



# PBRF 2012 Evidence Portfolio Schema Definition Document

Status	Final
Version	5.1
Date	1 February 2012

Prepared by PBRF Solution Architect and Data Architect



## Document References

Document	Ref #
Performance-Based Research Fund Quality Evaluation Guidelines 2012 (referred to as PBRF Quality Evaluation Guidelines 2012)	A389550
PBRF_TEO_EP_Submission_2012.xsd	A540495

## Changes in this version 5.1

Change	Section / Page Number
<p>1. Corrected description of Canterbury Earthquake impact code 3 (removed the word university) to:</p> <p><i>Inability to access facilities and resources (includes office, laboratory, library space, venue space; field work; equipment, IT resources).</i></p>	Appendix A6

## Changes in this version 5.0

Change	Section / Page Number
<p>1. To address the impact of the Canterbury Earthquakes, addition of new Canterbury Earthquakes Special Circumstance section to the EP.</p> <p>Addition of SpecialCircumstanceCanterburyEarthquakesType element and associated ImpactCode, EligibilityPeriod and CircumstanceComment child elements.</p> <p>Includes an option for a researcher claiming Canterbury Earthquakes Special Circumstances to choose an alternate assessment period of 1 January 2005 to 31 December 2010 for RO, PE and CRE components of the EP.</p>	<p>3.1 Pages 6, 9</p> <p>3.4 Pages 18,19</p> <p>3.6.1 Page 26</p> <p>Appendix A6</p>
<p>2. Removal of the CE, Canterbury earthquakes Special CircumstanceType code from the previous set of Special Circumstances codes. There are now six types of Other Special CircumstanceType codes permitted.</p>	<p>3.1 Page 6</p> <p>3.5 Page 19</p> <p>Appendix A7</p>
<p>3. Modification to the business rules for the PanelsType element to allow cross referral to <b>only one</b> subgroup of the Professional and Applied Research Expert Advisory Group.</p> <p>Cross referrals to Expert Advisory Groups are no longer required elements.</p>	3.3 Pages 13, 15,16, 17
<p>4. At least one NRO must be flagged for the attention of the EAG if a cross-referral to the Pacific Research Expert Advisory Group or to one of the Professional and Applied Research Expert Advisory Sub Groups is requested.</p> <p>Note that this rule is enforced in the PBRF IT system, not in the XSD.</p>	<p>3.6 Page 20</p> <p>3.6.1 Pages 22, 23</p>
<p>5. Update on how to request an FTP username and login</p>	4.2 Page 37
<p>6. Update on file content types</p>	4.5 Page 37
<p>7. "Other Form of Assessable Output" research output type 99 includes book reviews and magazine articles as examples.</p>	Appendix A3 Page 41

## Changes in version 4.0

Change	Section / Page Number
1. Change to the indicators for Professional and Applied Research Expert Advisory Groups to reflect the four EAGs that can now be requested.	3.3 Pages 13,15
2. Clarification that the ComponentID element must be unique within the entire EP, not just within the component.	3.6.1, 3.6.2, 3.6.3, 3.6.4 Pages 24,30,32,33-34
3. URI element – changes to extend the validation rule to allow www.myorganisation.com and doi:10.1000.182 formats for URIs.	3.6.1 Pages 28,29
4. Addition of a new Special Circumstance code, CE, Canterbury earthquakes. Up to 7 types of Special Circumstances allowed. (Revised and no longer valid. See revision in version 5.0)	3.1 Page 9 and Appendix A6 (Now A7)

## Changes in version 3.0

Change	Section / Page Number
1. Confirmation that some data elements can include HTML and have been classified as unparsed Character Data (CDATA). These data elements are: <ul style="list-style-type: none"> <li>a. OtherComments (EP)</li> <li>b. Title (NRO)</li> <li>c. Source (NRO)</li> <li>d. MyContributionDescription (NRO)</li> <li>e. Description (NRO)</li> <li>f. Description (ORO)</li> <li>g. Description (PE)</li> <li>h. Description (CRE)</li> </ul> <p>The number of characters in a CDATA section will be counted as the rendered text of the section, rather than the actual count of the number of characters.</p>	1.5 Page 2
2. Correction of misspelling in SendQualityCategoryScoreToResearcher element.	3.1 Page 8
3. Other Comments element has been removed from the ORO and added to the overall Evidence Portfolio. The maximum length has been increased to 2048 characters.	3.1 Page 8
4. Researcher - NationalStudentNumber - Validation of the researcher against the National Student Index (NSI) will check that the NSN exists on the NSI, the birth dates match and that the NSI record is a master record.	3.2.1 Page 11
5. Researcher - Clarification of validation rule. If a second EP is received for a researcher (where the EvidencePortfolioIDs are different), it will not be accepted unless the first has been flagged as deleted.	3.2.1 Page 11
6. Researcher - Validation of name – removed the rule that the researcher name in the EP needs to exactly match the name held on the NSI.	3.2.1 Page 11
7. Panels - Correction of misspelling in ProfessionalResearchAdvisoryGroupAssessmentInd and PacificResearchAdvisoryGroupAssessmentInd	3.3 Page 15
8. Special Circumstances – size of Comments element has been increased to 2048 characters.	3.4 Page 20
9. NRO Authors – clarified that this element lists the authors in the order and as they appear on the output. Where there are more authors than can be listed within the number of characters allowed, the number of other authors should be recorded.	3.6.1 Page 25

Change	Section / Page Number
10. NRO - added Source element to identify where an item is published or made available.	3.6.1 Page 26
11. NRO URI format for files uploaded to the TEC file store – clarified that this format is file name only.	3.6.1 Page 27
12. Additional validation rules added.	3.7 Page 35
13. Details of NRO FTP file upload process added.	4 Page 36
14. Added Portable Network Graphic (.png) file type for electronic images.	4.5 Page 37
15. Updated recommendation regarding video file types.	4.5 Page 38
16. Research Output Type Literary Translations – value changed to 30	Appendix A3 Page 41
17. Changes to code values to align to 2006 code sets <ul style="list-style-type: none"> <li>• Peer Esteem Type</li> <li>• Contribution to the Research Environment Type</li> <li>• Type of Special Circumstances</li> </ul>	Appendices A4, A5, A7 Pages 42,43
18. List of SAC funded degree delivering TEOs updated	Appendix A8 Page 42



# Table of Contents

<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
1.1	DOCUMENT PURPOSE	1
1.2	AUDIENCE	1
1.3	DOCUMENT SCOPE	2
1.4	TERMINOLOGY & CONVENTIONS	2
1.5	HTML MARKUP	2
<b>2</b>	<b>EVIDENCE PORTFOLIO FILE STRUCTURE OVERVIEW</b>	<b>4</b>
<b>3</b>	<b>EVIDENCE PORTFOLIO</b>	<b>6</b>
3.1	OVERVIEW	6
3.2	RESEARCHER	9
3.2.1	<i>Learner Identity Type</i>	11
3.2.2	<i>Learner Name</i>	12
3.3	PANELS	13
3.4	CANTERBURY EARTHQUAKES SPECIAL CIRCUMSTANCES	18
3.5	OTHER SPECIAL CIRCUMSTANCES	19
3.6	EVIDENCE PORTFOLIO COMPONENTS	20
3.6.1	<i>Nominated Research Output (NRO)</i>	22
3.6.2	<i>Other Research Output (ORO)</i>	30
3.6.3	<i>Peer Esteem Reference (PE)</i>	32
3.6.4	<i>Contribution to the research environment (CRE)</i>	33
3.7	ADDITIONAL VALIDATION RULES	35
<b>4</b>	<b>NRO FTP FILE UPLOAD PROCESS</b>	<b>36</b>
4.1	NRO FTP FILE PROCESS	36
4.1.1	<i>EP XML File Name</i>	36
4.1.2	<i>NRO File Name</i>	36
4.2	TEC ISSUED TEO FTP ACCOUNT	37
4.3	TEC PUBLISHED FTP URI LOCATION	37
4.4	FTP CLIENT TOOL	37
4.5	FILE CONTENT TYPES	37
	<b>APPENDICES</b>	<b>40</b>
A1	PANEL CODES	40
A2	SUBJECT AREA OF RESEARCH CODES	40
A3	RESEARCH OUTPUT TYPES	41
A4	PEER ESTEEM TYPES (PE)	42
A5	CONTRIBUTION TO RESEARCH ENVIRONMENT TYPES (CRE)	42
A6	TYPES OF IMPACT CODE	42
A7	TYPES OF SPECIAL CIRCUMSTANCES	43
A8	SAC FUNDED DEGREE DELIVERING TEOs	43



# 1 Introduction

## 1.1 Document purpose

The *PBRF Quality Evaluation Guidelines 2012* Chapter 2 Sections A, C, D, E, F and G describe the information to be submitted in an Evidence Portfolio (EP).

For the PBRF 2012 Quality Evaluation, TEOs will be able to submit EPs by either of two methods:

1. Create an electronic file of EPs and upload to the TEC
2. Use the TEC's PBRF solution and enter an EP online using web forms.

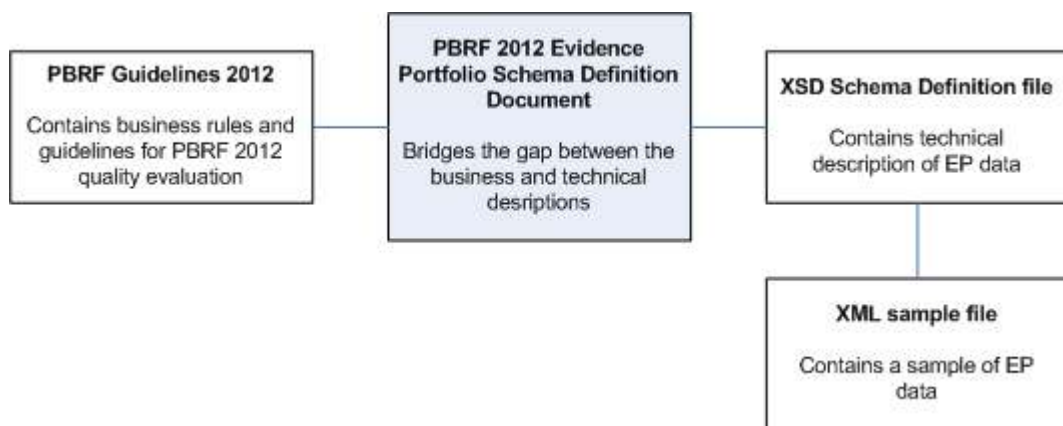
For those TEOs who wish to submit a file of EPs, this document describes the fields that make up the Evidence Portfolio (EP) schema for the PBRF 2012 Quality Evaluation.

The corresponding XSD (XML Schema Document), a technical schema definition, is provided in a separate file, the XSD Schema Definition File. An XML sample file based on this XSD has also been provided.

Wherever possible, validation rules have been built into the XSD. However TEOs should be aware that additional validation rules will be applied at the time the XML file is processed. This means that an individual EP could be flagged as failing one or more validation rules, even though it conformed to the XSD. The EP would require correction and re-submission to ensure it is assessed.

This document contains reference to the validation rules that will be built in to the XSD or applied as the XML file is processed.

The relationship between these documents is indicated below.



## 1.2 Audience

The audience for this document includes:

- Education organisation developers involved in the development of systems to supply EP files to the TEC.
- Education organisation business users who need to understand the data items to be captured as part of an EP.
- TEC staff involved in the development of the technical solution to support the PBRF 2012 quality evaluation.

While this document has been written with a non-technical audience in mind it does assume a basic understanding of XML schemas.

### 1.3 Document scope

This document describes the data elements contained within an evidence portfolio, their meaning, data types and basic validation rules. Detailed business rules and process related issues are not covered in this document and are described in detail in the *PBRF Quality Evaluation Guidelines 2012*. Where a business rule described within this document is in conflict with the *PBRF Quality Evaluation Guidelines 2012* then the definition in the *PBRF Quality Evaluation Guidelines 2012* takes precedence.

### 1.4 Terminology & conventions

As this document describes data to be supplied in an XML format the terminology used is consistent with the XML standard. Some basic terminology and conventions used in this document are:

- Element – an item of data to be supplied is known as an “element” e.g. Surname and FirstName are examples of elements.
- Cardinality – Describes how many instances of an element must be supplied
  - 0..1 – Optional, can only supply 1 or 0
  - 1 – Mandatory, must supply a single value
  - 0..n<sup>1</sup> – Optional, may supply many instances
  - 1..n – Mandatory, must supply at least one value but could supply multiple
- Data Types – This document lists the type or format of data required for a given element (e.g. string, integer etc) and uses XML types to describe this. Where the element contains sub elements then the data type will be listed as “complex”. Complex elements will have a post fix term called Type. Example. EvidencePortfolio**Type** is the same element called EvidencePortfolio.

### 1.5 HTML markup

A number of descriptive elements may contain HTML. It should be noted that the XSD file will be unable to validate the number of characters contained in these elements. TEOs should be aware that validation checks for character size will occur at the time the XML is processed and the EPs submitted to the PBRF system.

The data elements that can include HTML are:

- a. OtherComments (EP)
- b. Title (NRO)
- c. Source (NRO)
- d. MyContributionDescription (NRO)
- e. Description (NRO)
- f. Description (ORO)
- g. Description (PE)
- h. Description (CRE)

Data elements that can include HTML have been classified as unparsed Character Data (CDATA).

When the XSD is validated, everything inside a CDATA section (which starts with <![CDATA[" and ends with "]]>) is effectively ignored. This means that no “upper limit” is being applied to these data fields within the XSD validation.

---

<sup>1</sup> The schema may specify a maximum number of instances that may be supplied.

When the PBRF system validates the EP data, the number of characters in a CDATA section will be counted as the rendered text of the section, rather than the actual count of the number of characters. The number of rendered characters is then checked against the maximum allowed for the data element.

For example, the text

```
<![CDATA["<div style="font-family:courier;font-size:12px;"><h2 style="color:green;">Some  
text</h2> </div>"]]>
```

contains 91 characters (excluding spaces) but would be rendered as

Some text

which has only nine characters including the space.

Owing to the many and varied methods by which HTML can be created and inserted into a EP record (e.g. by cutting and pasting from Microsoft Word in a web-based input system), the PBRF system will accept all "valid" markup (i.e. content that has open and closed tags) except that which might compromise security or layout (see the sample list of blacklisted tags below). The TEC cannot guarantee that font tags, reference system fonts, or that markup will render accurately in a browser. For this reason, if TEOs include HTML in their EP submissions, the responsibility lies with them to view the EP in the PBRF system and check that the content is rendering correctly.

TEOs who wish to submit HTML formatted material may wish to conduct a cleanup of HTML in their research repositories prior to submission to minimise any risk of data not rendering correctly.

Please note that special characters can be included in any text element providing the characters are supported by the latest Unicode character set. This means that any requirement for special characters that cannot be met by HTML markup must still be met by providing those characters in Unicode. For the avoidance of doubt, this would not apply to an attached document in PDF format, where the text is rendered other than through a browser.

The following is a non-exhaustive list of tags that if used in an HTML data element, will result in the file being invalid:

- HTML
- BODY
- HEAD
- script
- link
- iframe
- frameset
- frame
- applet
- object
- embed
- a (hyperlinks)
- img (image tags)
- attributes - event handlers (onblur, onclick etc)
- attribute - style that contains executable expressions

## 2 Evidence Portfolio File Structure Overview

The EP file structure is designed to allow a Tertiary Education Organisation (TEO) to submit a collection of evidence portfolios.

A TEO can submit multiple EP files over time and is encouraged to do so to avoid any last-minute issues with validation and correction.

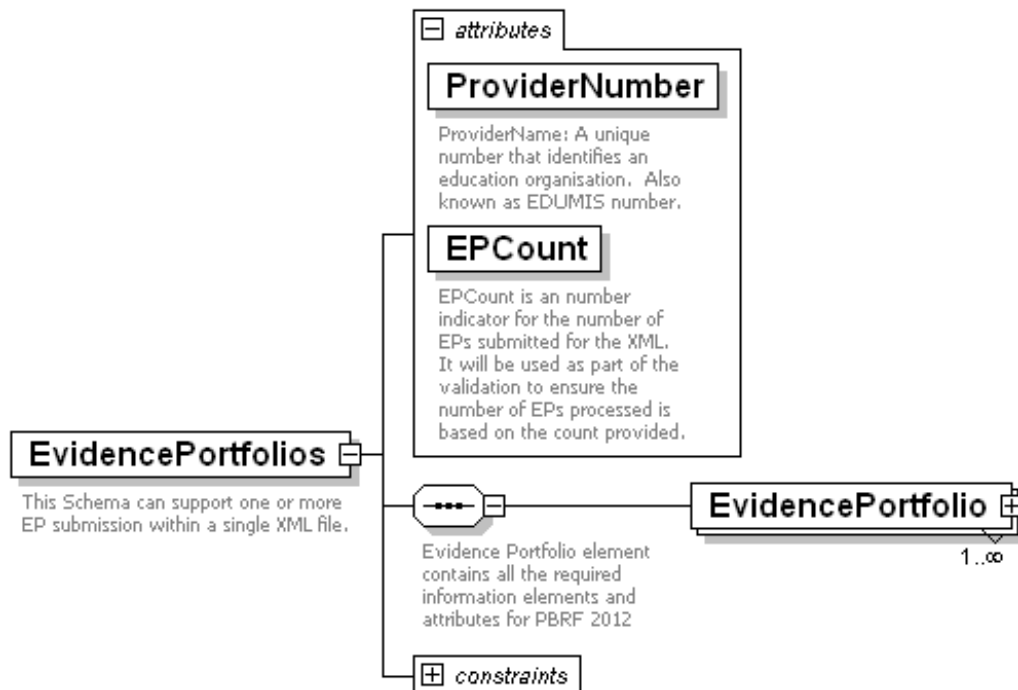
The design of the EP structure and processing assumes that each EP file:

- contains EPs for a single TEO only.
- must contain at least one EP but may contain many

If an EP is re-submitted, the new data will replace the data previously submitted.

If an EP has been submitted in error, the TEO will need to tag it as deleted using the online web-based PBRF system.

The diagram below summarises the basic structure of an EP file:



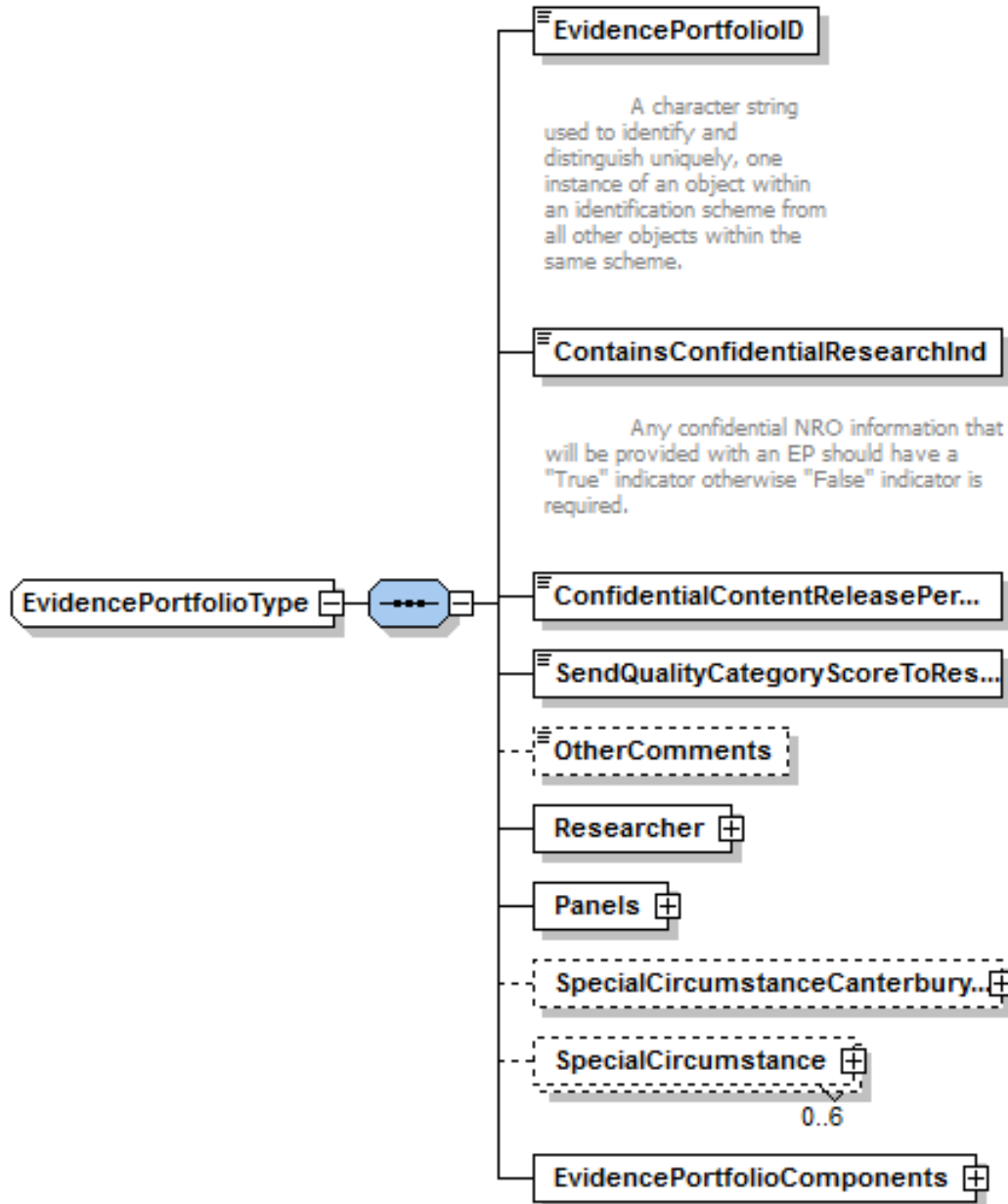
Element Name	Cardinality	Data Type	Description
ProviderNumber	1	xs:string Enumeration	<p>A number that uniquely identifies the TEO submitting the evidence portfolio(s).</p> <p><b>Validation:</b> Must provide one of the values in <b>Appendix A7</b>.</p>
EPCount	1	xs:int	<p>A count of the number of EPs contained within the file. Used by TEC as part of the validation processing.</p> <p><b>Validation:</b> Must provide a number range 1 to 9999.</p>
EvidencePortfolio	1..n	Complex	<p>An evidence portfolio (EP) is a key component of the PBRF. It forms the basis of the Quality Evaluation measure. See Section 3.1 for more details describing this element.</p>

### 3 Evidence Portfolio

#### 3.1 Overview

An evidence portfolio (EP) is a key component of the PBRF. It forms the basis of the Quality Evaluation measure. The EvidencePortfolio element is a summary of a researchers' relevant research being submitted for evaluation.

The diagram below lists the main elements within the EvidencePortfolio element.



Note: Special characters can be included in any text element providing the characters are supported by the latest Unicode character set.

Element Name	Cardinality	Data Type	Description										
EvidencePortfolioID	1	xs:string MinLen:1 MaxLen:10	<p>A character string that uniquely identifies an evidence portfolio.</p> <p><b>Validation:</b> Must be unique within the TEO submitting the TEO i.e. a TEO cannot submit 2 EPs with the same EvidencePortfolioID in the same file. If duplicates are found in an xml file, the duplicated EPs will not be processed.</p>										
ContainsConfidentialResearchInd	1	IndicatorType MinLen:1 MaxLen:5	<p>Indicate if Evidence Portfolio Components that were supplied contain any confidential content.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section C “Confidential Research Outputs” heading for a detailed description of confidentiality guidelines.</p> <p><b>Validation:</b> Must provide one of the following values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>(Provide one of these values)</td> <td></td> </tr> <tr> <td>True</td> <td>True (Yes/Y/T)</td> </tr> <tr> <td>False</td> <td>False (No/N/F)</td> </tr> </tbody> </table>	Value	Description	(Provide one of these values)		True	True (Yes/Y/T)	False	False (No/N/F)		
Value	Description												
(Provide one of these values)													
True	True (Yes/Y/T)												
False	False (No/N/F)												
ConfidentialContentReleasePermissionObtainedInd	1	IndicatorType MinLen:1 MaxLen:5	<p>Indicates whether the content owners’ permission has been sought prior to submission of the EP.</p> <p>Confidential research outputs (i.e. outputs not in the public domain) may be listed in an EP if the employing TEO can arrange all necessary permissions and make any other arrangements for members of peer review panels to access those research outputs if required.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section C “Confidential Research Outputs” heading for a detailed description of permission guidelines.</p> <p><b>Validation:</b> Must provide one of the following values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>(Provide one of these values)</td> <td></td> </tr> <tr> <td>True</td> <td>True (Yes/Y/T)</td> </tr> <tr> <td>False</td> <td>False (No/N/F)</td> </tr> <tr> <td>NA</td> <td>Not Applicable</td> </tr> </tbody> </table>	Value	Description	(Provide one of these values)		True	True (Yes/Y/T)	False	False (No/N/F)	NA	Not Applicable
Value	Description												
(Provide one of these values)													
True	True (Yes/Y/T)												
False	False (No/N/F)												
NA	Not Applicable												

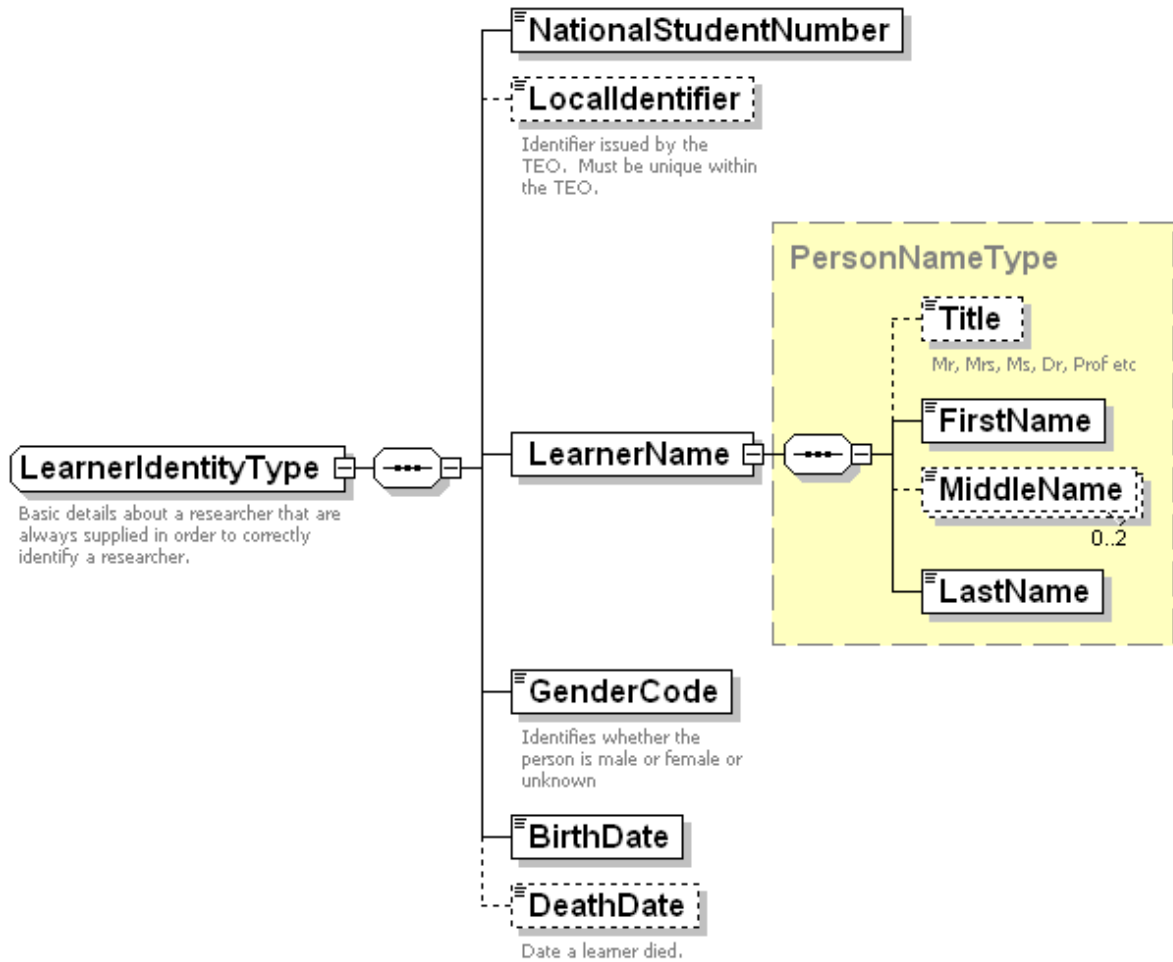
Element Name	Cardinality	Data Type	Description						
SendQualityCategoryScoreToResearcher	1	IndicatorType MinLen:1 MaxLen:5	<p>This element indicates if the staff member would like to receive their quality category score from their TEO.</p> <p><b>Validation:</b> Must provide one of the following values:</p> <table border="1"> <thead> <tr> <th>Value (Provide one of these values)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>True</td> <td>True (Yes/Y/T)</td> </tr> <tr> <td>False</td> <td>False (No/N/F)</td> </tr> </tbody> </table>	Value (Provide one of these values)	Description	True	True (Yes/Y/T)	False	False (No/N/F)
Value (Provide one of these values)	Description								
True	True (Yes/Y/T)								
False	False (No/N/F)								
OtherComments	0..1	xs:string MinLen:0 MaxLen:2048  Please refer to Section 1.5 HTML Markup	<p>Any relevant information on the nature, quantity, and quality of research outputs that demonstrates research quality during the assessment period.</p> <p>This data element can include HTML. If it does contain HTML it must be classified as unparsed Character Data (CDATA)</p> <p>e.g.</p> <pre>&lt;OtherComments&gt;   &lt;![CDATA[     &lt;div&gt;       &lt;P&gt;Research related       &lt;strong&gt;comments&lt;/strong&gt;&lt;/P&gt;     &lt;/div&gt;   ]]&gt; &lt;/OtherComments&gt;</pre> <p>This will render as: Research related <b>comments</b></p>						
Researcher	1	Complex	<p>This element describes the researcher who has submitted research evidence.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section B “Who is Eligible to Participate in the Quality Evaluation Process?” heading for a detailed description of eligible researcher guidelines.</p> <p>See section 3.2 for more details describing this element.</p>						

Element Name	Cardinality	Data Type	Description
Panels	1	Complex	<p>This element provides Information about the primary and cross referral panels requested by the TEOs.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section G “Guidelines for Selecting a Peer Review Panel” and “Peer Review Panels and Subject Areas” headings for a detailed description of primary and cross-referral panels.</p> <p>See section 3.3 for more details describing this element.</p>
SpecialCircumstance CanterburyEarthquakes	0..1	Complex	<p>The Canterbury Earthquakes Special Circumstances relate to the impact experienced by a staff member as a result of the series of earthquakes in Canterbury from September 2010 which may have affected the development of research outputs AND the staff member’s Peer Esteem (PE) or Contribution to Research Environment (CRE) components.</p> <p>The Canterbury Earthquakes Special Circumstances are discussed in more detail in <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section F.</p> <p>See section 3.4 for more details describing this element.</p>
Special Circumstances	0..6	Complex	<p>The special circumstances element relates to some impairment or impediment that has affected the quantity of research outputs AND the staff member’s PE or CRE components.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section F for a detailed description of special circumstances guidelines.</p> <p>See section 3.5 for more details describing this element.</p>
EvidencePortfolio Components	1	Complex	<p>This element contains the set of items that will be considered by the TEC when assessing the Researcher.</p> <p>See section 3.6 for more details describing this element.</p>

### 3.2 Researcher

Within the context of the EP file, a researcher is a person who is being assessed for the purposes of PBRF funding. Only one EP may be submitted for a researcher. TEC will use the National Student Index (NSI) system to manage this aspect of the PBRF process. The information captured here will be used to validate the researcher against the NSI and to associate the EP with the information supplied as part of the census.

The diagram below shows the elements captured about a researcher. In the PBRF context, the TEC standard reference to a learner should be interpreted as a researcher.



Note: Special characters can be included in any text element providing the characters are supported by the latest Unicode character set.

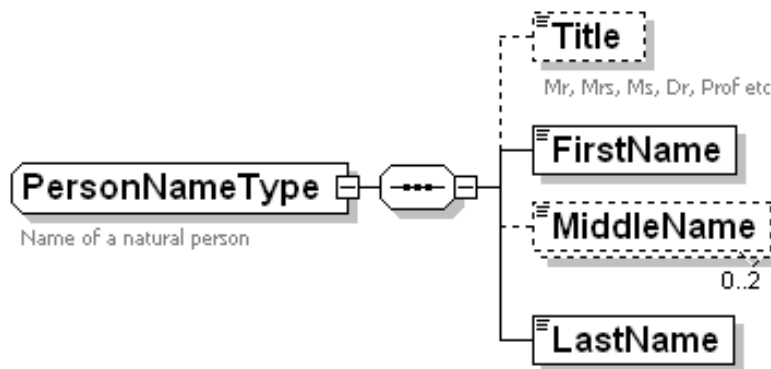
### 3.2.1 Learner Identity Type

Element Name	Cardinality	Data Type	Description								
NationalStudentNumber	1	xs:int	<p>The unique number issued by the National Student Index (NSI) that identifies a person (or researcher in the context of PBRF) on the NSI. TEC will check that the details (NSN, Birth Date) provided in the EP match those on the NSI and will report any EP where the details do not match. (Reporting will be available online)</p> <p><b>Validation:</b> The PBRF system will check that the NSN exists on the NSI and is an NSI master record.</p> <p>If a second EP is received for a researcher (where the EvidencePortfolioIDs are different), it will not be accepted unless the first has been flagged as deleted.</p>								
LocalIdentifier	0..1	xs:string MinLen: 0 MaxLen:10	The TEO reference or identifier for the researcher. This identifier may assist the TEO with identifying the researcher in their own records.								
LearnerName	1	Complex	<p>Learner name element (or researcher in the context of PBRF).</p> <p>See section 3.2.2 for more details describing this element.</p>								
GenderCode	1	xs:string Enumeration	<p>This element Indicates the gender code.</p> <p><b>Validation:</b> Must provide one of the following values:</p> <table border="1"> <thead> <tr> <th>Value (Provide one of these values)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>M</td> <td>Male</td> </tr> <tr> <td>F</td> <td>Female</td> </tr> <tr> <td>U</td> <td>Unknown</td> </tr> </tbody> </table>	Value (Provide one of these values)	Description	M	Male	F	Female	U	Unknown
Value (Provide one of these values)	Description										
M	Male										
F	Female										
U	Unknown										
BirthDate	1	xs:date	<p>Date of Birth in the following format CCYY-MM-DD. The date values are described as follows:</p> <ul style="list-style-type: none"> <li>• CC: Century (19-20)</li> <li>• YY: Year (00-99)</li> <li>• MM: Month (01-12)</li> <li>• DD: Day (01-31)</li> </ul> <p>Example: 12 March 1965 will be formatted "1965-03-12"</p> <p><b>Validation:</b> Must be provided in this format and must match the birth date held on the NSI.</p>								

Element Name	Cardinality	Data Type	Description
DeathDate	0..1	xs:date	The date the researcher died (if applicable). <b>Validation:</b> Only provide this element if it is applicable, using the same format as the BirthDate element above.

### 3.2.2 Learner Name

Learner name element (or researcher in the context of PBRF) will be matched to NSI. This element is of data type “PersonNameType” and described in more details below.

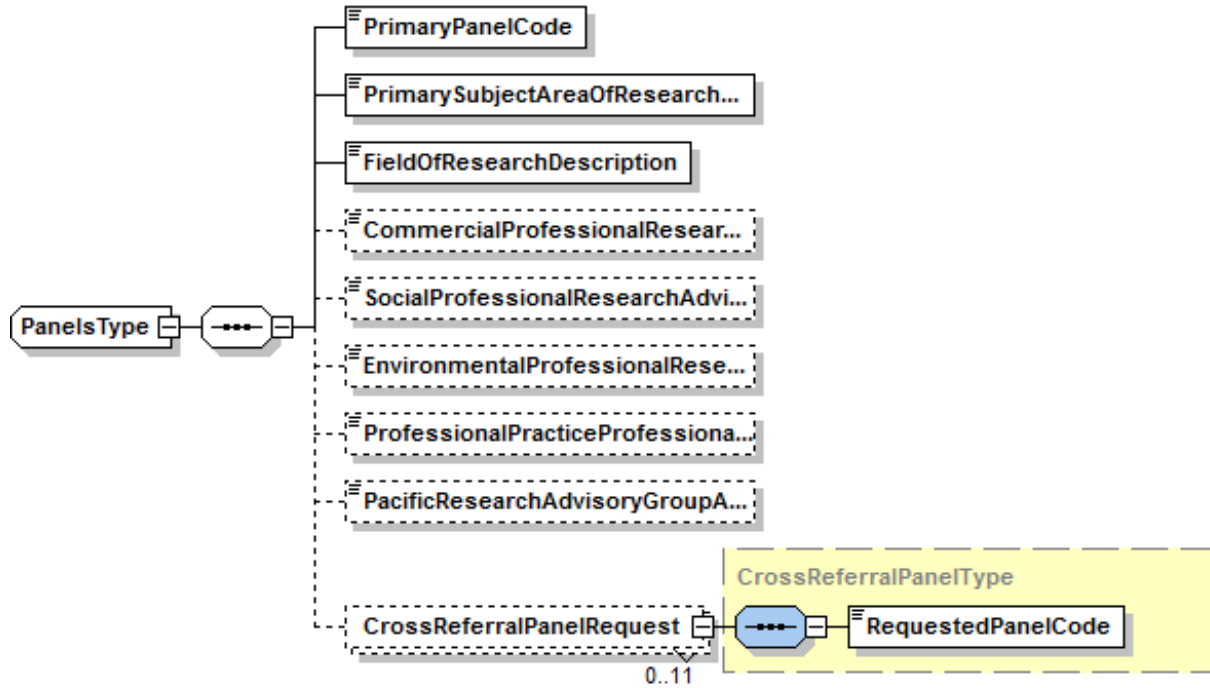


Element Name	Cardinality	Data Type	Description
Title	0..1	xs:string MinLen:0 MaxLen:255	Title of learner or researcher. <b>Validation:</b> Optional
FirstName	1	xs:string MinLen:2 MaxLen:255	First name of learner or researcher. <b>Validation:</b> Required
MiddleName	0..2	xs:string MinLen:0 MaxLen:255	Middle names of learner or researcher. Each middle name is contained in a MiddleName element. <b>Validation:</b> Optional and maximum of two middle names.
LastName	1	xs:string MinLen:2 MaxLen:255	Family name/surname of learner or researcher. <b>Validation:</b> Required

### 3.3 Panels

TEOs must select a preferred primary panel and can request a number of cross referral panels. In addition to these they can also request assessment by the Pacific Research and one (only) of the Professional and Applied Research Expert Advisory Sub-Groups.

The diagram below shows the elements captured about the various panels and expert advisory groups:



Element Name	Cardinality	Data Type	Description
PrimaryPanelCode	1	xs:string Enumeration	<p>This element contains the primary panel code requested by the TEO. The primary review panel should be the panel that covers the discipline or subject area best representing the staff member’s overall EP.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section G “Guidelines for Selecting a Peer Review Panel” heading for more details.</p> <p><b>Validation:</b> Must provide one of the values in <b>Appendix A1</b>.</p>

Element Name	Cardinality	Data Type	Description
PrimarySubjectAreaOfResearchCode	1	xs:string Enumeration	<p>The subject area selected for the EP will be the subject area that the quality score will be reported under on a nationally standardised basis.</p> <p>Forty-two subject areas have been identified across the panels, and staff members will be required to select the subject area for their EP that best matches their primary subject area of research. This may not always be the same as the subject area represented by the staff member's academic department.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section G "Guidelines for Selecting a Peer Review Panel" and "Peer Review Panels and Subject Areas" headings for more details.</p> <p><b>Validation:</b> Must provide one of the values in <b>Appendix A2</b>.</p>
FieldOfResearchDescription	1	xs:string MinLen:1 MaxLen:1024	<p>This text element will describe the level of a discipline or sub-discipline (e.g. educational psychology, molecular biology).</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section G "Guidelines for Selecting a Peer Review Panel" and "Peer Review Panels and Subject Areas" heading for more details.</p>

Element Name	Cardinality	Data Type	Description						
CommercialProfessionalResearchAdvisoryGroupAssessmentInd	0..1	IndicatorType MinLen:1 MaxLen:5	<p>An indicator for TEOs to request assessment by the Commercial Professional and Applied Research Expert Advisory Sub-Group.</p> <p>See the <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section H “The Expert Advisory Groups” and Chapter 3 Section B “Cross-referrals to an expert advisory group” headings for more details.</p> <p><b>Validation:</b> If supplied must be one of the following values.</p> <table border="1" data-bbox="903 584 1476 835"> <thead> <tr> <th data-bbox="903 584 1106 734">Value (Provide one of these values)</th> <th data-bbox="1106 584 1476 734">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="903 734 1106 786">True</td> <td data-bbox="1106 734 1476 786">True (Yes/Y/T)</td> </tr> <tr> <td data-bbox="903 786 1106 835">False</td> <td data-bbox="1106 786 1476 835">False (No/N/F)</td> </tr> </tbody> </table> <p>If a value of “True” has been provided for this indicator, the PBRF IT System will validate that no more than one Professional and Applied Research Expert Advisory Sub-Group has been requested for an EP, and that at least one NRO has been specifically referred to the Professional and Applied Research EAG (see 3.6.1).</p>	Value (Provide one of these values)	Description	True	True (Yes/Y/T)	False	False (No/N/F)
Value (Provide one of these values)	Description								
True	True (Yes/Y/T)								
False	False (No/N/F)								
SocialProfessionalResearchAdvisoryGroupAssessmentInd	0..1	IndicatorType MinLen:1 MaxLen:5	<p>An indicator for TEOs to request assessment by the Social Professional and Applied Research Expert Advisory Sub-Group.</p> <p>See the <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section H “The Expert Advisory Groups” and Chapter 3 Section B “Cross-referrals to an expert advisory group” headings for more details.</p> <p><b>Validation:</b> If supplied must be one of the following values.</p> <table border="1" data-bbox="903 1485 1476 1736"> <thead> <tr> <th data-bbox="903 1485 1106 1635">Value (Provide one of these values)</th> <th data-bbox="1106 1485 1476 1635">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="903 1635 1106 1686">True</td> <td data-bbox="1106 1635 1476 1686">True (Yes/Y/T)</td> </tr> <tr> <td data-bbox="903 1686 1106 1736">False</td> <td data-bbox="1106 1686 1476 1736">False (No/N/F)</td> </tr> </tbody> </table> <p>If a value of “True” has been provided for this indicator, the PBRF IT System will validate that no more than one Professional and Applied Research Expert Advisory Sub-Group has been requested for an EP, and that at least one NRO has been specifically referred to the Professional and Applied Research EAG (see 3.6.1).</p>	Value (Provide one of these values)	Description	True	True (Yes/Y/T)	False	False (No/N/F)
Value (Provide one of these values)	Description								
True	True (Yes/Y/T)								
False	False (No/N/F)								

Element Name	Cardinality	Data Type	Description						
EnvironmentalProfessionalResearchAdvisoryGroupAssessmentInd	0..1	IndicatorType MinLen:1 MaxLen:5	<p>An indicator for TEOs to request assessment by the Environmental Professional and Applied Research Expert Advisory Sub-Group.</p> <p>See the <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section H “The Expert Advisory Groups” and Chapter 3 Section B “Cross-referrals to an expert advisory group” headings for more details.</p> <p><b>Validation:</b> If supplied must be one of the following values.</p> <table border="1" data-bbox="903 584 1476 835"> <thead> <tr> <th data-bbox="903 584 1106 741">Value (Provide one of these values)</th> <th data-bbox="1106 584 1476 741">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="903 741 1106 786">True</td> <td data-bbox="1106 741 1476 786">True (Yes/Y/T)</td> </tr> <tr> <td data-bbox="903 786 1106 835">False</td> <td data-bbox="1106 786 1476 835">False (No/N/F)</td> </tr> </tbody> </table> <p>If a value of “True” has been provided for this indicator, the PBRF IT System will validate that no more than one Professional and Applied Research Expert Advisory Sub-Group has been requested for an EP, and that at least one NRO has been specifically referred to the Professional and Applied Research EAG (see 3.6.1).</p>	Value (Provide one of these values)	Description	True	True (Yes/Y/T)	False	False (No/N/F)
Value (Provide one of these values)	Description								
True	True (Yes/Y/T)								
False	False (No/N/F)								
ProfessionalPracticeProfessionalResearchAdvisoryGroupAssessmentInd	0..1	IndicatorType MinLen:1 MaxLen:5	<p>An indicator for TEOs to request assessment by the Professional Practice Professional and Applied Research Expert Advisory Sub-Group.</p> <p>See the <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section H “The Expert Advisory Groups” and Chapter 3 Section B “Cross-referrals to an expert advisory group” headings for more details.</p> <p><b>Validation:</b> If supplied must be one of the following values.</p> <table border="1" data-bbox="903 1480 1476 1731"> <thead> <tr> <th data-bbox="903 1480 1106 1637">Value (Provide one of these values)</th> <th data-bbox="1106 1480 1476 1637">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="903 1637 1106 1682">True</td> <td data-bbox="1106 1637 1476 1682">True (Yes/Y/T)</td> </tr> <tr> <td data-bbox="903 1682 1106 1731">False</td> <td data-bbox="1106 1682 1476 1731">False (No/N/F)</td> </tr> </tbody> </table> <p>If a value of “True” has been provided for this indicator, the PBRF IT System will validate that no more than one Professional and Applied Research Expert Advisory Sub-Group has been requested for an EP, and that at least one NRO has been specifically referred to the Professional and Applied Research EAG (see 3.6.1).</p>	Value (Provide one of these values)	Description	True	True (Yes/Y/T)	False	False (No/N/F)
Value (Provide one of these values)	Description								
True	True (Yes/Y/T)								
False	False (No/N/F)								

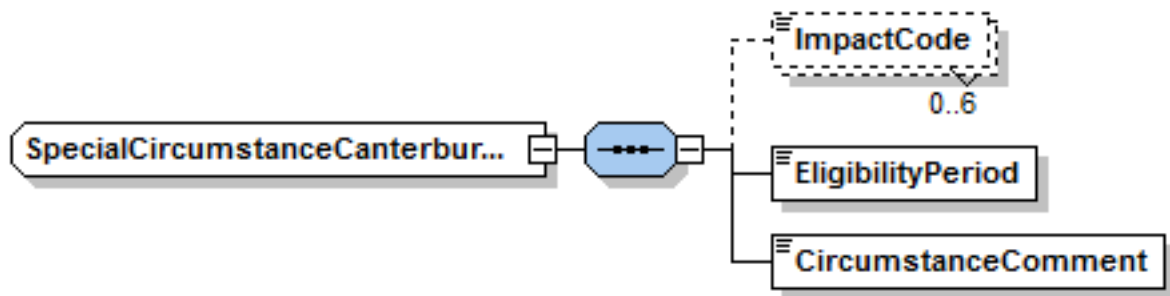
Element Name	Cardinality	Data Type	Description						
PacificResearchAdvisoryGroupAssessmentInd	0..1	IndicatorType MinLen:1 MaxLen:5	<p>An indicator for TEOs to request assessment by the Pacific Research Expert Advisory Group.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section H “The Expert Advisory Groups” and Chapter 3 Section B “Cross-referrals to an expert advisory group” headings for more details.</p> <p><b>Validation:</b> If supplied must be one of the following values.</p> <table border="1" data-bbox="903 584 1477 835"> <thead> <tr> <th data-bbox="903 584 1106 741">Value (Provide one of these values)</th> <th data-bbox="1106 584 1477 741">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="903 741 1106 786">True</td> <td data-bbox="1106 741 1477 786">True (Yes/Y/T)</td> </tr> <tr> <td data-bbox="903 786 1106 835">False</td> <td data-bbox="1106 786 1477 835">False (No/N/F)</td> </tr> </tbody> </table> <p>If a value of “True” has been provided for this indicator, the PBRF IT System will validate that at least one NRO has been specifically referred to the Pacific Research EAG (see 3.6.1).</p>	Value (Provide one of these values)	Description	True	True (Yes/Y/T)	False	False (No/N/F)
Value (Provide one of these values)	Description								
True	True (Yes/Y/T)								
False	False (No/N/F)								
CrossReferralPanelRequests	0..11	Complex	<p>Typically, an EP will be cross-referred to another panel (or other panels) when a significant proportion, but not a majority, of the outputs listed in the RO component falls within the subject areas covered by the other panel(s).</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 3 Section B “Cross-Referrals to another Panel” heading for more details.</p>						
RequestedPanelCode	1	xs:string Enumeration	<p>This element will contain the cross referral panel code. This is the child element of CrossReferralPanelRequests element listed above.</p> <p><b>Validation:</b></p> <p>Must provide one of the values in <b>Appendix A1</b> and <b>not</b> the same code provided in the PrimaryPanelCode element. Duplicate or primary panel code references in the requested panel code element will not be permitted.</p>						

### 3.4 Canterbury Earthquakes Special Circumstances

The Canterbury Earthquakes Special Circumstances relate to the impact experienced by a staff member as a result of the series of earthquakes in Canterbury from September 2010 which may have affected the development of research outputs AND the staff member’s Peer Esteem (PE) or Contribution to Research Environment (CRE) components.

The special circumstances are discussed in more detail in *PBRF Quality Evaluation Guidelines 2012* Chapter 2 Section F.

The diagram below shows the elements captured about Canterbury Earthquakes Special Circumstances:



Note: Special characters can be included in any text element providing the characters are supported by the latest Unicode character set.

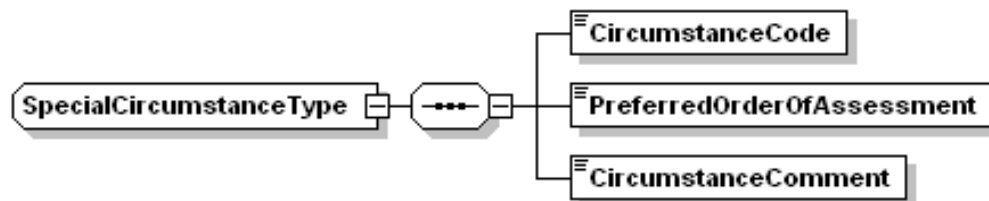
Element Name	Cardinality	Data Type	Description
ImpactCode	0..6	xs:string Enumeration	A staff member can select any of the impact codes to describe the personal impact of the Canterbury earthquakes. None, any or all of the impact codes can be selected. <b>Validation:</b> Must select the code values in <b>Appendix A6</b> . (Only if Canterbury Earthquakes Special Circumstances apply). Duplicated entries will not be processed.
EligibilityPeriod	1	xs:string 2005-2010 or 2006-2011	A staff member claiming Canterbury Earthquakes Special Circumstances may also choose an alternate assessment period of 1 January 2005 to 31 December 2010. This assessment period will apply to the NRO, ORO, PE and CRE components of the EP. <b>Validation:</b> Must be either 2005-2010 or 2006-2011. The PBRF IT System will validate that the YearAvailable value for the NROs submitted falls within the eligibility period chosen. i.e. 1 January 2005 to 31 December 2010 or 1 January 2006 to 31 December 2011.

Element Name	Cardinality	Data Type	Description
CircumstanceComment	0..1	xs:string MinLen:1 MaxLen:2048	This optional element can describe any relevant information on the nature, extent and seriousness of the impairment and the impact of the Canterbury earthquakes on the research activities of the staff member.  If additional comment is entered, the detail can include dates and further descriptions of how the Canterbury Earthquakes have affected the <b>quantity</b> of the individual’s research.  If ImpactCode “Other impacts” is selected, it is recommended that additional information is provided in the comment element.

### 3.5 Other Special Circumstances

Other special circumstances relate to some impairment or impediment (other than the Canterbury earthquakes) that has influenced the development of research outputs and the staff member’s peer esteem (see 3.6.3 below) or contribution to the research environment (see 3.6.4 below). The special circumstances are discussed in more detail in *PBRF Quality Evaluation Guidelines 2012* Chapter 2 Section F.

The diagram below shows the elements captured about other special circumstances:



Note: Special characters can be included in any text element providing the characters are supported by the latest Unicode character set.

Element Name	Cardinality	Data Type	Description
CircumstanceCode	1	xs:string Enumeration	<b>Validation:</b> Must provide one of the values in <b>Appendix A7</b> . (Only if Other Special Circumstances apply)  Duplicated entries will not be processed.
PreferredOrderOfAssessment	1	xs:unsignedByte Range:1-255	The order in which special circumstances will be displayed to the assessor. <b>Validation:</b> Positive numbers only.

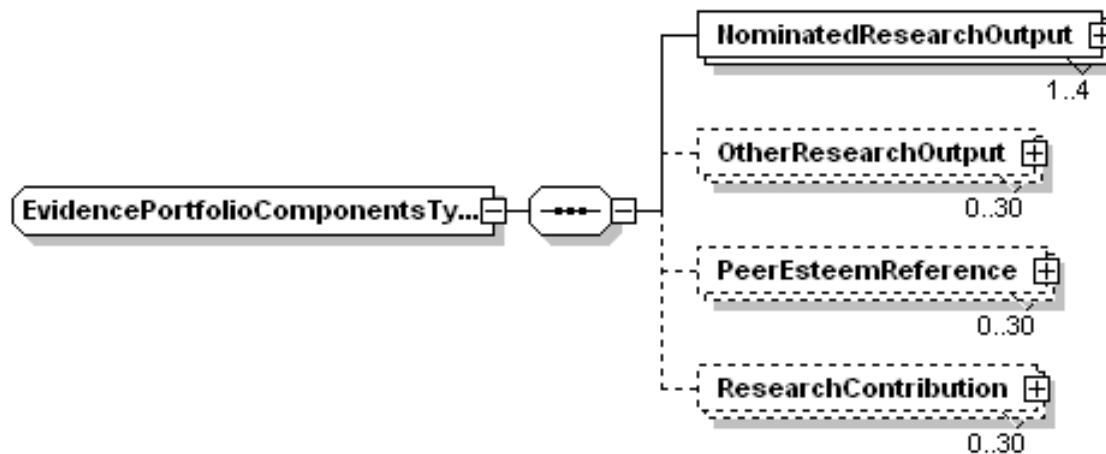
Element Name	Cardinality	Data Type	Description
CircumstanceComment	1	xs:string MinLen:1 MaxLen:2048	This element describes any relevant information on the nature, extent and seriousness of the impairment and the impact of these on the research activities of the staff member.  The circumstances must be described in sufficient detail that a judgment can be made about them. This detail must include dates of all relevant time periods, and a description of how the circumstance in question has affected the <b>quantity</b> of the individual's research.

### 3.6 Evidence Portfolio Components

The evidence portfolio components are a set of items used to assess the Researcher.

See *PBRF Quality Evaluation Guidelines 2012* Chapter 2 Section A, C, D and E for more information on EP components.

The diagram below shows the elements captured about portfolio components:



Note: Special characters can be included in any text element providing the characters are supported by the latest Unicode character set.

Element Name	Cardinality	Data Type	Description
NominatedResearchOutput	1..4	Complex	The nominated research output element will hold the up to four nominated research outputs that the PBRF-eligible staff member nominates as their best research outputs.  In addition, the attributes RequestProfessionalEagAssessment or RequestPacificEagAssessment must be used to flag one or more NROs where a request is made for cross-referral to an EAG.  See 3.6.1 for a more detailed description on this element.

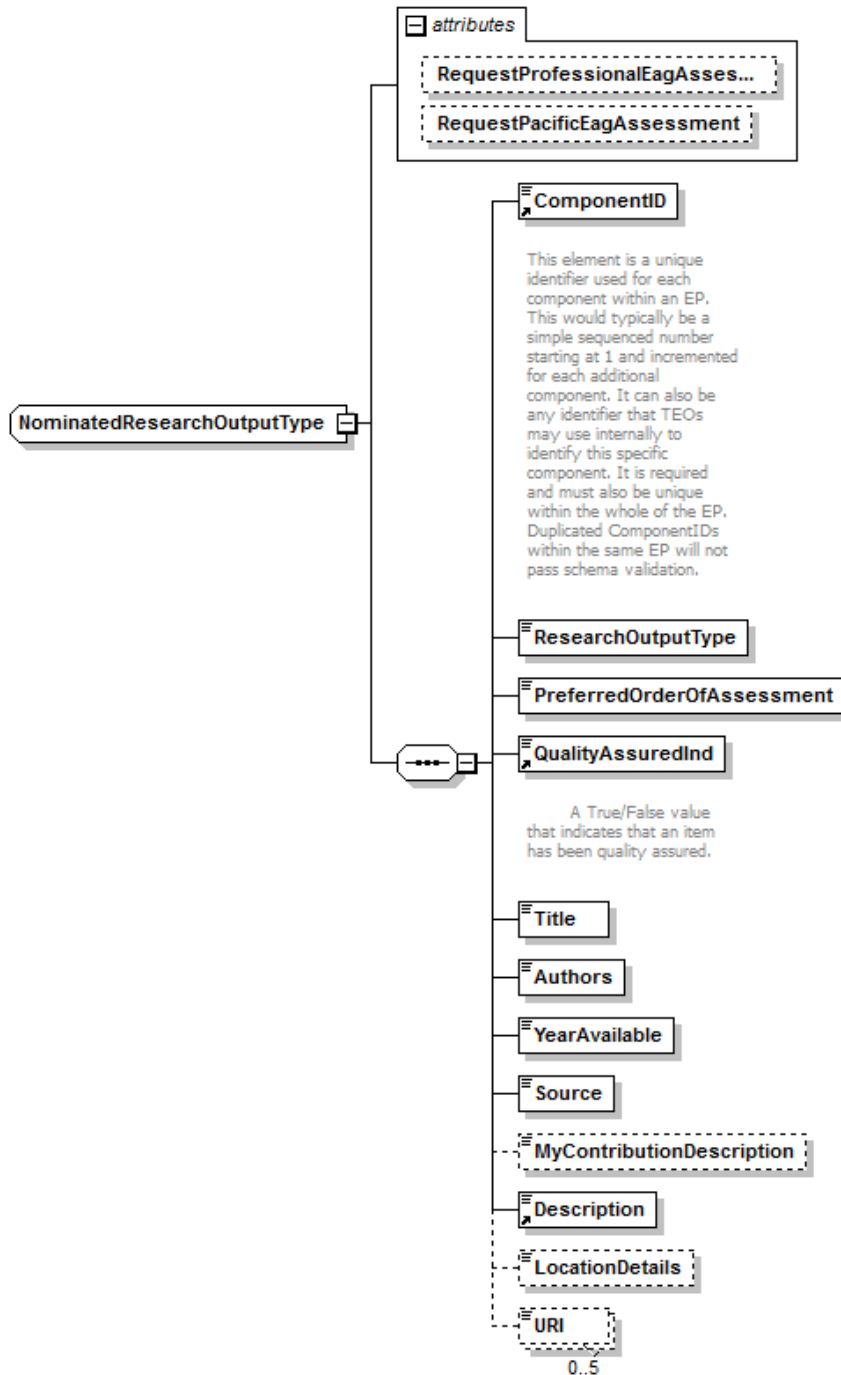
Element Name	Cardinality	Data Type	Description
OtherResearchOutput	0..30	Complex	<p>The Other Research Output (ORO) element will hold the additional research outputs that will be referenced and used during the assessment period.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section C for more information.</p> <p>See 3.6.2 for a more detailed description on this element.</p>
PeerEsteemReference	0..30	Complex	<p>The Peer Esteem (PE) element will describe the quality of the research of the staff member, as recognised by their peers.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section D for more information.</p> <p>See 3.6.3 for a more detailed description on this element.</p>
ResearchContribution	0..30	Complex	<p>The Contribution to the Research Environment (CRE): element describes the staff member's contribution to a vital high-quality research environment, both within the TEO and beyond it.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section E for more information.</p> <p>See 3.6.4 for a more detailed description on this element.</p>

### 3.6.1 Nominated Research Output (NRO)

An NRO is an output nominated by the PBRF-eligible staff member as one of their best research outputs.

The parent element NominatedResearchOutputType allows the attributes RequestProfessionalEagAssessment or RequestPacificEagAssessment to be used to meet the requirement that where a TEO request is made for cross-referral to an EAG, one or more NROs must be specifically identified for the attention of the EAG. This validation rule is enforced in the PBRF IT System.

The diagram below shows the elements captured about nominated research output:



Note: Special characters can be included in any text element providing the characters are supported by the latest Unicode character set.

Attribute Name	Cardinality	Data Type	Description						
RequestProfessionalEagAssessment	0..1	IndicatorType MinLen:1 MaxLen:5	<p>An attribute for TEOs to identify if the NRO meets the criteria for assessment by a Professional and Applied Research Expert Advisory Sub-Group, where referral to such an expert advisory sub-group has been requested in the Panels element.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section H “The Expert Advisory Groups” and Chapter 3 Section B “Cross-referrals to an expert advisory group” headings for more details.</p> <p><b>Validation:</b> If supplied must provide one of the following values.</p> <table border="1" data-bbox="903 674 1476 927"> <thead> <tr> <th data-bbox="903 674 1102 831">Value (Provide one of these values)</th> <th data-bbox="1107 674 1476 831">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="903 837 1102 875">True</td> <td data-bbox="1107 837 1476 875">True (Yes/Y/T)</td> </tr> <tr> <td data-bbox="903 882 1102 927">False</td> <td data-bbox="1107 882 1476 927">False (No/N/F)</td> </tr> </tbody> </table> <p>The PBRF IT System will validate that cross-referral to one of the Professional and Applied Research Expert Advisory Sub-Groups has been requested in the Panels element.</p>	Value (Provide one of these values)	Description	True	True (Yes/Y/T)	False	False (No/N/F)
Value (Provide one of these values)	Description								
True	True (Yes/Y/T)								
False	False (No/N/F)								
RequestPacificEagAssessment	0..1	IndicatorType MinLen:1 MaxLen:5	<p>An attribute for TEOs to identify if the NRO meets the criteria for assessment by the Pacific Research Expert Advisory Group, where referral to this expert advisory group has been requested in the Panels element.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section H “The Expert Advisory Groups” and Chapter 3 Section B “Cross-referrals to an expert advisory group” headings for more details.</p> <p><b>Validation:</b> If supplied must provide one of the following values.</p> <table border="1" data-bbox="903 1514 1476 1767"> <thead> <tr> <th data-bbox="903 1514 1102 1671">Value (Provide one of these values)</th> <th data-bbox="1107 1514 1476 1671">Description</th> </tr> </thead> <tbody> <tr> <td data-bbox="903 1677 1102 1715">True</td> <td data-bbox="1107 1677 1476 1715">True (Yes/Y/T)</td> </tr> <tr> <td data-bbox="903 1722 1102 1767">False</td> <td data-bbox="1107 1722 1476 1767">False (No/N/F)</td> </tr> </tbody> </table> <p>The PBRF IT System will validate that cross-referral to the Pacific Research Expert Advisory Group has been requested in the Panels element.</p>	Value (Provide one of these values)	Description	True	True (Yes/Y/T)	False	False (No/N/F)
Value (Provide one of these values)	Description								
True	True (Yes/Y/T)								
False	False (No/N/F)								

Element Name	Cardinality	Data Type	Description								
ComponentID	1	xs:string MinLen:1 MaxLen:10	<p>This element is a unique identifier used for each component within an EP. This would typically be a simple sequenced number starting at 1 and incremented for each additional component. It can also be any identifier that TEOs may use internally to identify this specific component. It is required and must also be unique within the whole of the EP.</p> <p><b>Validation:</b> Duplicated ComponentIDs within the same EP will not pass schema validation.</p>								
ResearchOutputType	1	xs:string Enumeration	<p>This element contains the type of research output selected from the list in Appendix A3.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section C “Types of Research Output” heading for more information.</p> <p><b>Validation:</b> Must provide one of the values in <b>Appendix A3</b>.</p>								
PreferredOrderOfAssessment	1	xs:unsignedByte Range:1-255	<p>NROs should be ordered in the EP according to the researcher’s preferred order of assessment.</p> <p>The researcher must indicate the NRO they would prefer to be assessed first, followed by the NRO they would prefer to be assessed second, and so forth. This order will be available to assessors when they view the EP and will assist assessors in deciding which NROs to view.</p> <p><b>Validation:</b> Positive numbers only.</p>								
QualityAssuredInd	1	IndicatorType MinLen:1 MaxLen:5	<p>An indicator that defines any research output that, prior to its publication (public dissemination, presentation, performance, or exhibition), has successfully completed a formal quality-assurance process.</p> <p>See <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 2 Section C “Quality-Assured and Non-Quality-Assured Research Outputs” heading for more information.</p> <p><b>Validation:</b> Must provide one of the following values:</p> <table border="1"> <thead> <tr> <th>Value</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>(Provide one of these values)</td> <td></td> </tr> <tr> <td>True</td> <td>True (Yes/Y/T)</td> </tr> <tr> <td>False</td> <td>False (No/N/F)</td> </tr> </tbody> </table>	Value	Description	(Provide one of these values)		True	True (Yes/Y/T)	False	False (No/N/F)
Value	Description										
(Provide one of these values)											
True	True (Yes/Y/T)										
False	False (No/N/F)										

Element Name	Cardinality	Data Type	Description
Title	1	xs:string MinLen:1 MaxLen:1024  Please refer to Section 1.5 HTML Markup	<p>The title of the research output as it appears on the output.</p> <p>Special characters can be included providing the characters are supported by the latest Unicode character set.</p> <p>e.g. <b>&lt;Title&gt;</b>BaBar Collaboration. (2004) <i>Search for the Decay <math>B_0 \rightarrow J / \Psi \gamma</math></i>. Physical Review D, 70, 9, 091104<b>&lt;/Title&gt;</b></p> <p><b>&lt;Title&gt;</b>Peijzel, P.S., Vergeer, P., Meijerink, A., Reid, M.F., Boatner, L.A. and Burdick, G.W. (2005) <i><math>4f(n-1)5d \rightarrow 4f(n)</math> emission of <math>Ce^{3+}</math>, <math>Pr^{3+}</math>, <math>Nd^{3+}</math>, <math>Er^{3+}</math>, and <math>Tm^{3+}</math> in <math>LiYF_4</math> and <math>YPO_4</math></i>. Physical Review B - Condensed Matter and Materials Physics, 71, 4, 045116 9 pp. <b>&lt;/Title&gt;</b></p> <p>The alternative is to provide the latex syntax where titles or descriptions contain special math equations.</p> <p>e.g. <b>&lt;Title&gt;</b>The theory and proof that <math>m \ll \frac{m_0}{\sqrt{1-\frac{v^2}{c^2}}}</math> is indeed flawed<b>&lt;/Title&gt;</b></p> <p>See <a href="http://en.wikipedia.org/wiki/LaTeX">http://en.wikipedia.org/wiki/LaTeX</a> for more information and resources on Latex.</p> <p>Please refer to the accompanying example XML file that demonstrates the use of special characters. See <b>60032011111101.xml</b> sample XML file.</p>
Authors	1	xs:string MinLen:1 MaxLen:2048	<p>This element lists the authors in the order and as they appear on the output. Where there are more authors than can be listed within the number of characters allowed, the number of other authors should be recorded.</p>

Element Name	Cardinality	Data Type	Description
YearAvailable	1	xs:gYear	<p>The year that the output was produced (2005 – 2011 inclusive).</p> <p>The format is CCYY. The values are described as follows:</p> <ul style="list-style-type: none"> <li>• CC: Century (20)</li> <li>• YY: Year (05-11)</li> </ul> <p><b>Validation:</b> Range from 2005-2011.</p> <p>Where the SpecialCircumstanceCanterbury Earthquakes element has been included in an EP, the IT System will validate that the YearAvailable value for NROs submitted falls within the selected eligibility period entered in the SpecialCircumstanceCanterbury Earthquakes element.</p> <p>Where <b>no</b> SpecialCircumstanceCanterbury Earthquakes element has been included in an EP, the IT System will validate that the YearAvailable value for NROs submitted falls within the default range of 2006 to 2011.</p>
Source	1	xs:string MinLen:1 MaxLen:1024  Please refer to Section 1.5 HTML Markup	<p>This element is used to identify where an item is published or made available.</p> <p>It can contain the following:</p> <p>parent document, volume, issue, article/chapter/session number, pagination, publisher, place, year.</p>
MyContributionDescription	0..1	xs:string MinLen:0 MaxLen:1024  Please refer to Section 1.5 HTML Markup	<p>Where the research output has more than one author, this element provides details on the staff member's overall contribution to the output including the nature of that contribution.</p>
Description	1	xs:string MinLen:1 MaxLen:1024  Please refer to Section 1.5 HTML Markup	<p>This element is a comprehensive description of the nature and significance of the output.</p> <p>It also describes why the output has been selected as one of the best four produced during the assessment period and how the output embodies research, as defined in the PBRF guidelines Definition of Research (see Chapter 1 Section D: "What Counts as Research?" heading).</p>
LocationDetails	0..1	xs:string MinLen:0 MaxLen:1024	<p>Description of how or where the NRO can be located or retrieved if it is not accessible using a URI.</p> <p><b>Validation:</b></p> <ul style="list-style-type: none"> <li>• Must have a value if no URI provided</li> <li>• Can have a value in addition to URI</li> </ul>

Element Name	Cardinality	Data Type	Description
URI	0..5	xs:string MinLen:1 MaxLen:2048	<p>The URI location of an electronic NRO. The researcher can provide more than one URI for a single NRO (but no more than 5). For example, a file of pictures and a video file. This should not be confused with the number of NROs.</p> <p>The following URI formats are acceptable:</p> <ul style="list-style-type: none"> <li>• [File Name]                      This will indicate that the NRO content was uploaded to the TEC file store prior to assessment closing date.                      Example: &lt;URI&gt;your NRO titled document file.pdf&lt;/URI&gt;</li> <li>• http:// [NRO Location and Name]                      This will indicate a non-secure publicly available web location where the NRO content can be located.  <b>No authentication or subscription should be required to access this location.</b>                      Example:                      &lt;URI&gt;http://www.publicresearcharea.co.nz/myNROResources&lt;/URI&gt;                      This link should take the assessor directly to the NRO text without having to provide any <b>search for</b> or <b>provide any additional subscription</b> or <b>credential</b> information.</li> </ul>

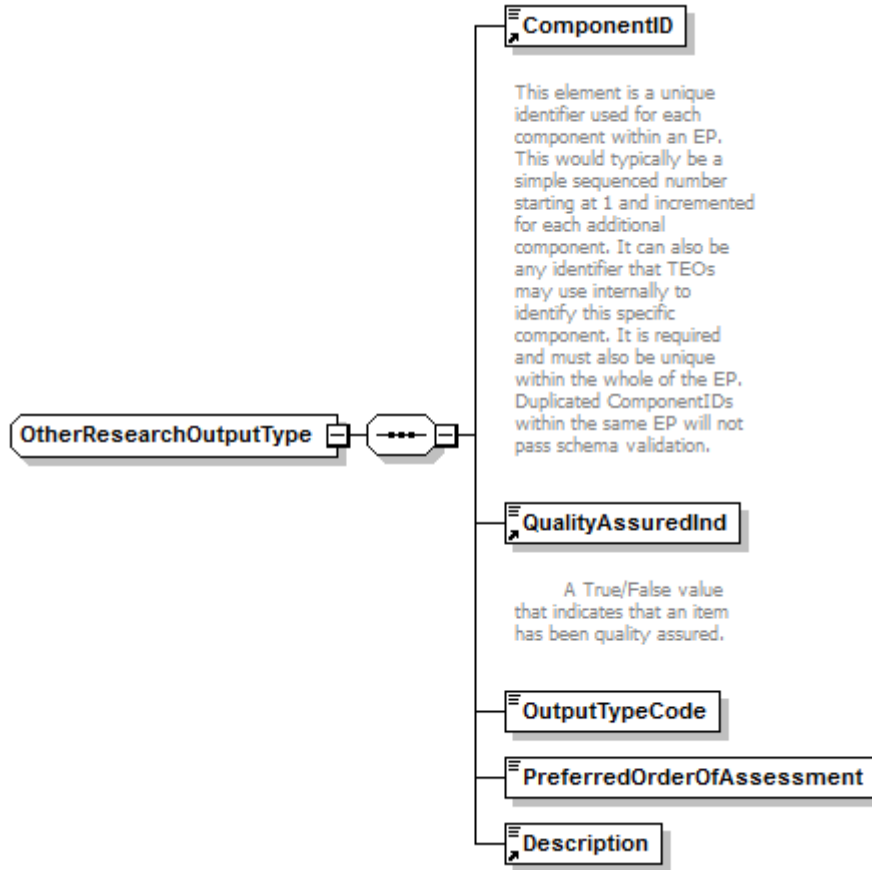
Element Name	Cardinality	Data Type	Description
			<ul style="list-style-type: none"> <li data-bbox="954 232 1460 472"> <p>https:// [NRO Location and Name]</p> <p>This will indicate a secure publicly available web location where the NRO content can be located.</p> <p><b>No authentication or subscription should be required to access this location.</b></p> <p>Example 1:            &lt;URI&gt;https://www.publicresearcharea.co.nz/myNROResources&lt;/URI&gt;</p> <p>This link should take the assessor directly to the NRO text without having to provide any <b>search for</b> or <b>provide any additional subscription</b> or <b>credential</b> information.</p> <p>Example 2: &lt;URI&gt;            www.publicresearcharea.co.nz/myNROResources&lt;/URI&gt;</p> <p>This will resolve to            http://www.publicresearcharea.co.nz/myNROResources</p> </li> <li data-bbox="954 987 1460 1592"> <p>ftp:// [NRO Location and Name]</p> <p>This will indicate a publicly available FTP location where the NRO content can be located. The preference is for the other options using the above URIs rather than the FTP option described here.</p> <p><b>No authentication or subscription should be required to access this location.</b></p> <p>Example:            &lt;URI&gt;ftp://ftp.publicresearcharea.co.nz/myNROResources&lt;/URI&gt;</p> <p>This link should take the assessor directly to the NRO text without having to provide any <b>search for</b> or <b>provide any additional subscription</b> or <b>credential</b> information.</p> </li> </ul>

Element Name	Cardinality	Data Type	Description
			<p><b>Additional Notes:</b></p> <ul style="list-style-type: none"> <li>• TEOs must take all reasonable steps to ensure that any URI that links to an external file store or open website will remain a usable link to the NRO through the period of assessment.</li> <li>• NROs should be directly accessible and not require the assessor to <b>search for</b> or <b>provide any additional subscription</b> or <b>credential information</b> to access the NRO link.</li> <li>• We recommend using the DOI naming convention and services (see <a href="http://www.doi.org/">http://www.doi.org/</a>) where possible or use available URI shortening services. Example using DOI: <a href="http://dx.doi.org/10.1000/182">http://dx.doi.org/10.1000/182</a> doi:10.1000/182 will be automatically linked to <a href="http://dx.doi.org/10.1000/182">http://dx.doi.org/10.1000/182</a> by the system.</li> <li>• Substitute the following characters within the URI to ensure that the schema validation passes, or avoid using these all together if possible: <ul style="list-style-type: none"> <li>○ Ampersand—&amp;—&amp;amp;</li> <li>○ greater-than—&gt;—&amp;gt;</li> <li>○ less-than—&lt;—&amp;lt;</li> <li>○ apostrophe—'—&amp;apos;</li> <li>○ quote—"—&amp;quot;</li> <li>○ space— —%20</li> </ul> </li> </ul> <p>Example URI element</p> <p><b>&lt;URI&gt;https://myorg.org/somespace %20share/somepage.aspx?someparam=value&amp;amp;someparam=value&amp;amp;someparam=value&lt;/URI&gt;</b></p> <p><b>Validation:</b> Location details element should have a value when no URI elements are provided.</p> <p>No duplicate URI will be allowed for a given NRO if more than one URI element is provided for a single NRO.</p>

### 3.6.2 Other Research Output (ORO)

Other research outputs are additional research items provided by staff member for consideration. See *PBRF Quality Evaluation Guidelines 2012* Chapter 2 Section C “Research Output Information Required for the EP” for more information on other research output.

The diagram below shows the elements captured about other research output:



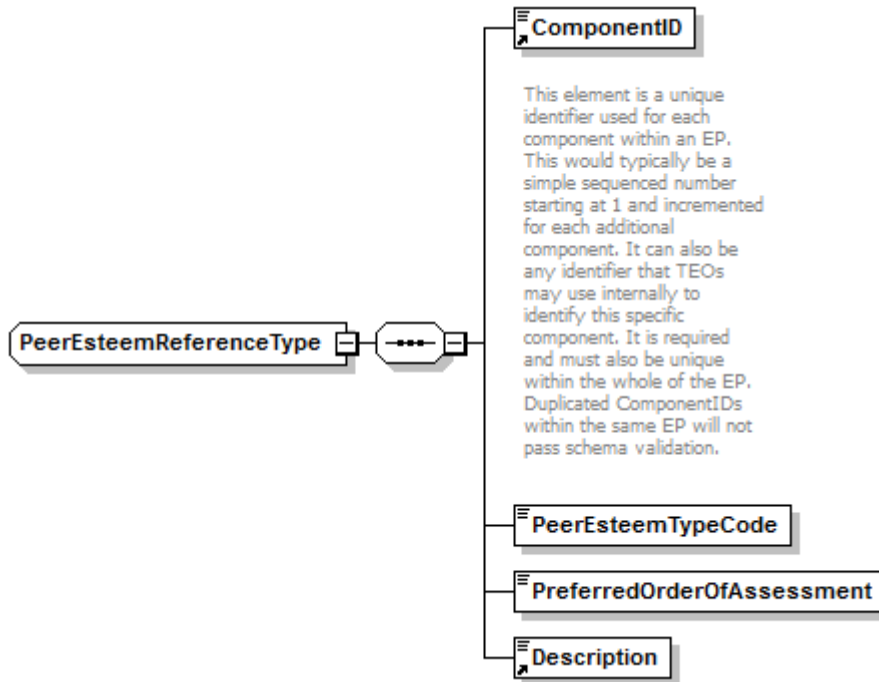
Element Name	Cardinality	Data Type	Description
ComponentID	1	xs:string MinLen:1 MaxLen:10	This element is a unique identifier used for each component within an EP. This would typically be a simple sequenced number starting at 1 and incremented for each additional component. It can also be any identifier that TEOs may use internally to identify this specific component. It is required and must also be unique within the whole of the EP.  <b>Validation:</b> Duplicated ComponentIDs within the same EP will not pass schema validation.

Element Name	Cardinality	Data Type	Description						
QualityAssuredInd	1	IndicatorType MinLen:1 MaxLen:5	<p>An indicator that defines any research output that, prior to its publication (public dissemination, presentation, performance, or exhibition), has successfully completed a formal quality-assurance process.</p> <p><b>Validation:</b> Must provide one of the following values:</p> <table border="1"> <thead> <tr> <th>Value (Provide one of these values)</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>True</td> <td>True (Yes/Y/T)</td> </tr> <tr> <td>False</td> <td>False (No/N/F)</td> </tr> </tbody> </table>	Value (Provide one of these values)	Description	True	True (Yes/Y/T)	False	False (No/N/F)
Value (Provide one of these values)	Description								
True	True (Yes/Y/T)								
False	False (No/N/F)								
OutputTypeCode	1	xs:string Enumeration	<p>Code describing the type of output.</p> <p><b>Validation:</b> Must provide one of the values in <b>Appendix A3</b>.</p>						
PreferredOrderOfAssessment	1	xs:unsignedByte Range:1-255	The order in which OROs will be displayed to the assessor.						
Description	1	xs:string MinLen:1 MaxLen:1024  Please refer to Section 1.5 HTML Markup	Entered in a recognised bibliographic format. This must include the title or name of the output, author, and sufficient location details to enable the TEC to independently verify its production (e.g. publication, publisher, publication year, and place of publication or equivalent details.)						

### 3.6.3 Peer Esteem Reference (PE)

Peer esteem references are concerned with the recognition of staff member’s research by their peers. See PBRF 2012 guidelines Chapter 2 Section D “Guidelines for Completing the PE Component” for more detailed description on PE.

The diagram below shows the elements captured about peer esteem references:



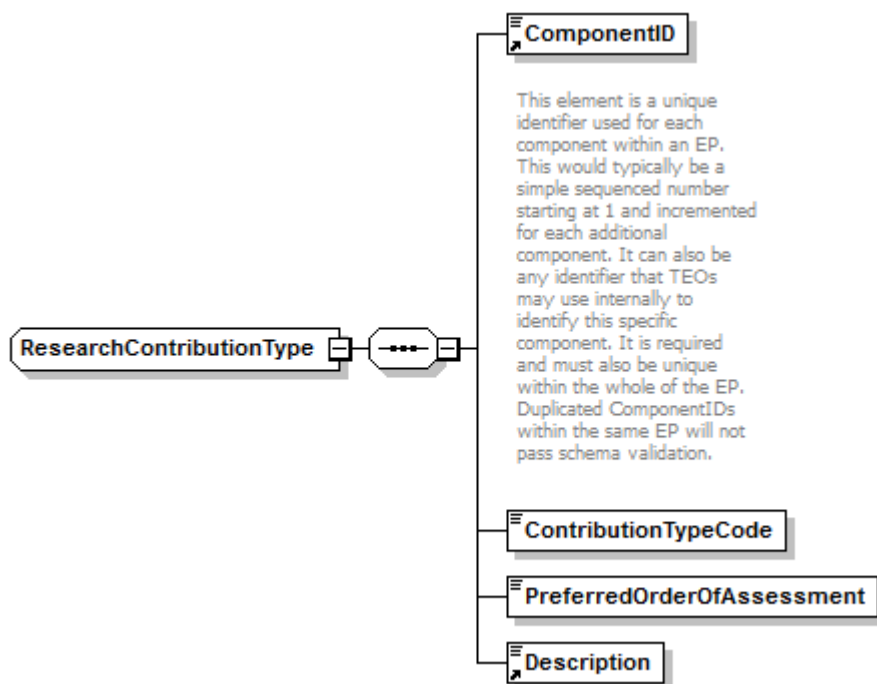
Element Name	Cardinality	Data Type	Description
ComponentID	1	xs:string MinLen:1 MaxLen:10	This element is a unique identifier used for each component within an EP. This would typically be a simple sequenced number starting at 1 and incremented for each additional component. It can also be any identifier that TEOs may use internally to identify this specific component. It is required and must also be unique within the whole of the EP. <b>Validation:</b> Duplicated ComponentIDs within the same EP will not pass schema validation.
PeerEsteemTypeCode	1	xs:string Enumeration	Code describing the type of peer esteem provided. <b>Validation:</b> Must provide one of the values in <b>Appendix A4</b> .
PreferredOrderOfAssessment	1	xs:unsignedByte Range:1-255	The order in which PE examples will be displayed to the assessor.

Element Name	Cardinality	Data Type	Description
Description	1	xs:string MinLen:1 MaxLen:1024  Please refer to Section 1.5 HTML Markup	This element describes comprehensive examples of peer esteem included in the EP, The staff member should provide a description that includes the following information: <ul style="list-style-type: none"> <li>• Details of the esteem example (e.g. prize, award, favourable review, appointment)</li> <li>• Date(s), where relevant</li> <li>• Organisation(s) involved.</li> </ul>

### 3.6.4 Contribution to the research environment (CRE)

Contributions to the research environment are concerned with the staff member’s contribution to a vital, high-quality research environment. It provides an opportunity to for staff members to indicate their role and contributions in this respect. See PBRF 2012 guidelines Chapter 2 Section E “Guidelines for Completing the CRE Component” for more detailed description on CRE.

The diagram below shows the elements captured about the contribution to the research environment:



Element Name	Cardinality	Data Type	Description
ComponentID	1	xs:string MinLen:1 MaxLen:10	This element is a unique identifier used for each component within an EP. This would typically be a simple sequenced number starting at 1 and incremented for each additional component. It can also be any identifier that TEOs may use internally to identify this specific component. It is required and must also be unique within the whole of the EP.  <b>Validation:</b> Duplicated ComponentIDs within the same EP will not pass schema validation.
ContributionTypeCode	1	xs:string Enumeration	Code describing the type of contribution.  <b>Validation:</b> Must provide one of the values in <b>Appendix A5</b> .
PreferredOrderOfAssessment	1	xs:unsignedByte Range:1-255	The order in which CRE examples will be displayed to the assessor.
Description	1	xs:string MinLen:1 MaxLen:1024  Please refer to Section 1.5 HTML Markup	This element describes comprehensive examples of contribution to the research environment included in the EP. The staff member should provide a description that includes the following information: <ul style="list-style-type: none"> <li>▪ Details of the activity</li> <li>▪ Date(s), where relevant</li> <li>▪ Organisation(s) involved</li> <li>▪ Student numbers and the degree level (eg masters, doctoral), where relevant.</li> </ul>

### 3.7 Additional Validation Rules

The following validation rules will be applied to EPs when they are submitted. If an EP fails any validation rule it will not proceed for assessment.

1. If the EP is flagged as containing confidential research outputs, (ConfidentialContentReleasePermissionObtainedInd = True), then at least one NRO or ORO must be of research output type *Confidential Report for External Body*.

Conversely, if an NRO or ORO is of research output type *Confidential Report for External Body* then the EP must be flagged as containing confidential research outputs.

2. If fewer than 4 NROs have been included, there must not be any OROs included.
3. HTML cannot be included in data elements other than the 8 descriptive elements specified. These data elements are:
  - a. OtherComments (EP)
  - b. Title (NRO)
  - c. Source (NRO)
  - d. MyContributionDescription (NRO)
  - e. Description (NRO)
  - f. Description (ORO)
  - g. Description (PE)
  - h. Description (CRE)

## 4 NRO FTP File Upload Process

### 4.1 NRO FTP File Process

TEO administrators or systems will connect to the TEC secure FTP server using technologies or tools that support FTPS (SSL/TLS) communication. Each TEO FTP account will provide access only to the TEO's own files and will not allow access to any other TEOs' files or folder locations.

A TEO should upload NRO files prior to the TEO submitting EPs. The reason for this is the submission of an EP XML file will trigger the processing and validation process which may check for the existence of an NRO in the TEC file store.

The format of the file and the options for NRO file formats are listed in section 4.5.

A TEO requires the following in order to successfully submit EP XML and NRO content files:

- TEC issued TEO FTP Account (see Section 4.2)
- TEC published FTP URI location (see Section 4.3)
- FTP Client Tool (see Section 4.4)

#### 4.1.1 EP XML File Name

The name of a file containing EPs will be unique for a TEO. An XML file will be overwritten if the file already exists on the FTP location (if it has not yet been processed) and will be rejected if the previous file has been processed.

EP XML files will trigger processing based on the file extension of .xml. It is recommended that the EP XML file names should follow the naming convention described below.

The EP XML filename consist of four parts:

1. **ProviderNumber** (See Appendix A7)
2. **Date (CCYYMMDD)**
3. **Sequence Number** depending on how many files are uploaded for the same date (range 0-999) – Default this value to zero (0)
4. **Extension** (Required)

e.g. **70012012011000.xml**

The example above can be interpreted that the provider 7001 created and/or uploaded an EP file around 10<sup>th</sup> Jan 2012.

#### 4.1.2 NRO File Name

NRO files names can be whatever the TEO is using to name the NRO file. It is recommended that the file name does not exceed 255 characters and does not contain any special characters as per standard operating system rules.

It is the responsibility of TEOs to ensure that the NRO file names are unique across the EPs being uploaded to prevent any accidental overwriting of NRO files.

## 4.2 TEC issued TEO FTP Account

The FTP account provisioning process and information is available to a TEO Administrator by emailing the PBRF HelpDesk at [pbrfhelp@tec.govt.nz](mailto:pbrfhelp@tec.govt.nz) requesting an FTP username and login. A contact phone number must be included in the email request so that a PBRF support person can phone back with the details. Further information on applying for FTP username and login is available on the [TEC Website](#).

## 4.3 TEC published FTP URI location

TEC will make the FTP URI available at the same time the FTP user account is issued to the requesting TEO.

## 4.4 FTP Client Tool

The following client tools have been used and tested to work with TEC secure FTP services.

- FileZilla

This free tool can be downloaded and installed and will enable TEO or TEO systems to upload the NRO and EP XML files.

<http://filezilla-project.org/>

TEOs can also use their own FTP client providing it supports FTP, FTP over SSL/TLS (FTPS) and SSH (SFTP) transfer protocols.

## 4.5 File Content Types

The following electronic media formats will be accepted as part of the Nominated Research Output (NRO) uploads. All files will be scanned for viruses and malware before they are accepted, but it is required that TEOs also scan the content files for viruses in order to prevent unnecessary delays or resubmission of research output files.

It is required that lengthy video files be supplied on DVD when requested by a PBRF panellist, rather than being accessed via a Uniform Resource Identifier (URI). This is to ensure that the panellist has a good viewing experience which cannot be guaranteed if viewing is via the internet.

Medium	Format Requirements
Electronic documents - URI link	<ul style="list-style-type: none"> <li>• Adobe Portable Document Format (.pdf) - recommended</li> <li>• Microsoft Word (.doc or .docx) (Office 2003 or higher)</li> <li>• Rich Text format (.rtf)</li> <li>• Extensible Markup Language (.xml)</li> </ul>
Electronic Image – URI link, DVD, CD	<ul style="list-style-type: none"> <li>• Graphics Interchange format (.gif)</li> <li>• Joint Photographic Experts Group (.jpg or .jpeg)</li> <li>• Bitmap (.bmp)</li> <li>• Portable Network Graphic (.png)</li> </ul>
Electronic Presentation - URI link	<ul style="list-style-type: none"> <li>• Microsoft PowerPoint (Office 2003 or higher)</li> </ul>

Medium	Format Requirements
Film or Video - URI link, DVD or CD	<p>PAL or SECAM format only using the following format:</p> <ul style="list-style-type: none"> <li>• Audio Video Interleave (.AVI) – recommended</li> <li>• Windows Media Video (.WMV)</li> <li>• Quicktime (.MOV)</li> <li>• Motion Picture Experts Group-4 (.MP4)</li> </ul> <p>Audio content of video content can be compressed with a wide variety of codecs. The use of compression codecs that are not readily available may affect the ability of the assessor to view the content.</p> <p>It is recommended that large video files (upward of 350 megabytes) are supplied on DVD when requested, rather than being accessed via a URI. DVDs provide good viewing experiences which cannot be guaranteed if viewing is via the internet.</p>
Audio - URI link, DVD or CD	MPEG-1 Audio Layer 3 (.mp3) – 128 Kbps (kilobits per second) – required
Software – URI links, DVD	<p>The recommendation for submitting software research outputs is to:</p> <ol style="list-style-type: none"> <li>1. record all screen and audio activity on a computer demonstrating the software and create industry-standard AVI video files. <i>Video Medium</i>, above, provides acceptable formatting information.</li> <li>2. provide in addition to the AVI above, any other related software specific documentation and files (such as source files or design representations) in electronic format. These files can be referenced and uploaded as part of the research output. The Evidence Portfolio file specification allows for up to five files to be referenced for a single research output.</li> </ol> <p>If an installable version of the software is the best representation of the research, a recommended approach to providing the software is outlined in the <i>PBRF Quality Evaluation Guidelines 2012</i> Chapter 7 “The Form of Evidence Required for Requested Research Outputs”.</p> <p>A tool such as Camtasia Studio or similar can also be used to record screen and audio activity on a computer and create industry-standard AVI video files. See <a href="http://www.techsmith.com/camtasia.asp">http://www.techsmith.com/camtasia.asp</a> for more information.</p> <p>Other software can be used to record screen and audio activity, provided it can output files in the required format.</p>

The following files will **NOT** be accepted.

- Executable Files (.EXE or .COM)
- Batch Command Files (.BAT or .CMD)
- Script Files (.VBS or .JS)
- Compressed files (.ZIP or .GZIP or .TAR)

Note that checking your XML file against the XSD will not highlight issues with file types that are not permitted. These will only be detected at the time the XML file is uploaded to the PBRF system.

## Appendices

### A1 Panel Codes

<b>Panels</b>	<b>Element Value for RequestedPanelCode</b>
Biological Sciences	BIOS
Business and Economics	BEC
Creative and Performing Arts	CPA
Education	EDU
Engineering Technology and Architecture	ETA
Health	HEALTH
Humanities and Law	HAL
Māori Knowledge and Development	MKD
Mathematical and Information Sciences and Technology	MIST
Medicine and Public Health	MEDPH
Physical Sciences	PHYSC
Social Sciences and Other Cultural/Social Sciences	SSOCSS

### A2 Subject Area of Research Codes

<b>Subject Area Description</b>	<b>Element Value for PrimarySubjectAreaOf ResearchCode</b>
Māori Knowledge and Development	10
Law	20
History, History of Art, Classics and Curatorial Studies	30
English Language and Literature	40
Foreign Languages and Linguistics	50
Philosophy	60
Religious Studies and Theology	70
Political Science, International Relations and Public Policy	80
Psychology	90
Human Geography	100
Sociology, Social Policy, Social Work, Criminology & Gender Studies	110
Anthropology and Archaeology	120
Communications, Journalism and Media Studies	130
Education	140
Chemistry	150
Physics	160
Earth Sciences	170
Molecular, Cellular and Whole Organism Biology	180
Ecology, Evolution and Behaviour	190
Agriculture and Other Applied Biological Sciences	200
Pure and Applied Mathematics	210
Statistics	220
Computer Science, Information Technology, Information Sciences	230
Engineering and Technology	240
Architecture, Design, Planning, Surveying	250
Biomedical	260
Clinical Medicine	270
Public Health	280
Nursing	290
Dentistry	300
Veterinary Studies and Large Animal Science	320

Sport and Exercise Science	330
Other Health Studies (including Rehabilitation Therapies)	340
Management, Human Resources, Industrial Relations and Other Businesses	350
Accounting and Finance	360
Marketing and Tourism	370
Economics	380
Music, Literary Arts and Other Arts	390
Visual Arts and Crafts	400
Theatre and Dance, Film, Television and Multimedia	410
Design	420
Pharmacy	430

### A3 Research Output Types

<b>Research Output Type</b>	<b>Element value for OutputTypeCode ResearchOutputType</b>
Artefact/Object/Craftwork	1
Authored Book	2
Chapter in Book	3
Composition	4
Conference Contribution - Abstract	5
Confidential Report for External Body	6
Design Output	7
Edited Book	8
Exhibition	9
Film/Video	10
Intellectual Property (e.g. patent, trademark)	11
Journal Article	12
Oral Presentation	13
Performance	14
Commissioned Report for External Body	15
Scholarly Edition	16
Software	17
Awarded Doctoral Thesis	18
Conference Contribution - Full Conference paper	20
Conference Contribution - Paper in published proceedings	21
Conference Contribution - Poster presentation	22
Conference Contribution - Oral presentation	23
Conference Contribution - Other	24
Awarded Research Masters Thesis	25
Discussion Paper	26
Monograph	27
Technical Report	28
Working Paper	29
Literary Translations, where these contain significant editorial work in the nature of research	30
Other Form of Assessable Output (including but not limited to book reviews, magazine articles, new materials, structures, devices, images, products, buildings, food products and processes, published geological and/or geomorphological maps, and explanatory texts).	99

**A4 Peer Esteem Types (PE)**

<b>Peer Esteem Type</b>	<b>Element value for PeerEsteemTypeCode</b>
Research-related fellowships, prizes and awards	10
Fellows and/or restricted or elected membership of learned societies or academies	20
Participation in editorial boards and/or refereeing (eg for journals)	30
Invitations to provide conference addresses or similar	40
Favourable reviews and/or commendations	50
Appointments to key discipline-based, research, industry, professional, community, or government bodies	60
Esteem factors associated with students	70
Research-related favourable citations	80
Other evidence of peer esteem	90

**A5 Contribution to Research Environment Types (CRE)**

<b>Contribution to the Research Environment Type</b>	<b>Element value for ContributionTypeCode</b>
Membership of research collaborations and consortia	10
Contributions to the research discipline	20
Facilitating discipline-based and research networks	30
Contributions to the research environment within and outside the TEO	40
Generation of externally funded research	50
Contribution to researcher development	60
Supervision of student research	70
Assisting student publishing, exhibiting or performance	90
Other evidence of contribution to the research environment	80

**A6 Types of Impact Code**

<b>Types of Impact Code</b>	<b>Element value for ImpactCode</b>
Personal trauma (includes death or injury to family member, friend or close colleague; injury to self; personal psychological impact)	1
Loss or damage to home and/or contents	2
Inability to access facilities and resources (includes office, laboratory, library space, venue space; field work; equipment, IT resources)	3
Increased responsibilities (family/community responsibilities; teaching or organisational/management responsibilities at work)	4
Impediments to undertaking research activity that equates to PE and/or CRE activities ( PhD students discontinued; conferences cancelled; invitations to meetings declined)	5
Other Impacts	6

**A7 Types of Special Circumstances**

<b>Types of Special Circumstances</b>	<b>Element value for CircumstanceCode</b>
Extended leave	EL
Significant community responsibilities	SC
Leadership positions involving extended or above the usual time commitment	LP
Long term disability	LD
Part-time employment	PT
Other circumstances	OC

**A8 SAC funded degree delivering TEOs**

<b>TEO</b>	<b>Element value for ProviderNumber</b>
<b>Polytechnics</b>	
Bay of Plenty Polytechnic	6003
Christchurch Polytechnic Institute of Technology	6006
Eastern Institute of Technology	6007
Manukau Institute of Technology	6010
Nelson Marlborough Institute of Technology	6011
Northland Polytechnic	6012
Open Polytechnic of New Zealand	6022
Otago Polytechnic	6013
Southern Institute of Technology	6015
Unitec New Zealand	6004
Universal College of Learning	6009
Waiariki Institute of Technology	6018
Waikato Institute of Technology	6019
Wellington Institute of Technology	6008
Western Institute of Technology Taranaki	6017
Whitireia Community Polytechnic	6014
<b>Universities</b>	
AUT University	7008
Lincoln University	7006
Massey University	7003
University of Auckland	7001
University of Canterbury	7005
University of Otago	7007
University of Waikato	7002
Victoria University of Wellington	7004
<b>Wananga</b>	
Te Wananga O Aotearoa	8630
Te Wananga O Raukawa	9241
Te Whare Wananga O Awanuiarangi	9386
<b>Private Training Establishments</b>	
AIS St Helens	8530
Anamata	9242
Bethlehem Institute of Education	8694
Carey Baptist College	8979
Good Shepherd College – Te Heparā Pai	8717
International Pacific College, NZ	8550
Laidlaw College Inc	8563
New Zealand College of Chiropractic	8396
New Zealand Tertiary College	8619
Pacific International Hotel Management School	8457
Te Kura Toi Whakaari O Aotearoa - New Zealand Drama School	8502
Te Whare Wananga O Te Pihopatanga O Aotearoa	8182
Whitecliffe College of Arts and Design	8509

