

Unmanned aircraft Integration Paper

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*‘Taking flight: an
aviation system for
the automated age’*

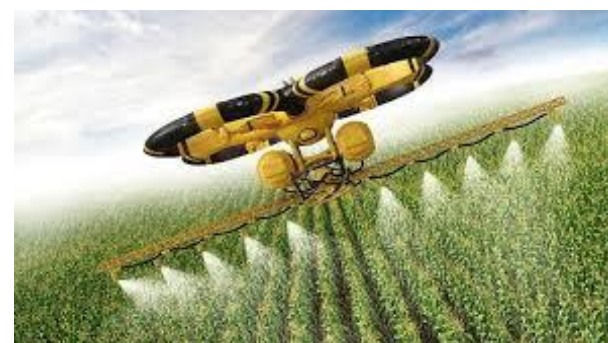


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Drones



The potential benefits of drone operations



- ▶ Drone operations have the potential to:
 - Stimulate innovation
 - Increase productivity across a range of sectors and critical services
 - Aid in disaster response and building resilience
 - Substitute activities that are too expensive, too risky or simply not possible to conduct with manned aircraft.

- ▶ Over time drones are expected to gradually expand to other aspects of the aviation sector.

Challenges and opportunities



- ▶ There are a number of challenges and opportunities that we need to balance, these include:

Challenges	Opportunities
Safety concerns associated with drone use and invasive use of drones	Increasing uses for drones
Understanding social acceptance (including privacy concerns)	Regional and economic development opportunities
Increasing numbers of companies interested in testing, trialling and developing innovative technologies in New Zealand	Potential to transform how we move goods and people, and how services are being delivered
Being more agile with requirements and the standards of the aviation system	

Government responsibilities



- ▶ The Ministry, CAA, MBIE and Airways have been working on a number of drone related initiatives – including regulatory changes, providing strategic direction and considering social campaigns.
- ▶ MBIE in particular have developed an Advanced Aviation Technologies platform play. This initiative aims to attract international innovators and investors. It also aims to help retain and build New Zealand's competitive advantage as a location for testing and trialling advanced aviation technologies like drones.
- ▶ Other agencies are involved in specific aspects of our drone related work (such as DoC, NZDF and Police).



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- ▶ In September 2018, we provided stakeholders with our draft drone integration paper, *'Taking flight: an aviation system for the automated age'*.
- ▶ The purpose of this document is to set a vision to enable a thriving, innovative and safe drone sector. It aims to provide a clear understanding of the Government's role, vision and priority areas to achieve the safe integration of drones into New Zealand's aviation system.
- ▶ The paper covers a number of various topics and explains *'what'* we are doing in regards to drone integration and *'why'* we are doing it.



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- ▶ By integration, we mean all aircraft (manned and unmanned) operating safely and seamlessly together, and seamlessly with other transport options.
- ▶ This work is hard. The challenges and opportunities presented by drone integration are not unique to New Zealand. A number of issues need to be balanced e.g. safety and R&D.
- ▶ We believe that it is essential that there is a pathway to integration.



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- ▶ Creating the environment for integration requires a number of complementary building blocks.
- ▶ We have identified four building blocks where we will propose actions and necessary timeframes to achieve drone integration. These are:
 - Regulation
 - Funding and Investment
 - Infrastructure and Technology
 - Research and Development.



Development of a drone work programme



- ▶ In the short term to medium term, we will be looking at putting together a work programme under each of the building blocks. For example:
 - ▶ Regulation
 - Working with the CAA to ensure that there is more awareness of current drone rules and increasing the compliance rate with those rules
 - Examining drone regulation in other jurisdictions to inform any changes and work out what we could borrow, with particular focus on the new European Union regulatory framework
 - Investigating whether we should introduce a registration regime and what that should look like
 - Building a social licence
 - ▶ Research and Development: Working with MBIE, CAA and Airways on testing and trialling work.

Governance arrangements



- ▶ Strategic guidance and oversight of the work to achieve the safe integration of drones into New Zealand's aviation and transport system will be provided by the Drone Integration Leadership Group.
 - The Group is made up of senior officials from the Ministry of Transport (Chair), CAA, Airways and MBIE to provide governance oversight.
 - We are also working on forming an industry group to provide input into our drone work.



Next steps



- ▶ Feedback on the integration paper has closed.
- ▶ Our aim is to incorporate feedback and provide the Minister with a final version of the paper to take to Cabinet by the end of the year.
- ▶ We intend to work closely with the aviation sector on the initiatives in the work programme.



Questions

