



Call for Proposals

Catalyst: Strategic – Space 2019

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What is Catalyst?

Introduction

The Government's ten year vision as set out in the National Statement of Science Investments (NSSI) is of a "highly dynamic science system that enriches New Zealand, making a more visible, measurable contribution to our productivity and wellbeing through excellent science".

International science and innovation connectivity will be a key contributor to achieving the NSSI's vision, as it provides an opportunity to drive increasing excellence and the potential for impact of New Zealand science.

International collaboration on science and innovation: improves the quality of research; increases end-user relevancy of research and knowledge exchange; enables firms to increase investment in innovation activities, so increasing their stock of knowledge; and provides access to additional capability and resources, which increases domestic absorptive and delivery capacity.

The Catalyst Fund

The Ministry of Business, Innovation and Employment's (MBIE) Catalyst Fund supports activities that initiate develop and foster collaborations leveraging international science and innovation for New Zealand's benefit. The Catalyst Fund seeks to achieve the following objectives:

- Targeted international partnerships which maximise the impact and quality of New Zealand science and innovation
- Emerging international science cooperation opportunities are pursued and advanced to deliver benefits to New Zealand
- International science and innovation is leveraged in key areas, delivering benefit to New Zealand at a faster pace, of better quality, or of greater impact than can otherwise be achieved.

Catalyst funding is delivered through four instruments: Influence, Leaders, Seeding and Strategic.

- Catalyst: Strategic - funds strategic research partnerships and large-scale international collaborations
- Catalyst: Seeding - supports small and medium-sized new international partnerships
- Catalyst: Leaders - supports targeted international fellowships for exceptional individuals
- Catalyst: Influence - supports New Zealand's involvement in and influence of key international forums

This Call for Proposals (CfP) invites applications for contestable funding under *Catalyst: Strategic*.

Catalyst: Strategic

Catalyst: Strategic funds strategic research and large-scale pre-research collaborations with priority partners and in targeted areas **that cannot be supported through other means**.

The objectives of Catalyst: Strategic are to:

- leverage international research infrastructure and capabilities in areas posing significant science-based challenges to New Zealand and our international partners
- profile New Zealand science and innovation, and our ability to contribute to global science challenges.

It is also expected that Catalyst: Strategic will support relevant activities that contribute to unlocking the innovation potential of Māori knowledge, resources, and people for the benefit of New Zealand, as outlined in MBIE's Vision Mātauranga policy framework.

More information about the Catalyst Fund can be found on MBIE's website.

This Catalyst: Strategic funding round

This Call for Proposals (CfP) provides you with information about **MBIE's investment objectives, how to apply, how your proposal will be assessed,** and the **contracting** process.

MBIE is inviting proposals under *Catalyst: Strategic*. \$3.0 million in total over three years is available in *Catalyst: Strategic* for investment in **satellite and space vehicle technologies** that cannot be supported through existing funding. This could include, but is not limited to, the following research areas:

- Propulsion
- Data Processing
- Sensors
- Communications
- Control
- Orbital Debris Management

MBIE has decided to fund up to six projects through this funding round. Up to \$500,000 (excl. GST) is available per successful project.

MBIE may choose to allocate leftover funding to successful applications in the event that MBIE decides to fund less than six projects. MBIE will contact successful applicants directly should this occur (you should not consider the potential for additional funding in your application).

Proposals will be assessed against the following **criteria** (refer page 18).

- **Enduring collaboration:** Will the proposed activity establish an enduring collaboration with world class international partners?
- **Novel knowledge and partnership:** Will the activity lead to the creation of new knowledge and a novel research partnership with international partners?
- **Strategic benefits:** Will the activity lead to a collaboration of strategic benefit to New Zealand?

These criteria will be interpreted through MBIE's objectives and rationale for this Investment. Please read these sections of this CfP carefully (refer pages 5, 6, and 7) and ensure that they are clearly reflected in your proposal. MBIE will not fund projects that do not contribute to its objectives for this Investment.

MBIE has identified eight **priority partners** for New Zealand's space sector development. All projects must significantly broaden and deepen collaborative research partnerships between New Zealand and organisations from at least one of the following eight partners:

- Australia
- France
- Japan
- United States
- Canada
- Germany
- United Kingdom
- European Space Agency (ESA)

This Investment is a unilateral initiative and there are no restrictions as to the shape of your collaboration partnership beyond the objectives and criteria described in this CfP.

Proposals should reflect and support **relevant Government strategies and initiatives**, to which science and innovation can make a major contribution. Such strategies include, but are not limited to, the National Statement of Science Investment, National Science Challenges, and Vision Mātauranga.

Investment Context

The New Zealand Space Agency (NZSA), under the Ministry of Business, Innovation and Employment, was set up in 2016 as the official governmental institution in charge of space policy, regulation and business development. The NZSA administers the Outer Space and High-altitude Activities Act 2017, of which the first objective is to facilitate the development of a space industry and to provide for its safe and secure operation.

New Zealand enjoys a unique geography with uncluttered launch windows, therefore enabling a high launch cadence. New Zealand also has significant advantages as a location for ground infrastructure and for Earth observation data calibration and validation. We have a modern regulatory regime for a safe, sustainable and thriving space industry and host the world's first fully private orbital launch range.

There is strong potential to grow a thriving space sector which significantly contributes to the Government's objectives of transitioning to a low carbon, knowledge-intensive, high-wage economy. However, while New Zealand has pockets of deep expertise across the science system, human capital is a key constraint to growth of the space sector. The need to develop space science and engineering capability is a key strategic priority for sector development.

This Call will be New Zealand's first strategic investment in space sector capability development and will signal the start of the New Zealand Government's space programme.

Investment Rationale

The mechanism of an open, contestable call for proposals will highlight for the New Zealand Space Agency where relevant expertise lies across the New Zealand science system. Successful proposals will rely on research organisations having invested in developing internal expertise sought by international collaborating partners. Successful projects will highlight further opportunities for sector development.

As an emerging player in the global space sector New Zealand has a strong interest in integrating the domestic science system into established global research networks. Successful proposals will require establishing connections with overseas research institutions and demonstrating the intent and ability to translate a project funded under the call into an enduring long-term partnership of strategic value to New Zealand. This will also assist the NZSA in establishing new relationships with overseas counterparts.

Funding multiple projects through a contestable call will enable the New Zealand science system to establish or deepen a number of collaborative partnerships. Should additional funding be available in the future, these partnerships could potentially lay a platform for future investments.

The thematic focus of this Call reflects New Zealand's new small launch capability and the priority of addressing the opportunities and challenges associated with it. These include developing solutions to managing orbital debris and enhancing the functionality of small satellites. This investment will enable New Zealand research organisations to collaborate with global experts working on solving these problems. It will also assist in establishing New Zealand as a research and development hub for small satellites and the use of Low Earth Orbit. Broader sector development, including improving national capability in applying Earth observation satellite data, will be addressed in other initiatives.

Investment Objectives

This Call will contribute to the overarching objective of accelerating the development of space sector capability in New Zealand. This impact will be realised in aggregate, across the projects that will be funded under this call.

The Call should (in no particular order):

- support the development of space technology research within New Zealand
- enable New Zealand researchers to gain practical experience through contributing to space missions and advanced research programmes
- generate new knowledge that addresses challenges and opportunities in developing New Zealand's space sector
- catalyse international relationships for emerging centres of space technology capability in New Zealand
- support relationships with a range of priority international space research partners
- establish platforms for possible larger-scale future research collaborations
- gain greater international visibility for New Zealand as an emerging 'new space' player

Key dates

12 April 2019	Registration opens Submit registrations to internationalscience@mbie.govt.nz
30 April	IMS portal opens for proposals
6 May 2019	Closing date for registrations
26 May 2019	Closing date for proposals
June 2019	Investment funding decision(s) announced
30 June 2019	Contracts expected to begin

Key reference documents

- National Statement of Science Investment 2015-2025
- Vision Mātauranga

Further information

Email: Proposal queries: internationalscience@mbie.govt.nz
Portal queries: imssupport@mbie.govt.nz

Phone: 0800 693 778 (Monday to Friday, 8:30am to 4:30pm) for portal queries

You can also [subscribe](#) to MBIE's Alert e-newsletter.

Funding opportunities

What funding is available?

New Zealand research teams can apply for up to \$500,000 (excl. GST) of funding over three years. Your budget should generally distribute this funding evenly across those years.

Who can apply?

This funding opportunity is open to both public and private **research organisations**. A research organisation is an organisation that has internal capability for carrying out research, science or technology, or related activities.

Eligibility Criteria

For a proposal to be assessed under this Catalyst: Strategic funding round, it must meet the eligibility criteria set out below. Proposals that MBIE determines do not meet these criteria will be declined for funding on eligibility grounds:

- The proposal must involve a collaboration with organisations from at least one of the priority partners for this investment (Australia, Canada, France, Germany, Japan, United Kingdom, United States, and the European Space Agency).
- The proposal must be made by a New Zealand-based research organisation or a New Zealand-based legal entity representing a New Zealand-based research organisation.
- The Science Leader must be employed by a New Zealand-based research organisation, or a New Zealand-based legal entity representing a New Zealand-based research organisation.
- The proposal must not be made by a department of the public service as listed in Schedule 1 of the State Sector Act 1988.
- The proposal must be uploaded on time via the MBIE Portal and meet the administrative requirements of MBIE.
- Applicants must have submitted a registration to internationalscience@mbie.govt.nz by the due date; 6 May 2019.
- Details listed in the registration must be substantively the same as listed in the proposal.
- Applicants must not submit multiple applications to this Catalyst: Strategic funding round based on the same project, where the only difference is in the duration of the proposed project or the amount of funding sought. Should the same New Zealand research team decide to submit more than one proposal they must demonstrate significant differences between those proposals. If a New Zealand research team submits multiple proposals based on the same project, all proposals for that project may be deemed ineligible.

Proposals that MBIE determines do not meet these criteria will not be assessed. MBIE may, at its discretion, notify applicants of eligibility issues with their registration submissions and suggest potential solutions.

Expenses

Allowable expenses

Expenses allowed under Catalyst: Strategic include the following, in connection with the project.

Expense	Details
Research activities	Expenses for consumables and other research expenses Expenses for personnel Contributions to pro-rated salaries
Research exchanges	Travel is expected to be an integral part of the project. Flights, accommodation, visas, travel insurance, ground transport, and meal expenses are permitted and should be based on the rules of the organisations with which the individual undertaking the activity is affiliated.

Expenses not funded

The following expenses will not be funded under Catalyst: Strategic:

- Acquisition of real estate or construction of buildings
- Procurement of equipment
- Any capital expenditure
- Dealing with accidents or disasters during the term of the contract
- Expenses for alcoholic beverages (for example at meetings)
- Expenses unrelated to the delivery of the contract.

The Investment Process

The application timeline



Process for applicants

The investment process consists of four stages:

- 1. Registration:** Applicants complete the registration form and submit it to MBIE at internationalscience@mbie.govt.nz. Registration is compulsory and includes the submission of a proposal outline to enable MBIE to identify suitable assessors. MBIE may provide brief feedback on an application after registration closes and will decline applications at this stage if there are unresolvable eligibility issues.
- 2. Proposal:** Applicants submit a full proposal through MBIE's Investment Management System (IMS). This should be an expansion upon the outline provided in Registration and proposals should be substantively similar to the original registration.
- 3. Assessment:** Independent Assessors review the full proposals against the Catalyst: Strategic assessment criteria and, where relevant, the Vision Mātauranga policy. The names of assessors will be published on MBIE's website prior to the assessment.

Based on the Assessor evaluations and portfolio balance, MBIE will then make a final decision on the proposals to be funded.
- 4. Contracting:** MBIE will enter into a Catalyst: Strategic Contract and an associated Work Programme Agreement with successful applicants (subject to any pre-contractual conditions being met). MBIE will only enter into a Science Investment Contract with a New Zealand based legal entity.

MBIE may set pre-contractual conditions that must be met before entering into a contract, set special contract conditions, and/or vary the funding allocated from that requested.

Preparing and submitting your registration and proposal

Submit your registration for this Call by returning your completed registration form to MBIE at internationalscience@mbie.govt.nz. Submitting your application for Catalyst funding is performed in MBIE's Investment Management System (IMS), a secure online electronic portal. For information on MBIE's Portal and the information you need to provide, see 'Submitting your Proposal in MBIE's Portal'.

The proposal process requires that you provide details about your:

- project;
- organisation;
- research team; and
- funding.

Applicants must submit this information in the MBIE Portal within the timeframes required. Once submitted, this information is reviewed as part of the assessment process. Please ensure that it is accurate and complete. It will also form the basis of successful applicants' contracts.

Information provided in your full proposal must be consistent with that contained in your registration. If there are any notable discrepancies between the information provided through the two phases, MBIE reserves the right to deem such proposals ineligible. If in doubt, or you believe the circumstances merit a substantial change between the two stages, please contact MBIE at internationalscience@mbie.govt.nz.

We recommend you familiarise yourself with the portal before starting your proposal. We also recommend that you copy and paste from a word editor of your choice rather than typing the information directly into the portal – this will help you keep a back-up of your application.

ANZSRC codes

An ANZSRC (Australian and New Zealand Standard Research Classification) code is a standard classification that allows research and development activities to be categorised according to their intended purpose or outcome. Definitions are available online at the *Australian Bureau of Statistics*.

We have asked you to identify up to two Socio-Economic Objective (SEO) codes and two Field of Research (FOR) codes in your registration as we will use these to help select assessors for your proposal.

Given the rapid developments in new space technologies, we understand that existing codes may not necessarily align perfectly for all proposals. If this occurs, try to align your codes as closely as possible to the subject area of your research. Contact MBIE at internationalscience@mbie.govt.nz if you have any concerns

SEO Codes Please provide up to two SEO ANZSRC codes, and allocate the percentage of relevance against each code, totalling 100%.	FOR Codes Please provide up to two FOR ANZSRC codes and allocate the percentage of relevance against each code, totalling 100%.
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The application forms

The questions that you are required to answer in your proposal are detailed on the following pages. The guidelines on areas to consider and suggested content are provided for guidance when developing your proposal and are not an exhaustive list of information you might want to provide.

Eligibility	Please provide a brief description of your proposed collaboration. This information does not need to be final; we understand that it is likely to develop during the crafting of your proposal.	
	<p>Do you represent a department of the public service, as listed in Schedule 1 of the State Sector Act 1988? Yes or No?</p> <p><i>Please note that departments of the public service are ineligible for this Call.</i></p>	

Proposal	<i>Abstract</i>	Provide a brief summary of your proposal. Write clearly and concisely. Your summary will be used, inter alia, by MBIE to identify assessors and any potential conflicts of interest. Do not use acronyms, abbreviations, or images. Your abstract must not contain commercially sensitive information.	(600 words)
	<i>Objectives</i>	Provide a concise, high-level description of what you plan to achieve during the project. The focus should be on how the collaborative activities will support the research project.	(250 words)
	<i>Research Area</i>	<p>Specify the research area(s) that best describes a major focus of your proposed research. This could include, but is not limited to, the following:</p> <ul style="list-style-type: none"> > Propulsion > Communications > Data Processing > Control > Sensors > Orbital Debris management. 	(20 words)
	<i>Keywords</i>	List up to 15 keywords that describe the nature of your proposal. Keywords will help us to align assessors for your proposal.	

Other Information	<i>ANZSRC Codes</i>	<p>Specify no more than two:</p> <ul style="list-style-type: none"> > Field of Research (FOR) ANZSRC codes > Socio-Economic Objective (SEO) ANZSRC codes <p>For each code, specify a percentage of relevance totalling 100% under each category. The codes selected will be used to select Assessors for your Proposal.</p> <p>An ANZSRC code is a standard classification that allows research and development activities to be categorised according to their intended purpose, outcome and/or discipline. See the Australian Bureau of Statistics for more details.</p> <p>If you have not used ANZSRC codes before, the University of Western Australia has a useful code finder at https://eis.uwa.edu.au/Utilities/ANZSRC</p>
	<i>Conflicts of Interest</i>	Identify any person who has a potential conflict of interest with the proposal and provide details. Outline any proposed arrangements to manage identified conflicts of interest.

Information Required for Full Proposal

There are eight sections to complete; *Summary, Eligibility, Proposal, Excellence and Impact, Key Performance Indicators, Team, Budget, and Other information*. You are required to submit your proposal through MBIE's IMS system (refer pages 23-27). We recommend that you familiarise yourself with the portal well before the deadline: *12:00pm, 27 May 2019*. The following table is a summary of the information required.

Title of Project	Enter your title from Registration	(15 words)
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Summary Information	<i>NZBN</i>	The NZBN and registration number (if applicable) populate automatically. The registration number applies if you are an incorporated society, charitable trust or company. If these fields are blank, email these details to imssupport@mbie.govt.nz . NZBN / Registration numbers allow MBIE to check that you are a New Zealand legal entity.	
	<i>Total Funding Requested</i>	Up to \$500,000	
	<i>Duration of Project</i>	Maximum of three years after contract begins	
	<i>Start Date</i>	Contracts are expected to begin by 29 June. Successful proposals should begin shortly afterwards.	
	<i>End Date</i>	Maximum of three years after proposal begins.	
	<i>Contact Person</i>	Provide the name, contact phone number and e-mail address for the primary contact person for the project. This contact must have the mandate to discuss the proposal with MBIE officials.	
	<i>Research Area</i>	Specify the research area(s) that best describes a major focus of your proposed research. This could include, but is not limited to, the following: <ul style="list-style-type: none"> ▪ Propulsion ▪ Communications ▪ Data Processing ▪ Control ▪ Sensors ▪ Orbital Debris management 	(20 words)

Eligibility	Key questions:	(100 words)
	<ul style="list-style-type: none"> ▪ Has your eligibility changed since you completed your registration (refer to the eligibility criteria on page 7)? Yes or No? ▪ Are there any substantive differences between the information in contained in your registration and proposal? Yes or No? <p>If you answered Yes to either question, please briefly explain why.</p>	
	<p>Is the applicant of this proposal a New Zealand-based research organisation or a New Zealand-based entity representing a New Zealand-based organisation? Yes or No?</p> <p><i>A research organisation is an organisation that has internal capability for carrying out research, science or technology, or related activities.</i></p>	
	<p>Provide the name of the Science Leader for your proposal. Are they employed by a New Zealand-based research organisation, or a New Zealand-based legal entity representing a New Zealand-based research organisation? Yes or No?</p>	
	<p>Have you identified suitable research collaborators from a leading research organisation(s) from one of the following priority partners?</p> <ul style="list-style-type: none"> > Australia > Canada > France > Germany > Japan > United Kingdom > United States > European Space Agency (ESA) 	
<p>Do you represent a department of the public service, as listed in Schedule 1 of the State Sector Act 1988? Yes or No?</p> <p><i>Please note that departments of the public service are ineligible for this Call.</i></p>		

Proposal	<i>Executive Summary</i>	Summarise the overall objective of your research proposal and how you will achieve it, including:	(600 words)
		<ul style="list-style-type: none"> ▪ why your research is needed, i.e. the issue or problem you are addressing (you may find it helpful to refer to MBIE’s overall objectives for this Call) ▪ what you are aiming to achieve ▪ what you propose to do (your hypothesis and scientific approach) ▪ the results, impacts or outcomes you expect, how they will be achieved, and who will use or benefit from them. <p>The Executive Summary is your opportunity to introduce Assessors and MBIE to your research, the potential impact(s) of that research, and your methodology.</p> <p>Do not include references, hyperlinks, images, video, or audio files.</p>	(also over page)

Proposal	<i>Public Statement</i>	<p>The public statement may be published on MBE's website if your proposal is funded. The statement is not used for the purpose of assessment.</p> <p>It is important to capture the essence of your research in a way that can be understood by a wider audience and can be used for media purposes. Include, if required, publishable contact details that can be used by members of the public and/or the media.</p> <p>Do not include confidential information or references, hyperlinks, images, video, or audio files.</p>	(400 words)
	<i>Research Plan</i>	<p>Explain:</p> <ul style="list-style-type: none"> ▪ your chosen approach and how you will achieve your research objectives ▪ the technical risks you have identified, and the steps you have taken or will take to mitigate or manage them ▪ If relevant, your proposed approach to manage intellectual property <p>Your Research Plan should be understandable to Assessors, regardless of their specific field of expertise. You may include images but not hyperlinks, video, or audio files.</p>	(400 words)
	<i>International Collaboration</i>	<p>Specify the organisation(s) you are collaborating with, their country of origin and their contribution to your research. This should include an indication of full-time equivalent (FTE) effort, key researchers or other resources identified to be contributed (for example, access to specialised equipment).</p>	(300 words)

Excellence and Impact (refer to Assessment Guidelines and Appendix 2)	<i>Novel Knowledge and partnership</i>	<p>Key questions:</p> <ul style="list-style-type: none"> ▪ Will the activity lead to the creation of new knowledge and a novel research partnership with international partners? ▪ Does the proposal demonstrate the relevant excellence of the New Zealand participants, and the contribution each will make to the project? 	(650 words)
	<i>Enduring Collaboration</i>	<p>Key question: Will the proposed activity establish an enduring collaboration with world class international collaborators?</p>	(500 words)
	<i>Strategic Benefits</i>	<p>Key question: Will the activity lead to a collaboration of strategic benefit to New Zealand?</p>	(500 words)

Key Performance Indicators	<p>Detail how the Project will measure its performance throughout the life of the Project through Key Performance Indicators (KPIs). A KPI will include a measure, targets and dates to be achieved.</p> <p>The KPIs should show how progress towards delivery of the Project’s objective and post-contract outcomes will be measured with targets to be achieved during the life of the contract.</p> <p>KPIs should include the following six performance areas:</p> <ul style="list-style-type: none"> > Delivery of objective > International collaboration > Governance and management > Sustainability > Vision Mātauranga > Capability development <p>MBIE will confer with you on KPIs based on these drafts during the contracting process.</p> <p>Enter a schedule for each of the above KPIs, using the table below as an example. Please include a target for June each year to be reviewed as part of your project’s annual progress.</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">PERFORMANCE AREA</th> <th style="text-align: left;">MEASURE</th> <th style="text-align: left;">TARGET</th> <th style="text-align: left;">DATE</th> </tr> </thead> <tbody> <tr> <td rowspan="3" style="vertical-align: top;">e.g. Delivery of the Objective</td> <td>e.g. No.</td> <td>2 to x stage</td> <td>30 June 2020</td> </tr> <tr> <td>technologies developed</td> <td>4 to x stage</td> <td>30 June 2021</td> </tr> <tr> <td>through the Partnership</td> <td>2 to x stage</td> <td>30 June 2022</td> </tr> </tbody> </table>	PERFORMANCE AREA	MEASURE	TARGET	DATE	e.g. Delivery of the Objective	e.g. No.	2 to x stage	30 June 2020	technologies developed	4 to x stage	30 June 2021	through the Partnership	2 to x stage	30 June 2022
PERFORMANCE AREA	MEASURE	TARGET	DATE												
e.g. Delivery of the Objective	e.g. No.	2 to x stage	30 June 2020												
	technologies developed	4 to x stage	30 June 2021												
	through the Partnership	2 to x stage	30 June 2022												

Budget	<i>Work Programme</i>	<p>In the field called ‘Work Programme’:</p> <ul style="list-style-type: none"> ○ Click “add a milestone”. You only need to add one milestone. ○ When on the new page, enter SPACE as your milestone title. <p>No further text is required under ‘Work Programme’. This enables you to use the Budget section.</p>
	<i>Funding Requested</i>	<p>Provide details of how you will apportion the total amount of MBIE funding requested across the length of your project on an annual basis.</p>
	<i>Budget</i>	<p>Submit an annualised budget for the project. Funding does not allow for annual inflation adjustments over the term of the contract.</p> <p>Total income must equal total expenditure.</p>

Team	<i>Key Researchers and Individuals in research teams</i>	<p>For each year of funding, identify the project team members. As a minimum, one of each of the following roles is required:</p> <ul style="list-style-type: none"> ▪ Contract manager ▪ Science Leader (must be a New Zealand-based researcher): this is the researcher with responsibility for leading science/research; typically this is the Project Director ▪ Key Researchers in New Zealand and/or Internationally: these are team members involved in research, whose expertise is critical to the success of the project. They may be from a contracted organisation. ▪ Key Individuals in New Zealand and/or Internationally <p>CVs are required for the Science Leader, Key Researchers and Key Individual team members identified in the proposal. These do not have to be in the standard RS&I format.¹</p>
	<i>FTEs</i>	Indicate the Full-time Equivalent (FTE) proportion of each team member's (except Contract Manager) contribution to the project.
	<p>¹ Please note, as part of MBIE's diversity policy, these roles will be invited to register separately in the IMS Portal where the following information will be captured:</p> <ul style="list-style-type: none"> • Gender • Ethnicity • Career Stage • Date of Birth. <p>For more information on the collection of diversity information, see MBIE's IMS portal webpage.</p>	

Other Information	<i>ANZSRC Codes</i>	<p>Specify no more than two:</p> <ul style="list-style-type: none"> > Field of Research (FOR) ANZSRC codes > Socio-Economic Objective (SEO) ANZSRC codes <p>For each code, specify a percentage of relevance totalling 100% under each category. The codes selected will be used to select Assessors for your Proposal.</p> <p>An ANZSRC code is a standard classification that allows research and development activities to be categorised according to their intended purpose, outcome and/or discipline. See the Australian Bureau of Statistics for more details.</p>
	<i>Conflicts of Interest</i>	Identify any person who has a potential conflict of interest with the proposal and provide details. Outline any proposed arrangements to manage identified conflicts of interest.

Tips for writing a good proposal

Before developing your proposal, you must consider the:

- Eligibility Criteria (page 7); and
- Appendix 1: Terms and conditions that apply to this Call for Proposals.

If you believe you meet the eligibility criteria and agree with the terms and conditions, then now is a good time to start thinking about the content of your proposal. In particular, make sure the content aligns to the:

- Government's goals for the Fund; and
- Assessment criteria in the next section.

It is also a good idea to look at the factors that assessors are being asked to consider when assessing proposals, so we also recommend that you consider the Catalyst: Strategic scoring system (Appendix 2).

The following are general tips for a focused, well supported and clear proposal. The assessment panel can only assess what is in the proposal so it is important to ensure that all key information is present. Please note that any text included in external links will not be considered.

Be succinct

Make every sentence count. A small amount of carefully crafted content is much better than a lot of unfocused content.

Explain local or specialist language

Assessors may not know the subject areas or areas of activity in the proposal in detail. If local or specialist terms are being used, they should be sufficiently explained.

Provide context for your idea

Both assessment panels may need to know where and how activity in the proposal fits into the science and innovation landscape, including links or relationships to existing cyber-research capability building or research projects, nationally and internationally.

Personnel and delivery

Assessors want to know that the proposal utilises experienced, skilled and suitable people. Identify what your organisation and the proposed sub-contractors do and demonstrate that your team has the skills to deliver the project by providing relevant information on key individuals, including CVs or relevant examples of their experience and skills.

Capability development

Assessors want to know how your proposal builds capability. Be clear about what new skills, relationships and knowledge will be developed in the course of the project. Explain in your proposal how your project will include and upskill post-doctorate and PhD students.

Clear and logical

Make sure the proposal is clear and logical, in particular how any activity will lead to the proposed outcomes. Provide evidence where appropriate to support the proposed activity and outcomes.

Evidence of proposed outcomes

Where relevant ensure you support your proposed ideas, approaches and outcomes with appropriate evidence.

Ethical, data management and regulatory compliance and consent

As necessary, ensure that any issues of ethical approval and regulatory compliance are addressed. Ensure that any issues around privacy and data sovereignty are addressed.

How will your proposal be assessed?

To be assessed, your proposal must meet the eligibility criteria set out on page 7. If it meets these eligibility criteria, it will be assessed against the assessment criteria (detailed below) by independent assessors, who will then provide advice to MBIE. Information provided during registration will not be assessed.

Pursuant to section 5(2) of the Research, Science and Technology Act 2010, and as set out in the New Zealand *Gazette* Notice Number 3833, 7 July 2016, the Catalyst Fund is subject to a separate decision-making process. For the Catalyst Fund, MBIE determines the decision-making process and makes funding decisions.

The Catalyst: Strategic fund will use competition to drive an increasing focus on excellent research with impact in areas of future value, growth and critical need for New Zealand. This reflects the vision set out in the NSSI that we should strive for greater excellence and impact in publicly funded research.

The assessment process

1. MBIE reviews applications to ensure they meet the eligibility criteria
2. MBIE assigns eligible proposals to assessment panel members for assessment
3. Each proposal is individually assessed – scores and assessment comments are entered into the MBIE Portal
4. MBIE will hold an assessment panel meeting to compare scores and agree on a final funding recommendation to MBIE as to which proposals merit being funded, and which do not.

Assessment criteria

		Assessment criteria	Weighting
EXCELLENCE		NOVEL KNOWLEDGE AND PARTNERSHIP Key question: Will the activity lead to the creation of new knowledge and a novel research partnership with international partners?	40%
	IMPACT	ENDURING COLLABORATION Key question: Will the proposed activity establish an enduring collaboration with world class international collaborators?	30%
		STRATEGIC BENEFITS Key question: Will the activity lead to a collaboration of strategic benefit to New Zealand?	30%

For a further explanation of the assessment criteria, please refer to the Assessment Criteria detailed on the next page.

Assessment criteria

The criteria listed below are intended to deliver on the Catalyst Fund outcomes and objectives, and the vision set out in the NSSI that we should strive for greater excellence and impact in publicly-funded research. As much of our science as possible should be of the highest quality by international standards and that investment should have clear line of sight to eventual impact. International collaboration can positively impact the excellence and impact of our science.

These criteria should be read in concert with objectives and rationale for this Call listed on pages 4-5. You are expected to outline out how your proposal will deliver against these objectives. Please note that the Call's objectives are not tied to a specific assessment criteria category, and will be assessed against your entire proposal.

You may also find it helpful to read the Catalyst: Strategic Assessment Scoring Guide found in Appendix 2 (pages 28-29).

Novel knowledge and partnership (40%)

Will the activity lead to the creation of new knowledge and a novel research partnership with domestic and international partners? You should include information on how the:

- international collaborator(s) will bring world-leading knowledge that complements the New Zealand research team's skills and knowledge
- proposed New Zealand partners bring world-class capability to the project and how each of these researchers will be expected to contribute to delivery of the entire project
- proposed collaboration will support a new partnership or a new research focus for an established collaboration
- proposal will deliver against the relevant objectives for this Call, particularly over the short-term.

Enduring collaboration (30%)

Will the proposed activity establish an enduring collaboration with world class international collaborators? You should include information on:

- track record and excellence of the researchers on the project team (relative to opportunity)
- demonstrable excellence of the international partner research organisation(s)
- potential of the collaboration to create an enduring partnership
- ability of the project team to deliver on proposed activities
- how the proposal will deliver against the relevant objectives for this Call, particularly over the short-term.

Strategic benefits (30%)

Will the activity lead to a collaboration of strategic benefit to New Zealand? You should include information on the:

- ability to leverage international investment, facilities and infrastructure not available in New Zealand
- pathway to build a substantive collaboration beyond an initial engagement that is in line with New Zealand's science priorities
- ability of the applicant to bring together relevant New Zealand research capabilities to form a strategic collaboration.
- proposal's approach to delivering against the relevant outcomes set out in the investment objectives and rationale for this Call.

Assessment criteria

When assessing proposals against the assessment criteria, MBIE will also take the following factors into account, including the extent to which the overall mix of investments:

- are likely to achieve the objectives of this CfP and Catalyst: Strategic (see What is Catalyst?)
- are likely to unlock the science and innovation potential of Māori knowledge, resources, and people for the benefit of New Zealand in accordance with the aim of the Vision Mātauranga policy
- will ensure that funding is not concurrently provided in respect of any two or more programmes of research, science, technology or related activities that are the same or similar (whether those proposals are part of a new proposal, or are already being funded), and
- will minimise the risk that an applicant will not be able to undertake the relevant programme of research, science or technology, or related activities because the applicant or any person involved in delivering the programme, would concurrently be committed to one or more other programmes (whether those proposals are part of a new proposal, or are already being funded).

Assessors

Assessors will be selected for their ability to contribute to one or more of the following criteria:

- Scientific knowledge relative to the range of topics covered by the research areas
- Broader international strategic expertise and experience
- Knowledge about complex international research programmes
- Knowledge of the national and international cyber security environment

There will also be an independent, non-scoring chair. The names of Assessors will be published through MBIE's Catalyst Fund webpage at a later date.

The role of the Assessors is to assess and provide advice to MBIE as to what projects are deemed high quality and fundable, and their relative rankings.

Conflicts of interest

MBIE will post a list of potential Assessors on MBIE's website before the panel assessment so you may check for, and advise MBIE of, any direct or indirect conflicts of interest. An MBIE Alert will be issued when Assessor names are posted on the website.

If you identify that an Assessor has either a direct or an indirect conflict of interest, you must notify MBIE by including details in the conflicts of interest section of the proposal or by emailing internationalscience@mbie.govt.nz with the details for further discussion.

What is considered a conflict of interest?

Conflicts of interest for Assessors may occur on two different levels:

A **direct conflict of interest** is where an Assessor:

- is directly involved with a Proposal (as a participant, manager, mentor, or partner) or has a close personal relationship with the applicant, for example, family members, or
- is a collaborator or in some other way involved with an applicant's Proposal.

An **indirect conflict of interest** is where an Assessor:

- is employed by an organisation involved in a Proposal but is not part of the applicant's Proposal
- has a personal and/or professional relationship with one of the applicants (for example an acquaintance), or
- is assessing a Proposal under discussion that may compete with their business interests.

The decision process

MBIE will make the final funding decision. MBIE will take into account the recommendations made by the Assessors, and MBIE's total investment across the Catalyst Fund to ensure it is a balanced portfolio across topic areas. Accordingly, MBIE may decide to either:

- approve your Proposal
- decline your Proposal
- approve your Proposal with conditions that may need to be met before or during the contract, or
- approve your Proposal, but for an adjusted amount of funding.

In making its investment decisions, MBIE may also:

- set pre-contract conditions which must be met before the investment is contracted
- set special conditions in addition to the general terms and conditions set out in the Catalyst Fund Contract, which is available on MBIE's website
- assess the appropriateness of the budget submitted with the Proposal
- vary the proposed term of a Proposal, either by setting a different term to that proposed or by stage-gating the investment, i.e. by requiring certain conditions to be met at a point in the term, before the Proposal is funded for the full term, or
- vary the funding allocated from what is proposed and require critical performance indicators to be renegotiated to MBIE's satisfaction to reflect the changed funding.

Please note:

- Proposals MUST demonstrate excellent science. MBIE will not fund research that does not demonstrate sufficient excellence.
- MBIE may choose not to fund any applications if they do not sufficiently address the criteria and issues with proposals cannot be rectified to MBIE's satisfaction.
- Participation in the investment process does not guarantee funding.

Notifying you of the outcome

When a decision about your Proposal has been made, MBIE will advise the contact person listed in your Proposal by email. MBIE may also contact this person to discuss the decision.

Following notification, MBIE will publish its decisions and may announce these with a press release. The details MBIE or the Research, Science and Innovation Minister may make public are the:

- name of the applicant organisation and any other parties participating in the project
- name of any applicant
- short title of your project
- description and public statement of the proposed project
- total amount of funding applied for and awarded
- duration of your project, and
- the fact that the project has been funded from the Fund.

Meeting the New Zealand Government's data requirements

MBIE is committed to ensuring that all science data generated through its investments meets minimum expectations of good data management and public availability. If you receive funding, MBIE expects you to comply with the New Zealand Government Open Access and Licensing Framework. This framework advocates the use of creative commons licences.

The contracting process

If there are any pre-contract conditions, these must be completed to the satisfaction of MBIE before MBIE will prepare and send you a contract. If you are unable to meet any pre-contract condition by the due date, you need to inform us as soon as possible before that due date. We will discuss and may renegotiate the conditions and/or extend the due date.

Subject to completion of any pre-contract conditions, contracts will be sent to your organisation for signing immediately following notification. You will be required to return the signed contract by **29 June 2019**.

If you are unable to sign and return the contract by **29 June 2019** you need to inform us as soon as possible.

The terms and conditions of the Catalyst Fund Contract will apply to the provision of funding agreed between MBIE and the contracting organisation. By submitting a proposal, you are agreeing to accede to the terms and conditions of the Catalyst Fund Contract, which is available on MBIE's website. We advise that you seek any required legal advice or review as early as possible regarding the acceptance of standard terms and conditions so as not to delay contract signing.

Submitting your Proposal in MBIE's Portal

Registrations and proposals are entered and submitted using MBIE's Investment Management System (IMS) – a secure, online portal. This process comprises two stages:

1. Registering for access to the IMS portal (this step is only required if you do not already have access)
2. Submitting your proposal.

Accessing MBIE's IMS Portal

If you have not used the IMS Portal before, you need to complete and email an access registration form to imssupport@mbie.govt.nz. On acceptance, you will receive a username, temporary password and instruction on how to access.

For returning applicants: log in using your existing username and password. If you've forgotten this, use the 'I've forgotten my password' option.

Note: Five or more failed log-in attempts will automatically lock you out of the system. If this occurs, contact the Investment Operations Team and ask for your account to be unlocked.

For all IMS portal queries, e-mail or call the Investment Operations Team:

Email: imssupport@mbie.govt.nz

Phone: 0800 693 778 (Monday to Friday, 8:30am to 4:30pm)

IMS Portal icons

In the IMS Portal, mandatory fields are denoted by an asterisk (either red or black).

- Fields with a red * must be completed before you can save and close the current section
- Fields with a black * must be completed before you can submit your proposal.

We recommend that you regularly click the Save button to save work as you are going.

Symbols alongside each section in the navigation panel allow you to easily check the completeness of your submission.

The symbol...	indicates that the section...
	has not started.
	is in progress.
	contains invalid or incomplete fields.
	is complete and is valid.

To submit a proposal

1. From the Home screen of IMS portal, click the **Project List** tab.
2. Click the **New Application** button (located to the right of the screen).



3. On the resulting screen, select **2019 Catalyst Strategic Investment: Space** from the **Investment Process** field. Click the **Create** button to start your Proposal.

Investment Process	<input type="text" value="2019 Catalyst Strategic Investment: Space"/>
Phase	<input type="text" value="Proposal"/>
Title	<input type="text"/>

4. Complete the required fields. We recommend that you familiarise yourself with the portal well before the deadline.

Note:

- Information provided through the registration must be consistent with that to be contained in the proposal. If there are any notable discrepancies between the information provided through the two phases, MBIE reserves the right to deem such applications ineligible.
- In the field called 'Work Programme':
 - Click "add a milestone". You only need to add one milestone.
 - When on the new page, enter **SPACE** as your milestone title.
 - No further text is required under "Work Programme." This enables you to use the Budget section.

5. Develop in Word and copy and paste. Adhere to word limits.

Notes:

- See Developing your proposal section on pages 13 – 17 for more information about the fields
- All forms of documents (for example Excel, Word and unsecured PDFs) can be uploaded to the portal. We will not be able to access or print your proposal if you load a secured PDF.

6. If you are adding **Science Leader** or **Key Researcher**, complete the following extra steps:

If they are already in IMS with an email address:

- a. Click the Invite for ORCID Integration button - 
- b. Click the **Send** button.
- c. Click the **Save** button.

If they are not already in IMS or don't have an email address already loaded:

- a. Enter the persons email address in the field.
- b. Highlight and copy the email address.
- c. Click the Invite for ORCID Integration button - 
- d. Paste the email address into the pop up window and click the **Send** button.
- e. Click the **Save** button.

7. When you have completed all sections, scroll to the top of left hand navigation panel and click the **Submit proposal** section.

- Click the **Check my application before submission** button to run a validation check. This check will verify the completeness of your application and will detect any missing content.

Notes: If the validation is successful, every section in the navigation panel is marked with the symbol . If errors and/or incomplete fields are detected, these will display as:

- light blue error message hyperlinks in the proposal validation result section
 - a or beside the relevant sections.
- Click the first error message to open the section, make the required corrections/additions and click the **Save** button.
 - If applicable, repeat the above step for other sections marked with or .
 - Once you have corrected all of the errors and/or added all of the missing information, click the **Submit proposal** section then the **Check my application before submission** button again.
 - On achieving a successful validation, click the **Submit to IMS** button.

Appendix 1: Terms and conditions that apply to this Call for Proposals

The terms applying to this Fund are set out below. The terms and conditions are non-negotiable and do not require a response. Each applicant that submits a proposal will be deemed to have agreed to these terms and conditions without reservation or variation.

INVESTIGATIONS AND RELIANCE ON INFORMATION

Applicants must examine this document and any reference documents, and carry out all necessary investigations before submitting a proposal. If in doubt as to the meaning of any part of these guidelines, applicants must set out in their proposal their interpretation and assumptions.

RELIANCE BY APPLICANTS

All information contained in this document or given to any applicant by MBIE is for the purpose of allowing that applicant to prepare its proposal. MBIE has endeavoured to ensure the integrity of such information. However, it has not been independently verified and may not be updated.

RELIANCE BY MBIE

MBIE may rely upon all statements made by any applicant in its proposal and in correspondence or negotiations with MBIE or its representatives. If an applicant's proposal is approved by MBIE, any such statements may be included in the contract.

Each applicant must ensure all information provided to MBIE is complete and accurate. MBIE is under no obligation to check any proposal for errors, omissions, or inaccuracies. Each applicant must notify MBIE promptly upon becoming aware of any errors, omissions, or inaccuracies in its proposal or in any additional information provided by the applicant.

INDUCEMENTS

Applicants must not directly or indirectly provide any form of inducement or reward to any assessment panel member, officer, employee, advisor, or other representative of MBIE in connection with this funding process.

Business-as-usual communications (relating to any existing funding between MBIE and the applicant) will be maintained with the usual contacts.

However, during the funding process, applicants must not use business-as-usual contacts to solicit or discuss details of this Fund with any person at MBIE or its agents, including the assessment panel members.

OWNERSHIP AND INTELLECTUAL PROPERTY

This document and any other documents supplied by MBIE to any applicant remain the property of MBIE. All copyright and other intellectual property rights in this document and any documentation and other information provided to any applicant or any other person by or on behalf of MBIE in connection with this Fund will remain with, and belong at all times to, MBIE or its licensors. MBIE may request the immediate return of all documents supplied and any copies made of them at any time. Applicants must comply with any such request in a timely manner.

Any proposals or information supplied by applicants to MBIE will become the property of MBIE and may not be returned to applicants. Ownership of the intellectual property rights in a proposal does not pass to MBIE. However, in submitting a proposal, applicants grant MBIE a non-exclusive, non-transferable, perpetual licence to use, disclose, and copy their Proposal for any purpose related to this funding process.

By submitting a proposal, applicants warrant that the provision of that information to MBIE, and the use of it by MBIE for the evaluation of their proposal and for any resulting negotiation, will not breach any third-party intellectual property rights.

CONFIDENTIALITY

MBIE will treat proposals as confidential, but applicants should be aware that MBIE is subject to the Official Information Act 1982 and may be required to release information supplied in proposals in accordance with that Act, or as otherwise required by law.

THE PROPOSAL PROCESS

The following rights are reserved.

- MBIE may amend, suspend, cancel and/or re-issue the Call for Proposals, or any part of the Call for Proposals.
- MBIE may make any material change to the Call for Proposals (including any date) on the condition that you are given a reasonable time within which to respond to the change.
- In exceptional circumstances, MBIE may accept a late registration or proposal where it considers that there is no material prejudice to other applicants.
- MBIE may waive irregularities or requirements in or during the Call for Proposals process where it considers it appropriate and reasonable to do so.
- Your proposal may not be approved for funding.
- All or any proposal(s) may be rejected.
- Your proposal may be accepted in whole, or in part.
- Any information you provide to MBIE with your proposal may be retained or destroyed.
- Clarification may be sought from any applicant(s) in relation to any matter in connection with this Call for Proposals process.
- Any applicant(s) may be contacted, which may be to the exclusion of any other applicant(s), at any time before or after the approval (if any) of proposal(s).
- MBIE may reject, or not consider further, any documentation related to your proposal that may be received from you, unless it is specifically requested.
- MBIE may amend the proposed contract at any time
- This Call for Proposals process may be run in such manner as MBIE may see fit.

NO CONTRACTUAL OBLIGATIONS CREATED

No contract or other legal obligations arise between MBIE and any applicant out of, or in relation to, this Fund or funding process, until a formal written contract (if any) is signed by both MBIE and the successful applicant.

This document does not constitute an offer by MBIE to provide funding or enter into any contract with any applicant. The request for and receipt of proposals does not imply any obligation on MBIE to contract for any funding requested in any proposal. MBIE will not be bound in any way until a formal written contract (if any) is signed by both MBIE and the successful applicant. Any verbal communications made during the funding process will not be binding on MBIE and are subject to the terms of this document.

NO PROCESS CONTRACT

This document does not give rise to a process contract.

EXCLUSION OF LIABILITY

Neither MBIE, nor any assessment panel members, officers, employees, advisers or other representatives will be liable (in contract or tort, including negligence, or otherwise) for any direct or indirect damage, expense, loss or cost (including legal costs) incurred or suffered by any applicant, its affiliates, or other person in connection with this document or the funding process. To the extent that legal relations between MBIE and any applicant cannot be excluded as a matter of law, the liability of MBIE is limited to \$1.

COSTS AND EXPENSES

MBIE is not responsible for any costs or expenses incurred by applicants in the preparation of a proposal.

GOVERNING LAW AND JURISDICTION

This document will be construed according to, and governed by, New Zealand law and applicants agree to submit to the exclusive jurisdiction of New Zealand courts in any dispute concerning this document.

PUBLIC STATEMENTS

MBIE may make public the following information: the name of any applicant; the name of the organisation and any other parties participating in the project; the title, description and public statement of the proposed project; the total amount of funding applied for and awarded; the period of time for which funding has been requested; and the fact that the project has been funded from the Fund. Please note that any information you provide may be published on the MBIE website.

Applicants are requested not to release any media statement or other information relating to the process outlined in this document and the submission or approval of any proposal in any public medium without providing reasonable advance notice to MBIE.

Appendix 2: The Catalyst: Strategic assessment scoring system

SCORE	KEY WORDS	ENDURING COLLABORATION	NOVEL KNOWLEDGE AND PARTNERSHIP	STRATEGIC BENEFITS
1	<i>None Insufficient Not relevant No information Missing</i>	<ul style="list-style-type: none"> The research team and/or its overseas partner have/has a negligible track record in international collaboration and lack(s) the capabilities and capacity to build and manage a substantive international collaboration. The proposal could be implemented without the proposed international collaboration. The research team and/or its overseas partner substantially lack(s) the capabilities including collaboration, scientific and other resourcing, and supporting infrastructure to satisfactorily carry out the proposed work. The project plan does not contain the expected elements or the information provided is inadequate for the plan to be at all plausible. The project plan does not outline how this collaboration would credibly lead to an enduring partnership. 	<ul style="list-style-type: none"> The research aims and the methodology proposed, including the incorporation of Vision Mātauranga (VM) elements if appropriate, are inadequate and lack sufficient detail to give any confidence that the approach has been sufficiently thought through. The proposal is not plausibly linked with any applicable scientific and technological principles and with relevant state-of-the-art knowledge. The project would generate no new knowledge or technologies. Partnering with the nominated international partner would not bring any new advantages to New Zealand, i.e. the overseas research team does not have expertise, skills, knowledge, infrastructure and other resources which cannot be accessed elsewhere to help implement the proposal. The proposed international and New Zealand partners have worked together before on a project the same as, or very much the same as that detailed in the bid. The level of novelty is non-existent. 	<ul style="list-style-type: none"> The estimated benefits, including the incorporation of VM elements (if appropriate), are negligible and/or the methods of estimation/uncertainty give no confidence that the anticipated benefits would be achieved. The opportunities needs identified are not linked in any plausible way to end-users and/or the research team and its overseas partners have no credible record of engagement with end-users. All benefits are likely to go to the overseas collaborator and/or the project would not enhance the research capability and capacity of the New Zealand research team. The project will not improve New Zealand's international profile as an advanced science and innovation nation in relevant science communities of the partner country and globally. There is no meaningful engagement in the project from other New Zealand research organisations. The proposed research activities have no connection to New Zealand strategic priorities.
2	<i>Vague Unclear Unlikely Dubious Little relevance</i>	<ul style="list-style-type: none"> More than 1 but less than 3 	<ul style="list-style-type: none"> More than 1 but less than 3 	<ul style="list-style-type: none"> More than 1 but less than 3
3	<i>Limited benefit/impact Minimum acceptable level Uncertainty Lacks detail</i>	<ul style="list-style-type: none"> The research team and its overseas partner have some track record in international collaboration and adequate capabilities and capacity to build and manage a substantive international collaboration. Nevertheless, they need additional critical or significant expertise to fully realise the available international opportunities outlined in the proposal. The proposed project could proceed without the proposed international collaboration but at a slower pace or otherwise less effectively. The research team and/or its overseas partner have limited capabilities, including collaboration, scientific and other resourcing, and supporting infrastructure to satisfactorily carry out the proposed work. The project plan contains some of the expected elements with an adequate level of detail as to how to develop and support a new international partnership. The project plan adequately signals how this collaboration would lead to an enduring partnership but is not convincing. 	<ul style="list-style-type: none"> The research aims and the methodology proposed, including the incorporation of VM elements (if appropriate), are reasonable but lack detail and leave some significant questions over effectiveness. The proposal is linked with applicable scientific and technological principles and with relevant state-of-the-art knowledge, but the links are not well explained and not convincing. The project would generate some new knowledge, technologies, activity, understanding of capability, and international partnership but in a limited way and with little impact. Partnering with the nominated overseas partner would provide only limited new advantages to New Zealand, i.e. the overseas research team offers only limited expertise, skills, knowledge, infrastructure and other resources which cannot be accessed elsewhere to help implement the proposal. The proposed international and New Zealand partners have worked together before on a project with similar features to those detailed in the bid. The level of novelty is low. 	<ul style="list-style-type: none"> The research aims and the methodology proposed, including the incorporation of VM elements (if appropriate), are reasonable but lack detail and leave some significant questions over effectiveness, and/or the analysis which supports the estimates of benefit and uncertainty is not convincing. The opportunities or needs identified are not well linked to end-users and/or the research team and its overseas partners have a weak record of engagement with end-users. Most benefits are likely to go to the overseas collaborator and/or the project would not substantially enhance the research capability and capacity of the New Zealand research team. The project is not likely to enhance New Zealand's international profile as an advanced science and innovation nation in relevant science communities of the partner country and globally. If the research team or its overseas partner team is new: the research team and/or its overseas partner are/is new and there is no track record information available although the experience of individual team members raises some doubts (give new teams some benefit of doubt). There is limited engagement in the project from other New Zealand research organisations. The proposed research activities have weak connections to New Zealand strategic priorities.

SCORE	KEY WORDS	ENDURING COLLABORATION	NOVEL KNOWLEDGE AND PARTNERSHIP	STRATEGIC BENEFITS
4	<i>Acceptable Adequate Suitable</i>	<ul style="list-style-type: none"> • More than 3 but less than 5 	<ul style="list-style-type: none"> • More than 3 but less than 5 	<ul style="list-style-type: none"> • More than 3 but less than 5
5	<i>Significant Clear Multiple High level Robust</i>	<ul style="list-style-type: none"> • The research team and its overseas partner have good track records in international collaboration. • The research team and its overseas partner have all necessary, complementary capabilities and capacity to build and manage a substantive international partnership and fully realise the available international opportunities outlined in the proposal. • The proposed project could not proceed without the proposed international collaboration. • The research team and its overseas partner have capabilities including collaboration, scientific and other resourcing, and supporting infrastructure which are comprehensive and at an excellent level of content and detail for carrying out the proposed work. • The project plan contains all of the expected elements with a high level of detail as to how to develop and support a new international partnership. 	<ul style="list-style-type: none"> • The research aims and the methodology proposed, including the incorporation of VM elements (if appropriate), are good. • The proposal is effectively linked with applicable scientific and technological principles and with relevant state-of-the-art knowledge. • The project would generate new knowledge, technologies, activity and understanding of capability, and international partnership which would not be otherwise produced. • Partnering with the nominated international partner would provide substantial new advantages to New Zealand, i.e. the overseas partner offers complementary high-quality expertise, skills, knowledge infrastructure and other resources which are not available in NZ. • The proposed international and New Zealand partners have not worked together or have worked together before on a project with no common elements with those detailed in the bid. The level of novelty is good. 	<ul style="list-style-type: none"> • The estimated benefits, including the incorporation of VM elements (if appropriate), are substantial and the analysis which supports the estimates of benefit and uncertainty is convincing. • The opportunities and needs identified are of substantial importance to multiple end-users and the research team and its overseas partners have a good record of engagement with end-users. • Most benefits will be shared equally between the New Zealand research team and the overseas collaborator or New Zealand will be the major beneficiary and the project would substantially enhance the research capability and capacity of the New Zealand research team. • The project is likely to enhance New Zealand's international profile as an advanced science and innovation nation in relevant science communities of the partner country and globally. • If the research or its overseas partner team is new: the research team is new and there is no track record information available although the experience and quality of individual team members gives significant confidence. (Give new teams some benefit of doubt but no higher than a score of 5). • There is good to very good engagement in the project from other New Zealand research organisations or faculties. • The proposed research activities have good connections to New Zealand strategic priorities.
6	<i>Certain Enduring Effective Comprehensive</i>	<ul style="list-style-type: none"> • More than 5 but less than 7 	<ul style="list-style-type: none"> • More than 5 but less than 7 	<ul style="list-style-type: none"> • More than 5 but less than 7
7	<i>Excellent Exemplary Detailed Step-change Impressive</i>	<ul style="list-style-type: none"> • The research team and its overseas partner are recognised internationally for their outstanding track records in collaborating with other research organisations and in delivering research results. • The research team and its overseas partner have outstanding capabilities and capacity to build and manage a substantive international partnership and fully realise the available international opportunities outlined in the proposal. • The proposed project could not proceed without collaboration with the nominated overseas partner. • The research team and its overseas partner have outstanding and comprehensive capabilities including collaboration, scientific and other resourcing, and supporting infrastructure, appropriate to carrying out the work. • The project plan contains all of the expected elements with an exemplary level of detail as to how to develop and support an enduring international partnership. It gives full confidence that a valuable international partnership would be created. 	<ul style="list-style-type: none"> • The proposed project plan, including the incorporation of VM elements (if appropriate), contains all of the elements that would be expected, and the supporting information is highly credible and convincing. The plan gives full confidence that the work would be implemented as indicated. • The proposal provides applicable scientific and technological principles and links with relevant state of the art knowledge are comprehensive and of outstanding quality. • The proposal would create new knowledge which is of the highest calibre and would have national and international scientific impact and recognition. • Partnering with the nominated international partner would provide outstanding advantages to New Zealand, i.e. the overseas partner offers highly complementary, world-class expertise, skills, knowledge infrastructure and other resources which are not available elsewhere. • The proposed international and New Zealand partners have not worked together or have worked together before on a project with no common elements with those detailed in the bid. The level of novelty is excellent. 	<ul style="list-style-type: none"> • The estimated benefits, including the incorporation of VM elements (if appropriate), are of national significance, and the analysis which supports the estimates of benefit and uncertainty is excellent. • The opportunities and needs identified are clearly of very substantial or game changing importance to multiple end-users or end-user sectors and the research team and its overseas partners have an excellent record of engagement with end-users. • This project is likely to generate significant additional benefits from which the New Zealand research team, and the wider New Zealand science community can benefit in terms of research capability and capacity. • The project is likely to enhance New Zealand's international profile in the relevant disciplines and more generally as an advanced science and innovation nation in both science communities of the partner country and globally. • There is excellent engagement in the project from other New Zealand research organisations or faculties. • The proposed research activities have excellent connections to New Zealand strategic priorities.

Appendix 3: ANZSRC Codes

What are ANZSRC codes?

An ANZSRC (Australian and New Zealand Standard Research Classification) code is a standard classification that allows research and development activities to be categorised according to their intended purpose, outcome and/or discipline. See [Australian Bureau of Statistics](#) for more details.

ANZSRC is a hierarchical classification, with 2, 4, and 6 digit codes representing increasing specificity. For example:

82 Plant Production and Plant Primary Products
8201 Forestry
810104 Native Forests

Entering ANZSRC Codes

ANZSRC codes are categorised under two research classifications;

- **Field of Research (FOR)** - this is the discipline and/or the process or techniques used in the research.
- **Socio-Economic Objectives (SEO)** - this describes the intended purpose or outcome of the research undertaken.

Under each classification, **no more than two** ANZSRC codes must be specified.

Glossary (Key definitions)

Applicant

“Applicant” means the New Zealand-based research organisation submitting the Catalyst proposal.

Call

“Call” refers to this investment and its overall objectives. “Call for Proposals”, or “CfP”, refers to this document specifically.

Key Researchers and Individuals

These are people (apart from the Science Leaders) who are critical to the success of the project such that their departure would constitute a change event. These people are typically fewer in number, and at a level above others in the team.

- Key Researchers are involved in the scientific research
- Key Individuals are not directly involved in the research but they are involved in implementation activities

Portal

The MBIE Portal is the online interface through which applicants submit their proposals and MBIE manages contracts.

Research organisation

For the purposes of this document, a research organisation is defined as an organisation that has the internal capability to carry out RS&T or related activities. Public service departments as listed in Schedule 1 of the State Sector Act 1988 are not eligible to apply under the Catalyst Fund.

Science Leader

A New Zealand based researcher from the Project Lead organisation who is leading an individual project.

Vision Mātauranga

Vision Mātauranga aims to unlock the science and innovation potential of Māori knowledge, people and resources for the benefit of New Zealand. It seeks to stimulate and support research which will respond to distinctive Maori needs and enable distinctive Maori contributions to RS&T. For this reason the Vision Mātauranga policy is embedded across all science investments.

