

**REF 2014 submission system validation rules**

**Updated September 2013**

This document is aimed at supporting institutions importing data into the REF 2014 submission system and is not intended to be a policy guidance document. For policy guidance on REF 2014 please see <http://www.ref.ac.uk/subguide/>.

This document lists all validation rules that are enforced when importing data into the REF 2014 submission system either using the web user interface or the API. Field names are as listed in the [published data requirements](http://www.ref.ac.uk/media/ref/content/subguide/User%20requirements%20Nov%202012.pdf)[[1]](#footnote-1).

In September and May 2013 this document was updated. The table below outlines the changes that were made.

|  |  |  |  |
| --- | --- | --- | --- |
| **Section** | **Page** | **Change** | **Date changed** |
| Research outputs (REF2) | 9 | Additional text added | Sept 2013 |
| Research outputs (REF2) | 10 | Outputidentifier validation rule updated | Sept 2013 |
| Research outputs (REF2) | 15 | Additional text added | May 2013 |
| Impact case studies (REF3b) | 19 | Title character length changed from 64 to 256 | May 2013 |
| Impact case study contacts | 20 | Change to text. ‘of either type’ replaced with ‘in total’ | May 2013 |

## Validation rule levels

The validation rules for each field are divided into up to three parts:

Save – The record cannot be imported if any of these rules are broken.

Submission – The record can be imported if any of these rules are broken but the problem must be resolved in order for the institution to submit to REF 2014.

Warning – The field is acceptable for submission to REF 2014 but you may want to check that it is correct.

## Data types

The following table describes each data type. Where Save/Submission/Warning is stated, this indicates whether providing an invalid value will result in a save error, a submission error or a warning for the field:

|  |  |
| --- | --- |
| **Data type** | **Comments** |
| Text (maximum characters) | Any text up to the given length.  Any text over the maximum number of characters will be truncated. |
| Text (Save/Submission/Warning)   * Value1 * Value2 * Value3 | Any of the given values only. |
| Text (A-E, Save/Submission/Warning) | Any capital letter from A to E inclusive. |
| Integer (x to y, Save/Submission/Warning) | Any whole number between x and y inclusive. |
| Number (x to y, Save/Submission/Warning) | Any number between x and y inclusive. The number of expected decimal places will be indicated e.g. 1.00-5.00 indicates two decimal places. |
| Boolean | One of: true, false, yes, no.  If a Boolean field is marked as mandatory this means that one of the four values must be provided; it doesn’t mean the value must be positive (yes or true).  Validation rule descriptions below will use the words ‘true’ and ‘false’ rather than ‘yes’ and ‘no’. |
| Date | Date fields should be formatted as a date in an Excel or Access file.  Dates imported using XML should be in the format ‘YYYY-MM-DD’ e.g. 2nd Jan 2013 = ‘2013-01-02’.  Dates imported using a text import can be accepted in numerous formats but the recommended format to avoid ambiguity is ‘DD MMM YYYY’ e.g. 2nd Jan 2013 = ‘2 Jan 2013’. |
| Binary | Binary data, typically used to represent a file.  When using a text import, the data must be BASE64 encoded. |

## Identifying a record in an error message

The log or validation report for an import or validation job may contain some error messages that include a short code that identifies a record. The format of this code for each record type is given in the table below.

* [Submission] = UOA and multiple submission letter if applicable e.g. 1, 36A, 36B.
* [a field name] = The value of the named field in the record, unless otherwise stated.

|  |  |  |
| --- | --- | --- |
| **Record type** | **Format** | **Comments** |
| Research group | RG-[Submission]-[code] |  |
| Staff (REF1a) | REF1a-[Submission]-[identifier] | identifier = hesaStaffIdentifier or staffIdentifier if hesaStaffIdentifier is not provided |
| Staff circumstances (REF1b) | REF1b-[Submission]-[identifier]-[circumstanceIdentifier] |
| Category C staff circumstances (REF1c) | REF1c-[Submission]-[identifier] |
| Output (REF2) | REF2-[Submission]-[identifier] | identifier = outputIdentifier or outputNumber if outputIdentifier is not provided |
| Impact template (REF3a) | REF3a-[Submission] |  |
| Impact case study (REF3b) | REF3b-[Submission]-[caseStudyIdentifier] |  |
| Impact case study contact | REF3b-[Submission]-[number] |  |
| Research doctoral degrees awarded (REF4a) | REF4a-[Submission]-[year] |  |
| Research income (REF4b) | REF4b-[Submission]-[source] |  |
| Research income-in-kind (REF4c) | REF4c-[Submission]-[source] |  |
| Environment template (REF5) | REF3a-[Submission] |  |
| User details | USER-[emailAddress] |  |
| User form permissions | FORMPERMISSION-[Submission]-[emailAddress]-[form] |  |
| User function permissions | FUNCTIONPERMISSION-[emailAddress]-[function] |  |

# Validation rules

## Common fields

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data type** | **Validation rules** | **GoS reference** |
| Institution | Text (8) | Save  Mandatory.  Must match the UKPRN of the importing institution. |  |
| unitOfAssessment | Integer (1 to 36, Save) | Save  Mandatory.  There must be an existing submission in the given UOA for the importing institution. | Annex D |
| multipleSubmission | Text (1) | Save  If provided, the value must match a multiple submission identifier in the given UOA for the importing institution. If not provided then there must be a single submission in the given UOA for the importing institution. | Paragraph 50 |
| action | Text (Save)   * Update * Overwrite * Delete |  |  |

## Research groups

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data type** | **Validation rules** | **GoS reference** |
| code | Text (1) | Save  Mandatory.  Any single letter or digit (a lower case letter will be stored in upper case).  Submission  Must not be duplicated within the submission. |  |
| name | Text (64) | Save  Mandatory.  Submission  Must be unique within the submission. |  |

## Research staff (REF1a)

If neither hesaStaffIdentifier nor staffIdentifier are provided then a new staff member will be created on import. If two or more REF1a records in the same import file have the same hesaStaffIdentifier or the same staffIdentifier then the record that appears closest to the end of the file will overwrite any conflicting details in the first records.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data type** | **Validation rules** | **GoS reference** |
| hesaStaffIdentifier | Text (13) | Save  Must not be duplicated within the submission.  Submission  Must not be duplicated within the institution.  Mandatory for Category A staff.  Must not be provided for Category C staff.  Must be in the form XXDDDDDDDDDDC (X=any digit or X, D = any digit, C = check digit) and the check digit must be valid; see [HESA website](http://www.hesa.ac.uk/index.php?option=com_collns&Itemid=233&task=show_manuals&r=05025&f=003)[[2]](#footnote-2) for more detail. |  |
| staffIdentifier | Text (24) | Save  Mandatory if hesaStaffIdentifier is not provided.  Must not be duplicated within the submission.  Submission  Mandatory for Category C staff. |  |
| surname | Text (64) | Submission  Mandatory. |  |
| initials | Text (10) | Submission  Mandatory. |  |
| category | Text (Save)   * A * C | Submission  Mandatory. | Paragraphs 77-83 |
| birthDate | Date | Submission  Mandatory for Category A staff.  Must not be provided for Category C staff.  Must be between 01/01/1913 and 31/10/1992 inclusive. |  |
| contractedFte | Number (0.20 to 1.00, Submission)  (-9.99 to 9.99, Save) | Submission  Mandatory for Category A staff.  Must not be provided for Category C staff. |  |
| isResearchFellow | Boolean | Submission  Mandatory for Category A staff in all HEFCW funded institutions.  Must not be provided for Category C staff.  Must not be provided for Category A staff in non-HEFCW funded institutions. | Footnote 3 |
| isEarlyCareerResearcher | Boolean | Submission  Mandatory. | Paragraphs 85-87 |
| startDate | Date | Submission  Mandatory for Category A staff who started as academic staff at the institution between 01/01/2008 and 31/10/2013.  Must not be provided for Category C staff. | Paragraph 84j |
| isOnFixedTermContract | Boolean | Submission  Mandatory for Category A staff.  Must not be provided for Category C staff. |  |
| contractStartDate | Date | Submission  Mandatory for Category A staff with isOnFixedTermContract set to true.  Must not be provided for Category C staff.  Must not be provided for Category A staff with isOnFixedTermContract set to false.  Must be on or before 31/10/2013. |  |
| contractEndDate | Date | Submission  Mandatory for Category A staff with isOnFixedTermContract set to true.  Must not be provided for Category C staff.  Must not be provided for Category A staff with isOnFixedTermContract set to false.  Must be on or after 31/10/2013. |  |
| isOnSecondment | Boolean | Submission  Mandatory for Category A staff.  Must not be provided for Category C staff. |  |
| secondmentStartDate | Date | Submission  Mandatory for Category A staff with isOnSecondment set to true.  Must not be provided for Category C staff.  Must not be provided for Category A staff with isOnSecondment set to false.  Must be between 31/10/2011 and 31/10/2013 inclusive.  Must not be more than two years before secondmentEndDate. |  |
| secondmentEndDate | Date | Submission  Mandatory for Category A staff with isOnSecondment set to true.  Must not be provided for Category C staff.  Must not be provided for Category A staff with isOnSecondment set to false.  Must be between 31/10/2013 and 31/10/2015 inclusive.  Must not be more than two years after secondmentStartDate. |  |
| isOnUnpaidLeave | Boolean | Submission  Mandatory for Category A staff.  Must not be provided for Category C staff. |  |
| unpaidLeaveStartDate | Date | Submission  Mandatory for Category A staff with isOnUnpaidLeave set to true.  Must not be provided for Category C staff.  Must not be provided for Category A staff with isOnUnpaidLeave set to false.  Must be between 31/10/2011 and 31/10/2013 inclusive.  Must not be more than two years before unpaidLeaveEndDate. |  |
| unpaidLeaveEndDate | Date | Submission  Mandatory for Category A staff with isOnUnpaidLeave set to true.  Must not be provided for Category C staff.  Must not be provided for Category A staff with isOnUnpaidLeave set to false.  Must be between 31/10/2013 and 31/10/2015 inclusive.  Must not be more than two years after unpaidLeaveStartDate. |  |
| isNonUKBased | Boolean | Submission  Mandatory for Category A staff.  Must not be provided for Category C staff. |  |
| nonUKBasedText | Text (7500) | Submission  Mandatory for Category A staff with isNonUKBased set to true.  Must not be provided for Category C staff.  Must not be provided for Category A staff with isNonUKBased set to false.  Maximum 200 words. | Paragraph 79d |
| isSensitive | Boolean |  | Paragraph 36 |
| CircumstanceExplanation | Text (7500) | Submission  Mandatory for staff members with any individual staff circumstances (REF1b).  Maximum 200 words for staff members with clearly defined circumstances.  Maximum 300 words for staff members with complex circumstances.  Must not be provided for staff members with no staff circumstances (REF1b). |  |
| ResearchGroup1 | Text (1) | Save  Must match the code for a research group in the same submission as the staff member, otherwise the value will be ignored. No error message or warning will be produced.  Submission  The research group must not be repeated in the same staff member. |  |
| ResearchGroup2 | Text (1) |  |
| ResearchGroup3 | Text (1) |  |
| ResearchGroup4 | Text (1) |  |

## Staff circumstances (REF1b)

If neither hesaStaffIdentifier nor staffIdentifier are provided then the REF1b record will not be imported because it cannot be associated with a staff member. If two or more REF1b records in the same import file have the same hesaStaffIdentifier or the same staffIdentifier then the record that appears closest to the end of the file will overwrite any conflicting details in the first records.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data type** | **Validation rules** | **GoS reference** |
| hesaStaffIdentifier | Text (13) | See validation for hesaStaffIdentifier in REF1a above. |  |
| staffIdentifier | Text (24) | See validation for staffIdentifier in REF1a above. |  |
| circumstanceIdentifier | Integer (1 to 7, Save)  1 : Early career researcher  2 : Part time, career break or secondment  3 : Qualifying period of maternity, paternity or adoption leave  4 : Period of additional paternity or adoption leave under four months  5 : Category A junior clinical academic  6 : Category C clinical, health or veterinary professional  7 : Complex circumstances | Save  Mandatory.  Submission  Circumstances 5, 6 and 7 cannot be combined with any other circumstances.  No circumstanceIdentifier can be duplicated for a staff member.  Circumstance 5 can only be cited by Category A staff in Main Panel A.  Circumstance 6 can only be cited by Category C staff in Main Panel A. |  |
| earlyCareerStartDate | Date | Submission  Mandatory for circumstance 1.  Must not be provided for any circumstance except 1.  Must be between 01/01/2008 and 31/10/2013 inclusive. | Paragraphs 85-86 |
| totalPeriodOfAbsence | Number (0.01 to 70.00, Submission)  (-9999.99 to 9999.99, Save) | Submission  Mandatory for circumstances 2 and 4.  Must not be provided for any circumstance except 2 and 4. |  |
| numberOfQualifyingPeriods | Integer (1 to 3, Submission)  (0 to 255, Save) | Submission  Mandatory for circumstance 3.  Must not be provided for any circumstance except 3. |  |
| complexOutputReduction | Integer (1 to 3, Submission)  (0 to 255, Save) | Submission  Mandatory for circumstance 7.  Must not be provided for any circumstance except 7. |  |

## Category C staff circumstances (REF1c)

If neither hesaStaffIdentifier nor staffIdentifier are provided then the REF1c record will not be imported because it cannot be associated with a staff member. If two or more REF1c records in the same import file have the same hesaStaffIdentifier or the same staffIdentifier then the record that appears closest to the end of the file will overwrite any conflicting details in the first records.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data type** | **Validation rules** | **GoS reference** |
| hesaStaffIdentifier | Text (13) | See validation for hesaStaffIdentifier in REF1a above. |  |
| staffIdentifier | Text (24) | See validation for staffIdentifier in REF1a above. |  |
| employingOrganisation | Text (256) | Submission  Mandatory for Category C staff.  Must not be provided for Category A staff. |  |
| jobTitle | Text (64) | Submission  Mandatory for Category C staff.  Must not be provided for Category A staff. |  |
| explanatoryText | Text (7500) | Submission  Mandatory for Category C staff.  Must not be provided for Category A staff.  Maximum 200 words. |  |

## Research outputs (REF2)

A submission error will be produced if any staff member has more than four outputs assigned.

A warning will be produced if any staff member has fewer than four outputs assigned, regardless of any circumstances cited in REF1b.

A submission error will be produced if an output of any of the following types has no PDF associated with it:

* D – Journal article
* E – Conference proceeding
* G – Software
* S - Research datasets and databases
* U – Working paper

For types D and E, if the REF team has not been able to download a PDF for the output then the PDF must be uploaded manually via REF2 on the submission system website or using the submission system web service by the submission deadline (midday 29th November 2013).

For all other types listed above, a PDF for the output must be uploaded manually via REF2 on the submission system website or using the submission system web service by the submission deadline (midday 29th November 2013).

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data type** | **Validation rules** | **GoS reference** |
| hesaStaffIdentifier | Text (13) | The hesaStaffIdentifier and staffIdentifier fields are used to assign an output to a staff member.  If neither hesaStaffIdentifier nor staffIdentifier identifies a staff member in the same submission as the output then the output will not be assigned to a staff member.  If hesaStaffIdentifier and staffIdentifier identify different staff members in the submission then the output will be assigned to the staff member with the matching hesaStaffIdentifier.  The output will not be assigned to a staff member if outputNumber is not provided.  All outputs assigned to a staff member must have different outputNumbers so the output will only be assigned to a staff member if outputNumber is unique to this output for the matching staff member.  Save  For identification of the output, if outputIdentifier is not provided then either hesaStaffIdentifier or staffIdentifier must be provided with outputNumber.  Submission  The output must be assigned to a staff member.  Warning  If the output is assigned to an excluded staff member then the output will be excluded by implication. |  |
| staffIdentifier | Text (24) |  |
| outputNumber | Integer (1 to 4, Submission)  (0 to 255, Save) | See notes against hesaStaffIdentifier and staffIdentifier above for how outputNumber is used to assign an output to a staff member. |  |
| outputIdentifier | Text (24) | Save  Mandatory if either hesaStaffIdentifier or staffIdentifier is not provided along with outputNumber.  Must not be duplicated within the submission if the institution has provided a PDF for the output.  Submission  Mandatory.  Must not be duplicated within the submission. |  |
| outputType | Text (A-U) | Submission  Mandatory. |  |
| title | Text (7500) | Submission  Mandatory. |  |
| place | Text (256) | Submission  Mandatory if outputType is one of: L, P, I, M S and isPendingPublication is false.  Warning  Should not be provided if outputType is one of: A, B, C, R, D, E, U, F, N, O, K, J, Q, H, G. |  |
| publisher | Text (256) | Submission  Mandatory if outputType is one of: A, B, C, U, N, O, G, T.  Warning  Should not be provided if outputType is one of: D, E, L, M, I, F, K, J, S, H. |  |
| volumeTitle | Text (256) | Submission  Mandatory if outputType is one of: C, R, D, E.  Warning  Should not be provided if outputType is one of: A, N, U, L, P, M, I, F, O, K, J, Q, S, H, G, T. |  |
| volume | Text (16) | Submission  Mandatory if outputType is D.  Warning  Should not be provided if outputType is not D or E. |  |
| issue | Text (16) | Warning  Should not be provided if outputType is not D or E. |  |
| firstPage | Text (8) | Submission  Mandatory if outputType is D, isPendingPublication is false and articleNumber is not provided.  Mandatory if outputType is E.  Warning  Should not be provided if outputType is not D or E. |  |
| articleNumber | Text (32) | Submssion  Mandatory if outputType is D, isPendingPublication is false and firstPage is not provided.  Warning  Should not be provided if outputType is not D. |  |
| isbn | Text (24) | Submission  Mandatory if outputType is A, B or C and isPendingPublication is false.  Warning  Should not be provided if outputType is one of: D, E, U, L, P, M, I, F, N, O, K, J, Q, S, H, G, T.  Should be in one of the following forms (any dashes or spaces included will be ignored):  DDDDDDDDDX  DDDDDDDDDDDDD  (X=any digit or X, D = any digit).  The final character is a check digit; a warning will be produced if it is not valid. See <http://isbn-information.com/10-digit-isbn.html> for details of how the check digit is calculated for a 10 digit ISBN and <http://isbn-information.com/isbn-check-digit.html> for a 13 digit ISBN. |  |
| issn | Text (24) | Submission  Mandatory if outputType is D and isPendingPublication is false.  Warning  Should not be provided if outputType is not D or E.  Should be in the following form (any dashes or spaces included will be ignored):  DDDDDDDX  (X=any digit or X, D = any digit).  The final character is a check digit; a warning will be produced if it is not valid. |  |
| doi | Text (256) | The prefix http://dx.doi.org/ will be removed if it is provided.  Submission  Must be in the form:  10.DDDD/anycharacter  (D = any digit, anycharacter = any number of characters that can be used in a URL).  Warning  Should not be provided if outputType is one of: U, L, P, M, I, F, O, K, J, Q, H, G.  Should be provided if available and outputType is D or E and isPendingPublication is false. |  |
| patentNumber | Text (24) | Submission  Mandatory if outputType is F and isPendingPublication is false.  Warning  Should not be provided if outputType is not F. |  |
| year | Text (Submission):   * 2007 * 2008 * 2009 * 2010 * 2011 * 2012 * 2013 | Submission  Mandatory.  Must be 2013 if isPendingPublication is true. |  |
| url | Text (1024) | Submission  Mandatory if outputType is H and isPendingPublication is false.  Warning  Should start with one of: http://, https://, ftp://. |  |
| mediaOfOutput | Text (24) | Submission  Mandatory if outputType is one of: L, P, M, I, K, J, Q, S, H, G, T and no PDF has been uploaded for the output.  Warning  Should not be provided if outputType is one of: A, B, C, R, D, E, U, F, N, O. |  |
| numberOfAdditionalAuthors | Integer (0 to 9999, Submission)  (-32768 to 32767, Save) |  |  |
| isPendingPublication | Boolean | Submission  Must either be false or not provided if year is not 2013. | Paragraph 111b |
| isDuplicateOutput | Boolean | Submission  Must not be true if proposeDoubleWeighting is true. | See references in ‘Panel criteria’, Annex A |
| isNonEnglishOutput | Boolean |  | Paragraphs 128 – 130 |
| isInterdisciplinary | Boolean |  | Paragraph 119 |
| proposeDoubleWeighting | Boolean | Submission  Must not be true if isDuplicateOutput is true. | See references in ‘Panel criteria’, Annex A |
| doubleWeightingStatement | Text (7500) | Submission  Mandatory if proposeDoubleWeighting is true.  Must not be provided if proposeDoubleWeighting is false.  Maximum 100 words. | See references in ‘Panel criteria’, Annex A |
| reserveOutput | Integer (1 to 4, Submission)  (0 to 255, Save) | Submission  Mandatory if proposeDoubleWeighting is true and there are more than two other outputs assigned to this output’s staff member.  Must not be provided if proposeDoubleWeighting is false.  Must be different to outputNumber for this output.  Must not identify a double-weighted output.  Must not identify an output that is a reserve for another double-weighted output.  Must identify one of the other outputs assigned to the same staff member as this output. | See references in ‘Panel criteria’, Annex A |
| hasConflictsOfInterests | Boolean | This field is now obsolete and will be ignored on import. The output will be considered to have conflicts of interest if conflictedPanel members has been provided. |  |
| conflictedPanelMembers | Text (512) | Warning  Should not be provided if outputType is not O. | Paragraphs 115 – 117 |
| isOutputCrossReferred | Boolean | This field is now obsolete and will be ignored on import. A cross-referral request will be stored against the output if crossReferToUoa is provided. | Paragraphs 75d and119. ‘Panel criteria’ Part 1 paragraphs 96-100. |
| crossReferToUoa | Integer (1 to 36, Save) | Submission  Must identify a different unit of assessment to the one that the output belongs to. | As above |
| additionalInformation | Text (7500) | Submission  Maximum 300 words. | See references in ‘Panel criteria’, Annex A |
| englishAbstract | Text (7500) | Submission  Mandatory if isNonEnglishOutput is true.  Must not be provided if isNonEnglishOutput is false.  Maximum 100 words. | Paragraphs 128 – 130 |
| researchGroup | Text (1) | Save  The researchGroup must match the code for a research group in the same submission as the staff member that the output is assigned to.  Submission  The researchGroup must match the code for one of the research groups that the assigned staff member belongs to. | Paragraph 119 |
| isSensitive | Boolean |  | Paragraph 36 |
| excludeFromSubmission | Boolean | Warning  A warning will be produced if excludeFromSubmission is true. |  |
| scopusIdentifier | Text (20) | Export only. |  |
| citedByCount | Integer | Export only. |  |

## Impact template (REF3a)

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data type** | **Validation rules** | **GoS reference** |
| requiresRedaction | Boolean |  | Paragraph 36 |
| statement | Binary | Save  Must be a PDF file no larger than 10Mb.  Submission  Mandatory.  Must not contain more than the allowed number of pages based on Category A staff FTE in the submission. |  |
| redactedStatement | Binary | Save  Must be a PDF file no larger than 10 Mb.  Warning  Must be provided before 31 January 2014 if requiresRedaction is true.  Should not be provided if requiresRedaction is not provided or false. |  |

## Impact case studies (REF3b)

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data type** | **Validation rules** | **GoS reference** |
| caseStudyIdentifier | Text (24) | Submission  Mandatory.  Must not be duplicated within the submission. |  |
| title | Text (256) | Submission  Mandatory. |  |
| redactionStatus | Text (Save):   * NotRedacted * RequiresRedaction * NotForPublication | Submission  Mandatory. |  |
| conflictedPanelMembers | Text (512) | Warning  Should not be provided if redactionStatus is NotRedacted. |  |
| caseStudy | Binary | Save  Must be a PDF file no larger than 10Mb.  Submission  Mandatory.  Must not contain more than four pages.  Must pass an accessibility test. |  |
| redactedCaseStudy | Binary | Save  Must be a PDF file no larger than 10 Mb.  Submission  Must pass an accessibility test.  Warning  Must be provided by 31 January 2014 if redactionStatus is RequiresRedaction.  Should not be provided if redactionStatus is not RequiresRedaction. |  |
| isCaseStudyCrossReferred | Boolean | This field is now obsolete and will be ignored on import. A cross-referral request will be stored against the case study if crossReferToUoa is provided. |  |
| crossReferToUoa | Integer (1 to 36, Save) | Submission  Must identify a different unit of assessment to the one that the output belongs to. |  |

## Impact case study contacts

A submission error will be produced if there are more than five contacts in total associated with a case study.

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data type** | **Validation rules** | **GoS reference** |
| caseStudyIdentifier | Text (24) | Save  Mandatory.  Must identify a case study in the submission. |  |
| number | Integer (1 to 5, Submission)  (0 to 255, Save) | Save  Mandatory.  Must not be duplicated within the case study. |  |
| contactType | Text (Save):   * ContactDetails * FactualStatement | Submission  Mandatory. |  |
| Name | Text (64) | Submission  Mandatory. |  |
| jobTitle | Text (64) | Submission  Mandatory. |  |
| emailAddress | Text (128) | Save  Must be structured as a valid e-mail address.  Submission  Must be provided if contactType is ContactDetails and either addressLine1 or postcode is not provided.  Must not be provided if contactType is FactualStatement.  Must be different to alternateEmailAddress. |  |
| alternateEmailAddress | Text (128) | Save  Must be structured as a valid e-mail address.  Submission  Must not be provided if contactType is FactualStatement.  Must be different to emailAddress. |  |
| phone | Text (24) | Submission  Must not be provided if contactType is FactualStatement. |  |
| organisation | Text (128) | Submission  Mandatory. |  |
| addressLine1 | Text (64) | Submission  Must be provided if contactType is ContactDetails and emailAddress is not provided.  Must not be provided if contactType is FactualStatement. |  |
| addressLine2 | Text (64) | Submission  Must not be provided if contactType is FactualStatement. |  |
| addressLine3 | Text (64) | Submission  Must not be provided if contactType is FactualStatement. |  |
| addressLine4 | Text (64) | Submission  Must not be provided if contactType is FactualStatement. |  |
| addressLine5 | Text (64) | Submission  Must not be provided if contactType is FactualStatement. |  |
| postcode | Text (10) | Submission  Must be provided if contactType is ContactDetails and emailAddress is not provided.  Must not be provided if contactType is FactualStatement. |  |
| country | Text (64) | Submission  Must not be provided if contactType is FactualStatement. |  |
| corroborateText | Text (512) | Submission  Mandatory.  Maximum 50 words. |  |

## Research doctoral degrees awarded (REF4a)

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data type** | **Validation rules** | **GoS reference** |
| year | One of the values (Save):   * 2008 * 2009 * 2010 * 2011 * 2012 | Save  Mandatory. |  |
| degreesAwarded | Number (0.00 to 9999.99, Submission)  (-9999.99 to 9999.99, Save) |  |  |

## Research income (REF4b)

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data type** | **Validation rules** | **GoS reference** |
| source | Integer (1 to 14, Save)  1 : BIS Research Councils, Royal Society, British Academy and Royal Society of Edinburgh  2 : UK-based charities (open competitive process)  3: UK-based charities (other)  4 : UK central government bodies, local authorities, health and hospital authorities  5 : UK industry, commerce and public corporations  6 : EU government bodies  7 : EU-based charities (open competitive process)  8 : EU industry, commerce and public corporations  9 : EU other  10 : Non-EU based charities (open competitive process)  11: Non-EU industry, commerce and public corporations  12 : Non-EU other  13: Other sources  14 : Income from specific bodies that fund health research (see GoS paragraph 172) | Save  Mandatory.  14 is only valid within Main Panel A (UOAs 1 to 6). | Paragraph 172 |
| Income2008 | Integer (-10,000,000 to 50,000,000, Submission)  (-2,147,483,648 to  2,147,483,647, Save) |  |  |
| Income2009 | Integer (-10,000,000 to 50,000,000, Submission)  (-2,147,483,648 to  2,147,483,647, Save) |  |  |
| Income2010 | Integer (-10,000,000 to 50,000,000, Submission)  (-2,147,483,648 to  2,147,483,647, Save) |  |  |
| Income2011 | Integer (-10,000,000 to 50,000,000, Submission)  (-2,147,483,648 to  2,147,483,647, Save) |  |  |
| Income2012 | Integer (-10,000,000 to 50,000,000, Submission)  (-2,147,483,648 to  2,147,483,647, Save) |  |  |

## Research income in kind (REF4c)

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data type** | **Validation rules** | **GoS reference** |
| source | Integer (14 to 15, Save)  14 : Income from specific bodies that fund health research (see GoS paragraph 172)  15: BIS Research Councils | Save  Mandatory.  14 is only valid within Main Panel A (UOAs 1 to 6). | Paragraph 172 |
| Income2008 | Integer (-10,000,000 to 50,000,000, Submission)  (-2,147,483,648 to  2,147,483,647, Save) |  |  |
| Income2009 | Integer (-10,000,000 to 50,000,000, Submission)  (-2,147,483,648 to  2,147,483,647, Save) |  |  |
| Income2010 | Integer (-10,000,000 to 50,000,000, Submission)  (-2,147,483,648 to  2,147,483,647, Save) |  |  |
| Income2011 | Integer (-10,000,000 to 50,000,000, Submission)  (-2,147,483,648 to  2,147,483,647, Save) |  |  |
| Income2012 | Integer (-10,000,000 to 50,000,000, Submission)  (-2,147,483,648 to  2,147,483,647, Save) |  |  |

## Validation of REF4a/b/c totals

The total number of research degrees awarded, the total research income and the total research income-in-kind will be validated against the numbers held by HESA during bulk validation, but not on import. For details of the validation rules that will be applied, please see [REF submission system environment data limits](http://www.ref.ac.uk/subguide/ref4environmentdata/refsubmissionsystemenvironmentdatalimits/)[[3]](#footnote-3) for more detail.

## Environment template (REF5)

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Data type** | **Validation rules** | **GoS reference** |
| requiresRedaction | Boolean |  | Paragraph 36 |
| statement | Binary | Save  Must be a PDF file no larger than 10Mb.  Submission  Mandatory.  Must not contain more than the allowed number of pages based on Category A staff FTE in the submission. |  |
| redactedStatement | Binary | Save  Must be a PDF file no larger than 10 Mb.  Warning  Must be provided before 31 January 2014 if requiresRedaction is true.  Should not be provided if requiresRedaction is not provided or false. |  |

## User

|  |  |  |
| --- | --- | --- |
| **Name** | **Data type** | **Validation rules** |
| emailAddress | Text (128) | The emailAddress should be in the format: xxx@xxx.xxx where ‘x’ is any single character (punctuation is technically valid as well). However the import validation is currently not enforcing this rule.  Save  Mandatory.  Must be unique within the entire submission system. |
| name | Text (64) | Save  Mandatory.  Must be unique within the institution. |
| password | Text (64) | Save  Mandatory when creating a new user.  Must be at least 6 characters in length.  Must contain both letters and numbers.  Must not contain < > or &.  Must be different to emailAddress.  Must be different to name.  Warning  If a password is provided for an existing user account it will be ignored. |
| accountExpires | Date |  |
| accountType | Text (Save):   * Administrator * User * Automated | Save  Mandatory when creating a new user. |
| accountRestriction | Text (Save):   * None * ReadOnly * NoAccess | Save  Mandatory when creating a new user. |

## Form permissions

|  |  |  |
| --- | --- | --- |
| **Name** | **Data type** | **Validation rules** |
| emailAddress | Text (128) | Save  Mandatory. |
| unitOfAssessment | Integer (1 to 36, Save) | Save  Mandatory.  A submission must exist in the given unit of assessment. |
| multipleSubmission | Text (1) | Save  Mandatory if multiple submissions exist with the given unit of assessment.  If provided then a multiple submission must exist with the multiple submission letter within the given unit of assessment. |
| form | Text (Save):   * REF1a * REF1b * REF1c * REF2 * REF3a * REF3b * REF4a * REF4b * REF4c * REF5 * RG | Save  Mandatory. |
| permission | Text (Save):   * None * Read * ReducedRead * Write | Save  Mandatory. |

## Function permissions

|  |  |  |
| --- | --- | --- |
| **Name** | **Data type** | **Comments** |
| emailAddress | Text (128) | Save  Mandatory. |
| function | Text (Save):   * Delete * Import * Export * Submission * News * Locks * CrossRefLookup * ScopusMatching | Save  Mandatory. |
| permission | Boolean | Save  Mandatory. |

1. http://www.ref.ac.uk/media/ref/content/subguide/User%20requirements%20Nov%202012.pdf [↑](#footnote-ref-1)
2. http://www.hesa.ac.uk/index.php?option=com\_collns&Itemid=233&task=show\_manuals&r=05025&f=003 [↑](#footnote-ref-2)
3. http://www.ref.ac.uk/subguide/ref4environmentdata/refsubmissionsystemenvironmentdatalimits/ [↑](#footnote-ref-3)