

### The New Zealand Space Agency

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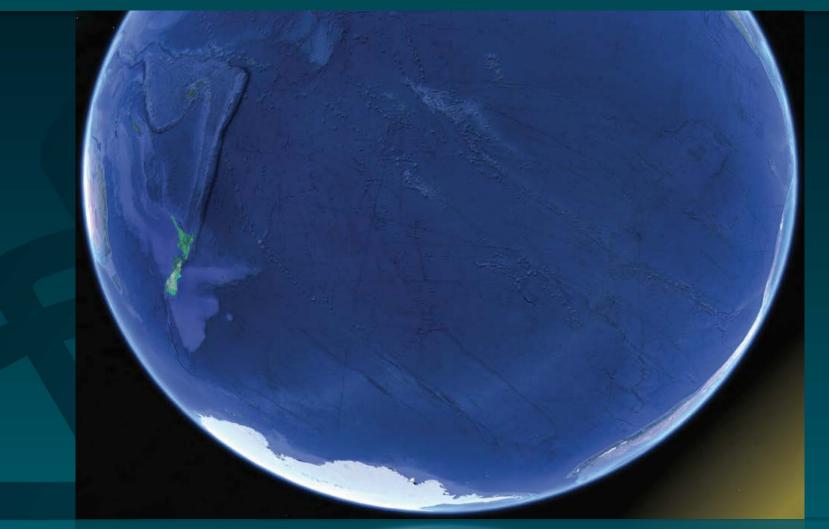
### Contents

- + The need for New Zealand Space Law
- + The Outer Space and High-altitude Activities Act Principles
- + The Outer Space and High-altitude Activities Act Licences and Permits
- + Orbital Debris Mitigation Plans (ODMP)
- + Space Situational Awareness (SSA)





### **Clear Seas and Skies**







### Rocket Lab - Electron Launch



Video Credit: Rocket Lab Webcast





### The New Zealand Launch Sector

- + Dedicated and frequent small satellite launches to LEO.
- + The world's first privately owned orbital launch site in Mahia.



### New Zealand: Space Law Timeline







# NZ Legislation: Principles

- + Facilitates the development of a safe, secure and responsible space industry in New Zealand.
- + Facilitating efficient regulation to fill gaps in domestic law.
- + Implements New Zealand's international obligations relating to space activities.
- + Enable economic development and innovation while managing risks
- +Avoid unnecessary compliance costs which could stifle the industry
- + Flexible and future focused for advances in technology.





### The Outer Space and High-altitude Activities Act



### **Outer Space and High-altitude Activities Act 2017**

Public Act2017 No 29Date of assent10 July 2017Commencementsee section 2

#### Contents





### Licences and permits

Launch licence
Payload permit
Overseas launch licence
Overseas payload permit
Facility licence
High-altitude licence







# **Orbital Debris Mitigation Plans (ODMP)**

An ODMP must be provided prior to granting a payload permit or launch licence. It must demonstrate that the measures taken by the applicant ensure:

- + release of debris during the normal operations
- + potential for break-up
- + potential for collision
- + disposed of in a way that minimises risks





# **Recognising ODMPs**

The Act allows authorisations granted by foreign countries to satisfy New Zealand's orbital debris mitigation requirements. This is intended to:

- + avoid the duplication of assessment
- + reduce the costs and regulatory burden
- + leverage the capabilities of competent authorities

Authorisations from the European Space Agency meet New Zealand's orbital debris mitigation requirements.





### Relationship With ESA

- + ESA is an international leader in orbital debris mitigation
- + We have contracted ESA to provide technical assessments
- + ESA visited the New Zealand Space Agency in September 2018
- + This visit included ODM training





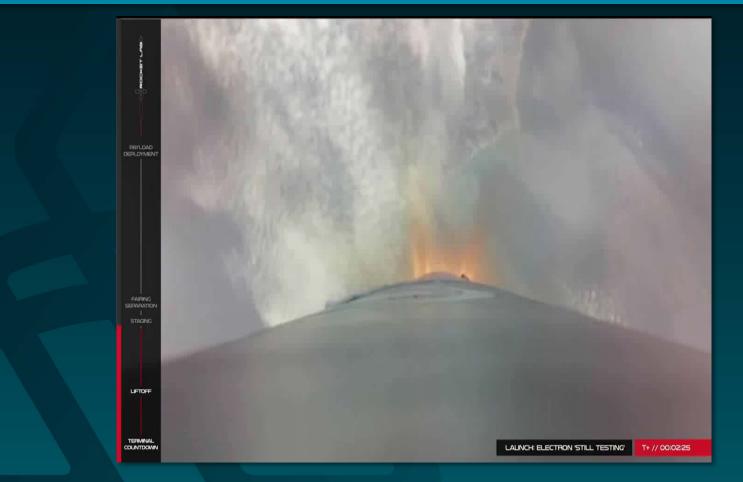
### **Space Situational Awareness**

- + Requirement to provide intended orbital parameters and comply with their ODMP.
- +We use open source data to verify, along with post-deployment reporting.
- +Opportunities to enhance oversight of space objects launched from NZ





### Questions?



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