measure approaches also have a relationship with the amount of product dispersed, but it would be very difficult to correlate them and to assign a levy in an accurate or meaningful manner. Unlike 'hectares covered', the 'loads' and 'hours flown' measures can also vary significantly depending on the nature of the aircraft, the technology used, the terrain and the type of agricultural product being dispersed. As a result, they have a less direct relationship.
110. The 'hours flown' approach includes the flight time spent ferrying product, getting to and from the site, planning and reconnaissance activities as well as the actual dispersing of the agricultural product. Rather than the total hours flown, a levy would probably need to be based on hours spent dispersing product or at least on 'productive' hours<sup>32</sup>.
111. Overall, the 'tonnes' approach is believed to have a more direct relationship with the activity of dispersing agricultural product than the other options and, hence, is more directly related to the activity on which the levy is calculated.

### c. The levy data collected should be accurate and robust

112. Data on each of the activity types being considered is already collected as agricultural aviation operators are routinely required to provide statistical returns on a quarterly basis. Each of the activity types being considered is also believed to provide a relatively simple (in terms of administration) and stable (in terms of minimal large fluctuations on CAA revenue) structure. While an activity may fluctuate throughout the year in alignment with the seasons and the agricultural calendar, the amount of levy recovered per year is relatively stable.

<sup>32</sup> 'Productive hours' refers to the hours spent dispersing product and undertaking planning and reconnaissance.

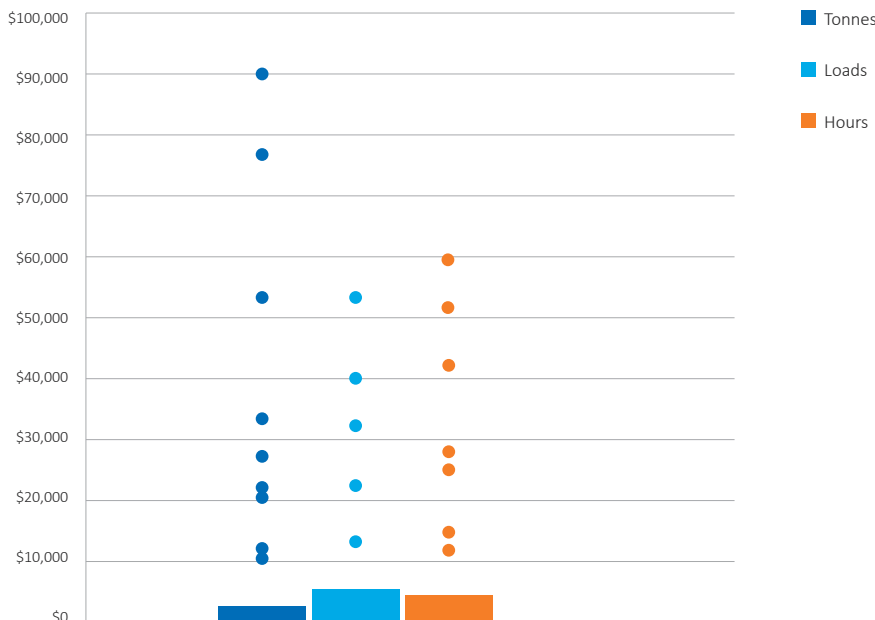
- 113. Because ‘loads’ relates to the number of times an aircraft takes off and lands, it is difficult to correlate this with the actual process of dispersing agricultural product. The process relies on the pilots counting how many times they landed and took off again. As a result, the data is less verifiable, has the potential to be less accurate than ‘tonnes’ and is, therefore, less robust for levy purposes.
- 114. For a levy approach using ‘hours flown’, data is accurate and verifiable because the flying times are recorded in multiple places (e.g. the pilot logbook, airframe logbook, engine logbook and the propeller logbook etc.) and any inaccuracies may also be detected during maintenance inspections. Unfortunately, although hours actually spent dispersing agricultural product (i.e. the ‘total hours flown dispersing agricultural product’ as opposed to the ‘total hours flown’) is currently requested, this information is not always provided. This is because information is more difficult for operators to retrieve and is less verifiable (unless they use GPS tracking). Because of this, the information is not considered sufficiently robust for levy purposes.
- 115. While data on ‘hectares covered’ is collected, the accuracy of that data varies as the Rule<sup>33</sup> only requires an estimate. Some agricultural aviation operators will use GPS to track their ‘hectares covered’, while others might simply make a ‘best guess’ estimate. Therefore, if a levy were to be based on ‘hectares covered’, this would require further consideration on how more accurate data could be recorded.
- 116. The current levy approach based on ‘tonnes’ is considered to be an operationally robust approach in that the information used to calculate the levy is traceable and verifiable (as the client pays for specific amounts of agricultural product and invoices are provided by various parties).

## Investigating Characteristics of the Agricultural Levy Activity Measure

### Financial Impact of different levy activity measures across the Agricultural Aviation Sector

- 117. Analysis was carried out to investigate the broad financial impact on the agricultural aviation sector of using a levy based on different activity measures (‘tonnes’, ‘hours flown’ and ‘loads’). The results were viewed in terms of how widely the total levy amount would be spread among the participants of the agricultural aviation sector. Using a levy amount based on 2018 data (calendar year), the results are summarised in Figure 9 below.

Figure 9: Distribution of Agricultural Operations Safety Levy<sup>34</sup>



<sup>33</sup> 19.103(a)(6)(iii) the estimated total land area treated.

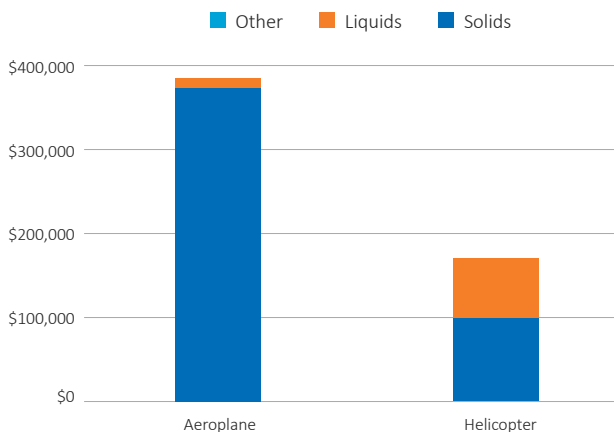
<sup>34</sup> The levy amounts for tonnes are the current levy rates. The same rate structure and graduated rate brackets as with tonnes were retained, with the levy rates set at the amount required in order to return the same amount of overall levy. This has been done for illustrative purposes only and is not indicative of any potential levy rates.

- 118. Results indicate that using ‘loads’ or ‘hours flown’ as the basis for a levy essentially means that contribution to the total levy paid is slightly more evenly distributed across all agriculture aviation operators. Where ‘tonnes’ is used as the basis for the levy, a smaller number of operators (predominantly those distributing the largest volume of agricultural product) contribute a greater proportion to the total levy amount.
- 119. This finding reveals an interesting and useful financial characteristic across the agricultural aviation sector. It does not, however, establish any correlation between levy measure type and risk/safety (i.e. it does not show that the use of one particular levy measure results in a better safety outcome than any of the others).

### Investigating the Redistribution of the Levy across Aircraft Type

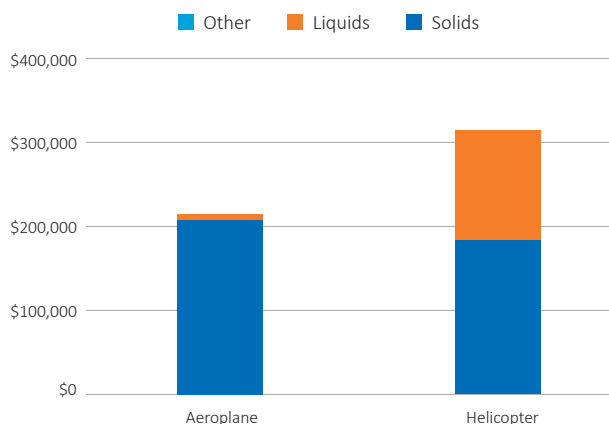
- 120. In 2018, fixed wing aircraft made up 25 percent of agricultural aircraft, and helicopters made up 75 percent of agricultural aircraft (relatively consistent numbers over the last few years). To investigate the potential of using different levy types, levy rates were allocated (the same ones allocated to flight hours and loads and the current rates for tonnes) and the potential distribution by aircraft type was compared. The results can be seen in the following graphs:

**Figure 10: Levy distribution by aircraft type: based on tonnes**

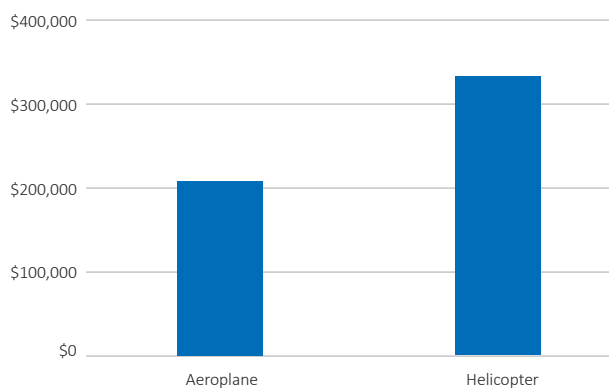


- 121. Under a ‘tonnes’-based levy (based on the amount of product an operator disperses), fixed wing aircraft were seen to disperse 73 percent while helicopters dispersed 27 percent of the total amount of agricultural product dispersed in 2018. This means that under a ‘tonnes’ approach, fixed wing operators will contribute roughly 70 percent of the overall levy and helicopter operators will contribute roughly 30 percent of the total levy amount.

**Figure 11: Levy distribution by aircraft type: based on loads**



**Figure 12: Levy distribution by aircraft type: based on hours**



\*Note: The Authority does not have fertiliser information to compare solids and liquid products for hours flown.

- 122. Under a ‘loads’ based levy (based on the number of times the aircraft takes off and lands), helicopters contribute about 60 percent of the total levy amount<sup>35</sup>. This is because they usually can’t carry as much agricultural product as fixed wing aircraft and therefore need to take off and land more frequently to distribute the same volumes.
- 123. Under an ‘hours flown’ approach, helicopters are again seen to contribute about 60 percent of the total levy amount<sup>36</sup> because they need to stay airborne longer to distribute the same volumes as fixed wing aircraft.
- 124. This analytical exercise reveals that the application of a levy using ‘tonnes’ would result in fixed-wing aircraft contributing more to the overall safety levy amount whereas a levy based on ‘loads’ or ‘hours flown’ would result in helicopters contributing more to the overall safety levy amount. Once again however, the analysis does not establish any correlation between aircraft type and the levy measure used in terms of safety outcomes.

35 Based on the CAA illustrative rates and retaining the current price brackets.

36 Based on the CAA illustrative rates and retaining the current price brackets.

## Summary/Conclusion

125. After assessing the potential options against the different criteria, it was found that, on balance, ‘tonnes’ remains the most effective, activity-linked mechanism on which to base the Agricultural Operations Safety Levy. This was because:
- basing the levy on ‘tonnes’ does not incentivise poor or unsafe behaviour (whereas other options considered have the potential to do so);
  - the amount of levy paid through a ‘tonnes’ based levy appears more directly related to the amount of activity undertaken by each operator (as opposed to that paid through a levy based on the other options);
  - a levy based on ‘tonnes’ utilises data that is more verifiable and, therefore, likely to be more accurate and robust than data collected through the other options considered.
126. The financial analysis carried out as part of the review was unable to establish a correlation between the type of levy measure used and risk/safety (i.e. it did not show that the use of one levy measure results in a better safety outcome than any of the others).

### Question 6

Do you have any information (or are you aware of any credible information source) indicating a correlation between the use of a particular activity measure and better safety outcomes than others?

### Question 7

The Authority recognises that the proposed increase to the Agricultural Operations Safety Levy will have a financial impact on the agricultural aviation sector. Can you provide some indication of the potential impact this might have on your business?



# Cost recovery of Regulatory Functions under the Hazardous Substances and New Organisms Act 1996

## Background

### The Hazardous Substances and New Organisms Act 1996

127. The Hazardous Substances and New Organisms Act 1996 (HSNO Act) provides a regulatory framework for managing hazardous substances and new organisms in New Zealand. Section 97 of the HSNO Act identifies the agencies with responsibility for enforcing the provisions of the Act, typically within their area of their expertise.
128. Under Section 97 of the HSNO Act, the Civil Aviation Authority is the enforcement agency for hazardous substances related to aircraft operation. Until recently, that enforcement responsibility was limited to hazardous substances ‘in or on any aircraft’<sup>37</sup>, a reasonable arrangement due to the overlap of HSNO Act provisions and the Civil Aviation Dangerous Goods requirements – which the Authority already enforces.<sup>38</sup> The Authority also assisted other agencies with spray drift type incidents on occasion when sufficient resource was available.

### Additional responsibilities in relation to the discharge of hazardous substances

129. From 1 December 2017, under section 37 of the HSNO Amendment Act 2015, the Authority also became responsible for enforcement around ‘the discharge of hazardous substances from any aircraft’.<sup>39</sup> This was a significant broadening of responsibilities which meant that the Authority became responsible for investigating and, where necessary, prosecuting cases that involve events such as ‘spray drift’ from agricultural aircraft operations or the misapplication of pest control products. Hazardous substances discharged from

aircraft, however, could also involve materials such as fuel jettisoned during flight (on some occasions), waste seepage from malfunctioning aircraft, etc. Any incidents of discharge involving these latter examples however, are understood to be substantially less common.

130. In recognition of the additional funding required to meet the expanded obligations, the Authority requested ongoing Crown funding. Funding of \$0.52 to \$0.55 million per annum was approved, but only for a fixed period of two financial years.<sup>40</sup> So, for the purposes of the pricing review, it is assumed that the functions will need to be funded from levies (which is consistent with signals from Government).

## Funding the ‘Discharge of Hazardous Substances from an Aircraft’ Obligation

### *The policy objective of the Authority’s enforcement of the HSNO Act*

131. Enforcement of aviation legislation is just one element of a wide suite of different regulatory tools available to the Director to create and sustain a safe and secure civil aviation system. Most aviation sector participants are willing (and have strong incentives) to undertake their activities safely. In recognition of this, the Authority takes a risk-based (and proportionate) approach to targeting its regulatory interventions as efficiently and effectively as possible.

37 Until 2010, the Authority was also responsible for hazardous substances at any aerodrome. This responsibility was removed on 20 April 2010, by section 24 of the Hazardous Substances and New Organisms Amendment Act 2010 (2010 No 18).

38 Civil Aviation Rules, Part 92 Carriage of Dangerous Goods.

39 Section 37 of the Hazardous Substances and New Organisms Amendment Act 2015 (2015 No 72), commenced on 1 December 2017 by the HSNO Amendment Act 2015 Commencement Order 2017.

40 The Authority received \$0.55 million in crown funding in 2018/2019, and \$0.52 million in 2019/2020.

132. The objective in enforcing the ‘discharge of hazardous substances from an aircraft’ obligation is to ensure that people, communities and the environment are protected from the adverse effects posed by such discharges. A lack of action by the Authority to enforce the reduction of risk associated with discharge incidents could lead to a drop in good practice behaviour by operators when discharging such substances and, consequently, an increased occurrence of harm.

### Beneficiaries and risk exacerbators

133. Farmers and foresters that have purchased the aerial applications are the main beneficiaries and, therefore, benefit most from the introduction of this risk to the aviation system. However, the general public also benefits from regulatory oversight and enforcement in this area, as this would help to protect them from harm through the incorrect use or discharge of hazardous substances in the agricultural aviation sector.
134. Agricultural aviation operators are the principal risk exacerbators. The Authority’s regulatory oversight under the ‘discharge of hazardous substances from an aircraft’ obligation relates almost uniquely to the dispersal of certain agricultural products by the agricultural aviation sector.<sup>41</sup> This includes agricultural aviation operators spraying on behalf of the Department of Conservation for pest control purposes.
135. Most product dispersed from an aircraft is permitted to do so under a Part 137 certificate and this therefore excludes the vast majority of non-agricultural operators from the group of aviation operators undertaking the activities that cause the risk.<sup>42</sup> One exception is the small number of Part 102 certificated operators that use drones to apply agricultural product.<sup>43</sup> However, there could also be other cases of discharge of hazardous substances that don’t involve agricultural products (such as the dumping of fuel in emergency situations etc).
136. The Authority recovers the costs of regulatory activities through a mix of Government funding, industry levies and specific fees<sup>44</sup>. The enforcement function in relation to ‘the discharge of hazardous substances from an aircraft’ relates predominantly to agricultural operators. In the absence of Crown funding, it’s believed that it’s appropriate to apportion the substantial proportion of these costs to the agricultural sector.

## Options to Fund the Regulatory Oversight of HSNO Dispersal Function

137. Three potential options to recover the costs of additional responsibilities associated with the ‘discharge of hazardous substances from an aircraft’ were considered as follows:

### Option 1 – Full cost recovery through the Agricultural Operations Safety Levy

138. Current data on discharges of hazardous substances from aircraft suggest that regulatory oversight for this enforcement function will always be primarily related to regulatory activities within the agricultural aviation sector. On that basis, it would be sensible to increase the levy rates for the agricultural aviation sector to fully cost recover for regulatory activities around the discharge of hazardous substances from aircraft. This increase would be over and above any proposed price increase introduced across fees, levies and charges as a result of the pricing review.
139. At present, approximately \$0.58 million per year is recovered through the Agricultural Operations Safety Levy. Even when combined with income from fees and charges (for example through certification and SMS), this figure is insufficient to cover the full costs associated with the regulatory oversight activities within that sector.
140. If the additional cost of the responsibilities associated with the ‘discharge of hazardous substances from any aircraft’ were added to the Agricultural Operations Safety Levy, the Authority would be seeking to recover approximately \$1.1 million per annum from the agricultural aviation sector (i.e. double the current amount but, even then, not the full cost).

### Option 2 – Include Additional HSNO Costs in General Levy Increase

141. This option would simply involve including the costs of regulatory oversight for ‘the discharge of hazardous substances from any aircraft’ within the general levy increase being proposed through the pricing review, and would require a 6.4% increase on all fees, levies and charges. In effect, this would involve a full cross-subsidisation of this activity in the agricultural aviation sector (for example, through the international and domestic passenger levies which make up roughly 69 percent of the Authority’s income – the combined income from all of the operations safety levies make up about three percent of the total income).

<sup>41</sup> The relevant work requests across the HSNO/HSWA unit during the period 1 December 2017 to 31 May 2017 were reviewed to confirm that all activities during this period were related to the agricultural sector.

<sup>42</sup> Part 137 prescribes additional instrument and equipment requirements for aircraft conducting agricultural aircraft operations, as well as requirements for the certification and operations of persons performing commercial agricultural aircraft operations.

<sup>43</sup> Part 102 drone operators must also meet these requirements to use a drone to apply agricultural products.

<sup>44</sup> The authority to set levies is set out in sections 42A and 42B of the Civil Aviation Act 1990.

142. This option would remove any specific impact on the agricultural aviation sector (although it too would be subject to a proportion of the general levy increase). However, it does not align any of the costs associated with this function to the risk exacerbators and, potentially, reduces the Authority’s ability to encourage behavioural change where necessary to improve health, environmental and other outcomes.

### Option 3 – A Combination of Option 1 and 2 (Preferred Option)

143. This option would involve increasing the Agricultural Operations Safety Levy rates above the proposed general rate to take this expenditure – most directly related to the agricultural aviation sector – into account. Unlike option one, full cost recovery through a levy increase would not be implemented. Over time, the Authority could look at gradually amending the Agricultural Operations Safety Levy rates, to more accurately cover the costs associated with this HSNO-related regulatory function.
144. It is therefore proposed to:
- increase the Agricultural Operations Safety Levy rate by a figure equating to ninety percent of the oversight costs of the ‘discharge of hazardous substances from an aircraft’ obligation; and
  - apportion the remaining ten percent of the oversight costs of the ‘discharge of hazardous substances from an aircraft’ obligation’ across all fees, levies and charges (requiring a cumulative 5.3 percent increase on all fees, levies and charges).
145. This latter proposed figure apportioned across all fees, levies and charges is representational, however the approach has the benefit of introducing a cost for regulatory oversight of ‘the discharge of hazardous substances from any aircraft’ that’s directly linked to the risk exacerbators, while recognising the potential for the discharge of hazardous substances from non-agricultural aviation operators. The distribution across the Agricultural Operations Safety Levy as a result of apportioning ninety percent of the additional HSNO-related regulatory functions is shown in Table 10.

**Table 10: Impact of 90/10 split on the distribution of the Agricultural Operations Safety Levy**

	CURRENT RATE	PROPOSED RATE (80% INCREASE)	% INCREASE (HSNO COSTS ONLY)	% INCREASE (HSNO COST + 5.3% GENERAL RATE INCREASE)
Op Safety Levy Part137 Ag (0 to 10,000 tonne)	0.87	1.57	71%	80%
Op Safety Levy Part137 Ag (10,001 to 50,000 tonne)	0.73	1.31	71%	80%
Op Safety Levy Part137 Ag (50,001 + tonne)	0.65	1.17	71%	80%

146. The impact across all fees, levies and charges from this ninety/ten apportion split can be seen in Table 11<sup>45</sup>.

**Table 11: Impact of 90/10 split on the overall fees, levies and charges, revenue increased by 5.3%**

	<b>PROJECTED 20/21 \$000</b>	<b>PROJECTED 21/22 \$000</b>	<b>PROJECTED 22/23 \$000</b>
International	11,890	12,009	12,129
Domestic Non ANZA	20,430	20,992	21,570
Domestic ANZA	4,338	4,457	4,580
Operator Safety Levy	2,173	2,173	2,173
Participation Levy	529	529	529
Crown Funding	2,953	2,980	2,980
Ministry Contracted Revenue	1,560	1,544	1,488
Fixed Fee & Hourly Charge	6,970	6,632	6,626
Third Party	620	563	562
<b>Total</b>	<b>51,463</b>	<b>51,879</b>	<b>52,637</b>

#### Question 8

Are you aware of any other 'hazardous substances' discharged from aircraft that are not discharged by the agricultural aviation sector?

#### Question 9

Do you have any other information to support a more appropriate split to the HSNO costs distribution than the proposed 90 percent : 10 percent split for the agricultural aviation sector : the wider aviation sector?

<sup>45</sup> Note that the minor difference in totals to Table ten is due to calculating the 5.3 percent increase to one decimal place.

# Review of the Airport Identity Card (AIC) fees

## Background

147. Airport Identity Cards (AICs) are part of a control mechanism to mitigate any risk to aviation security from people who access secure areas in the aviation system. A person issued with an airport identity card is entitled to enter and remain in a security area or security enhanced area (secure area) on either a short or long-term basis. AICs are generally used by individuals in order to complete duties for their employer – typically the airport or the airline (directly, or under contract).
148. The Director of Civil Aviation may issue or approve an AIC or other identity document to any person under Civil Aviation Rule 19.357, in accordance with requirements stated in the rule. The AIC fees are set in 10A of the Civil Aviation Charges Regulations (No 2) 1991.
149. An AIC authorises a person to access a security or security enhanced area and is used as a means of identification for the holder of the card. A person with an AIC may only remain in the security area for the purpose of delivering their duties at the airport.
150. Two types of AICs can be issued:
  - permanent AICs; and
  - temporary AICs.

## Permanent AICs

151. Subject to a favourable security vetting result, a permanent AIC is valid for up to three years, and it entitles the cardholder to unaccompanied secure area access. The purpose of security vetting is to establish whether the person may pose a threat to aviation security.
152. Permanent AICs can take up to ten days to issue and are generally required for those employed by, or contracted to work for, an organisation that requires them to carry out work in a secure area at a security designated airport (and in some circumstances a non-security designated airport).
153. In the financial year ending 30 June 2019, 17,666 permanent AICs were issued.

## Temporary AICs

154. Temporary AICs are used as an interim, new or replacement permanent card, by a tradesperson or contractor, or by a bona fide visitor who requires temporary entry to a secure area.
155. In order to mitigate the security risk associated with the absence of a vetting process, unvetted temporary card holders are generally issued with an ‘escorted temporary card’ and must be accompanied at all times when in a secure area by a holder of a permanent AIC. Where a temporary AIC is issued to a card applicant who has already been vetted (for example, if the temporary AIC is replacing a lost permanent AIC), an ‘Unescorted’ temporary AIC can be provided.
156. A temporary printed AIC is valid for up to seven days. If access is required for more than seven days, the cardholder must apply for a new temporary card. If access to a secure area is required for eight weeks or more, applicants are advised to apply for a permanent card.
157. In the financial year ending 30 June 2019, 59,743 temporary AICs were issued to 27,533 cardholders.

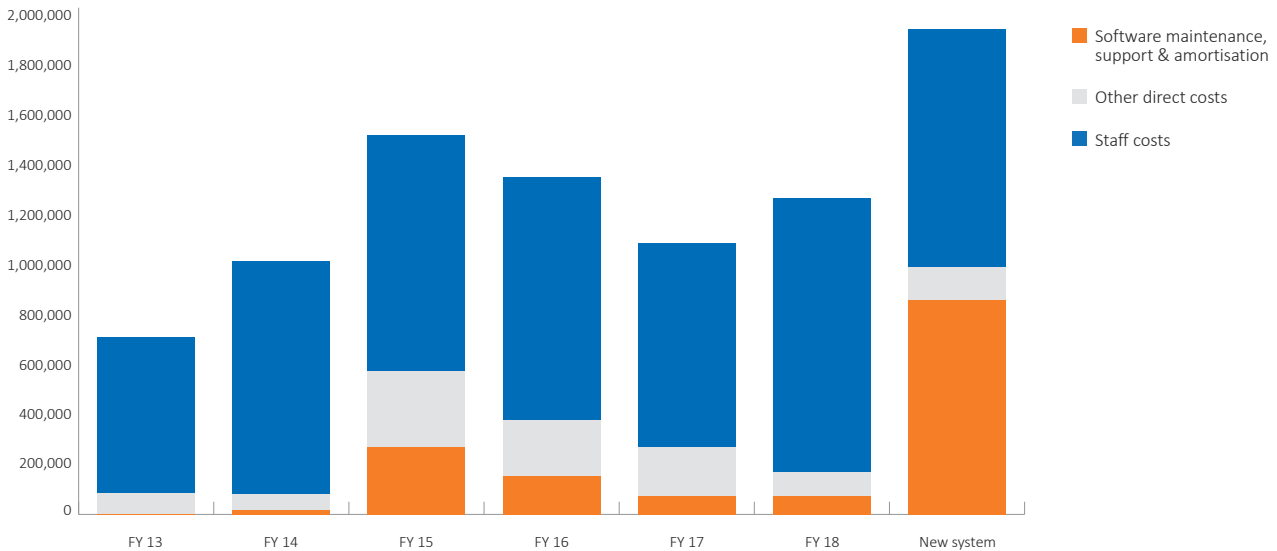
## Costs of Running the AIC System

158. AIC administration is undertaken on behalf of the Director by the Aviation Security Service (Avsec), an operational group within the Civil Aviation Authority. The costs of administering the AIC regime are recovered via a fee on individual AIC applicants. As per section 10A of the Civil Aviation Charges Regulations 1991:
- the Permanent Airport Identity Card Fee is currently set at \$54.31 (\$62.45 including GST); and
  - the Temporary Airport Identity Card Fee is currently set at \$6.91 (\$7.95 including GST).
159. The Authority is currently in the process of replacing the outdated Airport Identity Card Information System (AICIS) used in the production and issuing of AICs as the current AICIS has a number of issues requiring urgent remediation. This includes:
- the host platform is no longer supported (i.e. cannot upgrade security);
  - system faults (e.g. a data issue that leads to duplication);
  - highly manual processes (e.g. the information sharing for Ministry of Justice and New Zealand Security Intelligence Services check).
160. The new AICIS (expected to be implemented in December 2019) will deliver better security outcomes that ensure vulnerabilities arising from insider threats are managed appropriately. As well as fulfilling the necessary aviation security requirements, the introduction of the new AICIS will result in some changes for the production of individual cards. For example, the existing practice of printing Airport Identity details onto some airport's access (proximity) cards will cease. A simple identity card will be issued instead, leaving airports to organise access arrangements. This change will achieve a modest reduction in the cost of producing permanent AICs.
161. Overall however, annual costs are expected to rise with expenses estimated to approach \$2 million, a net increase of \$0.7 million from 2018. These include:
- direct costs of \$0.84 million for the new AICIS. \$0.07 million in FY 2018
  - \$0.94 million of staff costs for issuing AICs. This includes a reduction on current levels due to savings in staff at the Auckland office and in management time. \$1.08 million in FY 2018
  - internal Information Technology (IT) support costs of \$0.05 million
  - other direct costs of just under \$0.13 million including consumables. \$0.09 million in 2018
162. Staff costs have been allocated as accurately as possible, noting that staff who issue AICs also perform additional duties. Wherever possible, consideration was given as to whether costs could be further reduced or eliminated (e.g. through staff reductions at the AIC office) however no further feasible savings were identified. A national network price approach was also applied as it is current Authority practice not to price separately for different locations.



163. The costs for the 2019 financial year (FY) and previous financial year costs are outlined in figure 13:

**Figure 13 – AIC costs**



164. The total cost per annum to provide AICs over the next three years, therefore, is estimated at \$5.9 million (an average of \$1.96 million per year from 2020 to 2022). The CAA has considered how to most appropriately recover these costs over that period.

## Cost Recovery for the AICs from 2020/21 to 2022/23

165. Although the Authority will continue to issue both permanent and temporary AICs, there will continue to be a cost differential between the production of the two card types (temporary AICs do not involve background checks<sup>46</sup> and are printed on paper instead of a hard plastic). As a result, there is continued justification to maintain separate fees for permanent and temporary AICs.

166. It is possible to estimate and allocate most direct costs for the different AICs (e.g. labour across permanent AICs and temporary AICs), based on the known nature of those costs, however it is less clear what proportion of the costs associated with the implementation and ongoing support of the new AICs (which makes up around half of the overall cost) should be attributed to each card type.

## AICIS System/Support Cost Attribution Options

167. The following factors were considered when determining the appropriate attribution of AICIS costs to each card type:

- the AICIS will be used for both permanent and temporary cards
- for temporary cards, the AICIS will only be utilised for recording data, reporting and to support billing
- given that the AICIS is not yet in place, some estimates have been made relating to the system usage. For example, it is estimated that AICIS will be used for approximately two minutes to process each temporary card and used for approximately 30 minutes to process each permanent card
- the permanent card process is more complex than the temporary card process, requiring additional steps and AICIS functionality:
  - extra data fields are required
  - Ministry of Justice and New Zealand Security Intelligence Services process for vetting
  - exception process for adverse security vetting

<sup>46</sup> Civil Aviation Rule 19.357(h) states that security checks are not required for applicants for (escorted) temporary AICs.

- must manage AIC expiry dates
  - allows for some organisations' self-management
  - requires NZ Business number and postcode process
- at present, approximately 23 percent of all AICs issued are permanent AICs and 77 percent are temporary AICs.

168. Taking volumes and utilisation into account delivers an AICIS attribution ratio of 82 percent permanent: 18 percent temporary card. This is outlined in Table 12 below.

**Table 12: AICIS attribution for the permanent and temporary AICs**

	ESTIMATED TIME	NUMBER OF CARDS ISSUED IN FY 2019	SYSTEM UTILISATION	SYSTEM PERCENTAGE
Permanent	30	17,666	529,980	81.6%
Temporary	2	59,743	119,486	18.4%

169. In summary therefore, it is expected that, whilst there may be some shift from temporary to permanent cards, there will continue to be a higher volume of temporary AICs produced than permanent AICs. The permanent AIC process is far more intensive, requiring greater system functionality and 'per-card' utilisation than temporary AICs.
170. Based on the estimated system utilisation time and the volume of each card type fees were developed by:
- apportioning all known costs where they lie; and
  - apportioning 82 percent of the new costs of the AICIS system (and its support) to permanent AICs and 18 percent to temporary AICs.
171. This resulted in the following fees:
- permanent cards - \$51.75 excluding GST (\$59.51 including GST) - currently \$54.31 excluding and \$62.45 including GST
  - temporary cards - \$18.91 excluding GST (\$21.75 including GST) - currently \$6.91 excluding and \$7.95 including GST
172. In practice, this results in a 173.6 percent increase in the price of temporary cards and a 4.7 percent decrease in the price of permanent cards. Whilst this is a significant price increase for temporary cards, it properly apportions the costs of the new system and processes where they lie, reduces cross subsidisation between the two card types and ensures that costs are recovered.

#### Question 10

Do you agree that the proposed 'user pays' approach to pricing is fair and equitable?

(Yes / Substantially / Partially / No).

#### Question 11

Will the proposed increased price of a temporary AIC have a meaningful impact on your business or on the type of AIC card that you request in future (i.e. would you request a permanent card rather than several temporary cards)?

# Review of Regulated Air Cargo Agent Security Vetting Fees

173. In conjunction with the assessment of the costs of Airport Identity Cards (AIC), consideration was also given to Regulated Air Cargo Agent (RACA) security vetting fees. The fees charged for this service recover the costs associated with security vetting for employees/staff of regulated air cargo agents. As with the AIC regime, the RACA security vetting regime is designed to mitigate any risk to aviation security from people who access secure areas.

## RACA Vetting Process

### Background

174. Under CAA Rule 109.59 (c)(1)(i), RACAs are required to have a procedure in place to ensure that no person will be issued an authorisation to perform RACA related functions, unless that person has a favourable security check.
175. Avsec manages Security Check Determination applications for staff that work for RACAs<sup>47</sup> under delegation from the Director. The RACA security check application process is outlined [here](#).
176. The RACA security check process has a number of similarities to the AIC process (for permanent cards) in that both involve security vetting. The main difference however, is that the RACA process involves the production and emailing of an official letter advising of the security vetting outcome rather than producing an identity card on completion of the security vetting process. As with AICs, there is an 'exception' process that is followed should the security vetting return a negative result for the application.

### Cost Recovery for RACA

177. Section 11(a)(iii) of Schedule 1 of the Civil Aviation Charges Regulations (No2) 1991 provides that a charge, at the standard rate, is payable in respect of any security programme or procedure that is required by or under the Civil Aviation Act, or any person or organisation required to establish such a programme or procedure.
178. The current fee to conduct a RACA security check

is \$53.30 (or \$61.30 including GST). In the 2018/9 financial year the Authority received payment for 1,250 RACA applications.

179. The process to perform RACA security checks is a desktop exercise that includes data entry, the export/import of data for Ministry of Justice and New Zealand Security Intelligence Service vetting checks, and the emailing of an official letter advising the final result. The Station Manager deals with any negative results of an application.
180. The main cost drivers for this (mostly manual) process are the labour cost involved in processing, the cost of the RACA Information Technology (IT) system and its ongoing support, and Ministry of Justice charges for conducting a security vetting process.

### RACA Pricing

181. The IT system used to process RACA applications is essentially a database. The version of the 'Angular' platform it is constructed on is now approaching its technical 'end-of-life' and will require replacement in the near future.
182. The RACA vetting process is not included in the scope of the AICIS production system replacement project so while consideration could be given to combining the RACA process with the AICIS in the future, thus eliminating the need for a separate database, this is not currently planned.
183. In line with the cost recovery principles outlined in the Treasury's 'Guidelines for Setting Charges in the Public Sector' the OAG's 'Charging Fees for Public Sector Goods and Services' and the Ministry of Transport's 'Transport regulatory system: Funding principles', the Authority proposes to set the price at an appropriate level to recover the estimated cost of the RACA process, including the likely cost of upgrading the IT system.
184. Based on the latest annual volume of 1,250 applications and an assumption that volumes will continue to gradually increase, it is proposed to base the RACA security vetting fee on an assumption of 1,500 applications per annum.
185. This approach would set the fee at \$22.14 (or \$25.47 including GST). This is a \$35.83 (GST inclusive) or approximately 58.5 percent reduction of the current fee of \$53.30 (or \$61.30 including GST).

<sup>47</sup> CAA manages applications for the actual RACA organisation. The process is outlined [here](#).

# Feedback and Next Steps

## Feedback

186. The Authority would like to hear your views on the proposals outlined in this discussion document.
187. Please complete the feedback form on CAA's website [here](#) or send your comments to [consultation@caa.govt.nz](mailto:consultation@caa.govt.nz) by 5pm, Friday, 7 February 2020.
188. If you have any queries or would like to organise a meeting with the Authority to discuss elements of this document, please get in contact by emailing [consultation@caa.govt.nz](mailto:consultation@caa.govt.nz) - we will ensure your query is responded to.
189. Please note that all submissions become public information that can be requested under the Official Information Act 1982 (OIA). Please indicate clearly if any parts of your submission are commercially sensitive, or if for any other reasons you do not want that information to be disclosed. The Authority will consider this in making a decision in respect of any Official Information Act requests. It should be noted that the Authority cannot guarantee confidentiality in respect of any specific submissions.

## Next Steps

190. 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.
191. If the proposal is approved by Cabinet, the appropriate Civil Aviation Charges Regulations will be amended via an Order in Council, with the new pricing taking effect from the specified date. The desired date of implementation of any changes to the current pricing regime is 1 July 2020.

# Appendix 1

## Current and Proposed Changes to CAA Fees, Levies and Charges

These tables include the fees, levies, and charges that were effective from 1 July 2017, and the proposed changes. The legal reference is the Civil Aviation [Safety] Levies Amendment Order 2017 and the Civil Aviation Charges Regulations (No.2) 1991 Amendment Regulations 2017.

### Current and proposed changes to Civil Aviation Levies

CIVIL AVIATION LEVIES	CURRENT 2019 RATE GST EXCLUSIVE	WITH 5.3% INCREASE AND HSNO ATTRIBUTED 90% TO AGRICULTURE GST EXCLUSIVE	WITH 5.3% INCREASE AND HSNO ATTRIBUTED 90% TO AGRICULTURE GST INCLUSIVE	
<b>Passenger levies</b>				
Passenger Levy (Domestic)	1.60	1.68	1.93	
Passenger Levy (ANZA)	1.57	1.65	1.90	
Passenger Levy (International)	1.60	1.68	1.93	
<b>Participation levies - Aircraft</b>				
Heavy (exceeding 100,000kg)	11,900.00	12,530.70	14,410.31	
Medium Heavy (13,600 – 100,000kg)	2,900.00	3,053.70	3,511.76	
Medium (5,700 – 13,600kg)	1,200.00	1,263.60	1,453.14	
Medium-light (2,730 – 5,700kg)	480.00	505.44	581.26	
Light (1,000 – 2,730kg)	100.00	105.30	121.10	
Very light (below 1,000kg)	70.00	73.71	84.77	
<b>Operations safety levies</b>				
Category A: Part 115 (adventure aviation)	1.60	1.68	1.93	
	Very light	3.50	3.69	4.24
Category B: Part 115 (adventure aviation)	Light	5.50	5.79	6.66
	Medium	8.50	8.95	10.29

	Up to 10,000	0.87	1.57	1.81
Category C: Part 137 (agricultural): Tonnes dispensed	10,000 to 50,000	0.73	1.31	1.51
	Over 50,000	0.65	1.17	1.35
	Up to 10,000	3.00	3.16	3.63
Category D: Part 119 or Part 129 (foreign) Freight-only: Tonnes carried	10,000 to 50,000	2.60	2.74	3.15
	Over 50,000	2.00	2.11	2.43
	Part 135 (small/heli)	6.50	6.84	7.87
Category E: Other Part 119 Operations	Part 121 or 125	5.50	5.79	6.66



## Current and proposed changes to Civil Aviation Fees

FEES SCHEDULE – GST INCLUSIVE	CURRENT 2019 RATE	WITH 5.3% INCREASE
<b>Personnel licensing (Part 1 Of Schedule)</b>		
Training, examining, flight testing, and conducting organisation		
Issue of certificate of approval (A minimum fee of \$133 is payable on application)	Standard hourly rate	
Renewal of, or amendment to, certificate of approval	Standard hourly rate	
Monitoring of, or carrying out checks in relation to, certificate of approval holder	Standard hourly rate	
Air Traffic Service Personnel Licences and Ratings		
Air Traffic Trainee Licence	197.00	207.44
Flight Service Trainee Licence	197.00	207.44
Air Traffic Controller Licence	197.00	207.44
Flight Service Operator Licence	197.00	207.44
Air Traffic Service instructor rating	131.00	137.94
Air Traffic Service examiner rating	131.00	137.94
<b>Aircraft Maintenance Personnel Licences and Ratings</b>		
Aircraft Maintenance Engineer (AME) licence (includes issue plus one category)	299.00	314.85
Aircraft Maintenance Engineer (AME): additional category	200.00	210.60
Aircraft Maintenance Engineer (AME): rating	200.00	210.60
Aircraft Maintenance Engineer (AME): maintenance approval	266.00	280.09
Aircraft Maintenance Engineer (AME) Certificate of Inspection authorisation	266.00	280.09
Exchange old Aircraft Maintenance Engineer (AME) to lifetime equivalent	197.00	207.44
<b>Flight Crew Licensing</b>		
Private Pilot Licence	230.00	242.19
Recreational Pilot Licence	230.00	242.19
Commercial Pilot Licence	230.00	242.19
Airline Transport Pilot Licence	230.00	242.19
Instrument rating	131.00	137.94
Flight Instructor rating - A Category	131.00	137.94
Flight Instructor rating - B Category	131.00	137.94
Flight Instructor rating - C Category	131.00	137.94
Flight Instructor rating - D Category	131.00	137.94
Flight Instructor rating - E Category	131.00	137.94

Flight Examiner rating	197.00	207.44
Validation of Foreign pilot Licence	197.00	207.44
Replacement of licence, certificate or rating	99.00	104.25
Amendment to face of document (all personnel licences)	131.00	137.94

---

#### Flight Testing

Air Transport Pilot Licence (ATPL -aeroplane): issue flight test	2,759.00	2,905.23
Air Transport Pilot Licence (ATPL -helicopter) issue flight test: issue flight test	2,759.00	2,905.23

---

#### Airline Flight Examiner Rating

Airline Flight Examiner Rating - issue and renewal test	Standard hourly rate	
---	----------------------	--

---

#### General Aviation Flight Examiner Rating

GA flight examiner rating: Issue	Standard hourly rate	
GA flight examiner rating: Renewal	1,379.00	1,452.09

---

#### Medical

Accredited Medication Conclusions (more than 2 hours)	Standard hourly rate	
Medical Certificate Application Fee	120.75	127.15

---

#### Trans-Tasman Mutual Recognition Agreement

Registration of licensees recognised under the Agreement	197.00	207.44
--	--------	--------

---

#### AIRCRAFT REGISTRATION (Part 2 of Schedule)

Initial registration	296.00	311.69
Annual fee for maintenance of Register	99.00	104.24
Change of registration	394.00	414.88
Change of ownership	263.00	276.94
Reservation or Allocation of a particular Registration Mark	197.00	207.44
Cape Town Convention Registration	279.00	293.79

## Current and proposed changes to Civil Aviation Charges

CHARGES SCHEDULE – GST INCLUSIVE	CURRENT 2019 RATE	WITH 5.3% INCREASE
Standard Hourly Rate for chargeable services	284.00	299.06

### SPECIFIC STANDARD HOURLY RATE CHARGE APPLICATION

#### PART / SECTION / PARAGRAPH

PART 2	AIRCRAFT REGISTRATION
6 (a)	Type certificate
6 (b)	Type acceptance certificate
6 (c)	Design certification of aircraft parts or equipment
6 (d)	Airworthiness certificate
6 (e)	Renewal of or amendment to airworthiness certificate
6 (f)	Approval of minimum equipment list
6 (g)	Approval of aircraft modifications
6 (h)	Approval of flight manuals or amendments
6 (i)	Approval of aircraft radio station
6 (j)	Special flight permit
PART 3	AIR SERVICE CHARGES
7 (a)	Grant of air operator certificate
7 (b)	Renewal or amendment of air operator certificate
7 (c)	Non-routine Monitoring of holders of air operator certificate
7 (d)	Assessment of manuals, etc
PART 4	AERODROME CHARGES
8 (a)	Aerodrome operating certificates
8 (b)	Non-routine Monitoring of holders of aerodrome operating certificates
PART 5	OTHER AVIATION RELATED CHARGES
9 (a)	Grant of certificate
9 (b)	Renewal or amendment of certificate
9 (c)	Non-routine Monitoring of approved organisations
9 (d)	Amendment of manuals, etc
9 (e)	Approval of simulators
9 (f)	Approval of training and checking organisations
9 (g)	Non-routine Monitoring of training and checking organisations
9 (h)	Grant of maintenance organisation certificate
9 (i)	Non-routine Monitoring of maintenance organisation

<b>PART 6</b>	<b>AIR TRAFFIC SERVICES, NAVIGATION INSTALLATION, AND INSTRUMENT FLIGHT PROCEDURE SERVICE AND REGISTRATION CHARGES</b>
10 (a)	Telecommunication service certificate, air traffic service certificate, aeronautical information service certificate, and instrument flight procedure service certificate
10 (b)	Non-routine Monitoring of providers of air traffic services, navigation installations, or instrument flight procedure services
10 (c)	Assessment of radio frequencies
10 (d)	Allocation of ICAO location indicators or ICAO aircraft operating agency designators
10 (e)	Instrument flight procedure registration
<b>PART 7</b>	<b>AVIATION SECURITY</b>
11 (a)	Approvals
11 (b)	Non-routine Monitoring
<b>PART 8</b>	<b>METEOROLOGICAL SERVICE PROVIDERS</b>
(a)	Grant of meteorological service certificate
(b)	Non-routine Monitoring of meteorological service providers
<b>PART 9</b>	<b>OTHER AVIATION RELATED CHARGES</b>
(a)	Certification and clearance of Aeronautical Information Publication material
(b)	Other aviation publications
(c)	Exemptions
(d)	Aerodrome determinations
(e)	Compliance advice
(f)	Examination approvals
(g)	Aeronautical study or safety review
(h)	Construction or alteration of structure, or other activity, that could constitute hazard
(i)	Non-routine monitoring for which a specified charge is not otherwise prescribed
(j)	Approval or investigations for which specified charge is not otherwise prescribed



Aviation Security Service  
— Kaiwhakamaru Rererangi —

Civil Aviation Authority of New Zealand  
Asteron Centre, 55 Featherston Street, 6011  
PO Box 3555, Wellington, 6140, New Zealand