



## BRIEFING

### Airspace Integration Trials programme: update and proposed 'soft-launch'

<b>Date:</b>	12 September 2019	<b>Priority:</b>	High
<b>Security classification:</b>	In Confidence	<b>Tracking number:</b>	0757 19-20

Action sought		
	Action sought	Deadline
Hon Dr Megan Woods <b>Minister of Research, Science and Innovation</b>	<b>Agree to release a press release announcing the Airspace Integration Trials programme.</b>	18 September 2019

Contact for telephone discussion (if required)				
Name	Position	Telephone		1st contact
Dr Kjesten Wiig	Director, Innovative Partnerships	04 901 3959	Privacy of natural persons	✓
Michelle Schulz	Strategic Partnerships Manager, Innovative Partnerships	04 901 2135	Privacy of natural persons	
Emma Wardle	Graduate Policy Advisor, Innovative Partnerships	04 897 6389		

The following departments/agencies have been consulted
Ministry of Transport, Civil Aviation Authority, Airways, Callaghan Innovation, New Zealand Trade & Enterprise

Minister's office to complete:

- |   |  |
|---|--|
| <input type="checkbox"/> Approved             | <input type="checkbox"/> Declined            |
| <input type="checkbox"/> Noted                | <input type="checkbox"/> Needs change        |
| <input type="checkbox"/> Seen                 | <input type="checkbox"/> Overtaken by Events |
| <input type="checkbox"/> See Minister's Notes | <input type="checkbox"/> Withdrawn           |

Comments



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#### Purpose

To update you on progress to establish the Airspace Integration Trials programme and our proposed 'soft-launch' of the programme on Sunday 29 September.

#### Recommended action

The Ministry of Business, Innovation and Employment (MBIE) recommends that you:

- a **Note** that MBIE has been working across government to establish the Airspace Integration Trials programme and engaging with potential industry partners;  
*Noted*
- b **Agree** to release the press release "NZ Government establishes innovative, industry-focused Airspace Integration Trials Programme" on Sunday 29 September; and  
*Agree / Disagree*
- c **Forward** this briefing to Hon Phil Twyford, Minister of Transport and Minister for Economic Development, for his information.  
*Agree / Disagree*

Dr Kjesten Wiig  
**Director, Innovative Partnerships**  
Labour, Science & Enterprise, MBIE

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Hon Dr Megan Woods  
**Minister of Research, Science and Innovation**

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## Background

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1. In December 2018, you agreed to establish a programme of Airspace Integration Trials (the programme) to enable the safe testing, development and market validation of advanced Unmanned Aircraft (UA) in New Zealand [2052 18-19 refers].
2. In May 2019, we provided you with an update on next steps to establish the programme. You agreed to the proposed portfolio make-up of the programme (including passenger and cargo transport, agricultural services and hazard management and monitoring services), the phased approach to the Initiation, Development and Delivery of each trial, and the centralised programme management structure [3196 18-19 refers].
3. The programme is a key action under MBIE's Innovative Partnerships' *Advanced Aviation Technologies* platform-play, which seeks to position New Zealand as the location of choice for the emerging advanced UA sector [0346 18-19 refers]. It is led by MBIE with support from the Ministry of Transport (MoT) and the Civil Aviation Authority (CAA), and active contribution from Airways.
4. The programme complements the Government's broader MoT-led vision for a thriving, innovative and safe aviation system outlined in the paper *Taking Flight: An aviation system for the automated age*.<sup>1</sup>
5. To support the broader MoT-led vision and the programme, Cabinet agreed in July 2019 to the reprioritisation of \$3 million funding from Vote Science and Innovation to build capability at the CAA, and to support MoT's regulatory policy work-programme [3153 18-19 refers].

## We are working across government to establish the programme

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### We are in the process of recruiting a Programme Manager

6. A key feature of the programme is its centralised programme management structure. MBIE is currently recruiting for a Programme Manager who will coordinate input and actions of industry partners, relevant agencies and other key stakeholders.
7. We want someone with senior leadership experience and the credibility and capability to deliver this complex programme in a rapidly-changing and innovative sector. They will also have in-depth knowledge and connections across the domestic and international aviation systems to engage effectively with industry, government and other stakeholders.
8. We expect to complete the procurement process in October.

### We are putting mechanisms in place to ensure ongoing engagement from the CAA while preserving their independence as regulatory decision-makers

9. As indicated in previous advice, ongoing engagement with CAA's subject matter experts for guidance on operations, airworthiness and airspace use will be integral to the programme and specific trials' success. The CAA already regularly engages with new entrants to provide high-level advice around regulatory requirements. Engagement with participants conducting trials in the programme would build on and be consistent with the approach already taken with other new entrants.
10. The engagement will not preclude or influence the CAA's independent assessment and certification of operations. As the independent regulator, the CAA will retain the right to decline approval at any stage in the process for operations that it does not consider to be

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<sup>1</sup> <https://www.beehive.govt.nz/sites/default/files/2019-07/Taking%20Flight%20an%20aviation%20system%20for%20the%20automated%20age.pdf>

safe. This is critical to maintaining the overall safety of the aviation system and the credibility of New Zealand as an innovative and responsible aviation regulator.

11. To ensure clarity and transparency as to the nature of the CAA's involvement, we are working with MoT and CAA to develop a Terms of Reference for the agencies involved in the programme, with a specific focus on CAA's engagement in the programme and specific trials.

## **We are engaging with potential industry partners**

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### **We have formally started the Initiation Phase with Zephyr Airworks to define the scope of the programme's first trial**

12. The purpose of the Initiation Phase is to assess the credibility of prospective industry partners, and to define the feasibility and scope of the intended trial. The output will be a Memorandum of Understanding (MoU) outlining the scope of the trial, the commitments of the relevant agencies to provide support and coordination, and the industry partner's commitment to complete the trial and to share any learnings through the programme [3196 18-19 refers].
13. Zephyr has recently presented a high-level outline of their intended operations to relevant agencies **Commercial Information, Information received in confidence** [redacted]. The success of this will depend on Zephyr providing the appropriate safety case to support such an operation.
14. To date, engagement has focused on assessing the proposed operation's scope and feasibility. The discussions have been aimed at identifying potential barriers to the delivery of the trial and will support Zephyr to develop a detailed concept of operations in parallel.
15. It has also enabled the discussion of opportunities for the Government to use the trial to continue to develop social licence for UA, test adjacent technologies (eg UA traffic management systems, on-aircraft sensors, ground communication systems), and provide a case-study for international data sharing with other agencies working to achieve airspace integration.
16. We will continue to work with Zephyr, MoT and the CAA to scope the trial and to move towards the signing of an MoU in mid-to-late October.
17. In parallel, Zephyr is having early conversations with local stakeholders including iwi, councils **Commercial Information**. These will continue into the Development phase of the trial, with support from the Programme Manager.

### **We are continuing conversations with other potential industry partners**

18. **Commercial Information, Information received in confidence, Ongoing negotiations** [redacted]
19. **Commercial Information, Information received in confidence, Ongoing negotiations** [redacted]
20. **Commercial Information, Information received in confidence, Ongoing negotiations** [redacted]

21. Commercial Information, Information received in confidence, Ongoing negotiations
22. Commercial Information, Information received in confidence, Ongoing negotiations

## **We propose a 'soft-launch' of the programme for late September**

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23. We propose to soft-launch the programme on Sunday 29 September through a Ministerial press release (PR) (provided to your office separately). The tone of the announcement will be visionary, but small in scope, announcing that the Government is establishing an Airspace Integration Trials Programme and is currently engaging with a number of prospective industry partners, including Zephyr.
24. The proposed PR will signal that the Government is committed to enabling the integration of UA and maximising the economic and social benefits this presents. We have an internationally-respected regulatory regime and world-leading, innovative companies already established in New Zealand. The programme will capitalise on and build upon our existing competitive advantage in this sector.
25. The soft-launch will also provide the opportunity to announce the recent Cabinet-agreed reprioritisation of \$3 million funding from Vote Science and Innovation to directly support the CAA and MoT's contribution to the programme [3153 18-19 refers].
26. We propose to proactively release the previous briefings relating to the programme through MBIE's website [2052 18-19 & 3196 18-19].
27. The soft-launch would then be followed by a more detailed announcement about the programme's first trial with Zephyr, following the signing of the MoU in mid-to-late October.

## **Risks and mitigations**

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### **We do not foresee any risks with the proposed soft-launch of the programme**

28. The soft-launch will send a clear message internationally that New Zealand is committed to being at the forefront of UA development and integration, and provide a marketing tool to further attract internationally leading innovators. This signal is important in the context of increasing international competition from other jurisdictions which are advancing regulatory reform processes and launching their own innovative initiatives.
29. Domestically, the soft-launch is a way to maintain transparency around the programme and invite constructive discussion and inform the development of the MoU for the first trial. It also helps us to remain on the front foot with the circulation of information relating to the programme (briefing papers have previously been released in part under the Official Information Act 1982 and we will be openly advertising for the procurement of programme management services).

### **We are putting in place mechanisms to mitigate any risks associated with the programme**

30. As noted in previous advice:
  - Social acceptance is key to the success of the programme. Accelerating the integration of advanced UA may raise safety or privacy concerns among the public or the wider aviation industry. To manage concerns and promote acceptance, we will be working

across the agencies and with our industry partners to develop and implement proactive engagement plans.

- The unproven nature of the technologies required for UA integration creates some uncertainty for the programme. The proactive approach and selection criteria for the identification of industry partners will mitigate this risk by ensuring that we target UA industry leaders that have the aviation experience, technical expertise and funding needed to succeed in the programme.
- Ongoing engagement with CAA's subject matter experts will be integral to the programme's success. It is therefore necessary that we maintain clarity and transparency to ensure that any perceived conflicts of interest between the CAA's contribution to the programme and its role as the independent regulator can be managed. Developing the Terms of Reference for the agencies' involvement and making this document publically available will mitigate this risk.

31. These risks and mitigations will be addressed as part of the Question & Answer package to be provided to your Office separately.

## Next steps

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32. MBIE will work with your office to coordinate the announcement and pitch the story to media. We will also work with MoT and Minister Twyford's office to ensure they are prepared to respond to enquiries.
33. We will continue to work with Zephyr and the key government agencies to develop an MoU that outlines the key roles and responsibilities, the commitments of each party and a high-level scope of the trial. We are aiming to have the MoU finalised in mid-to-late October. We will prepare to make another announcement at this point sharing the high-level scope
- Commercial Information