



Draft Audit Methodology

For the Performance-Based Research Fund
(PBRF) Quality Evaluation 2026

August 2023



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1. Introduction

1.1 Background Information

Tertiary Education Organisation (TEO) results from the Performance-Based Research Fund (PBRF) will determine the allocation of \$2.2 billion of funding for the seven years starting from 2026. The majority (55 percent) of this funding is allocated through the Quality Evaluation process.

Te Amorangi Mātauranga Matua | The Tertiary Education Commission (TEC) is responsible for administering the PBRF. The TEC implemented the first Quality Evaluation in 2003 as part of introducing the PBRF to the Aotearoa New Zealand tertiary education sector. Quality Evaluations were also completed in 2006, 2012, and 2018.

Additional information on the PBRF Quality Evaluation is published on the TEC website. This includes the references throughout this document to the *Guidelines for tertiary education organisations participating in the 2026 Quality Evaluation* (known as the “PBRF guidelines”).

The purpose of this document is to provide the TEC and TEOs with clarity on the timing, extent, and nature of the audit activities that will be completed during the Quality Evaluation.

1.2 Quality Evaluation 2026 audit objectives

A comprehensive compliance audit programme supports the Quality Evaluation. The objective of this audit programme is to provide comfort to the TEC that the PBRF guidelines have been consistently and correctly applied by all participating TEOs. Specifically, the audit programme will provide comfort that:

- Staff submitting Evidence Portfolios (EPs) meet the staff participation criteria
- The Achievement Relative to Opportunity framework has been correctly applied
- The research outputs and contributions referenced in EPs exist, were published in the correct period to be considered eligible, and are accurately represented.

The audit approach also involves reviewing the preparedness of participating TEOs before the Quality Evaluation (see section 3).

2.1.1 Scope exclusions

The audit methodology outlined in this document does not include reviewing the following:

- Panel Review and Moderation processes
- Aspects of the PBRF funding formula outside of the Quality Evaluation, including:
 - Research Degree Completions
 - External Research Income
 - The formula to calculate annual PBRF funding.

1.3 Quality Evaluation auditors

Following a competitive procurement process, Deloitte was appointed as the auditor for Quality Evaluation 2026. Deloitte’s team has a strong understanding of the PBRF with David Sinkins participating in the last three Quality Evaluations (2006, 2012, and 2018).

2. Key auditing principles

2.1 Guiding principles of the PBRF and the Quality Evaluation audit

The PBRF is governed by 12 principles with six of them underpinning the audit methodology to ensure all TEOs are treated fairly. These are:

Consistency	Evaluations of quality made through the PBRF should be consistent across the different subject areas, and in the calibration of quality ratings against international standards of excellence.
Credibility	The methodology, format and processes employed in the PBRF must be credible to those being assessed.
Efficiency	Administrative and compliance costs should be kept to a minimum, consistent with a robust and credible process.
Transparency	Decisions and decision-making processes must be explained openly, except where there is a need to preserve confidentiality and privacy.
Inclusiveness	The methodology encourages and recognises the full diversity of epistemologies, knowledges, and methodologies to reflect Aotearoa New Zealand’s people.
Equity	The methodology reflects the different forms research excellence may take and treats all participants equitably.

This methodology strikes an appropriate balance between compliance costs and the necessary level of review over this important process.

3. Summary of audit approach

This section provides a brief overview of the audit approach, which is similar to that applied in previous periods. The audit approach has been revised to consider:

- Changes to the PBRF guidelines
- Learnings from previous Quality Evaluations
- Feedback the TEC obtained from the Sector Reference Group consultation process.

Phase 1: Process Assurance	
Activity	Timeline
Questionnaire	Jan – Feb 2025
Site visits and remote audits	April – Aug 2025
Reporting	Oct – Nov 2025

Phase 1: Process Assurance

This phase will be completed between January and December 2025. The purpose of this phase is to identify the level of TEO preparedness for Quality Evaluation 2026. The controls and systems in place at each TEO will be understood and reviewed as part of this phase.

Phase 1 starts with an audit questionnaire being sent to all TEOs. Data collected from the questionnaire will form part of the report on overall TEO preparedness for the Quality Evaluation. This will be followed by site visits to the eight universities, Te Pūkenga and other selected TEOs (if they submit over 150 Eps). Those submitting less than 150 EPs will not be subject to a site visit but will be audited remotely. The timing of site visits will be confirmed in March 2025.

This phase will involve:

- Reviewing the information in the questionnaire
- Meeting key personnel from each TEO
- Reviewing process documentation
- Performing a limited amount of sample-based testing to form a view on each TEO's preparedness.

Workshops and webinars will be held in March 2024, in conjunction with the TEC PBRF team. These will introduce the audit process and answer any questions that TEOs may have about the audit.

A brief report will be provided to each TEO highlighting any findings and suggested areas of focus to increase preparedness for the Quality Evaluation. A summary report will be prepared for the TEC, highlighting themes observed across TEOs.

Phase 2: Data Evaluation audit	
Activity	Timeline
Staff participation audit	Jul – Dec 2026
Evidence Portfolio audit	Jul – Dec 2026
Report to the TEC	Feb 2027

Phase 2: Data Evaluation audit

This phase will be completed between July and December 2026 and will provide comfort to the TEC and PBRF Peer Review Panels that staff submitting EPs meet the staff participation criteria, and that research outputs and contribution items within EPs exist, were published in the correct period to be considered eligible, and are accurately represented.

Phase 2 involves extracting the data TEOs submit from the PBRF IT system and selecting samples for review. Evidence TEOs provide is reviewed against the requirements of the PBRF guidelines and queries are raised with TEOs where potential discrepancies have been identified.

TEOs will be asked to respond, with evidence, to address the queries raised. Deloitte will review additional evidence provided in the first instance. Any unresolved queries are referred to the TEC for assessment and decisions on an appropriate course of action.

4. Detailed audit approach

4.1 Phase 1: Process Assurance

4.1.1 Questionnaire

Phase 1 will commence with an audit questionnaire to be sent to all TEOs. The questionnaire seeks to understand the processes TEOs have implemented to ensure all staff submitting EPs meet the requirements in the PBRF guidelines. TEOs will have 21 working days to respond to the audit questionnaire.

4.1.2 Site visits and workshops

TEOs will be selected for a site visit based on the number of EPs they expect to submit. All TEOs expected to submit more than 150 EPs will be visited. Based on the 2018 Quality Evaluation process, Deloitte expects to visit the eight universities and Te Pūkenga.

Those submitting less than 150 EPs will not be subject to a site visit but will be audited remotely. The scope of the site visits and remote audits will be the same.

Deloitte will document, review and test processes the TEO has implemented to meet the PBRF guidelines. This will include understanding how each TEO calculates full time equivalent (FTE) and determines the residency, ethnicity, and status (e.g., new and emerging, part-time) of their staff. How the TEO has identified staff where the Achievement Relative to Opportunity framework applies will also be considered.

Where TEO processes are found to have areas for improvement, Deloitte will follow up with TEOs through late 2025/early 2026 to confirm that gaps are addressed. Additional sample testing may also be performed in Phase 2 (data evaluation audit) to ensure the accuracy of data the TEO submitted.

Deloitte understands that TEOs may not be fully prepared at the time of the process assurance audits. However, this phase has previously been useful to understand how TEOs are applying more complex areas of the PBRF guidelines, and also to identify TEOs that may require more assistance from Deloitte or the TEC to effectively participate in the Quality Evaluation.

Deloitte and the TEC will also facilitate up to four workshops and webinars with the sector to discuss themes from the process assurance phase and answer any questions on the audit methodology.

4.1.3 Reporting

A brief memorandum-style audit report will be prepared for each TEO. This will highlight relevant findings from the process assurance phase and suggested areas on which to focus to ensure the TEO is prepared for the Quality Evaluation. A report on themes and findings from the process assurance phase will also be prepared. It is expected that this report will be published on the TEC website.

4.2 Phase 2: Data Evaluation audit – Staff participation

The audit approach reviews whether staff submitting EPs meet the requirements of the staff participation criteria. The PBRF guidelines set out four criteria that must all be met for staff to participate in the Quality Evaluation. These are:

- They are employed or otherwise contracted (under a contract for service):
 - At any time between 12 June 2025 and 11 June 2026; and
 - Are under one or more agreements or concurrent agreements of paid employment or service with a duration of at least one year on a continuous basis.
- They meet one of the following conditions. They have:
 - A minimum of 0.2 FTE throughout the duration of their employment if they are resident in Aotearoa New Zealand; or

- A minimum of 0.5 FTE throughout the duration of their employment if they are not resident in Aotearoa New Zealand.
- They meet the substantiveness test for teaching or research, or both, by:
 - Fulfilling a 'major role' in the teaching and assessment of at least one degree or postgraduate-level course or equivalent (the substantiveness test for teaching); and/or
 - Being required to undertake one or more of the following:
 - The design of research activity - the preparation of research outputs that is likely to result in being named as an author (or co-author or co-producer) on one or more research outputs; and/or
 - The academic supervision of graduate research students in a primary, joint, or co-supervisor role (the substantiveness test for research).
- Their employment or service contract functions include degree and/or postgraduate-level teaching, or research, or both.

In addition, staff contracted to a TEO from a non-TEO must meet the strengthened substantiveness test for degree-level teaching and research.

This phase will also look at staff who have been identified as New and Emerging and/or who are identified as eligible under the Achievement Relative to Opportunity framework. For staff to be classified as 'new and emerging researchers' they must have become independent researchers on or after the start of the assessment period on 1 January 2018.

As part of the data evaluation audit, the population of staff submitting EPs is extracted from the PBRF IT system. From this, a sample of staff are selected for review. For each staff member in the sample, the TEO is asked to provide evidence to demonstrate that all four criteria in the PBRF guidelines have been met and for any other relevant criteria (new and emerging, achievement relative to opportunity).

4.2.1 Sample size

During the audit, a sample of staff submitting EPs will be selected for review. Deloitte will determine the precise sample size once all data has been submitted in the PBRF IT system.

The sample will be calculated using the formula below.¹ In 2018, a sample of 1,296 staff were selected for audit. The sample size for 2026 will be calculated using the same formula as 2018. It will be based on the actual number of staff submitting EPs.

$$s = \frac{x^2 NP(1 - P)}{d^2(N - 1) + x^2 P(1 - P)}$$

Where:

s	Sample size.
x	The table value of chi-square for 1 degree of freedom at the desired confidence level (95%).
N	Population size
P	Population proportion (assumed to be 0.50 since this would provide the maximum sample size).
D	Degree of accuracy expressed as a proportion (2.5%)

4.2.2 Sampling approach

A sample of staff submitting EPs will be selected using the formula described above to determine its size. The sample selected will ensure coverage of staff from all TEOs and subject area panels. This approach is similar to the approach applied in the 2018 audit. The sample will be weighted to areas of the staff participation criteria considered to be higher risk, specifically staff:

¹ Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement* (30), 607-610.

- Who were employed by, or ceased to be employed by, the TEO on or around the period 12 June 2025 to 11 June 2026;
- Employed at or around 0.2 FTE to deliver degree level teaching or higher when resident in Aotearoa New Zealand, or at or around 0.5 FTE if not resident;
- With a teaching or research presence predominantly outside of Aotearoa New Zealand; and
- Contracted from a non-TEO.

In 2018, all new and emerging researchers were selected for audit. In 2026, only a sample of new and emerging researchers will be audited. The sample size is to be determined based on risks identified from review of submission data, plus any risk indicators from the process assurance reviews.

Consideration will also be given to the EPs of staff who are submitting under the Achievement Relative to Opportunity framework, particularly if they have submitted fewer than three EREs as a result.

Limitations of this approach

As the sample is selected based on risk, it is not possible to draw statistically valid conclusions on the level of non-compliance with the PBRF guidelines. Due to the risk-based sampling approach, a higher rate of non-compliance is expected in the sample than in the total population.

4.2.3 Minimum standards of evidence for the staff participation audit

As part of the PBRF audit, TEOs will be requested to provide evidence to demonstrate that staff members who have submitted EPs meet the requirements of the PBRF guidelines.

For the majority of cases, the audit objectives will be fulfilled by reviewing the relevant staff member's individual or collective employment agreement, or contract for service. To ensure consistency in the audit, all TEOs will be required to provide employment agreements (or the equivalent documentation) on request.

If the auditors cannot form a conclusion based on the requirements in the paragraph above, Deloitte may also request to view the following documentation:

- Position descriptions
- Curricula Vitae*
- HR/Payroll information system records
- Evidence to support residency, for example travel documents
- Teaching timetables and university calendars
- Timesheets (where relevant)
- Leave requests.

*Required for all staff claiming new and emerging status.

For staff employed by a non-TEO or claiming new and emerging status, the above evidence may be sought for prior years (i.e., before 2018).

Staff employed or otherwise contracted by wholly owned subsidiaries such as commercialisation companies and in fully controlled trusts of the TEO may participate in the PBRF (if they satisfy the other participation criteria), as these bodies operate under the controls of the participating TEO. These staff may also be included in the audit sample. The auditors will review the employment agreement (or similar) in place with the employing entity. Providing the TEO's ownership and control of the subsidiary can be demonstrated, the additional requirements for staff contracted from a non-TEO will not apply.

As with previous Quality Evaluations, the auditors will work with TEOs to ensure that information is kept confidential and appropriate safeguards are in place to protect the privacy of participating staff. TEOs may elect to redact sensitive aspects (e.g., salary or address), providing the auditors are still able to verify the calculation of FTE.

4.3 Phase 2: Data Evaluation audit – Evidence Portfolios

The structure of EPs for Quality Evaluation 2026 consist of two main components:

- The ERE Component.
 - One to three Examples of Research Excellence (EREs).
 - Each ERE may contain up to three supplementary items.
 - Up to eight Other Examples of Research Excellence (OEREs), along with a single contextualising summary narrative.
- THE CRE Component.
 - Up to ten Contributions to the Research Environment (CREs).
 - This component describes the research related contributions the staff member has made to sustaining, developing and/or growing the research environment and culture.

The objective of this aspect of the data evaluation audit is to assess whether research excellence and research environment contributions:

- Exist
- Were first made publicly available in the correct period to be considered eligible (1 January 2018 to 31 December 2025 inclusive)
- Are accurately represented.

4.3.1 Sampling approach for the ERE Component

Consistent with the calculation of the total weighted score assigned to an EP, sample selection will be split approximately 70 percent to EREs and 30 percent for CREs.

The ERE audit will be primarily focused on ERE Outputs, as these are given particular scrutiny during the Quality Evaluation and their impact on the score awarded to an EP.

In 2018, participating staff (approximately 8,300) could submit four Nominated Research Outputs. The maximum number of ERE Outputs that can be submitted is three.

For the purposes of determining draft sample sizes, we have assumed the number of participants remains largely consistent and that all participants submit the maximum number of pieces of evidence.

The audit sampling approach will involve reviewing an estimated:

- 7.5% of EREs (including ERE Outputs and Supplementary Items) (based on a 95% confidence level and 2% margin of error) – approximately 1,870 ERE Outputs.
- 1% of OEREs (non-statistical sample) – approximately 660.
- 1% of CREs (non-statistical sample) – approximately 830.

This represents a total of 3,360 items within EPs. Panel members are able to request the auditors to review specific items and these will be included in the sample sizes above.

Note the above sample sizes are draft based on initial estimates. The exact sample sizes will be determined once all data has been submitted in the PBRF IT system.

All types of research evidence and contributions will be assessed during the audit, e.g., including those not written in the English language. Samples will be selected randomly.

4.3.2 Testing approach for the CRE Component

The CRE items selected for sampling will be reviewed in comparison with publicly available sources. An exact match to the data sources will not necessarily be expected because of possible differences in the nature of the data. Accordingly, queries will only be raised with TEOs in the event of significant variances.

Although TEOs are not required to submit evidence of CREs for panel review, it is expected that each TEO will have implemented processes to provide a basic level of assurance that CREs are accurately represented in EPs.

Deloitte will send the audit sample for CREs to TEOs shortly after the close off date for submitting EP data. This will allow TEOs to collect evidence to support CREs from their participating staff.

A random sample of EPs will be chosen for audit. The CRE likely to have the greatest impact on an EP will be audited.

4.3.3 Minimum standards of evidence for the Evidence Portfolio audit

Evidence must be available to support the existence and accuracy of all aspects of the bibliographical information provided in EPs for all research outputs. Evidence is to be submitted in electronic format by default.

Where a TEO has elected to supply physical (rather than electronic) copies of research outputs, these should be made available to the auditors upon request and at the TEO's cost within 10 working days. The auditors will only review physical evidence at the request of the Moderation Panel. If required, the auditors will review physical research evidence at the TEC's premises to meet the insurance coverage set out in the PBRF guidelines.

The section 'Research output evidence requirements for assessment and audit' in the PBRF guidelines (Pages 139 to 155 of the August 2023 version) sets out the minimum standards of evidence for items in the EP that TEOs must provide for audit.

5. Managing and reporting errors

5.1 Investigating potential errors

To investigate and manage potential errors identified during the data evaluation audit the following process will be applied. This process starts once Deloitte has reviewed the initial information a TEO has provided and potential discrepancies have been identified. For example, if an ERE Output cannot be confirmed as publicly available then the following approach will be applied:

- Send a list of identified queries to the TEO. Efforts will be made to batch queries as much as possible.
- Inform the TEO of the ten working days requirement to respond to the queries and provide the relevant information.
- Deloitte will review the information provided and if no error is identified, no further action will be taken.
- If a conclusion on whether there is an error in the data cannot be reached based on the additional information provided, the information will be provided to the TEC for a final decision. This will include making a final decision on the outcome and the actions it will take. Advice may be sought from the Moderators, if required.
- The TEC will advise the TEO of the outcome.
- The TEC will action any changes required to the staff and/or EP data.

5.2 Reporting errors

As set out above, Deloitte will report to the TEC the nature and extent of validated errors identified during the data evaluation audit. The TEC will determine the actions, if any, it may take in response to each error.

The PBRF guidelines separate errors into two categories 'major' and 'minor'. A high-level framework is also provided that sets out the actions likely to be applied for major and minor errors.

6. TEO declaration

The Chief Executive or Vice-Chancellor of each participating TEO must submit a declaration confirming they have taken all reasonable steps to ensure:

- The information within submitted EPs is complete, accurate, and complies with the PBRF guidelines.
- All participating staff members meet the requirements for participation in the Quality Evaluation.
- All EPs likely to receive a funded Quality Category have been submitted for assessment.
- All items within EPs are available for inspection by the peer review panels if required.
- Only staff members with legitimate circumstances have claimed the researcher circumstances provision.

This declaration must be provided to the TEC within 24 hours of the final submission date – no later than 4:00pm on 13 July 2026. The declaration to be completed is provided within the PBRF guidelines.

7. Reporting on audit findings

Deloitte will prepare reports on audit findings. It is expected that the reporting format will be similar to the approach followed for the Quality Evaluation 2018. The following sections describe the reporting on audit findings for Phases 1 and 2.

7.1 Phase 1: Process Assurance

- A brief memorandum-style audit report for each TEO highlighting relevant findings from the process assurance audit and suggested areas of focus to ensure the TEO is prepared for the Quality Evaluation.
- A report on themes and findings from the process assurance phase. It is expected that this report will be published on the TEC website. This report will include a brief summary of Deloitte's assessment of each TEO's level of preparedness.

7.2 Phase 2: Data Evaluation

- A report on themes and errors identified during the data evaluation phase. This will include specific observations for each TEO. It is expected that this report will be published on the TEC website.

8. Communication between the auditors and the sector

8.1 Key contacts

Each TEO is required to nominate a contact person with whom the Quality Evaluation auditors will communicate on a day-to-day basis. This role will be known as the 'PBRF audit coordinator'.

Throughout the audit, Deloitte will communicate with the nominated PBRF audit coordinators and the appointed senior manager responsible for research (as appropriate). Communication will be predominantly through email and Teams/Zoom.

The TEC will share general communications and announcements at key times during the audit via email or on the TEC's website.

8.2 Queries from TEOs around the interpretation of the PBRF guidelines

As with previous Quality Evaluations, the **Quality Evaluation** auditors expects to receive a small number of queries from TEOs seeking clarity on specific clauses in the PBRF guidelines and regarding the treatment of specific staff or specific elements of EPs. Deloitte will review each query against the requirements in the PBRF guidelines and where necessary, consult with TEC staff or the PBRF moderators before responding. All queries or clarifications will be anonymised and the TEC may share both the question and answer to inform the TEOs.

9. Escalation and complaints

9.1 Complaints about the audit process

Complaints regarding the activities or behaviours of an auditor should be made in writing to the TEC.

The relevant contact details are:

Dan Haines Cohen

Principal Advisor PBRF

Tertiary Education Commission

PO Box 27-048

Wellington 6141

Email to: dan.hainescohen@tec.govt.nz

9.2 Anonymous reporting of complaints about the behaviour of TEOs

A process will be established by TEC to manage the anonymous reporting of complaints about the behaviour of TEOs. Any party will be able to make an anonymous report. The details of this will be added to the confirmed methodology.

Deloitte will investigate all complaints and inform the TEC of the outcome, who will be responsible for determining the actions (if any) to take.

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