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Page 3: Submitter Information

Q1

Personal Information

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Q2 No

Are you making this submission on behalf of a business or organisation?

Q3 Yes

Would you like to be kept informed of the outcome of the Space Policy Review?

Q4 Yes

Are you happy for MBIE to contact you if we have questions about your submission?

Q5 Respondent skipped this question

Privacy

Q6

Release of Information

I understand that if there is other information in this submission that I do not wish to be released, I will email this to spacepolicyreview@mbie.govt.nz with the subject line "Release of information", together with my reasons for withholding the information and grounds under the Official Information Act 1982, for consideration by MBIE

Page 4: New Zealand's interests in space

Q7 Other (please specify):

What are your interests and relationship to space? Pick as many as apply below:

I am a former Director of Science at the British National Space Centre, the forerunner to the UK Space Agency.

08

Please note any other interests and relationship to space below that you would like to share.

My objectives at BNSC were to ensure the UK extracted the maximum Science and Industry benefits from the Government spend on space science and included representing the UK on international bodies such as the International Mars Exploration Working Group, the International Lunar Exploration Working Group and the ESA Aurora Board for Human Exploration of Space.

Page 5: New Zealand's values in space

Q9

To what extent do you agree or disagree that these values should apply to New Zealand's space activities and engagements?

Innovation Strongly agree
Responsibility Strongly agree

Stewardship Strongly agree

Partnership Neither agree nor disagree

Q10

Are there any other values, or aspects of kaitiakitanga (guardianship), that you think should apply to New Zealand's space activities and engagements? For example, cultural values regarding space.

I would hope space activities would engage with all New Zealanders independently of ethnicity.

Page 6: New Zealand's space policy objectives

Q11

Rank these key policy objectives in order of importance to you:Click and drag to reorder the objectives from 1 (most important) to 5 (least important)

Growing an innovative and inclusive space sector 1

Modelling sustainable space and Earth environments 5

Promoting the responsible uses of space internationally 4

Protecting and advancing our national security and economic

interests

Regulating to ensure space activities are safe and secure

3

2

Page 7: Growing an innovative and inclusive space sector

Q12

To what extent do you agree or disagree that these policy objectives will help the New Zealand government to grow an innovative and inclusive space sector?

Promoting New Zealand's natural advantage for conducting space activities, and research and development expertise across the space value chain Strongly agree

Partnering within New Zealand and internationally to increase research and development capabilities

Strongly agree

Identifying opportunities to increase diversity in the space sector

Agree

Using cutting-edge space technology and space sourced data to

Agree

support New Zealand's values and interests

Q13

Do you have any comments on these policy objectives? (e.g. any suggested change to how they are framed? Is there anything missing?)

I would promote research and development expertise across the space value chain above promoting "New Zealand's natural advantage for conducting space activities" which presumably means the attraction of location and geography for launch sites.

Q14

Are there any other policy objectives that you think would help the New Zealand government to grow an innovative and inclusive space sector?

I am unclear to what extent promoting research and development capabilities means investment in basic research in academia rather than just investment in applied research and development. I hope that investment in basic research would be significant.

Q15

Do you have any questions or comments about what these objectives would mean in practice?

The objectives imply government funding to stimulate research and innovation in both industry and academia.

Choosing carefully international partners rather than becoming tied too closely to one significant major partner (NASA?).

Page 8: Promoting the responsible uses of space internationally

Q16

To what extent do you agree or disagree that these policy objectives will help the New Zealand government to promote the responsible uses of space internationally?

Advocating for effective international rules, norms and standards

in space

Strongly agree

Partnering with like-minded launch states to adopt peaceful,

Strongly agree

responsible and sustainable space practices

Collaborating internationally to increase New Zealand's influence

Strongly agree

and capabilities in the global space sector

Q17

Do you have any comments on these policy objectives (e.g. any suggested change to how they are framed? Is there anything missing?)

But New Zealand has to be very cautious about which partners it chooses. I am not sure that it was wise for New Zealand to tie itself to the NASA programme for human exploration by signing the Artemis Accords. Your strategy document makes the point well that New Zealand's space activities are New Space which has grown through commercial pressures – the human exploration programme is a return to Old Space. That programme is, as was the case for the original Apollo programme, a race driven by politics and prestige and not by what is economically and scientifically sensible. In the 19th century we had the scramble for Africa and Asia, now we have the scramble for the Moon, Mars and Asteroids.

It would have been good for New Zealand to have retained an independent voice assessing what is sensible and leading the way on United Nations Accords rather than being tied to NASA Accords. If New Zealand now wants to comment on the activities of others lining up for the scramble, for instance, China, India and the United Arab Emirates, New Zealand will now be seen as not an independent, sensible, voice but as NASA's mouthpiece.

Q18

Are there any other policy objectives that you think would help the New Zealand government to promote the responsible uses of space internationally?

Promoting objectives through the United Nations should be considered as a priority.

Q19

Do you have any questions or comments about what these objectives would mean in practice?

See the answer to 17

Page 9: Protecting and advancing our national security and economic interests

Q20

To what extent do you agree or disagree that these policy objectives will help the New Zealand government to protect and advance our national security and economic interests?

Use space assets to protect and advance New Zealand's national security and economic interests

Neither agree nor disagree

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Neither agree nor disagree

Manage the broad range of security risks in space to protect New Zealand's space industry

Collaborate with international space and security partners to pursue New Zealand's national security and economic interests

Neither agree nor disagree

Q21

Do you have any comments on these policy objectives (e.g. any suggested change to how they are framed? Is there anything missing?)

I would separate economic interests from security interests. Those are two quite separate aspects of space activities. It would be good for New Zealand to be seen as an independent voice on security interests.

Q22

Respondent skipped this question

Are there any other policy objectives that you think would help the New Zealand government to protect and advance our national security and economic interests?

Q23

Respondent skipped this question

Do you have any questions or comments about what these objectives would mean in practice?

Page 10: Modelling sustainable space and Earth environments

Q24

To what extent do you agree or disagree that these policy objectives will help the New Zealand government to model sustainable space and Earth environments?

Encouraging inclusive, sustainable space collaborations within

Strongly agree

New Zealand

Assessing the cumulative impact of space activities on the Earth environment

Strongly agree

Assisting with solving sustainability challenges through space

Strongly agree

data, including to better monitor or understand the Earth's environment

Strongly agree

Investing in New Zealand's capability to retain, grow, access and use sustainable space technologies

Q25

Respondent skipped this question

Do you have any comments on these policy objectives (e.g. any suggested change to how they are framed? Is there anything missing?)

Q26

Respondent skipped this question

Are there any other policy objectives that you think would help the New Zealand government to model sustainable space and Earth environments?

Q27

Do you have any questions or comments about what these objectives would mean in practice?

This could be an area in which New Zealand could be very influential as long as it retains its independence.

Page 11: Regulating to ensure space activities are safe and secure

Q28

To what extent do you agree or disagree that these policy objectives will help the New Zealand government to promote the responsible uses of space internationally?

Facilitating the safe and secure use of emerging space technologies from New Zealand

Strongly agree

Clarifying what New Zealand space activities are inconsistent with the national interest

Strongly agree

Promoting and protecting New Zealand's interests through

Strongly agree

permitting space technologies

Do you have any comments on these policy objectives (e.g. any suggested change to how they are framed? Is Respondent skipped this question

Q30

Q29

there anything missing?)

Respondent skipped this question

Are there any other policy objectives that you think would help the New Zealand government to ensure space activities are safe and secure?

Q31

Do you have any questions or comments about what these objectives would mean in practice?

These are very much an area in which government needs to play a key oversight role.

Space Policy Review Consultation Submission Form

Page 12: Regulating in line with our national interests

Q32

Are there any comments you would like to make about these criteria that inform consideration of the national interest?

I agree fully with the separation into acceptable and not acceptable activities

Q33

Respondent skipped this question

What questions do you have about how the national interest is considered in practice?