



## COVERSHEET

<b>Minister</b>	Hon Stuart Nash	<b>Portfolio</b>	Economic and Regional Development
<b>Minister</b>	Hon Dr Ayesha Verrall	<b>Portfolio</b>	Research, Science and Innovation
<b>Minister</b>	Hon Kieran McAnulty	<b>Portfolio</b>	Associate Transport
<b>Title of Cabinet paper</b>	Aerospace Strategy: Release of public consultation document and associated reprioritisations	<b>Date to be published</b>	10 October 2022

### List of documents that have been proactively released

<b>Date</b>	<b>Title</b>	<b>Author</b>
August 2022	Aerospace Strategy: Release of public consultation document and associated reprioritisations	Office of the Minister for Economic and Regional Development; Office of the Minister of Research, Science and Innovation; Office of the Associate Minister of Transport
24 August 2022	Aerospace Strategy: Release of public consultation document and associated reprioritisations DEV-22-MIN-0200 Minute	Cabinet Office

### Information redacted

**YES**

Any information redacted in this document is redacted in accordance with MBIE's policy on Proactive Release and is labelled with the reason for redaction. This may include information that would be redacted if this information was requested under Official Information Act 1982. Where this is the case, the reasons for withholding information are listed below. Where information has been withheld, no public interest has been identified that would outweigh the reasons for withholding it.

Some information has been withheld for the reason of confidential advice to Government.

**In Confidence**

Office of the Minister for Economic and Regional Development

Office of the Minister of Research, Science and Innovation

Office of the Associate Minister of Transport

Cabinet Economic Development Committee

**Aerospace Strategy: Release of public consultation document and associated reprioritisations**

**Proposal**

- 1 This paper seeks the Cabinet Economic Development Committee's agreement to release a public consultation document on a draft Aerospace Strategy (the Strategy).
- 2 It also seeks approval to a fiscally neutral transfer to support regulatory capability to implement the Strategy.
- 3 The draft consultation document is attached as Appendix One.

**Issues identification**

- 4 New Zealand has a strong emerging aerospace sector, with many participants operating at the cutting edge of the global aerospace economy. While there is significant opportunity to grow the sector to achieve a range of economic and emissions reductions benefits, we lack a strategy to focus government and sector actions to achieve this. There are also strong calls from the sector for Government leadership, which the Strategy will support.
- 5 Investments we make in growing the sector and developing emerging technologies in New Zealand will have limited value unless there is sufficient regulatory capability and support to ensure safe integration of these technologies into the aviation system. Should Cabinet agree, this paper will provide short term and partial resourcing for the Civil Aviation Authority (CAA) to help keep pace with the sector and better consider these issues. Long term resourcing for the CAA will remain a challenge that needs addressing.

**Relation to government priorities**

- 6 An ambitious Strategy will support our aim to encourage high-value innovation and investment in New Zealand. In the 2020 Speech from the Throne, the Prime Minister stated that we would continue to invest in research and development and expand programmes to attract innovative companies to New Zealand.

- 7 The Strategy will also support our objectives under the Emissions Reduction Plan to decarbonise transport. Our connectivity to the global economy relies on aviation, which needs to develop and adopt new technologies to reduce emissions.
- 8 The Strategy will directly support our Just Transition, Future of Work and Māori and Pacific wellbeing objectives. A proposed action under the Strategy will commission research to understand engagement in the sector by these population groups.

## Executive Summary

- 9 The draft Strategy sets out a framework to guide New Zealand's activities in the growing global aerospace sector<sup>1</sup> through to 2030, including five aspirational goals to drive activity.
- 10 Aerospace is a high-value sector with significant potential for New Zealand, both through direct economic impact and through related products and services. The draft Strategy is focused on growing an internationally competitive sector that makes a significant contribution to New Zealand's economic performance and supports broader Government objectives. Consideration of safety and national security interests will also be important as sector development interventions are designed and implemented.
- 11 The Strategy also supports New Zealand trialling and adopting low and zero emissions aviation options, which will be critical to maintaining our connectedness to the global economy while reducing emissions. The Strategy will support various actors in the aviation sector who are already working to achieve this.
- 12 Should Cabinet agree, the Strategy consultation will be launched at New Zealand's inaugural National Aerospace Summit in Christchurch on the 5<sup>th</sup> of September. Feedback received during the public consultation period will be incorporated into a final Strategy that will be presented to Cabinet by early 2023.
- 13 In addition, the Minister of Research, Science and Innovation may announce additional financial support for the Strategy at the summit, particularly for aerospace research programmes.
- 14 A critical enabler for the Strategy will be additional resourcing for policy and regulatory functions to regulate aerospace activity in New Zealand. This paper proposes a fiscally neutral transfer from Vote Business, Science and Innovation to Vote Transport to help provide this resourcing in the short term.
- 15 This funding will be used for regulatory capability and support to ensure New Zealand can:

---

<sup>1</sup> The aerospace sector encompasses the research and development, design, manufacturing and launch of satellites, drones, flight vehicles, space launch vehicles, and spacecraft, as well as upstream and downstream services concerning the provision and use of aerospace data.

- 15.1 rapidly develop and adopt low and zero carbon aviation technologies necessary for New Zealand's future transport needs;
  - 15.2 enable the safe testing, trialling, and transition into service of advanced aerospace technologies including space and autonomous vehicles, particularly those developed by industry partners in the Aerospace Integration Trials Programme;
  - 15.3 respond to other emerging aerospace technologies as they arise.
- 16 Supporting these outcomes will involve modernising the existing regulatory system and providing the foundational groundwork for the advanced use of aerospace technologies, including with personnel.

## Background

*New Zealand has an opportunity to significantly grow its aerospace sector but lacks a Strategy to catalyse this growth*

- 17 New Zealand already has a strong emerging aerospace sector, with many participants operating at the cutting edge of the global aerospace economy. These include domestic start-ups, international firms and a growing research community. In 2018-19 the space sector alone contributed \$1.69 billion to the economy and supported 12,000 jobs<sup>2</sup>.
- 18 Aerospace is a rapidly growing sector worldwide<sup>3</sup>, and we can secure a proportion of this growth to benefit New Zealand. Our aerospace sector can grow to become a multi-billion-dollar industry by 2030.
- 19 New Zealand has many advantages for aerospace activities, including our diversity of geography, clear sea and skies, low-population density, and a trusted and safe regulatory system. International companies are locating in New Zealand to utilise these benefits for undertaking research and development. This is bringing investment, technology and skills into the country, which further supports growth of local participants.
- 20 Aerospace technologies also offer solutions to national and global challenges including decarbonisation of the aviation system, environmental monitoring, agricultural productivity and safety, pest eradication, search and rescue, and supply-chain resilience. A range of domestic and international companies are developing technologies to address these and other issues in New Zealand.
- 21 While there is significant opportunity to grow, an ambitious Strategy will focus government and sector actions to achieve this growth. The draft Strategy aims to develop what has emerged to date in order to achieve significant economic growth and innovation benefits for New Zealand. It sets out three pillars of capability New Zealand will need to develop the sector, and five stretch goals

---

<sup>2</sup> New Zealand Space Sector: Its value, scope and structure, Deloitte Access Economics, November 2019

<sup>3</sup> The Space Report 2020 Q2, The Space Foundation (July 2020)

we aim to achieve by 2030. This will be supported by an action plan and a leadership group including government and sector representatives.



- 22 Successful implementation of the Strategy could see significant numbers of new, high-value jobs created and would establish aerospace as a significant part of the New Zealand economy. Opportunities in aerospace will be distributed throughout the country, promoting economic development in the regions.
- 23 The proposed action plan under the Strategy will identify workstreams required to achieve this vision. Actions that will be implemented as part of the Strategy will include adequately resourcing policy and regulatory capability, targeted research and development investments, building the domestic talent pipeline, enhancing supply-chain connections and establishing essential infrastructure. In particular, officials have identified an initial package of research and development initiatives from within the Research, Science and Innovation portfolio, which will be rolled out over time in support of the Strategy.
- 24 Development and implementation of the Strategy will be led by the Ministry of Business, Innovation and Employment (MBIE), in collaboration with Te Manatū Waka Ministry of Transport (MoT) and the CAA.
- 25 A wide range of agencies have contributed to the development of the Strategy to date, including the Ministry for Primary Industries, Airways New Zealand, New Zealand Defence Force (including the Defence Technology Agency), Ministry of Defence, New Zealand Intelligence Community, Ministry of Foreign Affairs and Trade, Toitū Te Whenua Land Information New Zealand, Te Puni Kōkiri, Te Arawhiti, Statistics New Zealand, Ministry of Education, Department of Conservation, New Zealand Trade and Enterprise, and Callaghan Innovation.

*There is strong sector demand for a strategy, and public consultation will ensure all views are heard*

- 26 A supportive aerospace sector is critical to the success of the Strategy. A group of sector representatives have advocated for greater policy leadership from the Government and strongly encouraged the development of a strategy. This group has been involved in the development of the Strategy through targeted workshops and requests for submissions on specific elements.
- 27 Officials have also engaged with industry and academia, and have established a Māori Stakeholders Group, to ensure that the Strategy reflects a wide range of perspectives.
- 28 A public consultation period will now enable the wider sector and other parties with an interest in aerospace to provide feedback on the draft Strategy prior to finalisation. Those who have contributed in a targeted manner will also have the opportunity to comment on a full draft.

- 29 Aerospace Christchurch<sup>4</sup>, will host an inaugural New Zealand Aerospace Summit (the Summit) in Christchurch on 5 September 2022. We propose to release the Strategy for consultation at this summit. The consultation will run online on MBIE's website for five weeks from 7 September to 12 October. Officials will then finalise the Strategy for agreement by Cabinet in early 2023.
- 30 In addition to releasing the consultation document, the Minister of Research, Science and Innovation may announce additional support for the strategy at the Summit, particularly for aerospace research programmes. This will ensure we are showing early support for implementing the Strategy once finalised.

**Reprioritisation of funding to support critical regulatory capability and capacity**

- 31 In order to achieve the goals set out in the Strategy, New Zealand needs to immediately build additional regulatory capacity and capability to support the emerging aerospace sector. Failure to resource the regulator will not only compromise chances of achieving these goals, but will also damage New Zealand's reputation as an aerospace nation, making it difficult to maintain pace with this fast moving sector.
- 32 Regulatory capacity and capability is needed to ensure emerging technologies, including low and zero carbon aviation options, can be developed, adopted and operated safely in New Zealand. Without this capability the New Zealand economy risks losing connectivity to our export markets, including tourism, as focus on reducing emissions from aviation increases. The growing aerospace sector will also face challenges in developing their technology in New Zealand and will likely look to other jurisdictions that are making significant investments to support this capability.
- 33 The risk of lost economic opportunity without further regulatory support has been corroborated by participants in the aerospace sector. They confirm the need for a well-resourced regulator with the capacity and capability needed to keep up with technology developments.
- 34  Confidential advice to Government  

- 35 On 29 June 2022 Cabinet Economic Development Committee agreed in principle to transfer a forecast underspend of \$3.7 million from Vote Tourism into Vote Economic and Regional Development for the purposes of the Strategy (DEV-22-MIN-0153 refers). The paper authorised the Ministers of

<sup>4</sup> Aerospace Christchurch is an industry body promoting the growth of the aerospace sector in New Zealand. Aerospace Christchurch is currently focused on the centre of aerospace activity in Canterbury but will soon rebrand to Aerospace New Zealand to encourage a national approach.

<sup>5</sup> \$8.85m was provided to the Ministry of Transport and CAA, however, for the Enabling Drone Integration Package, which has related but separate purposes.

Finance, Economic and Regional Development, and Tourism to jointly agree the final amounts to be transferred.

- 36 To provide further funding to the CAA, this paper seeks authorisation for the Minister of Finance, Minister for Economic and Regional Development, Minister of Tourism and Associate Minister of Transport to make a fiscally neutral transfer of \$3.7m from Vote Economic Development to Vote Transport.
- 37 This funding will be provided to the CAA to begin the implementation of an ETP. The funding will be used within the ETP to ensure that New Zealand has the regulatory capability and support to:
- 37.1 Rapidly develop and safely adopt low and zero carbon aviation technologies necessary for New Zealand's future transport needs;
  - 37.2 Enable the safe testing, trialling and transition into operation of advanced aerospace technologies, including space and autonomous aviation vehicles, particularly those developed by industry partners in the Government's Airspace Integration Trials Programme;
  - 37.3 Respond to other emerging aerospace technologies as they arise.
- 38 Supporting the outcomes in paragraph 37 will involve modernising the existing regulatory system and laying the foundational groundwork for the advanced use of aerospace technologies, including with personnel. The capability will complement the existing enabling approach New Zealand has to the regulation of space activities.
- 39 Consideration needs to be given to CAA's long-term resourcing for the ETP, which will be an enduring issue. The funding in this paper will only be a short term and partial solution to the CAA and New Zealand's future needs.
- 40 With uncertainty on future funding, CAA will only be able to provide a minimum capability to regulate emerging aerospace technologies, which will not meet aerospace sector or Government expectations about efficiency. CAA will only have limited ability to work collaboratively with the sector to enable aerospace activity, limiting their growth. The aerospace sector will be concerned about a lack of enduring regulatory capability.
- 41 Uncertain funding creates a significant risk for the delivery of the Strategy, and that aerospace actors will look at other locations and regulatory regimes around the world to undertake research and development, test, and scale their activities. This risk particularly applies to New Zealand's pathway to rapidly adopt low and zero carbon aviation options in the near future, as is being pursued by Air New Zealand and is the objective of goal one of the Strategy. It will also apply to the government's Airspace Integration Trials Programme that is enabling testing and trialling autonomous vehicles, and will be a major action necessary to achieve goal two of the Strategy.

- 42 The CAA has initiated work on a funding review. However, it is unlikely that the review will be able to identify a means for recovering costs from a nascent sector which still requires government support and investment. It is also unlikely that the timeframes for the review will see any new funding sources being established in time to fund the development of an ETP to meet the outlined 2030 goals of the Strategy.

### **Implementation**

- 43 Development and implementation of the Strategy is being led by MBIE in collaboration with MoT and the CAA.
- 44 Consultation will be undertaken via an online submission process for a period of five weeks from 7 September to 12 October. Following the consultation period officials will provide a finalised strategy to Cabinet for consideration in early 2023.
- 45 A Space Policy Review consultation will also be undertaken between 19 September and 31 October. These consultations have different purposes, with the Space Policy Review focusing on national space policy issues, while the Strategy consultation focuses on the growth of the wider aerospace sector. The overlap in consultation periods is not an issue provided clear messaging differentiates the purposes of the two consultations.

### **Financial Implications**

- 46 There are no financial implications arising as a direct result of releasing the public consultation document.
- 47 The paper proposes a fiscally neutral transfer from Vote Business, Science and Innovation to Vote Transport.
- 48 The transfer in funding from Vote Business, Science and Innovation to Vote Transport will be confirmed following the 2022 October Baseline Update process after the presentation of MBIE's 2021/22 audited financial statements.

### **Legislative Implications**

- 49 There are no legislative implications arising from releasing the consultation document.
- 50 The Strategy will be enabled by policy and regulatory work currently underway on the Civil Aviation Bill, the review of the Outer Space and High-altitude Activities Act, the Air Navigation System Review and the Enabling Drone Integration Package.

### **Impact Analysis**

#### **Regulatory Impact Statement**

- 51 This paper does not require a Regulatory Impact Statement.



### Climate Implications of Policy Assessment

52 There are no climate implications in this paper.

### Population Implications

53 There are no population implications in this paper.

### Human Rights

54 There are no human rights implications in this paper.

### Consultation

55 The Ministry of Transport, Civil Aviation Authority, and the Treasury have been consulted on this paper.

56 A range of agencies have been consulted on the draft Strategy during its development, including the Ministry for Primary Industries, Airways New Zealand, New Zealand Defence Force (including the Defence Technology Agency), Ministry of Defence, New Zealand Intelligence Community, Ministry of Foreign Affairs and Trade, Toitū Te Whenua Land Information New Zealand, Te Puni Kōkiri, Te Arawhiti, Statistics New Zealand, Ministry of Education, Department of Conservation, New Zealand Trade and Enterprise, and Callaghan Innovation.

### Communications

57 The Strategy consultation will be launched at New Zealand's inaugural Aerospace Summit in Christchurch on the 5th of September.

58 To support this announcement, the Minister of Research, Science and Innovation may announce additional funding for aspects of the Strategy.

### Proactive Release

59 This paper will be released on 5 September 2022 in conjunction with the Strategy consultation launch.

### Recommendations

The Minister for Economic and Regional Development, Minister of Research, Science and Innovation, and Associate Minister of Transport and recommend that the Committee:

#### *Release of Aerospace Strategy Consultation Document*

- 1 **Note** that New Zealand has a significant opportunity to foster economic growth and innovation through the development of its emerging aerospace sector;
- 2 **Note** that an ambitious Aerospace Strategy is necessary to set out a framework and actions for achieving sector growth;

- 3 **Agree** to release the Aerospace Strategy consultation document for a public consultation period of five weeks from September 7 to October 12;
- 4 **Authorise** the Ministry of Business, Innovation and Employment to make any necessary editorial changes that arise during the finalisation of the Aerospace Strategy consultation document before its release;

*Transfers in funding to implement the strategy*

- 5 **Note** that additional regulatory capability and support is required to enable the success of the Aerospace Strategy, and this will require further funding;
- 6 **Note** that the Cabinet Economic Development Committee approved in principle expense transfers of up to \$3.7m within Vote Business Science and Innovation to be used for the purposes of the Aerospace Strategy, and authorised the Minister of Finance, Minister of Tourism and Minister for Economic Development to jointly agree the final amounts to be transferred and to approve the required fiscally neutral adjustments [DEV-22-SUB-0153 refers];
- 7 **Agree** that a fiscally neutral transfer of up to the amount in Recommendation 6 be used for the Civil Aviation Authority's Emerging Technologies Programme, to ensure New Zealand has the regulatory capability and support to:
  - 7.1 Rapidly develop and safely adopt low and zero carbon aviation technologies necessary for New Zealand's future transport needs;
  - 7.2 Enable the safe testing, trialling and transition into operation of advanced aerospace technologies, including space and autonomous aviation vehicles, particularly those developed by industry partners in the Government's Airspace Integration Trials Programme;
  - 7.3 Respond to other emerging aerospace technologies as they arise;
- 8 **Authorise** the Minister of Finance, Minister of Economic and Regional Development, Minister of Tourism, and Associate Minister of Transport acting jointly to transfer funding to enact the policy decisions referred to in recommendation 7 above (including establishing new appropriations or changing existing appropriations), once the final amount available has been determined, and with no impact on the operating balance and/or net core Crown debt across the forecast period;
- 9 **Note** that the final amount of funding from Vote Business Science and Innovation will be determined through the completion of the 2021/22 audited financial statements of the Ministry of Business, Innovation and Employment;
- 10 **Note** that supporting the outcomes in recommendation 7 will involve modernising the existing regulatory system and laying the foundational groundwork for the advanced use of aerospace technologies, including with personnel.

Authorised for lodgement

Hon Stuart Nash

Minister for Economic and Regional Development

Hon Dr Ayesha Verrall

Minister of Research, Science and Innovation

Hon Kieran McAnulty

Associate Minister of Transport