

# Aotearoa New Zealand Aerospace Strategy

*Submission by* Wisk New Zealand

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## Overview of the Aerospace Strategy

*1: Do the four areas above provide the right basis for the Aerospace Strategy?*

Wisk feels that the four areas provide a sound basis for the Aerospace Strategy, notwithstanding room for clarification, strengthening, and critical additions, which we will outline below.

*2: What are the critical factors that you see for Aerospace Sector Development?*

Wisk views resourcing, education, and industry/government collaboration as critical factors for the development of the aerospace sector. Specifically, we feel that:

- Appropriate resourcing and forward-facing structures for CAA and Airways are critical to ensure robust regulatory, procedural, and safety oversight.
- Regular and frequent assessment of the alignment between policy and regulation towards realising the aerospace strategy to ensure efficient and timely progress.
- Key factors in ensuring a sustainable talent pool for a growing industry include an ongoing focus on tertiary education in aerospace-relevant disciplines, an increased focus on retraining and upskilling, and making aerospace an accessible career opportunity for young people.
- Continued and increasing collaboration between the industry and government will enable future visions to be delivered safely and ensure communities see the benefits of a growing aerospace sector.

### *3: How would an Aerospace Strategy help you?*

An Aerospace Strategy shared by government, industry, and education has the potential to help Wisk and all parties involved by catalysing efforts between these key groups and ensuring unity and transparency toward:

- More efficient decision-making and the implementation of plans.
- Ensuring research efforts across the sector avoid critical omissions and duplications by being better aligned in priorities.

## A Strategy for Building our Aerospace Sector

*4: Is the 2030 Future State set out in a way that enables New Zealand to build on its existing advantages to develop a leading place in the global aerospace economy?*

We suggest the following additions to the description of the 2030 Future State:

- In this section, or within the Pillar Two reference to “fit-for-purpose regulatory systems,” we would like a reference or an acknowledgment of the regulatory resources required to enable such a future state. This is important given that the development of the regulatory resource pool is critical to the growth and improvement required in this area.
- Acknowledgement that commercial service providers, such as Wisk, exist alongside development-centred businesses offering products. In its current form, we feel that the Future State is focused on the growth of development-centred business, whereas Wisk also aspires to be a provider of transport services as an outcome of development efforts.
- A reference to facilitating or supporting the incorporation of aerospace technology to benefit future society, such as providing increased options, improving efficiency, and creating more sustainability in transport.

*5: Will the 2030 Future State support your ambitions for growth and participation in the sector?*

We feel that the 2030 Future State goes a long way toward supporting our ambitions for growth. We propose adding explicit support for the incorporation of aerospace technology into future society in areas such as transport, to provide increased options, improved efficiency, and sustainability in the Future State.

## *6: What barriers are there to optimising sector growth?*

While safety is paramount, a barrier to sector growth is the belief (whether conscious or not) that safety and the rate of progress are inherently at odds with each other. At Wisk, we believe that maintaining safety goes hand-in-hand with innovation and change.

In order to optimise sector growth, the New Zealand regulatory systems will require ongoing improvement in their knowledge base of what is emerging in the aerospace sector, as well as an acute awareness of the stance of the global regulatory community towards new technologies.

In addition to the rate of change, we see the following issues as challenges to sector growth:

- A lack of funding for aerospace start-ups. Ensuring New Zealand values start-ups is critical to ensuring we remain on the cutting edge of aerospace technologies.
- A lack of priority for sustainability of all kinds - sustainable resourcing, environmentally sustainable technology, infrastructure, and social/community sustainability.

## *7: How could the government and the sector work together to achieve the 2030 Future State?*

Continued collaboration between industry and government will carry us further toward the Future State, but to get there in the time envisioned, it requires regular "alignment checks" to ensure that all parties are still on the same path and moving at the same pace.

Another key function of government/sector collaboration is to share important research insights, especially in areas of safety and sustainability.

## *8: How can the Government enable Maori ambitions for the sector?*

Māori ambitions for the aerospace sector should be supported by the government through training and education incentives, early engagement towards co-designing initiatives and infrastructure with mana whenua, and equitable involvement from iwi, hapū, and whanau at all levels of decision-making, without the requirement of aerospace-relevant qualifications or experience.

## **Building Strong Foundations (Three Pillars)**

## *9. What do you think of the Three Pillars and do you think they will support the 2030 Future State?*

The Three Pillars are a good framework for supporting the 2030 Future State, however, the statement that “Aerospace activities actively contribute towards improving our environment through reducing greenhouse gas emissions and enhancing sustainability across the New Zealand economy” could be better supported by the Three Pillars through a bigger focus on sustainability woven throughout each of the Pillars.

Wisk is keen to support the development of the initiatives listed in these pillars so far, and notwithstanding our feedback around a stronger focus on sustainability, we feel they present a reasonable breakdown of what the government can influence to advance the aerospace sector in New Zealand.

### *10. What else would you like to see in the Three Pillars?*

Wisk would like to see a bigger focus on sustainability woven through the Three Pillars and clarity/context provided in the statement “uses of aerospace technologies by the government.”

### *11. What actions and initiatives could the sector focus on to support the Three Pillars?*

Actions and initiatives that the sector could focus on to support the Three Pillars include:

- Pillar One: Different funding for different levels of maturity, which are analogous to VC funding approaches, and the facilitation of access and connection between the industry and academia.
- Pillar Two: Continuation of initiatives supporting the education and training of regulatory personnel in emerging technologies and practices through participation in industry consensus bodies, and attendance at significant conferences and training programs.
- Pillar three: Undertaking outreach programmes and other initiatives to build public understanding and trust in the New Zealand aerospace sector and its capabilities.
- All Pillars: Ensuring sustainability considerations are part of evaluation criteria for research funding.

## Goals for 2030

### *12. What do you think of the Goals for 2030?*

The Goals for 2030 are a good overview of present-day areas of focus, but would benefit from a brief acknowledgement of the evolution of air transport, space activities, and industry tools and technologies towards a post-2030 strategy.

*13. Are the goals framed in a way that will enable New Zealand to build on its strengths and comparative advantages to achieve the 2030 Future State?*

Wisk feels that the goals adeptly identify tangible areas that the aerospace industry can make progress towards, however, we would like to see the definition of Goal One expanded. Specifically, we feel it should include:

- Sustainable manufacturing methods.
- Development and certification of non-toxic, preferably natural, and recyclable, reusable or compostable materials.
- Support and incentives for closed-loop systems where the waste of one organisation might become the input for another.
- Consideration of biodiversity.

*14. What activities and milestones can help us achieve these Goals?*

Activities and milestones that could help achieve these goals should include continued support for initiatives like the Airspace Integration Trials Programme and others like it, and increased publicising of such trial programmes (in consultation and agreement with participants) to build public and government awareness of these programmes.

*15. Where do you see yourself in realising these Goals?*

Wisk sees ourselves as a key participant in working towards realising Goals One, Two and Five. As part of the overall development of Aotearoa New Zealand as an Aerospace Nation, Wisk staff are ardent supporters of Goals Three and Four and where practical will provide support, primarily through sector collaboration.

## Pathway to the 2030 Future State

*16. What policies, ideas, actions, and/or initiatives would you like to see in the Action Plan to help achieve the ambitious 2030 Future State?*

We would like to see support for the AITP and similar initiatives included in the Action Plan, as Wisk builds on the progress made to date. We would also like to see the inclusion of additional funding for aerospace start-ups to encourage the development of new concepts and technologies across the spectrum of aerospace technologies.

We also suggest considering the inclusion of initiatives for infrastructure that are relevant to various industry members, incentives for commercial facility construction, and the facilitation of studies on future infrastructure development.

*17. What would be the benefits of these actions and how would they help grow the New Zealand aerospace sector?*

Designing products, services, and manufacturing processes for sustainability will strengthen the New Zealand aerospace sector in the short term by saving money, as well as in the long term by avoiding supply chain issues, waste, and other resource availability constraints.

Start-up funding initiatives will support the continued growth of the sector through increasing the membership base of the industry.

Demonstration and trial programmes will continue to facilitate the gathering of real-world test data and experience among industry and government participants.

Support for infrastructure development will enable the longer-term elements of the strategy by providing much-needed support to objectives that necessarily function on a longer timeline.

*18. How would you like to be involved in the delivery of the Aerospace Strategy?*

Wisk intends to continue its efforts to bring sustainable urban transport options to the public, while also advancing state-of-the-art autonomy in aviation.

Specifically, we would like to be involved in an industry reference group to advise on latest information and infrastructure developments. We are also interested in collaborating on research and STEM initiatives.

Wisk would be happy to discuss how we can publicly champion the launch of the Aerospace Strategy, following the completion of the consultation process.