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# Data requirements for REF import files

**Updated September 2013**

1. This document sets out data requirements for REF import files and should be read in conjunction with the publications ‘Assessment framework and guidance on submissions’ (REF 02.2011, hereafter ‘guidance on submissions’) and ‘Panel criteria and working methods’ (REF 01.2012, hereafter ‘panel criteria). These are available at [www.ref.ac.uk](http://www.ref.ac.uk).
2. The data requirements listed show all possible data requirements, whether mandatory or optional, for the purpose of developing REF import files. Existence of a data requirement in this document does not indicate that it is a mandatory requirement for the REF.
3. When ‘Date’ is listed as the data type, its strucure has not been included as this differs depending on the format of import file used.
4. ‘Data type’ information for the initials field within REF1a was updated in May 2013.
5. ‘hesaStaffidentifier’ field was removed from within REF1c in September 2013.

## Common fields

When importing records the institution and unitOfAssessment fields must be provided.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Comments | GoS reference |
| institution | String of 8 characters long | The institution’s UKPRN. (UK Provider Reference Number) |  |
| unitOfAssessment | Integer between 1 and 36 | The unit of assessment the submission is for.  | Annex D |
| multipleSubmission | Single letter | The multiple submission letter if more than one submission is to be made to a unit of assessment.  | Paragraph 50 |
| action | One of the values * Update
* Overwrite
* Delete
 | Specifies how the importing of existing records are processed. If no action is provided then the submission system will default to Update. If the record does not exist then Update and Overwrite will insert a new record and Delete will not process the record.Update: will only change the columns included in the import file leaving all other columns with the values they contained before import.Overwrite : will set all the values of the columns to the values in the import file, if a column is not included then the value of the column will be set to NULL.Delete : Will remove the record from the database. |  |

## Research groups

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Comments | GoS reference |
| code | Single letter or digit | The code for the research group. |  |
| name | String, up to 64 characters long | The name of the research group. |  |

## Research staff (REF1a)

Unless otherwise stated see paragraph 84 of ‘guidance on submissions’. When importing staff records one of the hesaStaffIdentifier and staffIdentifier fields must be provided.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Comments | GoS reference |
| hesaStaffIdentifier | String, up to 13 characters long | The HESA staff identifier for the member staff. |  |
| staffIdentifier | String, up to 24 characters long | An identifier provided by the institution for the member staff. The identifier must be unique within a submission to a unit of assessment. |  |
| surname | String, up to 64 characters long | The last name of the staff member. |  |
| initials | String, up to 10 characters long | The initials of the staff member. |  |
| category | One of the values:* A
* C
 | The category of the member of staff on the census date. | Paragraphs 77-83 |
| birthDate | Date | The date of birth of the member of staff |  |
| contractedFte | A number to two decimal places between 0.2 and 1 | The contracted FTE on the census date. |  |
| isResearchFellow | Boolean (True / False) | A value which indicates whether the staff member is a research fellow (for HEFCW-funded institutions only) | Footnote 3 |
| isEarlyCareerResearcher | Boolean(True / False) | A value which indicates whether the staff member is an early career researcher. | Paragraphs 85-87 |
| startDate | Date | The date of starting as academic staff at the institution, if between 1 January 2008 and 31 October 2013  | Paragraph 84j |
| isOnFixedTermContract | Boolean (True / False) | A value which indicates whether the staff member is on a fixed term contract |  |
| contractStartDate | Date | The date the contract started on. |  |
| contractEndDate | Date | The date the contract ended or is due to end. |  |
| isOnSecondment | Boolean(True / False) | A value which indicates whether the staff member is on secondment. |  |
| secondmentStartDate | Date | The date the secondment started on. |  |
| secondmentEndDate | Date | The date the secondment ended or is due to end. |  |
| isOnUnpaidLeave | Boolean(True / False) | A value which indicates whether the staff member is on unpaid leave. |  |
| unpaidLeaveStartDate | Date | The date the unpaid leave started. |  |
| unpaidLeaveEndDate | Date | The date the unpaid leave ended or is due to end. |  |
| isNonUKBased | Boolean(True / False) | A value which indicates whether the staff member is not UK based. |  |
| nonUKBasedText | String | Text explaining the details of the connection between their research activity and submitted unit in the UK. | Paragraph 79d |
| isSensitive | Boolean(True / False) | A value indicating the staff record contains sensitive information and should be excluded from publication. | Paragraph 36 |
| CircumstanceExplanation | String | Text explaining the staff circumstances cited by a member of staff. (REF1b field) |  |
| ResearchGroup1 | Single letter or digit | The code for the first research group the member belongs to. |  |
| ResearchGroup2 | Single letter or digit | The code for the second research group the member belongs to. |  |
| ResearchGroup3 | Single letter or digit | The code for the third research group the member belongs to. |  |
| ResearchGroup4 | Single letter or digit | The code for the fourth research group the member belongs to. |  |

### Staff circumstances (REF1b)

The staff circumstance requirements are explained in paragraphs 63 to 91 of ‘panel criteria and working methods’.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Comments | GoS reference |
| hesaStaffIdentifier | String, up to 13 characters long | The HESA staff identifier for the member staff. When using XML this field is not required due to the document’s hierarchical structure. |  |
| staffIdentifier | String, up to 24 characters long | An identifier provided by the institution for the member staff. The identifier must be unique within a submission to a unit of assessment. When using XML this field is not required due to the document’s hierarchical structure. |  |
| circumstanceIdentifier | One of the values:* 1
* 2
* 3
* 4
* 5
* 6
* 7
 | The type of circumstances cited for the staff member. 1 : Early career researcher2 : Part time, career break or secondment3 : Qualifying period of maternity, paternity or adoption leave4 : Period of additional paternity or adoption leave under four months5 : Category A junior clinical academic6 : Category C clinical, health or veterinary professional7 : Complex circumstances  |  |
| earlyCareerStartDate | Date | The date the staff member first met the definition of an early career researcher. | Paragraphs 85-86 |
| totalPeriodOfAbsence | A number to 2 decimal places | The number of months within the assessment period that the staff member has been absent. |  |
| numberOfQualifyingPeriods | Integer | The number of qualifying periods of maternity, paternity or adoption leave. |  |
| complexOutputReduction | Integer | The number of outputs the user wishes to reduce without penalty for the member of staff citing complex circumstances. |  |

### Category C circumstances (REF1c: Category C staff details)

The category C circumstance requirements are explained in paragraphs 101 to 104 of ‘guidance on submissions’.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Comments | GoS reference |
| staffIdentifier | String, up to 24 characters long | An identifier provided by the institution for the member staff. The identifier must be unique within a submission to a unit of assessment. When using XML this field is not required due to the document’s hierarchical structure. |  |
| employingOrganisation | String, up to 256 characters long | The name of the organisation that the staff member is employed by. |  |
| jobTitle | String, up to 64 characters long | The job title for the staff member at the organisation the member is employed by  |  |
| explanatoryText | String | Text explaining their research responsibilities and how their research is focused in the submitting unit. |  |

## Research outputs (REF2)

Unless otherwise stated see paragraph 118 of ‘guidance on submissions’. When importing output records either the outputIdentifer fields or one of the staff identifier fields and the outputNumber field is required.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Comments | GoS reference |
| hesaStaffIdentifier | String, up to 13 characters long | The HESA staff identifier for the member staff. |  |
| staffIdentifier | String, up to 24 characters long | An identifier provided by the institution for the member staff. The identifier must be unique within a submission to a unit of assessment. |  |
| outputNumber | Number between 1 and 4 | The number of the output for the staff member. |  |
| outputIdentifier | String, up to 24 characters long | An identifier provided by the institution for the output. The identifier must be unique within a submission to a unit of assessment. |  |
| outputType | A letter between A and U | The type of output. |  |
| title | String | The title of the output. |  |
| place | String, up to 256 characters long |  |  |
| publisher | String, up to 256 characters long |  |  |
| volumeTitle | String, up to 256 characters long |  |  |
| volume | String, up to 16 characters |  |  |
| issue | String, up to 16 characters |  |  |
| firstPage | String, up to 8 characters long |  |  |
| articleNumber | String, up to 32 characters long |  |  |
| isbn | String, up to 24 characters long |  |  |
| issn | String, up to 24 characters long |  |  |
| doi | String, up to 256 characters long |  |  |
| patentNumber | String, up to 24 characters long |  |  |
| year | One of the values :* 2007
* 2008
* 2009
* 2010
* 2011
* 2012
* 2013
 | The year the output was published (first entered the public domain, or for confidential reports, was lodged with the relevant body). |  |
| url | String, up to 1024 characters long |  |  |
| mediaOfOutput | String, up to 24 characters long |  |  |
| numberOfAdditionalAuthors | An integer greater than -1 | The number of additional co-authors. |  |
| isPendingPublication | Boolean(True / False) | A value which indicates whether the output is to be published in December 2013. | Paragraph 111b |
| isDuplicateOutput | Boolean(True / False) | A value which indicates whether the output has been listed against another member of staff in the submission. | See references in ‘Panel criteria’, Annex A |
| isNonEnglishOutput | Boolean(True / False) | A value which indicates whether the output has been published in a language other than English. | Paragraphs 128 – 130 |
| isInterdisciplinary | Boolean(True / False) | A value which indicates whether the output has arisen from interdisciplinary research | Paragraph 119 |
| proposeDoubleWeighting | Boolean(True / False) | A value which indicates whether the output is proposed for double weighting. | See references in ‘Panel criteria’, Annex A  |
| doubleWeightingStatement | String | A statement justifying the proposal for double weighting. | See references in ‘Panel criteria’, Annex A  |
| reserveOutput | An integer between 1 and 4 | Identifies an output that will not be assessed if this output is accepted as double weighted. | See references in ‘Panel criteria’, Annex A  |
| \*hasConflictsOfInterests | Boolean(True / False) | A value which indicates that named panel members have conflicts of interest with the output. |  |
| conflictedPanelMembers | String | The name(s) of the panel member(s) which may have conflicts of interest for commercial reasons. | Paragraphs 115 – 117 |
| \*isOutputCrossReferred | Boolean(True / False) | A value which indicates whether the output is proposed to be cross referred to another panel. | Paragraphs 75d and119. ‘Panel criteria’ Part 1 paragraphs 96-100. |
| crossReferToUoa | Integer between 1 and 36 | The panel to cross refer the output to. | As above |
| additionalInformation | String | Additional information as requested by panels. | See references in ‘Panel criteria’, Annex A |
| englishAbstract | String | A short abstract in English describing the content and nature of the work, for outputs not written in English. | Paragraphs 128 – 130 |
| researchGroup | Single letter or digit | The code for the research group associated with this output. | Paragraph 119 |
| isSensitive | Boolean(True / False) | A value indicating whether the output record contains sensitive information and should be excluded from publication. | Paragraph 36 |
| excludeFromSubmission | Boolean(True / False) | A value indicating whether the output record should be excluded from submission |  |
| scopusIdentifier | String 20 characters long | The identifier of the journal article or conference proceeding in the Scopus database (export only and only for journal articles/conference proceedings for panels using citation data after the output has been matched with Scopus) |  |
| citedByCount | Integer | The number of journal articles or conference proceedings citing the output (export only and only for journal articles/conference proceedings for panels using citation data after the output has been matched with Scopus) |  |

## \*This column has been removed and is no longer required during import.

## Impact template (REF3a)

Details of requirements for the impact template are in ‘guidance on submissions’, paragraphs 149-155 and Annex F; and in the ‘panel criteria’, relevant sections of Part2 and Annex B.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Comments | GoS reference |
| requiresRedaction | Boolean(True / False) | A value which indicates the template requires redaction before publication. | Paragraph 36 |
| statement | Binary | The contents of the PDF file which contains the impact template. When using a text-based import format the binary data should be BASE64 encoded. If uploading using MS Access, see notes at the end of this document. |  |
| redactedStatement | Binary | The contents of the PDF file which contains the redacted impact template. When using a text based import format the binary data should be BASE64 encoded. If uploading using MS Access, see notes at the end of this document. |  |

## Impact case studies (REF3b)

Details of the requirements for impact case studies can be found in paragraphs 156-164 and Annexes F-G of ‘guidance on submissions’ and in the relevant section of the ‘panel criteria’.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Comments | GoS reference |
| caseStudyIdentifier | String, up to 24 characters long | An identifier provided by the institution for the case study. The identifier must be unique within a submission to a unit of assessment. |  |
| title | String, up to 256 characters long | A title for the case study |  |
| redactionStatus | One of the values:* NotRedacted
* RequiresRedaction
* NotForPublication
 | The redaction status of the case study.NotRedacted : The case study can be published without redaction.RequiresRedaction : The case study needs to be redacted prior to publication.NotForPublication : The case study should not be published at all. |  |
| conflictedPanelMembers | String | The name(s) of the panel member(s) which may have conflicts of interest for commercial reasons. |  |
| caseStudy | Binary | The contents of the PDF file which contains the impact case study. When using a text based import format the binary data should be BASE64 encoded. If uploading using MS Access, see notes at the end of this document. |  |
| redactedCaseStudy | Binary | The contents of the PDF file which contains the redacted impact case study. When using a text based import format the binary data should be BASE64 encoded. If uploading using MS Access, see notes at the end of this document. |  |
| \*isCaseStudyCrossReferred | Boolean(True / False) | A value which indicates whether the case study is proposed to be cross referred to another panel. |  |
| crossReferToUoa | Integer between 1 and 36 | The panel to cross refer the output to. |  |

## \*This column has been removed and is no longer required during import.

### Impact case study contacts

Each impact case study can name up to 5 contacts as sources of corroboration for the case study, see ‘guidance on submissions’ Annex G.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Comments | GoS reference |
| caseStudyIdentifier | String with a maximum length of 24 characters | An identifier provided by the institution for the case study. The identifier must be unique within a submission to a unit of assessment. |  |
| number | Integer between 1 and 5 | The number of the contact. |  |
| contactType | One of the values:* ContactDetails
* FactualStatement
 | A value which indicates whether the corroboration may be provided through the individual’s contact details, or a factual statement already made by them. |  |
| Name | String, up to 64 characters long | The name of the individual for corroboration. |  |
| jobTitle | String, up to 64 characters long | The job title of the individual. |  |
| emailAddress | String, up to 128 characters long | The email address of the contact for corroboration. Not required for a factual statement. |  |
| alternateEmailAddress | String, up to 128 characters long | The second email address of the contact for corroboration. Not required for a factual statement. |  |
| phone | String, up to 24 characters long | The phone number of the contact for corroboration. Not required for a factual statement. |  |
| organisation | String, up to 128 characters long | The name of the organisation the individual works for. |  |
| addressLine1 | String, up to 64 characters long | The first line of the address for the contract for corroboration. Not required for a factual statement. |  |
| addressLine2 | String, up to 64 characters long | The second line of the address for the contract for corroboration. Not required for a factual statement. |  |
| addressLine3 | String, up to 64 characters long | The third line of the address for the contract for corroboration. Not required for a factual statement. |  |
| addressLine4 | String, up to 64 characters long | The fourth line of the address for the contract for corroboration. Not required for a factual statement. |  |
| addressLine5 | String, up to 64 characters long | The fifth line of the address for the contract for corroboration. Not required for a factual statement. |  |
| postcode | String, up to 10 characters long | The post code of the address for the contact for corroboration. Not required for a factual statement. |  |
| country | String, up to 64 characters long | The country of the address for the contact for corroboration. Not required for a factual statement. |  |
| corroborateText | String, up to 512 characters long | Text describing what aspects of the case study the contact or factual statement can corroborate. |  |

## Research doctoral degrees awarded (REF4a)

The requirements for data on research doctoral degrees awarded are at paragraphs 166 – 170 of ‘guidance on submissions’.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Comments | GoS reference |
| year | One of the values:* 2008
* 2009
* 2010
* 2011
* 2012
 | The academic year the research doctoral degree was awarded in. |  |
| degreesAwarded | A positive number to two decimal places. | The number of research doctoral degrees awarded. |  |

## Research income and research income in kind (REF4b/c)

The requirements for the research income and research income-in-kind data are at paragraphs 171 – 182 of ‘guidance on submissions’.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Comments | GoS reference |
| source | Integer between 1 and 15 | The source of the income.1 : BIS Research Councils, Royal Society, British Academy and Royal Society of Edinburgh2 : UK-based charities (open competitive process)3: UK-based charities (other)4 : UK central government bodies, local authorities, health and hospital authorities5 : UK industry, commerce and public corporations6 : EU government bodies7 : EU-based charities (open competitive process)8 : EU industry, commerce and public corporations9 : EU other10 : Non-EU based charities (open competitive process)11: Non-EU industry, commerce and public corporations12 : Non-EU other13: Other sources14 : Income from specific bodies that fund health research (see GoS paragraph 172) 15: BIS Research Councils (for income-in-kind)(For REF4b, sources 1-14 apply; and REF4c, sources 14 and 15 apply) |  |
| Income2008 | Integer | The income for the year 2008-09. |  |
| Income2009 | Integer | The income for the year 2009-10. |  |
| Income2010 | Integer | The income for the year 2010-11. |  |
| Income2011 | Integer | The income for the year 2011-12. |  |
| Income2012 | Integer | The income for the year 2012-13. |  |

## Environment template/statement (REF5)

Details of requirements for the environment template are in ‘guidance on submissions’, paragraphs 183-186 and Annex F; and in the ‘panel criteria’, relevant sections of Part 2 and Annex C.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Data type | Comments | GoS reference |
| requiresRedaction | Boolean(True / False) | A value which indicates the template requires redaction before publication. | Paragraph 36 |
| statement | Binary | The contents of the PDF file which contains the environment template. When using a text-based import format the binary data should be BASE64 encoded. If uploading using MS Access, see notes at the end of this document. |  |
| redactedStatement | Binary | The contents of the PDF file which contains the redacted environment template. When using a text-based import format the binary data should be BASE64 encoded. If uploading using MS Access, see notes at the end of this document. |  |

## User

|  |  |  |
| --- | --- | --- |
| Name | Data type | Comments |
| emailAddress | String, up to 128 characters long | The e-mail address of the user; this has to be unique to the entire submission system. This does not have to be a valid e-mail address, but if it is not the user will be unable to receive new passwords. |
| name | String, up to 64 characters long | The name of the user. |
| password | String, up to 64 characters long | A password for the user. The password will be set to expire on the day before the user record was imported forcing the user to change their password when they next log in. When adding a new user a value must be supplied. |
| accountExpires | Date | The date after which the user will no longer be able to log into the submission system. |
| accountType | One of the values:* Administrator
* User
* Automated
 | The type of user account.Administrator : Has full access to all parts of the Submission system for the HEI.User : Can log into the Submission system and has the permission given to them by an administrator.Automated : This use can only use the Submission system API. |
| accountRestriction | One of the values:* None
* ReadOnly
* NoAccess
 | The state of the user account.None : The user’s normal permissions apply.ReadOnly : A user’s write access to replaced by read only.NoAccess : The user has not access to the Submission system. |

## FormPermissions

|  |  |  |
| --- | --- | --- |
| Name | Data type | Comments |
| emailAddress | String, up to 128 characters long | The e-mail address of the user.  |
| unitOfAssessment | Integer between 1 and 36 | The unit of assessment the permission is for. |
| multipleSubmission | Single letter | The multiple submission letter. |
| form | One of the values:* REF1a
* REF1b
* REF1c
* REF2
* REF3a
* REF3b
* REF4a
* REF4b
* REF4c
* REF5
* RG
 | The form the permission is for. |
| permission | One of the values:* None
* Read
* ReducedRead
* Write
 | The permission to give to the user.None : The user has no permission to view or edit the data.Read : The user is able to view the data.ReducedRead : The user is able to view only the names and identifiers staff (applies to REF1a only).Write : The user can view and edit the data. |

## Function permissions

|  |  |  |
| --- | --- | --- |
| **Name** | **Data type** | Comments |
| **emailAddress** | **String, up to 128 characters long** | The e-mail address of the user.  |
| function | One of the values:* Delete
* Import
* Export
* Submission
* News
* Locks
* CrossRefLookup
* ScopusMatching
 | The function to the permission applies to. |
| permission | Boolean(True / False) | If set to true the user is given permission to use the specified function and when set to false the user will have permission to use the function removed. |

**Notes about MS Access**

The access templates use the data type *OLE Object*  for the columns which contain PDF files for the REF3a, REF3b and REF5 forms. Microsoft Access stores binary data in the OLE Object data type as OLE Objects (a technology Microsoft in general no longer supports) however the submission system cannot read or write data stored in these OLE Objects. The submission system can read and write files stored in the columns by assuming they are equivalent to the *VARBINARY(MAX)*data type. For an example of how to use access to store files in columns as the submission system requires, see the Microsoft knowledge base article *ACC: Reading, Storing, & Writing Binary Large Objects (BLOBs)* located at: <http://support.microsoft.com/default.aspx?scid=kb;en-us;103257&Product=acc>

**Note:** Some knowledge of Visual Basic is required in order to achieve this.