

**Tertiary Education
Commission**

Te Amorangi Mātauranga Matua



PBRF Sector Reference Group – Consultation Paper 2

**Towards a more holistic understanding
of research excellence: PBRF research
and research excellence definitions**

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Purpose and structure

- 1 This paper sets out options developed by the PBRF Sector Reference Group (SRG) for achieving a more holistic understanding of research excellence in Quality Evaluation 2025, and invites feedback from the tertiary education sector and other stakeholders. Specifically, it:
 - › Sets out background information including the PBRF Review Panel’s recommendations and Cabinet’s decisions in relation to the PBRF definition of research;
 - › Provides the rationale for the proposed changes based on feedback from previous Quality Evaluation participants, PBRF Review Panel findings, and TEC officials’ analysis;
 - › Sets out options for achieving Cabinet’s direction to the TEC to broaden the definition of research and research excellence for the PBRF;
 - › Identifies where further work will be required to develop and agree wording once options are selected and explains the process for that work including further sector consultation; and
 - › Invites feedback on the options and proposed definition wording set out in this paper.
- 2 Research and research excellence are articulated for the purposes of the Quality Evaluation across the following three discrete but interrelated elements:
 - a. The PBRF definition of research;
 - b. The PBRF definition of research excellence (contained in the PBRF Funding Conditions but not included in the Quality Evaluation 2018 Guidelines);
 - c. The Quality Category descriptors.
- 3 The SRG has considered and developed options in relation to each of these three elements, which are presented in this paper as follows: for each element, the current definition or descriptors are presented, followed by information and analysis on which the SRG drew in reaching decisions on the options. This is then followed by the options for new definitions or descriptors along with any matters to consider.
- 4 Options for changes to Evidence Portfolio (EP) design will be proposed in the next consultation paper, due for publication in early March 2022. There are a number of EP design dependencies that flow directly from particular options in this paper, which will be highlighted.

Background

PBRF review recommendations and Cabinet decisions

- 5 Following the PBRF Quality Evaluation 2018, the Ministry of Education (MoE) set up an independent PBRF review panel. The review panel drew on sector feedback, PBRF data, expert analysis, and insight from Tertiary Education Commission (TEC), Ministry of Business, Innovation and Enterprise and MoE officials in developing its recommendations. The review recommendations informed Cabinet’s decisions on changes to the PBRF, announced in July 2021.

- 6 The review recommended that the PBRF adopt a ‘more capacious definition of research excellence that encompasses the production of research, engagement and impact relating to that research and support for vibrant, diverse research cultures.’¹
- 7 Following consultation on the review outcomes and advice from MoE, the Minister of Education made recommendations to Cabinet on changes to PBRF. In July 2021, Cabinet released its decisions on changes. These included instructing the TEC, in consultation with the SRG, to ‘broad[en] the PBRF definition of research by:
 - a. Rewording the PBRF definition of research;
 - b. Making changes to the Evidence Portfolio submitted by staff in the Quality Evaluation to complement the new PBRF definition of research’.²
- 8 MoE has subsequently removed the existing definitions of research and research excellence from the PBRF Funding Determination issued for 2022 onwards, to enable the TEC and SRG to develop new definitions. These will be added to the Funding Conditions when the final PBRF Guidelines are published in 2023.

Sector Reference Group process

- 11 The SRG received background information and analysis from TEC officials on previous Quality Evaluations and on other national research excellence assessment frameworks. This included the Research Excellence Framework (UK); the Excellence in Research for Australia (ERA), and the Research Assessment Exercise (Hong Kong). Research definitions in New Zealand and international competitive research funds were also considered (see Appendix 1: Background material).
- 12 In developing these options, the SRG considered whether they:
 - a. Deliver Cabinet’s instructions;
 - b. Address the concerns and aspirations identified in the *Report of the PBRF Review Panel* and the *Report of the Moderation and Peer Review Panels*;
 - c. Deliver fair and equitable outcomes for all participating TEOs and their staff;
 - d. Uphold the unique nature of research produced in Aotearoa New Zealand and reflect what is distinctive about our national research environment;
 - e. Are consistent with the PBRF Guiding Principles, including the three new Principles of partnership, equity, and inclusiveness; and
 - f. Are able to be implemented and audited (legally and practically).

¹ PBRF Review Panel, 2020. *Toward the Tertiary Research Excellence Evaluation (TREE): The Report of the PBRF Review Panel*. Wellington, PBRF Review Panel, p. 62.

² Cabinet Minute of Decision: Review of the Performance-Based Research Fund: Final Report (CAB-21-MIN-0175) p. 2.

PBRF definitions of research and research excellence

Existing PBRF definition of research

- 13 The existing PBRF definition of research, which appeared in the Quality Evaluation 2018 Guidelines, is as follows:

For the purposes of the PBRF, research is original, independent investigation undertaken to contribute to knowledge and understanding and, in the case of some disciplines, cultural innovation or aesthetic refinement.³

Research typically involves inquiry of an experimental or critical nature driven by hypotheses or intellectual positions capable of rigorous assessment by experts in a given discipline.

Research includes work of direct relevance to the specific needs of iwi, communities, government, industry and commerce. In some disciplines, research may be embodied in the form of artistic works, performances or designs that lead to new or substantially improved insights. Research may include:

- › *contributions to the intellectual underpinning of subjects and disciplines (for example, dictionaries and scholarly editions)⁴*
- › *the use of existing knowledge in experimental development to produce new or substantially improved, materials, devices, products, communications or processes*
- › *the synthesis and analysis of previous research to the extent that it is new and creative.*

Research findings must be open to scrutiny or formal evaluation by experts within the field. This may be achieved through various forms of dissemination including, but not limited to, publication, manufacture, construction, public presentation, or provision of confidential reports.

Activities that are part of routine standard practice and do not embody original research are excluded, such as:

- › *routine testing*
- › *data collection*
- › *preparation for teaching*
- › *the legal and administrative aspects of intellectual property protection and commercialisation activities.*

- 14 When the Quality Evaluation takes place, the Chairs of each peer-review panel are asked to develop a panel-specific elaboration of the PBRF research definition and additional guidance setting out the panel's expectations for Research Outputs and Research Contributions, panel coverage, cross-referrals, and any other guidance the panel deems necessary. The *Panel-specific Guidelines for the 2018 Quality Evaluation* can be found on the TEC [website](#).

³ The term 'independent' does not exclude collaborative work.

⁴ The term 'scholarly' is defined as the creation, development and maintenance of the intellectual infrastructure of subjects and disciplines, in forms such as dictionaries, scholarly editions, catalogues and contributions to major research databases.

Existing PBRF definition of research excellence

- 15 The Quality Evaluation 2018 Guidelines do not include a standalone definition of research excellence. The current PBRF Funding Conditions include a definition, which was included in the PBRF Funding Determination issued by the Minister of Education and was in effect during the Quality Evaluation 2018. The definition is as follows:

Excellence as a researcher includes all of the following activities:

- a. the production and creation of leading-edge knowledge;*
- b. the application of that knowledge;*
- c. the dissemination of that knowledge to students, industry, iwi and hapū, and the wider community; and*
- d. supporting current and potential colleagues (e.g., postgraduate students) in the creation, application and dissemination of knowledge.*

Excellence will be measured by a combination of external peer review, research degree completion and external research income indicators.

Rationale for changing PBRF definitions of research and research excellence

- 16 The PBRF Review and Cabinet decisions are clear that both the definition of research and research excellence should be broadened.
- 17 The following section sets out a series of options for changes to the PBRF definition of research and research excellence. This section draws on evidence and commentary from the *Report of the PBRF Review Panel (2020)* and the *Report of the Moderation and Peer Review Panels PBRF 2018 Quality Evaluation (2019)* to provide context for the changes sought and options proposed.
- 18 Following the conclusion of the Quality Evaluation 2018, the *Report of the Moderation and Peer Review Panels* was published in April 2019. The report includes general and panel-specific recommendations for changes to future Quality Evaluations, including a number which are relevant to the research definitions issue.
- 19 The general summary noted that in some cases panellists were not sure whether some outputs or contributions counted as research. The Creative and Performing Arts, Health, and Physical Sciences panels recommended clearer guidance for submitting staff on explaining and evidencing the research element of outputs. The Pacific Research panel recommended greater clarity about the value of community engagement-led research, and a more diverse range of eligible output types.
- 20 Broadly speaking, the general and panel-specific recommendations are reflective of panel assessors and moderators' focus on the extent to which EPs can be easily and fairly assessed. The concerns raised suggest that translation and application of the research definition across to the various elements of the EP requires clear guidance for both submitting staff and panellists.
- 21 The PBRF Review Panel sought feedback from across the sector on how the Quality Evaluation reflected and valued research excellence. The panel noted in its final report that although the PBRF definition of research was intentionally broad, there are widely-held concerns 'that the fund privileges certain kinds of research, discouraging the application of existing knowledge to problems specific to New Zealand, engagement with communities and undervaluing the impact of research.'⁵ The panel

⁵ *Report of PBRF Review*, p. 52.

considered that while some of these views were based on ‘myths’ about the assessment framework, there nonetheless remained valid criticisms that as a whole it did not adequately recognise the diversity of research excellence in Aotearoa New Zealand. The panel’s final recommendation to adopt a ‘more capacious’ definition of research excellence flows from this finding.

- 22 The panel noted that, in particular, the Quality Evaluation appeared to put less value on research which was focussed more on achieving impacts or outcomes for stakeholders than on outputs. The panel was of the view that this was partially because it ‘can be harder to explain and validate’ such research. As a consequence, the panel argued, it was likely that researchers were privileging more ‘traditional’ outputs in assembling their EPs, as these were perceived as less high risk.⁶ It follows that this would have the effect of disadvantaging researchers who because of the nature of their research are less likely to produce such outputs, and of dis-incentivising impact, engagement, and practice-led research.
- 23 Corroborating this, in the 2018 Quality Evaluation, while the majority of the 13 panels took up the opportunity to include an elaboration of the main research definition, most were concerned to clarify the inclusion or exclusion of specific forms of activity or output. However, the Creative and Performing Arts, Education, Māori Knowledge and Development panels, and to some extent, the Engineering, Technology and Architecture and Pacific Research panels, all produced elaborations which materially expanded on and moderated the PBRF research definition. The disciplinary and epistemological norms within these panels, where research is routinely applied, practice or community-based, provide some indication of the limitations of the current PBRF definition of research.
- 24 The panel also noted that the kinds of evidence that could be included in EPs, both as research outputs and as evidence of research contributions, was a significant factor in understanding why particular types or modes of research appeared to be valued less. While research example eligibility and other EP design matters remain out of scope for this consultation, research definitions and EP design are interlinked. The EP design settings will in effect implement the intentions set by the research definitions. Accordingly, the EP design consultation paper will follow this one.

⁶ *Report of PBRF Review*, p. 53. The report notes that analysis of EPs submitted in 2018 bear this assessment out.

Options for changes to the PBRF definition of research

The SRG has identified two options for delivering Cabinet’s instructions to broaden the PBRF research definition. Both options would provide a way to give effect to the PBRF principles including the new principles of partnership, equity and inclusiveness.

Both options will require that EP design, along with the Quality Category definitions (see below), are brought into alignment. This will require that the Examples of Research Excellence (EREs), Other Examples of Research Excellence (OREs), Research Contributions and eligible research outputs and evidence of research contributions are reviewed as part of the EP design consultation.

Option 1: Add detail

Broaden the existing definition of research by explicitly including rangahau, Mātauranga Māori and kaupapa Māori, Pacific research, community, action, practice-based and applied research, as well as by specifying what is *not* included.

Matters to consider

Adding detail will provide greater certainty about what is eligible and what is ineligible. If this option is pursued, the SRG has determined that additional PBRF articulations of rangahau, Mātauranga Māori, kaupapa Māori, and Pacific research should also be included in the guidance. Options are detailed below under *PBRF definitions of Māori and Pacific knowledges*.

Proposed wording Option 1: Add detail

In Aotearoa New Zealand our distinctive research culture and environment draws on diverse epistemological traditions of critical inquiry, experimentation, and knowledge-creation.

For the purposes of the PBRF, research, including rangahau, Mātauranga Māori, kaupapa Māori, and Pacific ways of knowing, being, and conducting research, is defined as a process of investigation or inquiry leading to new, recovered, or reinterpreted knowledge or understanding which is effectively shared and capable of rigorous assessment by experts. Research includes work that embodies new insights of direct relevance to the specific needs of iwi, hapū, marae, communities, government, scholarship and teaching, industry and commerce, and may be developed through collaborative and practice-led processes involving stakeholders from those constituencies. It can be an individual or collective process, and may be embodied in the form of artistic works, performances, designs, policies, or processes that lead to novel or substantially improved insights.

For further clarification, research includes:

- › *contributions to the intellectual underpinning of subjects, disciplines and epistemologies (for example, dictionaries, scholarly editions, and teaching materials that embody original research)*
- › *Applications of existing knowledge to produce new or substantially improved materials, devices, products, designs, policies or creative outputs*
- › *recovery and revitalisation of knowledge previously lost or suppressed (for example, the study of raranga, whakapapa narratives, rongōa, navigational knowledge, translation studies or ecological research)*

- › *the synthesis and analysis of previous research to the extent that it is new and creative.*

It does not include:

- › *routine testing and data collection lacking analysis, interpretation and/or evaluation*
- › *preparation for teaching that does not embody original research (for example, collation of existing research and research outputs into handbooks or textbooks)*
- › *the legal and administrative aspects of intellectual property protection and commercialisation activities.*

Option 2: Simplify

Simplify the existing research definition into a high-level, generic definition which does not specify any particular type or mode of research. Instruct each Panel Chair to elaborate a panel-specific definition of research, including as appropriate the place of rangahau, Mātauranga Māori, kaupapa Māori, Pacific research, community, applied, and practice-based research within that definition. Māori Knowledge and Development and Pacific Research Panel Chairs are appointed earlier in the process to ensure rangahau, Mātauranga Māori, kaupapa Māori, and Pacific research definitions are available to inform other panel-specific definitions as required. EP design and submission settings will specify activity and output eligibility.

Matters to consider

This option does not explicitly include or exclude any mode of research in the general definition, but instead enables each panel to elaborate an appropriate definition of research which reflects the disciplinary and methodological norms which characterise that panel's coverage.

This approach is informed by the understanding that submitting staff and TEOs do not read the definition of research in isolation but in conjunction with the detailed EP submission instructions and the Panel-specific Guidance. The Guidance would require careful wording to ensure this was clear.

Because the research definition is very generic, the EP design settings may need to be more detailed. The panel-specific elaborations of the research definition will also assume greater significance, and the SRG will carefully consider what additional instructions and training should be provided to panels when reviewing the panel assessment criteria and working methods issues.

Proposed wording Option 2: simplify

In Aotearoa New Zealand our distinctive research culture and environment draws on diverse epistemological traditions of critical inquiry, experimentation, and knowledge-creation.

For the purposes of PBRF, research is defined as a creative and systematic process of inquiry leading to new or recovered knowledge, effectively shared.

Panel-specific elaborations of the PBRF research definition will be developed in the Panel-specific guidelines. This definition should be read in conjunction with the relevant panel-specific elaboration, as well as the guidance on EP submissions.

Options for changes to PBRF definition of research excellence

The PBRF Review and Cabinet decisions are clear that both the definition of research and research excellence should be broadened. As set out above, the PBRF Funding Conditions include a standalone definition of research excellence, but this was not included in the 2018 Guidelines, and Cabinet's instructions provide scope to achieve that broadening in a range of ways.

Rather than set out features of excellent research (which might include, for example, originality, rigour, significance, or reach), the current definition articulates a set of activities through which research excellence is achieved: the creation, application, and dissemination of knowledge, as well as contributions to the research environment through supporting colleagues. These activities overlap substantially with the definition of research. At the same time, the Quality Categories and their descriptors are intended to provide guidance as to the quality, or degree of excellence that must be achieved. In the current Guidelines, therefore, research excellence is *de facto* defined through the definition of research and the Quality Category descriptors.

The SRG seeks the sector's views as to whether the 2025 Guidelines require a standalone research excellence definition, but takes the view that if a standalone definition is required, the existing one should be revised to ensure alignment with the PBRF definition of research (including PBRF Māori and Pacific knowledge definitions) and Quality Category descriptors.

Option 1: Develop new standalone definition for the Guidelines

Develop a standalone definition of research excellence which aligns with the new research definitions and with the revised QC descriptors, including with regard to rangahau, Mātauranga Māori, kaupapa Māori, Pacific, practice-based, community and applied research. This would sit in the Guidelines alongside the definition of research, and would be developed once the new research definition is agreed, alongside the new QCs.

Wording options will be developed once a research definition option has been recommended to the TEC. Wording options will be consulted on with sector stakeholders alongside the Māori and Pacific knowledge definitions consultation process.

Option 2: Do not develop new standalone definition in the Guidelines

As in the 2018 Guidelines, do not include a standalone definition of research excellence, but ensure that the research definition and Quality Categories collectively define and broaden research excellence in line with Cabinet's instructions. A definition of research excellence would continue to sit in the PBRF Funding Conditions and would be revised by TEC to ensure alignment with the new research definition.

Note that this is the option recommended to the sector by the SRG.

PBRF definitions of Māori and Pacific knowledges

24 Ensuring that the Quality Evaluation 2025 is better able to recognise, value, and assess EPs drawing on Māori and Pacific knowledges is an explicit aim of Cabinet’s instructions to the TEC. Realising this aim will require changes across the design issues on which the SRG will consult, including research definitions, EP design, staff identification, panels membership and training, and panel assessment criteria and working methods. This section presents the first of a series of options designed to achieve this.

Rationale for developing PBRF definitions of Māori and Pacific knowledges

- 30 In evaluating how well the Quality Evaluation recognises the diversity of research excellence in Aotearoa New Zealand, the PBRF Review Panel noted that staff from the Wānanga felt particularly that the framework did not well reflect or value their research, and that there was now an opportunity to recognise a ‘significant cohort of Māori researchers and research that used Māori methodologies and was relevant to iwi and hapū’.⁷
- 31 In addition to the rationale for broadening research excellence advanced by the review, MoE identified that the changes proposed would contribute to upholding the Government’s obligations under the *Education and Training Act 2020* to honour Te Tiriti o Waitangi and uphold Māori-Crown relationships, and would support Ka Hikitia outcomes. A new definition of research would also better recognise and reward Mātauranga Māori and kaupapa Māori research as well as supporting more diverse research, an aim which underpins Priority Eight of the Tertiary Education Strategy: ‘enhance the contribution of research and Mātauranga Māori in addressing local and global challenges’.⁸
- 32 In making its decisions Cabinet noted that the Minister of Education would direct the TEC to appoint an SRG that ‘demonstrates a strong commitment to Māori-Crown partnership and comprises a diverse membership’. In appointing the SRG, the TEC sought members with expertise in Mātauranga Māori, kaupapa Māori research, and Pacific research, in order to ensure the group as a whole had the necessary expertise to help the TEC to deliver Cabinet’s instructions.
- 33 Changes to the PBRF definitions of research and research excellence should also give effect to the new PBRF Guiding Principles agreed by Cabinet:
- a. Partnership: the PBRF should reflect the bicultural nature of Aotearoa New Zealand and the special role and status of the Treaty of Waitangi / Te Tiriti o Waitangi;
 - b. Equity: different approaches and resources are needed to ensure that the measurement of research excellence leads to equitable outcomes;
 - c. Inclusiveness: the PBRF should encourage and recognise the full diversity of epistemologies, knowledges, and methodologies to reflect Aotearoa New Zealand’s people.

Submission of Māori and Pacific knowledge-based EPs outside Māori Knowledge and Development and Pacific Research panels

34 It is important that the final Quality Evaluation guidance reflects the aspirations and practices of researchers working with Māori or Pacific knowledges in terms of their options for panel submission

⁷ *Report of PBRF Review*, p. 52

⁸ Ministry of Education, 2020. *The Statement of National Education and Learning Priorities & Tertiary Education Strategy*. Wellington, p. 1.

and cross-referral. In 2018, the majority of EPs based on such approaches were submitted to either the Māori Knowledge and Development or the Pacific Research panel. While this may have been the obvious place for EPs that were wholly or substantially based on Mātauranga Māori, kaupapa Māori research, or Pacific research, given the findings of the PBRF Review Panel we cannot assume that this was the preferred outcome for everyone, particularly those who combined a Western approach with a Māori or Pacific one. Those researchers may have preferred to submit to another panel if they had confidence that the panel had the appropriate expertise and guidance to assess Māori or Pacific elements of their work.

- 35 Issues relating to specific panel working methods including membership, training, and cross-referral settings will be considered in Consultation Papers 4 and 5 (*Panels assessment criteria* and *Panels membership and working methods*). However, it is important to understand sector stakeholders' views on this issue now to ensure the guidance as a whole achieves the desired outcomes in terms of the application of definitions of Māori and Pacific knowledges outside the Māori Knowledge and Development and Pacific Research panels.
- 36 In parallel with the present consultation process on research definitions, TEC officials will carry out targeted consultation on this issue with relevant stakeholders and peak bodies. The outcomes will be fed back to the SRG and will inform relevant options as they arise.

Options for changes to PBRF definitions of Māori and Pacific knowledges

If the preferred approach to the PBRF research definition is **Option 1: Add detail**, the SRG has determined it is necessary to consider how to include PBRF definitions of rangahau, Mātauranga Māori, kaupapa Māori research, and Pacific research in the Quality Evaluation guidance (the Guidelines and the Panel-specific Guidelines). Because these terms are included in the definition of research, and to ensure EPs based on rangahau, Mātauranga Māori, kaupapa Māori research, and Pacific research can be submitted to all panels where this is appropriate, it is important to ensure all panels, participating TEOs and submitting staff are working to common understandings. The SRG has agreed to consult on the options below for achieving this.

If the preferred definition is **Option 2: Simplify**, definitions in the guidance are not required. However, the SRG would still in that case welcome the sector's views on the options below.

Option 1: Definitions in Guidelines

The Guidelines include, alongside the PBRF definition of research, PBRF definitions of rangahau, Mātauranga Māori, kaupapa Māori research, and Pacific research. The definitions will be developed through consultation with relevant experts including from within the SRG, the sector, and other stakeholders.

The Guidelines will note that these definitions will be understood to apply across all panels where such definitions are relevant. Panel Chairs will draw on the definitions in leading the development of panel-specific elaborations of the PBRF definition of research, and panels will refer to them to support assessment of EPs with rangahau, Mātauranga Māori, kaupapa Māori or Pacific research elements as appropriate.

The cross-referral process will continue to enable EPs with rangahau, Mātauranga Māori, kaupapa Māori or Pacific research elements to be referred from other panels into the Māori Knowledge and Development or Pacific Research panels.

Option 2: Definitions in Māori Knowledge and Development and Pacific Research panel elaborations of research description

The Guidelines note that the Māori Knowledge and Development and Pacific Research Panel Chairs will lead development of PBRF definitions of rangahau, Mātauranga Māori, kaupapa Māori, and Pacific research as part of their panel-specific guidelines. These definitions will apply across all panels where such definitions are relevant. Other panel chairs will draw on the definitions in developing panel-specific elaborations of the PBRF definition of research, and to refer to them as appropriate to support assessment of EPs with rangahau, Mātauranga Māori, kaupapa Māori or Pacific research elements.

The cross-referral process will continue to enable EPs with rangahau, Mātauranga Māori, kaupapa Māori or Pacific research elements to be referred from other panels into the Māori Knowledge and Development or Pacific Research panels.

Matters to consider

Both options will require direct engagement and consultation with Māori and Pacific stakeholders, alongside the general public consultation process, to ensure that any chosen approach is acceptable. It is particularly important that we understand the aspirations of researchers with regard to panel

submission.

Option 2 would require that appointment of the Māori Knowledge and Development and Pacific Research Panel Chairs is prioritised ahead of other panels to ensure definitions can be developed and made available to inform other panel-specific elaborations of the PBRF definition of research.

Both options entail articulating concepts and epistemologies that are central to and indivisible from the lived experience and worldviews of Māori and Pacific peoples. It is important to be clear therefore that any articulations and/or definitions arrived at would be arrived at in consultation with Māori and Pacific stakeholders and would be adopted solely for the purposes of the PBRF Quality Evaluation to ensure the robust peer-review of research quality of EPs submitted to the Quality Evaluation.

PBRF Quality Categories

Existing PBRF Quality Category descriptors

- 37 The existing PBRF Quality Category (QCs) descriptions reflect the two parts of the EP: the Research Outputs and the Research Contributions, although assessment is of the EP as a whole. They are as follows:

Quality Category A

For an A to be assigned it would normally be expected that the EP contains evidence of research outputs of a world-class standard and research-related activity that shows a high level of peer recognition and esteem within the relevant research subject area and indicates a significant contribution to the New Zealand and/or international research environments, and may also show evidence of other significant demonstrable impact during the assessment period.

This Quality Category can be awarded to the EPs of all PBRF-eligible staff members including new and emerging researchers.

Quality Category B

For a B to be assigned it would normally be expected that an EP contains evidence of research outputs of a high quality and research-related activity that shows acquired recognition by peers for their research at least at a national level and indicates a contribution to the research environment beyond their institution, and/or a significant contribution within their institution, and may also show evidence of other demonstrable impact during the assessment period.

This Quality Category can be awarded to the EPs of all PBRF-eligible staff members including new and emerging researchers.

Quality Category C

For a C to be assigned it would normally be expected that an EP contains evidence of quality-assured research outputs and research-related activity that shows some peer recognition for their research and indicates a contribution to the research environment within their institution or the wider community during the assessment period.

This Quality Category can be awarded to the EPs of all PBRF-eligible staff members except new and emerging researchers.

Quality Category C(NE)

For a C(NE) to be assigned it would normally be expected that an EP contains evidence of quality-assured research outputs produced during the assessment period. They may have limited or no research-related activity in the RC component.

This Quality Category can be awarded to the EPs of new and emerging researchers only.

Quality Category R

An EP will be assigned an R when it does not demonstrate the quality standard required for a C Quality Category or higher.

This Quality Category can be awarded to the EPs of all PBRF-eligible staff members except new and emerging researchers.

Quality Category R(NE)

An EP will be assigned an R(NE) when it does not demonstrate the quality standard required for a Quality Category C(NE) or higher.

This Quality Category can be awarded to the EPs of new and emerging researchers only.

- 38 The Quality Evaluation Guidelines 2018 included a definition of ‘world-class research’ alongside the Quality Categories as follows:

Defining ‘world-class research’

The use of ‘world class’ in relation to the RO and RC component scoring descriptors denotes a standard, not a type or focus of research.

World-class research outputs are those outputs that rank with the best within their broader discipline, regardless of the topic, theme or location of the research, or place of publication.

Research outputs that deal with topics or themes of primarily local, regional or national focus or interest can be of world-class standard. For example, research that focuses on Māori or Pacific topics or themes, New Zealand history, or New Zealand culture, economy, wellbeing or ecology may rank with the best research of its discipline conducted anywhere in the world.

Research contributions that reflect the esteem of peers considered to be global experts in their field, or show how the staff member contributes to a world-leading research environment, can be considered of world-class standard.

Rationale for changing the existing Quality Category descriptors

- 39 The following section sets out a single option for changes to the QC descriptors. This section draws on evidence and analysis of Quality Evaluation 2018 results data which informed the development of the option.
- 40 The QC descriptors reflect the two parts of the EP, the Research Outputs and the Research Contribution. However, they function as holistic descriptions of overall EP quality, and are supplemented by the Research Output and Research Contribution Tie-Point Descriptors.
- 41 The current wording describes research output quality in terms of quality standards but does not offer any definition of what constitutes ‘quality’: an A requires ‘world-leading standard[s]’, a B requires a ‘high level of quality’, and a C or C(NE) requires ‘quality-assured outputs’.
- 42 The current wording describes research contribution quality in terms that relate largely to career stage. For example, an A requires ‘a high level of peer recognition and esteem’ and ‘a significant contribution to the New Zealand and/or international research environments’, while a B requires ‘acquired recognition by peers for their research at least at a national level and indicates a contribution to the research environment beyond their institution, and/or a significant contribution within their institution’. Despite the clarifications provided by the definition of ‘world-leading research’ in the current Guidelines, the correlation of ‘international’, ‘national’, and ‘institutional’ contributions with A, B, and C QCs additionally implies that recognition should be measured in terms of geographical impact.

- 43 The reliance on factors related to career stage and geographic reach means that the A and B QCs descriptors are weighted against by New and Emerging Researchers (NERs) and against research activity which either by design or due to disciplinary norms does not achieve reach or impact on a geographical scale.
- 44 In Quality Evaluation 2018, a total of 7,909 EPs were awarded a funded QC score. Of these, 15.6% were awarded an A QC, 39.8% were awarded a B, 29.8% were awarded a C, and 14.8% were awarded a C(NE). Scores were awarded by panels using the Quality Category descriptors above as guidelines, in conjunction with the Research Output and Research Contribution tie-point descriptors (see the *PBRF Guidelines for the 2018 Quality Evaluation assessment process*).⁹
- 45 Of the total number of EPs submitted in 2018, 17.6% were submitted by NERs. However, NERs made up only 0.7% of all A QCs awarded, and 5% of all A and B QCs combined. No A QCs were awarded to NERs in 37 of the 43 total subject areas. In three of the subject areas, no A or B QCs were awarded to NERs. These percentages are reflected in the breakdown of QCs awarded across the NER submissions. Of the 1,389 NER EPs awarded funding, 0.6% were awarded an A, 14.9% were awarded a B, and 84.5% were awarded a C(NE). These figures have not changed meaningfully since 2012.
- 46 Although the Guidelines are clear that EPs submitted by NERs and non-NERs are equally eligible to receive A and B QCs, these outcomes show that in practice it is exceptionally difficult for an NER EP to be awarded either score. In the absence of any other indicators that research quality in Aotearoa New Zealand is declining, it is likely these results are in part a product of the Quality Evaluation design. The original intent of the C(NE) QC was to recognise that NERs were at the beginning of establishing their research platforms, and to enable fair comparison with the output and activity of their established peers. However, these results suggest that an outcome of the current settings may be to create unintended barriers to achieving above the C(NE) QC.

⁹ Tertiary Education Commission, 2016. *PBRF Guidelines for the 2018 Quality Evaluation assessment process*, Wellington, pp. 45 and 52.

Option for changing Quality Category descriptors

Regardless of which research definition option is taken forward, the SRG proposes that the QC descriptors should be revised to bring them into line with the new definition. As discussed above, the SRG has also determined there is an additional opportunity to review the descriptors to ensure they better articulate standards of quality across the full scope of eligible research activity and career stage.

Option: Revise Quality Category descriptors in line with new research definition and review against intended functions

Review and revise the Quality Category descriptors to:

- a. reflect the preferred definition of research, ensuring that the full scope of eligible research activity is reflected;
- b. ensure the Quality Categories describe overall EP quality, with the emphasis placed on rigour, originality and depth of significance, disciplinary reach, contributions to cultures of research and benefits to communities, stakeholders and partners outside the academy as well as peer esteem; and
- c. ensure the Quality Categories reflect related but distinct indicators of prestige and value within Te Ao Māori, for example mana atua, mana tangata, mana whenua, mana Tiriti.

Precise wording options for Quality Category description options will be developed once a research definition option has been recommended by the SRG. Wording options will be consulted on with sector stakeholders alongside the Māori and Pacific knowledge definitions consultation process.

Note that the Research Output and Research Contribution tie-point descriptors will be revised to reflect any changes to the QC descriptors as part of the Panels: Assessment paper.

Next steps and consultation feedback

47 Feedback is sought on the following:

1. PBRF definitions of research

Do you prefer either Option 1 (detailed definition) or Option 2 (simplified definition)?

Are there any wording changes you would suggest for your preferred option?

Is there a different option you would like to propose?

2. PBRF definition of research excellence

Do you prefer either Option 1 (develop new standalone definition in the 2025 Guidelines) or Option 2 (as in 2018, no standalone definition in the Guidelines)?

If Option 1, do you have specific suggestions for the new definition?

Note that if Option 1 is recommended to the TEC, there will be additional sector consultation on this issue.

Is there a different option you would like to propose?

3. PBRF definitions of Māori and Pacific knowledges

Do you prefer either Option 1 (definitions in Guidelines) or Option 2 (definitions in Panel-specific Guidance)?

If Option 1, do you have specific suggestions for the new definition?

Note that if Option 1 is recommended to the TEC, there will be additional sector consultation on this issue.

Is there a different option you would like to propose?

4. Quality Category descriptors

Do you agree with the proposed option (revise descriptors to reflect new PBRF research definitions and review against intended function)?

If you agree, do you have specific suggestions for the new descriptors?

Note that if this option is recommended to the TEC, there will be additional sector consultation on this issue.

Is there a different option you would like to propose?

48 Feedback can be provided to the TEC via the online survey here:

<https://www.surveymonkey.com/r/N5QSBQW>. Responses must be submitted by **5pm, 14 February 2022**.

Next steps

- 49 Following the end of the consultation period, the SRG will consider the feedback, and make recommendations to the TEC on the PBRF definition of research, and the approach to Māori and Pacific knowledge definitions, research excellence, and Quality Category descriptor revisions.
- 50 The TEC will carry out additional sector consultation as indicated to develop specific wording based on the options recommended. These will then be considered by the SRG, alongside the outcome of consultation on EP design. This will provide an opportunity to ensure the research definition recommendations align with EP design recommendations.
- 51 We anticipate that the TEC's In Principle decisions on the PBRF definitions of research and research excellence, and EP design, will be confirmed in mid-2022.

Appendix 1: International research definitions and approaches

Definitions in existing research assessment exercises

Excellence in Research for Australia (ERA)

1.2 Objectives

The objectives of ERA are to:

1. continue to develop and maintain an evaluation framework that gives government, industry, business and the wider community assurance of the excellence of research conducted in Australian higher education institutions
2. provide a national stocktake of discipline level areas of research strength and areas where there is opportunity for development in Australian higher education institutions
3. identify excellence across the full spectrum of research performance
4. identify emerging research areas and opportunities for further development
5. allow for comparisons of research in Australia, nationally and internationally, for all discipline areas

1.8 Definitions

Research

ERA defines research as the creation of new knowledge and/or the use of existing knowledge in a new and creative way to generate new concepts, methodologies, inventions and understandings. This could include the synthesis and analysis of previous research to the extent that it is new and creative.

This definition of research is consistent with a broad notion of research and experimental development comprising “creative and systematic work undertaken in order to increase the stock of knowledge – including knowledge of humankind, culture and society – and to devise new applications of available knowledge” as defined in the ARC funding rules.

Research Excellence Framework (REF) (United Kingdom)

Definition of research for the REF

1. For the purposes of the REF, research is defined as a process of investigation leading to new insights, effectively shared.
2. It includes work of direct relevance to the needs of commerce, industry, culture, society, and to the public and voluntary sectors; scholarship; the invention and generation of ideas, images, performances, artefacts including design, where these lead to new or substantially improved insights; and the use of existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes, including design and construction. It excludes routine testing and routine analysis of materials, components and processes such as for the maintenance of national standards, as distinct from the development of new analytical techniques. It also excludes the development of teaching materials that do not embody original research.
3. It includes research that is published, disseminated or made publicly available in the form of assessable research outputs, and confidential reports (as defined in paragraph 261).

Research Assessment Exercise (Hong Kong)

Scope of Research

2.13 The UGC is of the view that research is not an isolated activity; rather it should support and illuminate teaching and learning. The UGC considers it important to maintain an inclusive view in defining the scope of

research for the purposes of assessment of research activities. In this regard, the broadened meaning of scholarship as defined by the Carnegie Foundation continues to be a guiding reference for the RAE 2020, that is, the discovery of knowledge, the integration of knowledge, the application of knowledge and the sharing of knowledge through teaching are regarded as different forms of scholarship on par with each other, so that high quality research in all forms of scholarship including inter-disciplinary and collaborative research will be encouraged and assessed as equally important across a broad front. This will help address any perceived bias in favour of particular type(s) of research.

2.14 In the context of the RAE 2020, research is defined as the process leading to new knowledge, insights, methodologies, solutions and/or inventions. It may involve systematic investigation, use of existing materials, synthesis, analysis, creation of artefacts or concepts, design, performance, and/or innovation.

Definitions in national/supranational research funds and strategies

Note that none of the funds MBIE administers appear to include research definitions in their guidelines or investment plans.

United Kingdom Research and Innovation comprises eight subject area Research Councils, of which only the Arts and Humanities Research Council provides a definition of research.

The European Research Council also does not appear to include a definition in its guidance, or in the Horizon Europe Strategic Plan.

Marsden Fund

1. The Marsden Fund invests in excellent, investigator-led research aimed at generating new knowledge, with long-term benefit to New Zealand. It supports excellent research projects that advance and expand the knowledge base and contributes to the development of people with advanced skills in New Zealand. The research is not subject to government's socio-economic priorities.

2. The Marsden Fund encourages New Zealand's leading researchers to explore new ideas that may not be funded through other funding streams and fosters creativity and innovation within the research, science and technology system.

Australian Research Council Discovery Program funding rules (2019)

Research is defined, for the purposes of these Funding Rules, as the creation of new knowledge and/or the use of existing knowledge in a new and creative way so as to generate new concepts, methodologies, inventions and understandings. This could include synthesis and analysis of previous research to the extent that it is new and creative.¹

Research Impact is the demonstrable contribution that research makes to the economy, society, culture, national security, public policy or services, health, the environment, or quality of life, beyond contributions to academia.

1. This definition of research is consistent with a broad notion of research and experimental development comprising "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man [humankind], culture and society, and the use of this stock of knowledge to devise new applications". OECD (2002), Frascati Manual: Proposed Standard Practice for Surveys on Research and Experimental Development, Paris (Page 30).

New Zealand Health Research Strategy 2017 - 2027

Research and development (R&D): creative and systematic work to increase the stock of knowledge – including knowledge of humankind, culture and society – and to devise new applications of available knowledge. An R&D activity must meet five criteria: (1) be aimed at new findings, ie, novel; (2) based on

original concepts and hypotheses, ie, creative; (3) be uncertain about the final outcome, ie, uncertain; (4) be planned and budgeted, ie, systematic; (5) lead to results that could be possibly reproduced, ie, transferable and/or reproducible [OECD Frascati Manual]. All R&D activities are innovation activities, but not all innovation activities are R&D activities.

Biomedical research: research with the goal of understanding normal and abnormal human functioning, at the molecular, cellular, organ system and whole body levels. It includes developing tools and techniques to be applied for this purpose; and developing new therapies or devices that improve health or the quality of life of individuals, up to the point where they are tested on human subjects. Studies on human subjects that do not have a diagnostic or therapeutic orientation. [Canadian Institutes of Health Research]

Clinical research: research with the goals of improving the diagnosis and treatment (including rehabilitation and palliation) of disease and injury; and improving the health and quality of life of individuals as they pass through normal life stages. Research on, or for the treatment of, patients. [Canadian Institutes of Health Research]

Health research: research that has or may have relevance to human health. [Health Research Council Act 1990]

Health services research: research with the goal of improving the efficiency and effectiveness of health professionals and the health care system through changing practice and policy. This multidisciplinary field of scientific investigation studies how social factors, financing systems, organisational structures and processes, health technologies, and personal behaviours affect access to health care, the quality and cost of health care and, ultimately, health and wellbeing. [Canadian Institutes of Health Research]

Kaupapa Māori research: an approach especially for researchers who are undertaking research with Māori. Kaupapa Māori research is based on the following principles: self-determination, cultural aspiration, culturally preferred pedagogy, socioeconomic mediation, extended family structure, collective philosophy, the Treaty of Waitangi and growing respectful relationships. [Rangahau]

Māori health research: research that creates knowledge essential for improving the health of Māori and creating healthy Māori communities. Māori approaches and knowledge can also inform improvements to the health of all populations. Māori health research can also encompass Māori research methodologies such as kaupapa Māori research. [Ministry of Health and MBIE]

Pacific health research: research that creates knowledge essential for improving the health of Pacific peoples and creating health Pacific communities. It encompasses Pacific research frameworks, such as fonofale, which is based on elements of a Samoan fale (thatched house). These research frameworks bring Pacific life and cultural dimensions to the research. [Health Research Council 'Pacific Health Research Guidelines' May 2014]

Public health research: research aimed at improving the health of a population, or of defined sub-populations, through a better understanding of the ways in which social, cultural, environmental, occupational and economic factors determine health status. Note that population health and public health are often used interchangeably. [Canadian Institutes of Health Research Impact Measurement Framework]

Arts and Humanities Research Council (UK) Funding Guidance*

'For all schemes except Research Networking and Follow-on Funding for Impact and Engagement (FoF), the AHRC's definition of research is as follows: research activities should primarily be concerned with research processes, rather than outputs. This definition is built around three key features and your proposal must fully address all of these in order to be considered eligible for support:

It must define a series of research questions, issues or problems that will be addressed in the course of the research. It must also define its aims and objectives in terms of seeking to enhance knowledge and understanding relating to the questions, issues or problems to be addressed.

It must specify a research context for the questions, issues or problems to be addressed. You must specify why it is important that these particular questions, issues or problems should be addressed; what other research is being or has been conducted in this area; and what particular contribution this project will make to the advancement of creativity, insights, knowledge and understanding in this area.

It must specify the research methods for addressing and answering the research questions, issues or problems. You must state how, in the course of the research project, you will seek to answer the questions, address the issues or solve the problems. You should also explain the rationale for your chosen research methods and why you think they provide the most appropriate means by which to address the research questions, issues or problems.'

*Note that of the seven research council which make up UKRI, only the AHRC includes a definition of research in its guidance.

