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Launching value

Share your expertise and insights to help accelerate New Zealand's Space and Advanced Aviation sectors

What are the benefits for my organisation:

By participating in this survey, it demonstrates your organisation's commitment to engaging in meaningful action that will benefit the future development of the Space and Advanced Aviation sectors in New Zealand.

Help shape policy



Providing accurate information ensures that the economic contribution of the Space and Advanced Aviation sector are properly represented in New Zealand's overall economic landscape. This information will help shape existing and future policy, including related to funding, ensuring that the needs and interests of the sector are addressed.

Raise profile of the sector



Understanding the complete economic contribution of the sector can help justify investments in resources and technologies by investors, companies, universities, institutions and governments. Highlighting evidence of economic growth and potential growth will make the sector attractive to skilled talent, investment and overseas interest.

Strengthen foundations



Once analysed, the collected data will help determine the overall health of the sector and highlight areas for potential improvement. Having one readily accessible source of accurate data on the sector will build consistent understanding and increase credibility amongst stakeholders.

The New Zealand Space Agency is part of the Ministry of Business, Innovation and Employment, and has commissioned Deloitte and Space Trailblazer to carry out the survey on their behalf.

The aim of the survey

This survey aims to gather accurate and comprehensive data about the state of the New Zealand Space and Advanced Aviation sectors. This survey benefits the Space and Advanced Aviation sectors by providing data which can be used to shape policy, raise the profile of the sectors, and strengthen the sectors foundations.

Additional Survey Information

Who should participate in the survey?

The survey should be completed by a CEO or senior leader of an organisation engaged in the Space and Advanced Aviation sectors of the New Zealand economy. If you are unsure if this survey applies to your organisation, please see the <u>Definitions</u> section of this FAQ.

Organisations may be companies (New Zealand or foreign owned), institutes, universities, associations or government agencies. Only one person per organisation should complete the survey.

How do I participate?

You will be sent a link that will take you to the online survey. The survey link will be hosted on MBIE's website. The survey should take approximately 15 minutes to complete. Please provide answers to as many questions as possible.

Additional comments to expand upon answers or that cover areas that may be beyond the scope of the survey are welcome in the 'free text' questions.

The survey will remain open until the 30th of November, however we recommend submitting your response as soon as possible.

Can I send the survey to my suppliers or other people I know in the sector?

Yes, we encourage you to send the survey link to your suppliers or other participants or consumers in the Space and Advanced Aviation sectors. This will allow the survey to reach as many organisations as possible.

What data or information will be collected?

The information we collect will relate to the Space and Advanced Aviation sub-sectors you operate in, organisational turnover, employee statistics, exports, capital investments, spending on research and development, views on barriers and future growth.

The only personal information that will be collected will be a contact name and email for the organisation (expected to be the person submitting the survey), so that we can contact you, if necessary, to clarify any responses.

How anonymous is my data?

Your responses will be treated confidentially. Results will be reported to the New Zealand Space Agency in aggregate form and no individual response will be identifiable. All data collected will be anonymised and aggregated to ensure specific information about respondents cannot be identified in the final report.

Deloitte and Space Trailblazer, working under strict confidentiality, may seek further information from you in clarification of a response made to a survey question. A NDA can be arranged if necessary.

When do you expect the survey results to be released?

The New Zealand Space Agency will determine the release date of the results. We anticipate this to be sometime in mid-2025.

Further questions?

If you have any questions about the survey, please contact survey@spacetrailblazer.space

Information about the survey

Definitions

What is the definition of **Space** used in this survey?

We have based our definition of the Space sector on the OECD definition (as per the 2019 study) to ensure there is comparability between New Zealand and other countries. This supports the positioning of the industry to international investors and other stakeholders.

It includes all organisations in the Space value chain, including manufacturing, enabling, upstream and downstream services. The following major categories and examples relate to the key areas of activity we are seeking to survey.

Space Manufacturing – the design and/or manufacture of space equipment and subsystems, including:

- Launch vehicles and subsystems
- Satellites, payloads, spacecraft and subsystems
- Scientific instruments deployed in space
- Ground segment systems and equipment
- Suppliers of material and components into space manufacturing
- Scientific and engineering support for space manufacturing
- Fundamental and applied research for space manufacturing.

Space Operations – the launch and/or operation of satellite and/or spacecraft, including:

- Launch services
- Satellite operations including sale/lease of capacity
- Ground segment operations, including third-party
- · Ground station networks.

Space Applications – applications making use of satellite signals and data, including:

- Satellite data processing
- Earth observation services and applications
- Engineering, geological, hydrological and surveying services
- Maritime situational awareness services
- Weather forecasting and meteorological services

- Location based services such as livestock monitoring and fleet management
- Environmental consulting services, agricultural services, crop monitoring, forestry monitoring and other technical consulting services
- Satellite telecommunication services
- Media and home entertainment services delivered via satellite.

Ancillary Services – specialised support services for space. Ancillary services are provided by suppliers into the sector to enable space activities; services must be directly focused on space activities and are not generic services that a space organisation happens to use, including:

- Launch and satellite insurance (including brokerage) services
- Financial services
- Legal services
- Construction
- Software and IT services
- Market research and consultancy services
- Business incubation, development, venture and investment
- Transport
- Logistics
- General component, material, engineering supply
- Tourism.

Research and Development – space-related research and development, including:

- Universities
- Institutes
- Professional training services.

Government – regulatory oversight, space-related policy making and sector development functions.

What is the definition of Advanced Aviation?

The survey's definition is based on the New Zealand Civil Aviation Authority's definition for Emerging Aviation Technologies:

"An advanced aviation technology is an all-encompassing term that refers to any aviation capability that:

- Has not been certified or approved before
- Is novel
- Is not routine
- Is not limited to unmanned aircraft."

To be considered part of this sector, you or your firm only need to meet one of the criteria. For example, if your product is (or will be) certified or approved by the CAA, but it is novel or non-routine, you are considered part of the Advanced Aviation sector.

Advanced Aviation Manufacturing – the design and/or manufacture of Advanced Aviation equipment and subsystems, including:

- Airspace design and management, uncrewed aircraft system traffic management
- Communication, navigation and surveillance (CNS), Remote identification (Remote ID) and Detect and Avoid (DAA)
- Landing sites and physical infrastructure, vertiports
- Advanced Air Mobility
- Urban Air Mobility
- · Regional Air Mobility
- New Aircraft designs
- Electric propulsion and alternative fuels
- Enabling Technologies and capabilities (cyber security, safe assurance, AI, radio frequency spectrum management).
- Software.

Advanced Aviation Operations – the operation of Advanced Aviation technology such as:

- Beyond Visual Line of Sight (BVLOS)
- · Transportation of goods, supply chain, delivery
- Transportation of people
- Simplified vehicle operations (technologies and software that automate traditional pilot tasks)
- High altitude operations
- Evolved conventional operations.

(Continues overleaf)

Information about the survey

Advanced Aviation Applications – including:

- Aerial surveying
- Drone logistics
- Uncrewed traffic managements
- Primary industry, forestry, agriculture
- Photography and filming
- Education
- Emergency management, response, search and rescue
- Police, security and defence
- Entertainment
- · Training.

Ancillary Services – specialised support services for Advanced Aviation. Ancillary services are provided by suppliers into the sector to enable Advanced Aviation activities; services must be directly focused on Advanced Aviation activities and are not generic services that a space organisation happens to use, including:

- Insurance services
- Financial services
- Legal services
- Construction
- Software and IT services
- Market research and consultancy services
- Business incubation, development, venture and investment
- Transport
- Logistics
- General component, material, engineering supply
- Tourism.

Research and Development – Advanced Aviation related research and development, including:

- Universities
- Institutes
- Professional training services.

Government – regulatory oversight, space related policy making and sector development functions.

Why has Advanced Aviation been included in this year's survey?

The recently published New Zealand Space and Advanced Aviation Strategy sets out the Government's objective of doubling the size of New Zealand's Space and Advanced Aviation Sectors by 2030. To inform future government initiatives that would support sector development and to measure the impact of those initiatives, the government needs to understand the size and other relevant characteristics of New Zealand's Space and Advanced Aviation sectors.

The New Zealand Space Agency is keen to expand the horizons of the survey to include Advanced Aviation. It aims to capture information about novel and non-routine aviation — and it includes both manned and unmanned aviation technologies and services, as well as alternative fuels.

Survey exclusions

This survey does not include commercial aircraft manufacture, maintenance and operations and airline services. Nor does it include the use of drones in recreational settings or commercial operations that do not require CAA section 102 certification.

Nevertheless, we expect some "routine" aviation companies to have innovative, relevant novel technologies they may wish to include in a response to this survey.

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Key contacts



Liza Van Der Merwe
Deloitte Access Economics partner
+64 9 303 0755
elvandermerwe@deloitte.co.nz



Lilly van Keulen Space Economist +64 4 470 3586 Ivankeulen@deloitte.co.nz



Jess Covich CEO, Space Trailblazer +64 27 227 9755 jess@spacetrailblazer.space



Rosie Cawthorne
Consultant, Space Trailblazer
+64 27 227 9755
rosiecawthorne@spacetrailblazer.: