

Performance-Based Research Fund

Sector Reference Group – Consultation Paper #9
Review of the TEO Audit process

Tertiary Education Commission
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The Tertiary Education Commission

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Name	Status	Distribution
Review of the TEO Audit process	CONSULTATION PAPER	Tertiary education sector and other stakeholders
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		PBRFSRG@tec.govt.nz
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Purpose

- 1. This paper has been prepared as part of the consultation for the design of the 2018 Performance-Based Research Fund (PBRF) Quality Evaluation. Specifically it:
 - provides background information on the 2012 Quality Evaluation audit process;
 - sets out the proposed framework for the auditing of the data submitted by tertiary education organisations (TEOs) for the 2018 Quality Evaluation;
 - seeks feedback on the proposed framework; and
 - invites feedback on any other matters relating to the TEO audit process not covered in this paper.
- 2. The Tertiary Education Commission (TEC) undertakes two separate audit processes; an internal probity assurance audit and the audit of participating TEOs to determine their preparedness and the validity of the data they submit to the TEC. The probity assurance audit is excluded from this process as it is a review of TEC's internal processes.

Design principles for the 2018 Quality Evaluation

- 3. The work of the Sector Reference Group (SRG) in the design of the 2018 Quality Evaluation is based on the following principles and considerations:
 - upholding the objectives and aims of the PBRF set out in Appendix 1;
 - drawing on the lessons learned as part of the previous Quality Evaluations;
 - accessing relevant experience and expertise across the SRG and the wider tertiary education sector:
 - ensuring that any proposed changes are exposed to rigorous sector and expert scrutiny;
 - achieving a level of consensus regarding how the 2018 Quality Evaluation should be conducted; and
 - avoiding changes that result in unreasonable compliance or high costs unless there is a robust rationale that indicates changes will result in significant improvements.

Background

- 4. The audit of the Quality Evaluation is undertaken to provide assurance to the Tertiary Education Commission (TEC), participating TEOs and other stakeholders that the results of the exercise are robust and valid. The TEC undertakes an independent audit of participating TEOs to determine their preparedness and the validity of the data they submit to the TEC ("TEO audit").
- 5. The 2003 Quality Evaluation TEO audit was undertaken by Audit New Zealand, while the 2006 and 2012 Quality Evaluation TEO audits were undertaken by KPMG.

- The objectives of the 2012 Quality Evaluation TEO audit process were to:
 - provide assurance to the TEC that TEOs are applying the guidelines in a transparent, fair, and consistent way that adheres to both the principles and letter of the guidelines
 - determine that TEOs had adequate systems and controls in place for:
 - ensuring their preparedness for the 2012 Quality Evaluation round,
 - determining the eligibility of staff, and
 - submitting Evidence Portfolios (EPs); and
 - provide assurance to the TEC that the Nominated Research Output (NRO) and Other Research Output (ORO) components of the EP (Quality Evaluation process), and staff eligibility data submitted by TEOs are complete and accurate.¹
- 7. The TEO audit excluded the Peer Esteem (PE) and Contribution to the Research Environment (CRE) components of EPs, along with the other two measures of the PBRF funding formulae (Research Degree Completions and External Research Income), and the peer review panel assessment and moderation processes. The internal probity assurance process undertaken by TEC included the assessment and moderation processes.
- There were two parts to the TEO audit process; the first was the audit of preparedness of participating TEOs ("Process Assurance audit") while the second was the audit of data submitted to the TEC for the Quality Evaluation ("Data Evaluation audit").

Timing of the 2012 Quality Evaluation TEO audit process

- The Process Assurance audit was undertaken between May and December 2011, with submission of EPs to the TEC being completed on 20 July 2012.
- 10. Each TEO was required to submit a declaration from the Chief Executive or Vice-Chancellor confirming both the accuracy of information contained in the EPs and the accuracy of assessment processes within the TEO. These declarations were required to be submitted to the TEC by 21 July 2012.
- 11. The Data Evaluation audit was undertaken between July and December 2012. Final summary reports were provided to TEOs in February 2013.

Process Assurance audit

12. The main objective of the Process Assurance audit in the 2012 Quality Evaluation was to provide assurance to the TEC that TEOs had adequate systems and controls in place to ensure their preparedness for the 2012 Quality Evaluation, including systems and controls for determining the eligibility of staff and for submitting correct and accurate EPs. This phase started with an audit questionnaire sent to all TEOs.

13. This questionnaire was used by the audit team to undertake a risk assessment. The results of this determined if a TEO received either a site-visit (higher risk) or a telephone interview and paper-based review (lower risk) to determine their level of preparedness.

¹ TEC KPMG Audit Approach for Tertiary Education Organisations Participating in the Performance-Based Research Fund Quality Evaluation 2012, June 2012, p.4.

Based on the participation rate and likely distribution of funds, all eight universities and four other TEOs were visited. The audit team also facilitate audit workshops aimed at, but not exclusively for, TEOs not subject to a site visit.

14. The results of the Process Assurance audit were provided to TEOs and the TEC also published the report.² This report identified key themes across participating TEOs relating to the application of the eligibility criteria for staff and research outputs. These themes became focus areas for the second stage of the audit process, along with any TEO-specific issues. The report also included common questions raised by TEOs through the process along with the auditors' response to these questions.

Data Evaluation audit

- 15. The main objective of the Data Evaluation audit was to provide assurance to the TEC and peer review panels that staff eligibility data and the NRO and ORO components of EPs submitted by TEOs were complete and accurate. The data integrity of the Research Output (RO) component of the EP, in particular the NROs, forms the most important aspect of the Quality Evaluation process due to its significant weighting of 70% in the assessment of EPs.
- 16. The Data Evaluation audit involved:
 - substantive testing of the application of the staff participation criteria for staff submitting EPs on a sample basis and the use of analytical review auditing techniques to assess compliance with the PBRF guidelines; and
 - testing that the NROs and OROs were complete and accurate based on a robust sampling methodology with the size of the sample at each TEO being influenced by the results of the Process Assurance audit, and proportionally more NROs than OROs sampled due to their significance and weighting in the assessment process.
- 17. Panel members were also able to note any concerns over the accuracy and reliability of any of the information contained in EPs. Those concerns relating to staff or research output eligibility were also investigated by the auditors, with concerns relating to the PE or CRE components being investigated by the TEC.

Staff eligibility

- 18. The focus of the staff eligibility audit was on those staff submitting EPs. Staff who had not submitted EPs were not included in the audit as this data was not used in either the funding calculation or the reporting of results (determining the Average Quality Scores).
- 19. This meant that high risk areas included the following:
 - inclusion of staff who were likely to receive a quality score that did not meet the staff participation criteria i.e. staff who are based overseas and do not meet the overseasbased staff test, or staff employed by non-TEOs;
 - incorrect classification of staff as new and emerging;
 - incorrect calculation of FTE level; and

² TEC KPMG Performance-Based Research Fund Report on the overall preparedness of Tertiary Education Organisations for the Quality Evaluation, 22 March 2012

assignment of staff to the correct panels and subject areas.

Research outputs

- 20. The audit of research outputs (NROs and OROs) focussed on two broad categories of errors: 'fundamental' and 'serious'.
- 21. Fundamental errors were those that render research outputs ineligible (and thus the output is discounted from the assessment process). These errors fall into three subcategories:
 - The output was produced (i.e. published, performed, exhibited, etc.) outside the assessment period for the 2012 Quality Evaluation
 - The output was not authored by the person who submitted the relevant EP
 - There was no evidence to confirm the output's existence.
- 22. Serious errors were those that materially affect a panel member's judgement on the quality of research outputs. These errors fall into six sub-categories:
 - Claims that an edited book was an authored book
 - Failure to include the names of co-authors, thus implying that the research output was sole-authored
 - Claims that a conference contribution was a journal article (or a book chapter)
 - Significant location errors that might affect a panel member's perception of a research output (e.g. the wrong publisher)
 - Title errors that might affect a panel member's perception of a research output
 - Claims that an output had significantly more (or fewer) pages (i.e. 30% plus or minus) than was actually the case.

Peer Esteem and Contribution to the Research Environment components

23. As noted above the PE and CRE components of EPs were excluded from the TEO audit however the TEC responded to specific panellists concerns about these items. The TEC removed part or all of 67 PE and CRE items from eight EPs due to these items being ineligible for submission. Duplication of entries and items that were outside the assessment period were common errors.

Discrepancies and the application of sanctions

- 24. When any discrepancies were identified relating to the eligibility of either staff or research outputs, the relevant TEO was informed and given an opportunity to respond. No timeframe for this response was specified in the 2012 Guidelines.
- 25. The identification of discrepancies mean that those TEOs could receive a follow-up site visit which focused on identifying the cause of discrepancies and understanding the impact of these discrepancies on that TEO's PBRF submission. An escalation progress report was also issued to the TEC that summarised the issues. Discrepancies could also be referred to the TEC Board of Commissioners to consider applying sanctions resulting from escalated issues as specified in the PBRF Guidelines.

- 26. The 2012 Guidelines provided some examples of actions that could be taken in response to certain errors. For example, if an NRO was found to be ineligible for inclusion in the Quality Evaluation, then the sanction was exclusion of that research output from assessment (and with the TEO unable to submit a replacement output).
- 27. The TEC could only change or remove data in consultation with the affected TEO.³ This created an issue with some TEOs submitting multiple appeals resulting in significant delays in resolving discrepancies. This in turn resulted in late changes to EPs including the withdrawal of entire EPs (as a result of ineligible staff) or withdrawal of ineligible NROs or OROs. In some instances this occurred during peer review panel meetings requiring panels to reconsider affected EPs.
- 28. The SRG and the TEC believe the process of managing discrepancies and sanctions is an area where improvements can be made.

Review of the TEO audit process

- 29. As part of the first consultation paper released by the SRG, feedback was received that indicated that a review of the TEO audit process would be welcomed by the sector. The areas identified for potential review included the scope, detail and timetable of the audit, as well as the sanctions applied particularly as they relate to cases of erroneous, misleading or false information.
- 30. The SRG and the TEC have reviewed the TEO audit process with input from KPMG. Consideration has also been given to the previous consultation papers released by the SRG, including the feedback received and the in-principle decisions that have already been made.
- 31. As a result of this, the following framework for the TEO audit process is proposed. This will underpin a more detailed audit methodology, which will be developed by the external auditors appointed by the TEC for the 2018 Quality Evaluation.

Underpinning principles of the TEO audit process

The auditing and data validation undertaken in the PBRF Quality Evaluation process will support many of the guiding principles of the PBRF – in particular the principles of consistency, credibility, efficiency, and transparency.

All TEOs will be subjected to the audit processes to ensure that that there is consistent application of the guidelines across participating TEOs.

All types of data submitted for the Quality Evaluation will be subject to audit and validation.

All TEOs (and their staff members) are expected to provide accurate data to the TEC.

Objectives of the TEO audit process

The objectives of the 2018 Quality Evaluation TEO audit process are to:

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³ TEC, PBRF: Quality Evaluation Guidelines 2012, May 2013, p.178.

- provide assurance to the TEC that all participating TEOs are applying the guidelines in a transparent, fair, and consistent way that adheres to both the principles and letter of the guidelines;
- determine that TEOs have adequate systems and controls in place for:
 - ensuring their preparedness for the 2018 Quality Evaluation round,
 - determining the eligibility of staff, and
 - submitting Evidence Portfolios (EPs); and
- provide assurance to the TEC that the Research Output (RO) and Research Contribution (RC) components of the EPs, and staff data submitted by participating TEOs is complete and accurate.

Stages of the TEO audit process

There will be two main stages to the TEO audit process; the first is the audit of preparedness of participating TEOs ("Process Assurance audit") while the second is the audit of data submitted to the TEC for the Quality Evaluation ("Data Evaluation audit").

The detailed audit methodology for the 2018 Quality Evaluation will be provided by the end of 2016.

Data validation during submission

During the submission phase of the Quality Evaluation process, EP and staff data will be automatically validated by the TEC submission system. The verification rules will be provided by the TEC. TEOs will be able to view all data submitted and access a validation report notifying them of any errors that occur in EP submission. TEOs are responsible for any changes including correcting errors prior to the final submission date.

Process Assurance audit

The Process Assurance audit will provide assurance to the TEC that TEOs have adequate systems and controls in place to ensure their preparedness for the 2018 Quality Evaluation. This audit will include a review of the systems and controls for:

- determining the eligibility of those staff submitting EPs; and
- submitting correct and accurate EPs which will include items in both the Research Output and Research Contribution components.

All participating TEOs, including those considering participating, will be required to complete a questionnaire which will be used to assess, evaluate and build an understanding of the maturity of each TEOs internal processes systems and controls and their level of preparedness for the Quality Evaluation.

Information from the questionnaire will be used to undertake a risk assessment which will assist the TEC to determine an appropriate level of auditing to be undertaken at each TEO.

Site visits, telephone interview and paper-based reviews will be undertaken during this audit.

TEO declaration

The Chief Executive or Vice-Chancellor of each participating TEO must submit a declaration confirming the accuracy of information contained in the EPs, the availability of evidence for assessment and/or audit and the accuracy of assessment processes within the TEO to the TEC within 24 hours of the final submission date.

This declaration specifically requests confirmation that:

- the information contained in the EPs submitted to the TEC by the TEO is complete, accurate and complies with the PBRF Guidelines issued by the TEC;
- all staff members who are being submitted to the TEC for assessment in the Quality Evaluation meet the requirements for participation in the PBRF;
- the TEO has appropriately applied the PBRF Guidelines to ensure no EP likely to receive a funded Quality Category been excluded from assessment in the Quality Evaluation;
- all the NROs identified in the submitted EPs are, if necessary, available for inspection by the peer review panels; and
- the TEO has complied with all other relevant PBRF Guidelines.

Data Evaluation audit

The Data Evaluation audit will provide assurance to the TEC and peer review panels that staff eligibility data, the Research Output and Research Contribution components of EPs submitted by TEOs are complete and accurate.

The TEC will conduct random checks of a proportion of staff data and EPs, including some from each TEO. This will use a risk-based sample selection that will be developed as part of the overall audit methodology.

Every participating TEO will be audited. The sample size selected for the audit of EP data will be based on an assessment of risk. In the event that errors are identified, an assessment will be made of the need for an escalated audit.

All aspects of EPs will be open to scrutiny, including data submitted in both the Research Output and Research Contribution components.

The PBRF IT system will allow panellists to see which items within an EP have been audited.

Staff eligibility

The staff eligibility audit will only be on those staff submitting EPs. TEOs will complete and submit the Staff Data File, along with their EPs, by 6 July 2018 with any errors corrected by 13 July 2018.

The Staff Data File will only include information on those staff members for whom EPs are submitted or who have transferred or are concurrently employed by another participating TEO.

The staff eligibility audit will focus on any areas where major discrepancies or inconsistencies were detected during the Process Assurance audit.

Site visits, telephone interview and paper-based reviews will be undertaken during this audit, and TEOs will be required to provide detailed information to auditors.

Research Outputs

In the 2018 Quality Evaluation, TEOs will be encouraged to make the majority of NROs electronically accessible to the TEC through the PBRF IT system. This will allow the audit of research outputs to be undertaken more easily and less intrusively. The TEC will seek specialist support on this audit to ensure that the process is robust.

In order to minimise administrative and compliance costs, the audit of research outputs will generally be handled through correspondence rather than site visits. Nevertheless, the TEC reserves the right to visit TEOs in order to verify data supplied in relation to the PBRF.

A proportion of an EP's research outputs will be cross-checked against a number of publication databases (and other data sources). Primary attention will be on NROs however, a proportion of OROs listed in EPs will also be investigated.

The main focus will be on those types of outputs that are amenable to such checking processes – i.e. authored and edited books, journal articles, and conference contributions. These types also make up the majority of research outputs submitted.

Particular attention will be given to those aspects of the output where inaccurate information could affect perceptions of its quality (e.g. the number of authors, location details, pagination) and to outputs that bear a date at the limits of the assessment period. Where publication dates appear to be outside the assessment period and no explanation has been supplied in the EP, the relevant research outputs will be sought; a publisher's letter confirming the actual publication date will also be sought if necessary (and if possible).

Research Contributions

Items submitted in the Research Contribution component will be included in the TEO audit process.

TEOs are not required to include evidence that supports the item within the EP. A low proportion of Research Contribution items will be sampled, with the proportion reflecting the weighting of the component.

Where possible and relevant, the data supplied by TEOs will be reviewed in comparison with other data, such as:

- TEO research reports
- TEO annual reports
- The grants awarded by research funding bodies (e.g. the Foundation for Research, Science and Technology, the Royal Society and the Health Research Council).

Because of possible differences in the nature of the data, an exact match will not necessarily be expected. Accordingly, investigations will be undertaken only in the event of significant discrepancies.

Panel members' concerns

Panel members are able to note any concerns over the accuracy and reliability of any of the information contained in EPs.

All concerns raised by panels will be investigated by the TEC Secretariat in the first instance and then escalated to the auditors as required.

The result of the investigation will be reported back to the relevant panel Chair, the relevant panel members and, if appropriate, all the members of that panel by the TEC Secretariat.

Nature and categories of errors

The Data Evaluation audit will focus on two broad categories of errors: 'fundamental' and 'serious'.

Fundamental errors

Fundamental errors are those that render staff ineligible to participate in the Quality Evaluation, and research outputs or contributions ineligible for assessment.

Fundamental errors are likely to include, but are not limited to:

- staff members not meeting the staff eligibility criteria, for example:
 - not continuously employed;
 - · being based overseas; or
 - employed for less than a minimum of 0.2 FTE throughout the census year.
- the final version of a research output being publicly available outside the assessment period for the 2018 Quality Evaluation;
- a research output not authored by the person who submitted the relevant EP;
- no evidence confirming the research output's existence;
- a research output with similar content to other research outputs submitted in the EP;
- a research output that doesn't meet the definition of research;
- a research contribution not attributed to the staff member submitting the EP; or
- a research contribution occurring outside the assessment period for the 2018 Quality Evaluation.

Serious errors

Serious errors are those that materially the PBRF status of a staff member in terms of assessment, or materially affect a panel member's judgement on the quality of research outputs or research contributions.

Serious errors are likely to include, but are not limited to:

- incorrect recording of a staff member's FTE;
- incorrect application of the new and emerging researcher criteria;
- · incorrect classification of research output type;
- identification of research outputs as quality assured when they are not;
- failure to include the names and/or contributions of co-authors; or
- misrepresentation of the contribution of the submitting staff member to a research output or research contribution.

The TEC expects TEOs to establish internal procedures that will ensure EPs submitted to the 2018 Quality Evaluation do not contain these kinds of errors.

Process for managing errors

The following process will be used to manage errors in data submitted to the 2018 Quality Evaluation.

Errors in staff and/or EP data are identified by the TEC auditors or panel members The TEC auditors send a list of queries to the relevant TEO TEO has 10 working days to respond to the gueries and provide additional evidence TEC auditors review additional evidence - If the additional information confirms there is no error in the data, no further action is taken - If the additional information does not confirm there is no error in the data, the original query, the additional information and the auditors assessment is provided to the TEC for a final decision. The TEC considers the error(s) identified, any additional information and the auditors assessment and makes a final decision Advice may be sought from the Moderators, if required TEOs are advised of the outcome and the sanction to be applied (if any) The TEC applies any sanctions and actions any changes required to the staff and/or EP data

If the error rate is above a tolerable level, then a further examination will be undertaken on other information submitted by that TEO.

Wherever the TEC finds errors or discrepancies that may affect the Quality Categories assigned to EPs, the relevant panel will be informed. Such information will be supplied in advance of the panel meetings.

Significantly high numbers of errors and errors of a systematic nature will also be drawn to the attention of the Chair of the Moderation Panel and the TEC Board.

Sanctions

The TEC will determine when and if sanctions are applied to TEOs. The following principles will apply to the application of sanctions to TEOs:

- The final decision on the application of any sanction will be the responsibility of the TEC, with advice sought from the Moderators as required.
- Any sanctions will vary according to the magnitude, nature and reason for the sanction.

In the event that sanctions are used, their main impact will be to reduce a TEO's potential PBRF revenue and/or quality score.

It is not possible to identify in advance every situation where sanctions may be applied. However, the following table shows actions that will be taken in relation to certain errors.

Fundamental errors	Sanctions and consequences
Staff member is found to be not PBRF-eligible.	 EP will not be assessed. This will mean a reduction in PBRF funding and a change to reported quality scores.
A research output or research contribution is found to be ineligible for inclusion in the Quality Evaluation (e.g. if a research output was produced outside the assessment period or because it fails to meet the Definition of Research).	 Research output or contribution will not be assessed. The TEO will not be able to submit a replacement output or contribution. The exclusion of the research output or contribution may reduce the Quality Category assigned to the EP, with consequent reduction in the TEO's PBRF revenue and a change to reported average quality scores.
Systemic errors or lack of confidence in the data supplied by a TEO.	Possible exclusion of all EPs submitted by that TEO from the Quality Evaluation process or from the reporting of results.

Serious errors are likely to result in lesser sanctions, for example incorrect recording of a staff member's FTE will result in the TEC correcting the data. However, the consequences of this is that the auditors will undertake a wider review of the TEOs data, the corrected FTE will impact the TEOs PBRF revenue and potentially the average quality scores, and all errors will be publicly reported.

Reporting of audits

The TEC will report the results of each of the audits back to the participating TEO.

The TEC will also publically report on the outcomes of both the Process Assurance audit and the Data Evaluation audit, including the results for each TEO. This will include the errors found and also any sanctions applied.

- 32. The SRG seeks feedback on the proposed framework, it also seeks specific feedback on the following questions:
 - a. Should the 2018 Quality Evaluation audit process follow similar timing as the 2012 Quality Evaluation (see Timing of the 2012 Quality Evaluation TEO audit process)?
 - b. Are there any other aspects of the Quality evaluation that should be included in the TEO audit process?
 - c. Are the broad categories of 'fundamental' and 'serious' errors appropriate?
 - d. Are there any other changes to the process for managing errors that need to be considered?
 - e. Are there other sanctions that need to be considered? For example, not reporting the average quality scores for TEOs where there have been systemic errors identified.

Providing feedback

- 33. Feedback is sought from the sector and other key stakeholders on the information outlined in this paper, as well as the proposed approach to the TEO audit process.
- 34. The SRG also welcomes feedback on any other matters not included in this paper that relate to the TEO audit process.
- 35. Feedback can be completed:
 - online: https://www.surveymonkey.com/r/7H5Z537
 - or via email using the template provided on the TEC website, with completed templates being emailed to PBRFSRG@tec.govt.nz.
- 36. All feedback would be appreciated as soon as possible, but no later than 5pm Friday 21 August 2015.

Appendix 1: Objectives and principles of the PBRF

Objectives of the PBRF

The primary objectives of the PBRF are to:

- increase the quality of basic and applied research at New Zealand's degree granting TEOs;
- support world-leading research-led teaching and learning at degree and postgraduate levels;
- assist New Zealand's TEOs to maintain and lift their competitive rankings relative to their international peers; and
- provide robust public information to stakeholders about research performance within and across TEOs.

In doing so the PBRF will also:

- support the development of postgraduate student researchers and new and emerging researchers;
- support research activities that provide economic, social, cultural and environmental benefits to New Zealand, including the advancement of Mātauranga Māori; and
- support technology and knowledge transfer to New Zealand businesses, iwi and communities.⁴

Principles of the PBRF

The PBRF is governed by the following principles:

- Comprehensiveness: the PBRF should appropriately measure the quality of the full range of original investigative activity that occurs within the sector, regardless of its type, form, or place of output;
- Respect for academic traditions: the PBRF should operate in a manner that is consistent with academic freedom and institutional autonomy;
- 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;
- Continuity: changes to the PBRF process should only be made where they can bring demonstrable improvements that outweigh the cost of implementing them;
- *Differentiation*: the PBRF should allow stakeholders and the government to differentiate between providers and their units on the basis of their relative quality;

⁴ The objectives were revised as a part of the Ministry of Education's review of the PBRF and agreed by Cabinet in February 2014.

- *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 the 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;
- Complementarity: the PBRF should be integrated with new and existing policies, such as charters and profiles, and quality assurance systems for degrees and degree providers; and
- Cultural inclusiveness: the PBRF should reflect the bicultural nature of New Zealand and the special role and status of the Treaty of Waitangi, and should appropriately reflect and include the full diversity of New Zealand's population.

⁵ These principles were first enunciated by the Working Group on the PBRF. See <u>Investing in Excellence</u>, pp.8-9.

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Appendix 2: Links to relevant documents

Investing in Excellence, 2002

PBRF: Report on the overall preparedness of Tertiary Education Organisations for the Quality Evaluation, 22 March 2012

Report from the Audit workstream, 9 April 2013

PBRF: Quality Evaluation Guidelines 2012, May 2013

PBRF Evaluating Research Excellence: The 2012 Assessment, October 2013

Appendix 3: 2012 Quality Evaluation Guidelines – Information relating to the TEO audit process

Auditing Principles

Support of base principles

Auditing, data validation and checking supports many of the guiding principles of the PBRF – in particular the principles of consistency, credibility, efficiency, and transparency.

All types of data checked

In addition to the two audits described below, all types of data submitted for the PBRF from all types of TEOs will be checked. Checking and validation will not be confined to certain data types (e.g. NROs), nor will it focus only on one type of TEO (e.g. major institutions).

This principle provides a strong incentive for all TEOs (and their staff members) to provide accurate data to the TEC.

Other existing mechanisms

The PBRF contains a range of constraints and mechanisms that will serve to enhance the accuracy and reliability of the data supplied by TEOs to the Ministry of Education (MoE) and the TEC. These include:

- TEO internal quality-assurance processes
- The ability to check other information contained in EPs (e.g. prizes, citations, etc.)
- The relatively small size of the academic community in New Zealand and the panel members' knowledge of the research of their disciplinary colleagues.

Two audits

Two audits will focus on the types of data where inaccuracies pose the greatest risks to the integrity of the PBRF. These areas are:

Staff eligibility to participate in the PBRF

The information contained in EPs and, in particular, in its NROs.

The Eligibility Audit

A two-stage audit

For the 2012 Quality Evaluation a two-stage eligibility audit will be held. The first stage of the eligibility audit will take place in the second half of 2011 and will examine every participating TEO.

Eligibility audit stage one

Stage one of the eligibility audit will focus on the process followed by TEOs in determining the PBRF-eligibility of their staff. Particular attention will be paid to how teaching-only staff are categorised and how exclusions on the basis of strict supervision are applied.

During this first stage of the eligibility audit TEOs will be required to supply to the TEC the numbers of all their academic staff and indicate which of these staff the TEO seeks to exclude from PBRF eligibility and why.

This information will be reviewed by a separate independent panel that will look to ensure that exclusion of staff from PBRF eligibility (in particular exclusion due to a teaching-only staff member being strictly supervised) is consistently applied by all TEOs.

Eligibility audit stage two

Stage two of the eligibility audit will focus on those TEOs where major discrepancies or inconsistencies were detected during stage one of the eligibility audit.

This stage of the audit may involve site visits to TEOs and the requirement to provide detailed information to auditors.

Further detail

More detail on the eligibility audit for the 2012 Quality Evaluation, including an audit methodology, will be provided following the publication of these Guidelines.

The Validation of EP Data

Checking of EP data

EPs will be checked one by one by the TEC's PBRF system as they are submitted electronically by TEOs.

TEOs will be able to access a validation report notifying them of any errors that occur in EP submission and will be responsible for correction of these errors. The verification rules will be provided by the TEC to allow TEOs to do this.

TEOs have the ability to view EPs submitted to the TEC at any time both before and after the final submission date. TEOs will be able to change any information in an EP (including an NRO) prior to the final EP submission date of 20 July 2012.

Note that EPs submitted as XML files must be resubmitted as XML files.

Further information is provided in the Evidence Portfolio Schema Definition Document, published simultaneously with these Guidelines and available on the TEC website.

Special circumstances audit

As part of the checking of EPs, researchers claiming special circumstances may be subject to random auditing, during which appropriate evidence of the claimed special circumstances may be requested.

CEOs' Evidence Portfolio Declaration

A declaration will be required by 21 July 2012 from Chief Executives of participating TEOs to confirm both the accuracy of information contained in the EPs and the process of assessment within the TEO. The form of this declaration follows.

Declaration of Chief Executive Officer for a Tertiary Education Organisation participating in the Performance-Based Research Fund: Submission of Evidence Portfolios to the Tertiary Education Commission:				
•	me) being the Chief Executive Officer			
(organ	isation name) hereby certify that to the best of my knowledge all reasonable steps have aken to ensure that:			
a)	The information contained in the Evidence Portfolios submitted to the Tertiary Education Commission by			
	(organisation name) is complete, accurate and complies with the PBRF Guidelines issued by the Tertiary Education Commission;			
b)	All the staff members who are being submitted to the Tertiary Education Commission for assessment in the Quality Evaluation meet the requirements for participation in the PBRF;			
c)	(organisation name) has appropriately applied the PBRF Guidelines to ensure no PBRF-eligible staff members have been excluded from participation in the Quality Evaluation;			
d)	All the Nominated Research Outputs identified in the submitted Evidence Portfolios are, if necessary, available for inspection by the peer review panels and expert advisory groups; and			
e)	(organisation name) has complied with all other relevant PBRF Guidelines.			
	(organisation name) by			
	Signature of Chief Executive Officer			
	Name of Chief Executive Officer			
	Dated			

The Audit of NROs

Checking NROs

In the 2012 Quality Evaluation, TEOs will make NROs electronically accessible to the TEC. In addition to allowing panel members to access NROs far more efficiently than in 2006, this will also allow the audit of NROs to be undertaken more easily and less intrusively.

Site visits for data checking and validation

In order to minimise administrative and compliance costs, the NRO audit will generally be handled through correspondence rather than site visits.

Nevertheless, the TEC reserves the right to visit TEOs in order to verify data supplied in relation to the PBRF.

Random checking of EPs

The TEC will conduct random checks of a proportion of EPs, including some from each TEO. This will use a risk-based sample selection that will be developed as part of the overall audit methodology.

Every participating TEO will be audited. The sample size selected for the audit of EP data will be based on an assessment of risk. In the event that errors are identified, an assessment will be made of the need for an escalated audit.

All aspects of EPs will be open to scrutiny, including data in relation to the Research Output, Peer Esteem and Contribution to Research Environment components.

Where possible and relevant, the data supplied by TEOs will be reviewed in comparison with other data, such as:

- TEO research reports
- TEO annual reports
- The grants awarded by research funding bodies (e.g. the Foundation for Research, Science and Technology, the Royal Society and the Health Research Council).

Because of possible differences in the nature of the data, an exact match will not necessarily be expected. Accordingly, investigations will be undertaken only in the event of significant discrepancies.

Cross-checks of NROs and 'other' research outputs

A proportion of an EP's research outputs will be cross-checked against a number of publication databases (and other data sources). Primary attention will be on NROs. 'Other' research outputs listed in EPs will also be investigated.

The main focus will be on those types of outputs that are amenable to such checking processes – i.e. authored and edited books, journal articles, and conference proceedings.

Particular attention will be given to those aspects of the output where inaccurate information could affect perceptions of its quality (e.g. the number of authors, location details, pagination) and to outputs that bear a date at the limits of the assessment period. Where publication dates appear to be outside the assessment period and no explanation has been supplied in the EP, the relevant research outputs will be sought; a publisher's letter confirming the actual publication date will also be sought if necessary (and if possible).

Panel members' concerns

Panel members will note any concerns over the accuracy and reliability of any of the information contained in EPs.

All panel concerns will be investigated by the TEC Secretariat, and the results will be reported back to the relevant panel Chair, the relevant panel members and, if appropriate, all the members of that panel.

Nature and Categories of Research-Output Errors

Nature and categories of errors

The audit of research outputs will focus on two broad categories of errors: 'fundamental' and 'serious'.

Fundamental errors

Fundamental errors are those that render research outputs ineligible (and thus the output is discounted from the assessment process). These errors fall into three sub-categories:

- The output was produced (i.e. published, performed, exhibited, etc.) outside the assessment period for the 2012 Quality Evaluation
- The output was not authored by the person who submitted the relevant EP
- There was no evidence to confirm the output's existence.

Serious errors

Serious errors are those that materially affect a panel member's judgement on the quality of research outputs. These errors fall into six sub-categories:

- Claims that an edited book was an authored book
- Failure to include the names of co-authors, thus implying that the research output was sole-authored
- Claims that a conference contribution was a journal article (or a book chapter)
- Significant location errors that might affect an panel member's perception of an research output (e.g. the wrong publisher)

- Title errors that might affect an panel member's perception of a research output
- Claims that an output had significantly more (or fewer) pages (i.e. 30% plus or minus) than was actually the case.

The TEC expects TEOs to establish internal procedures that will ensure none of the research outputs presented in EPs contain these kinds of errors.

Reporting on investigation of errors

Wherever the TEC finds errors or discrepancies that may affect the Quality Categories assigned to EPs, the relevant panel will be informed. Such information will be supplied in advance of the panel meetings.

Significantly high numbers of errors and errors of a systematic nature will also be drawn to the attention of the Chair of the Moderation Panel and the TEC Board.

Corrections to Original Data

TEOs to be informed

Where fundamental or serious errors are found during auditing, the relevant TEO will be informed and given an opportunity to respond. (For definitions of fundamental errors and serious errors, see "Nature and categories of errors" above.)

Changes

Data will be changed only in consultation with TEOs.

High levels of correction

If the error rate is above a tolerable level, then a further examination will be undertaken on other information submitted by that TEO.

The Application of Sanctions

Principles

The TEC will determine when and if sanctions are applied to TEOs. The following principles will apply to the application of sanctions to TEOs:

- Prior to the TEC applying sanctions, the relevant TEO will be informed and given an appropriate opportunity to respond
- The final decision on the application of any sanction will be the responsibility of the TEC Board
- Any sanctions will vary according to the magnitude, nature and reason for the sanction.

In the event that sanctions are used, their main impact will be to reduce a TEO's potential PBRF revenue and/or average quality score.

Actions to be taken

It is not possible to identify in advance every situation where sanctions may be applied. However, the following table shows actions that will be taken in relation to certain errors.

Error	Sanctions and Consequences
An NRO is found to be ineligible for inclusion in the Quality Evaluation (e.g. because it was produced outside the assessment period or because it fails to meet the Definition	 Research output excluded from assessment The TEO will not be able to submit a replacement output
of Research).	The exclusion of the research output may reduce the Quality Category assigned to the EP, with consequent reduction in the TEO's PBRF revenue and a change to reported quality scores.
Staff member found to be not PBRF-eligible.	EP will not be assessed
PBRF-eligible.	This may mean a reduction in PBRF funding and a change to reported quality scores.
Failure to include a PBRF-eligible staff member in the PBRF Census.	Staff member in question will be included as an "R" or "R(NE)"
	Staff member will be included for reporting purposes under the relevant TEO, panel, subject area and academic unit.
A high error-rate or lack of confidence in the data supplied by a TEO.	Possible exclusion of all EPs submitted by that TEO from the Quality Evaluation process.

Timings for the Auditing Processes

Timing of the specific information requests

Where the TEO is asked specific questions in relation to information provided for the PBRF, the information will normally need to be provided within 10 working days of the request.

Working papers and other relevant documentation should be available for inspection if required.

Confidentiality

All information obtained by the TEC from TEOs in relation to data checking and verification will be treated on a confidential basis, and will be retained as required. This will be done in compliance with relevant statutory provisions.

Where data checking and verification processes are outsourced, the third parties will be bound by confidentiality and conflict-of-interest policies.

More detailed audit schedule

The TEC will provide a more detailed audit schedule to TEOs following preparation of the audit methodology.

Reporting of Audits of PBRF Data to the TEC Board

Timing

A report on the conduct and outcome of auditing processes will be prepared by the TEC Secretariat at the conclusion of the 2012 Quality Evaluation round.

Part of PBRF Project Manager's report

The data checking and verification report will form part of the PBRF-Project Manager's report to the TEC Board on the conduct of the Quality Evaluation.

It is expected that this report will be published.