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REF2021 Submission System



User Guide

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For further information, please contact the following:

REF 2021, Nicholson House, Lime Kiln Close, Stoke Gifford, Bristol, BS34 8SR

Telephone: 0117 905 7630

Email: usersupport@ref.ac.uk

CONTENTS

Copyright and Contact	ii
CHAPTER 1 Introduction	1
What is REF 2021?	2
Support	5
Key REF guidance documents	5
Frequently asked questions	5
Live issues	5
Help desk	5
Overview of the submission system	6
Main tasks	6
CHAPTER 2 Logging in	7
New user login	8
Existing user login	10
Homepage	11
Logging out	12
CHAPTER 3 Navigation and general use	13
Navigating the submission system	14
Assistance pane	15
Browser notes	16
CHAPTER 4 Data validation	19
Character and word limits	20
Validation errors	21
Warning	21
Submit error	21
Save error	21
Mandatory fields	21
CHAPTER 5 Administration	23
Introduction to Administration	24

Submission management	25
Special requests tab	25
Request multiple submissions	26
Request small unit exception	27
Impact case studies requiring security clearance	27
Submissions tab	28
Creating submissions	29
Clearing submission data	37
Deleting a submission	38
User administration	39
Creating users	40
Managing user permissions	41
Managing individual users	43
News items	47
Creating news items	47
Modifying news items	48
Update button	48
HESA data files	49
CHAPTER 6 Clear cache	50
CHAPTER 7 Submission intentions	51
Introduction to the Survey of submission intentions	52
Displaying the existing submission intentions	53
Creating a new submission intention	54
Submission intention summary page	56
Adding a research specialism	56
Submitting your submission intentions	58
CHAPTER 8 Data entry	59
Introduction to Data entry	60
Research Groups (RGs)	61
Creating, modifying and removing Research Groups	61
REF1a/b: Staff details page	62
REF1a: Creating a record for a current member of staff	63
REF1b: Creating a record for a former member of staff	65
REF2: Introduction to research outputs	68
Research outputs (REF2) page	69
Outputs tab	69

Reserve outputs tab	70
Excluded outputs tab	70
Searching, filtering and sorting	70
Creating a new output	70
Output summary and completion	86
Attributing outputs	89
Deattributing outputs	89
REF3: Introduction to impact case studies	91
Impact case studies (REF3) page	91
Adding a case study	93
Deleting a case study	95
REF4a/b/c: Introduction to quantitative environment data	97
REF4a: Research doctoral degrees awarded	98
REF4b: Research income	98
REF4c: Research income-in-kind	99
REF5a/b: Introduction to the research environment submission requirements	100
REF5a: Institution-level environment statement	101
REF5b: UOA-level environment template	103
REF6a/b: Output reductions owing to staff circumstances	106
Form REF6a	106
Form REF6b	106
Notes for both REF6a and REF6b	107
Unit reductions (REF6a/b) page	107
Applied REF6a: Removal of the 'minimum of one' reduction	108
Applied REF6b: Unit reductions	108
REF6 Applying reviewed reductions	110
CHAPTER 9 Import and export	113
Introduction to import and export	114
Valid file formats	114
Merging and replacing data	116
Import/Export tables	117
Fields common to every table	117
Research Groups table	117
RGs	117
REF1 tables	117
Current staff table (REF1a)	117

Former staff table (REF1b)	118
Former staff contract table (REF1b)	119
REF2 tables	120
Outputs table	120
Table linking staff to outputs	122
REF3 tables	123
Impact case studies table	123
Impact case study grants table	124
Impact case study contacts table	125
REF4 tables	126
Research doctoral degrees awarded (REF4a)	127
Research income (REF4b)	127
Research income-in-kind (REF4c)	127
REF5 tables	128
HEI-level environment statement (REF5a)	128
UOA-level environment statement (REF5b)	128
REF6 tables	128
Request to remove the 'minimum of one' requirement for a member of staff (REF6a)	128
Request for overall unit output reduction based on special circumstances (REF6b)	129
Rationale for overall unit reduction (REF6b)	129
Import process	130
Procedure overview	130
Perform the import	130
Import jobs queue and logs	131
Import validation report	132
Export process	133
Export jobs queue and logs	133
CHAPTER 10 DOI lookup	135
Retrieving DOIs and output data via Crossref	136
Retrieving details for a single output	136
Retrieving bulk outputs using REF2 DOIs	136
Copying retrieved output details to REF2	137
CHAPTER 11 Generating citation data	139
Invoking the external matching service	140
Viewing the existing matches and citation counts	140
Retrieving a single citation count	141

Retrieving a bulk citation count	144
CHAPTER 12 Validation reporting	145
Introduction to Validation reporting	146
Validation report page	147
Validation report contents	147
Generating a new validation report	149
CHAPTER 13 Submission process	151
Introduction to the Submission process	152
Joint submissions	152
Submit status	152
Refresh	153
After the submission deadline	153
Validating all submissions	155
Validating a joint submission	156
Submitting	157
Unsubmitting	157
Submitting a joint submission	158
Unsubmitting a joint submission	158
CHAPTER 14 Submission reports	159
Introduction to submission reports	160
Reports page	161
Creating a new job	161
Generating a new report	162
Available report types	162
Generating a new print job	164
GLOSSARY	165
INDEX	169

CHAPTER 1

Introduction

What is REF 2021?	2
Support	5
Overview of the submission system	6

What is REF 2021?

The Research Excellence Framework (REF) is the system for assessing the quality of research in UK Higher Education Institutions (HEIs). The previous REF exercise was carried out in 2014 (under the name 'REF 2014'), and the next exercise, hereafter referred to as 'REF 2021', will be conducted in 2021.

REF 2021 will be undertaken by the four UK higher education funding bodies: Research England, the Scottish Funding Council (SFC), the Higher Education Funding Council for Wales (HEFCW), and the Department for the Economy, Northern Ireland (DfE).

The funding bodies' shared policy aim for research assessment is to secure the continuation of a world-class dynamic and responsive research base across the full academic spectrum of UK higher education.

The process of expert review for REF 2021 will be carried out by sub-panels, with one sub-panel for each of 34 subject-based Units Of Assessment (UOAs). Sub-panel assessments will be carried out under the guidance of four main panels - UOAs 1-6 under Panel A (Medicine, Health and Life sciences), UOAs 7-12 under Panel B (Physical sciences, Engineering and Mathematics), UOAs 13-24 under Panel C (Social sciences), and UOAs 25-34 under Panel D (Arts and Humanities):

Main Panel	Unit of assessment	
A	1	Clinical Medicine
	2	Public Health, Health Services and Primary Care
	3	Allied Health Professions, Dentistry, Nursing and Pharmacy
	4	Psychology, Psychiatry and Neuroscience
	5	Biological Sciences
	6	Agriculture, Food and Veterinary Sciences
B	7	Earth Systems and Environmental Sciences
	8	Chemistry
	9	Physics
	10	Mathematical Sciences
	11	Computer Science and Informatics
	12	Engineering
C	13	Architecture, Built Environment and Planning
	14	Geography and Environmental Studies
	15	Archaeology
	16	Economics and Econometrics
	17	Business and Management Studies
	18	Law
	19	Politics and International Studies
	20	Social Work and Social Policy
	21	Sociology
	22	Anthropology and Development Studies
	23	Education
	24	Sport and Exercise Sciences, Leisure and Tourism
D	25	Area Studies
	26	Modern Languages and Linguistics
	27	English Language and Literature
	28	History
	29	Classics
	30	Philosophy
	31	Theology and Religious Studies
	32	Art and Design: History, Practice and Theory
	33	Music, Drama, Dance, Performing Arts, Film and Screen Studies
	34	Communication, Cultural and Media Studies, Library and Information Management

Each sub-panel will examine the submissions made in its UOA, taking into account all the evidence presented. In accordance with paragraph 26 of the [Guidance on submissions \(2019/01\)](#), the sub-panels will assess three distinct elements of each submission: **Outputs** (for example, publications, performances, and exhibitions), **Impact** (beyond academia), and the **Environment** that supports the research. The weighting of the respective elements is 60% **Outputs**, 25% **Impact**, and 15% **Environment**.

The REF forms that enable the submission data to be entered for each of the UOAs selected for submission are listed in the following table. The forms in this table will be referred to throughout this guide.

REF forms that make up a submission

Section	Form	Description
1 Staff details	REF1a	Information on those staff in post on the Census date who have significant responsibility for research. These are referred to as Category A submitted staff.
	REF1b	Information about former staff to whom any assessable research outputs are attributed.
2 Outputs	REF2	Details of assessable outputs that the Submitting unit has produced during the Publication period . ¹
3 Impact	REF3	Case studies describing specific examples of impacts achieved during the Assessment period .
4 Environment data	REF4a	Data related to research doctoral degrees awarded during the period 1 August 2013 to 31 July 2020.
	REF4b	Data related to research income for the period 1 August 2013 to 31 July 2020.
	REF4c	Data related to research income-in-kind for the period 1 August 2013 to 31 July 2020.
5 Environment	REF5a	HEI-level environment statement related to the period 1 August 2013 to 31 July 2020.
	REF5b	Completed template describing the research and impact environment of the Submitting unit , drawing on quantitative indicators as appropriate, and relating to the period 1 August 2013 to 31 July 2020.

¹ The total number of outputs must equal 2.5 times the summed Full-Time Equivalent (FTE) of the UOA's submitted staff, less any requests due to staff circumstances given in REF6a and REF6b. Rounding to the nearest whole number, with values ending in .5 being rounded up, will be applied to give a whole number of outputs for submission.

Section	Form	Description
6 Staff circumstances	REF6a	<p>A minimum of one output must, by default, be attributed to each Category A submitted member of staff. However, where an individual's circumstances have had an exceptional effect on their ability to work productively throughout the assessment period (1 January 2014 to 31 July 2020), form REF6a can be used to submit a request that this 'minimum of one' requirement be removed. For further information, please refer to paragraphs 178 to 183 of the Guidance on submissions (2019/01).</p> <p> For notes on the circumstances for both REF6a and REF6b, please refer to Annex L of the Guidance on submissions (2019/01).</p>
	REF6b	<p>Where the cumulative effect of staff circumstances has disproportionately affected the potential output pool of a Submitting unit, it may optionally make a unit request, to reduce, without penalty, the total number of outputs required.¹</p> <p> For further information, please refer to paragraphs 184 to 191 of the Guidance on submissions (2019/01).</p>

This guide explains how to use the submission system, in order to set up the submissions (whether individual, multiple or joint) that are relevant to your particular Higher Education Institution (HEI), enter the submission data, and then submit the data for assessment.



Text in blue (both in the above table and throughout) indicates a hyperlink to another section, a term in the **GLOSSARY**, or an external website.

¹ This reduction will be in addition to the requests submitted in REF6a. The combined total across both REF6a and REF6b will set out the unit's requested reduction in outputs.

Support

Key REF guidance documents

The key REF guidance documents referred to in the help are as listed below:

- [Guidance on submissions \(2019/01\)](#)
- [Panel criteria and working methods \(2019/02\)](#)
- [Guidance on codes of practice.](#)



Supplementary guidance documents are given at <http://www.ref.ac.uk/guidance/additional-guidance/>.

Frequently asked questions

There is a list of [frequently asked questions](#) relating to the REF2021 submission system on the REF website. You might also wish to refer to the [policy FAQs](#).

Live issues

On the REF website any current defects present in the live and tests sites are listed along with an expected release date. Please refer to '[Submission system](#)' [live issues](#).

Help desk

To contact user support, you can either email usersupport@ref.ac.uk or call the help desk on 0117 450 1722 or 0117 450 1721. The help desk operates from Monday to Friday between the hours of 9.30am and 5.00pm.



If you have policy-related questions regarding your submissions, please contact info@ref.ac.uk.

Overview of the submission system

Main tasks

The main steps required are as follows:

1. Creation of submissions (refer to [Submission management](#)). This task needs to be performed by a system administrator.
2. Creation of user accounts (refer to [User administration](#)) and their association with the relevant permissions. This task needs to be performed by a system administrator.
3. Creation of submission intentions (refer to [Introduction to the Survey of submission intentions](#)).
4. Entry of the submission data into the REF forms by the relevant users (refer to [Introduction to Data entry](#)).
5. Submission of the data (refer to [Introduction to the Submission process](#)).



In addition to data being entered manually via the REF forms, submissions, user accounts and submission data can also be created using the *Import* feature (refer to [Import process](#)), and/or the API Import endpoint (refer to the separate [API Gateway](#) documentation).

CHAPTER 2

Logging in

New user login	8
Existing user login	10
Homepage	11
Logging out	12

New user login

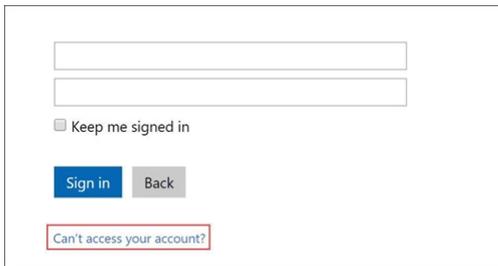
If you have previously logged into the REF2021 submission system, go straight to [Existing user login](#).

Alternatively, if you have been informed that you have been set up as a user on the REF2021 submission system, and you have not previously logged in, proceed as follows:

1. Go to the [REF2021 submission system](#) and click the **Login** button.
2. The Microsoft sign-in page is displayed as a pop-out window.

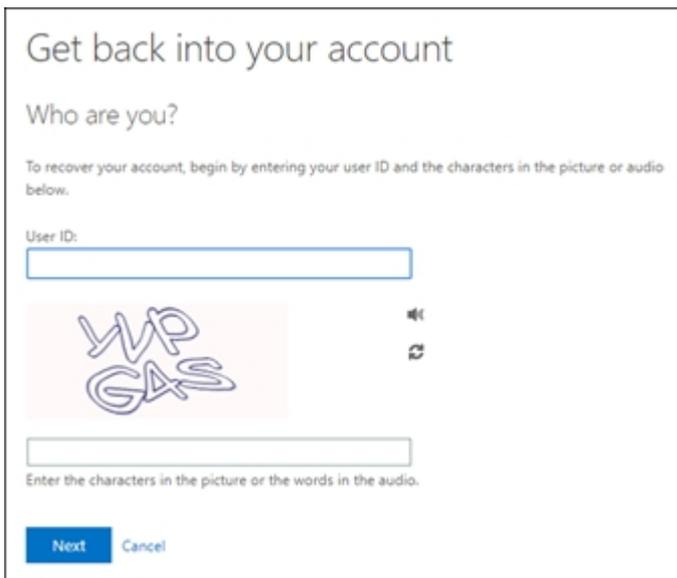
 If this window is not immediately visible, it may be hidden behind other windows.

3. Go straight to the bottom of the page, without filling in any fields, and click **Can't access your account?**:



The screenshot shows a Microsoft sign-in interface. It features two input fields for email and password, a checkbox for 'Keep me signed in', and two buttons: 'Sign in' and 'Back'. At the bottom, there is a link labeled 'Can't access your account?' which is highlighted with a red border.

4. The following screen is displayed:



The screenshot shows the 'Get back into your account' screen. It asks 'Who are you?' and provides instructions: 'To recover your account, begin by entering your user ID and the characters in the picture or audio below.' There is a 'User ID:' label above an input field. Below that is a captcha image showing the words 'LVP GAS' in a stylized font. To the right of the image are icons for audio and refresh. Below the image is another input field for the captcha characters. At the bottom, there are 'Next' and 'Cancel' buttons.

5. Enter your email address in the **User ID** field, followed by the *captcha* characters, and click **Next**.
6. Confirm that **Email** is your preferred means of receiving the verification code.
7. Enter the verification code that is emailed to you, and click **Next**.

 If you do not immediately see the email, check your spam/junk folder.

8. Enter your password, confirm it, and then click **Finish**.



The password must be between 8 and 256 characters in length, with representatives from the following character groups: lower case characters, upper case characters, numbers and symbols (for example ' . - _ ! # ^ ~).

9. If the process is successful, you will be sent a **Password reset notification** email, and the Microsoft sign-in window will invite you to click a link so that you can sign in with your new password via the original pop-out window.
10. You will see the parts of the submission system to which your user ID has access.



Most browsers have settings that allow them to remember the passwords to visited websites. You should adjust these settings according to preference and environment. If you are using a browser on a public computer to submit REF data, it is vital to clear the browser's history after use, and to verify that you did not save any passwords accidentally.

Existing user login

If you have previously logged into the REF2021 submission system, or if you have just set up a password via the Microsoft sign-in page in accordance with **New user login**, then proceed as follows:

1. Go to the **REF2021 submission system** and click the **Login** button.
2. The Microsoft sign-in page is displayed as a pop-out window.



If this window is not immediately visible, it may be hidden behind other windows.

3. If your account is already displayed in the pop-out window, simply click on it and use your password to sign in. If you do not see your account, click **Use another account** and then enter both your email address and password.
4. You will see the parts of the submission system to which your user ID has access.



If you are having trouble accessing your account, or if you have lost your password, click **Use another account** and, at the bottom of the subsequent page, click **Can't access your account?**. Then proceed from "**The following screen is displayed:**" in the previous topic.

Homepage

Following a successful login, or when you click the **Home** icon when already logged in, the homepage is displayed. This shows news items that have been published both by authorised users at your HEI, and by the REF team (in which case, the particular news items are seen by all HEIs).

The **Urgent** items are displayed at the top, followed by the remainder of the items in order of publication date, with the most recently published ones first.

Logging out

To log out of your current session of the submission system, click **Logout** in the top right hand corner of any page. You are logged out of your session of the REF submission system and the **Login** page is redisplayed.

CHAPTER 3

Navigation and general use

Navigating the submission system	14
Assistance pane	15
Browser notes	16

Navigating the submission system

There is a menu bar across the top of each page that provides access to groups of related options (**Data entry, Import, Administration**, and so on). This bar is 'sticky' in that it continues to appear whenever you scroll down the page.

There is also a 'sticky' breadcrumb trail directly below the menu bar that corresponds to the last page that you visited. For example, the breadcrumb trail **Home / Submission management / Create submission** indicates that **Create submission** was the last page that you opened. Clicking on any items prior to the last item in the breadcrumb trail takes you to the associated page. For example, clicking **Submission management** takes you to back up to the main **Submission management** page.

The system also supports standard web page navigation using the keyboard. For example, press Tab to move the focus from one field or button to the next, Return to select a button that is in focus, the spacebar to select and deselect a tick box, and the arrow keys to select and deselect a radio button.

Assistance pane

There is a collapsible pane on the right hand side of the screen that provides information under the following tabs:

- **Errors.** Displays any **Validation errors** generated for the currently loaded form. Only the **Save errors** need to be rectified immediately.



This tab is not initially populated until you click **Save** on the particular form. Thereafter, the outstanding errors will continue to be displayed each time that the form is loaded.

- **Help.** Contains any field-level help for the currently loaded form.
- **Audit log.** Lists all the different changes that have been created on the particular form, so that you can audit your progress.

Browser notes

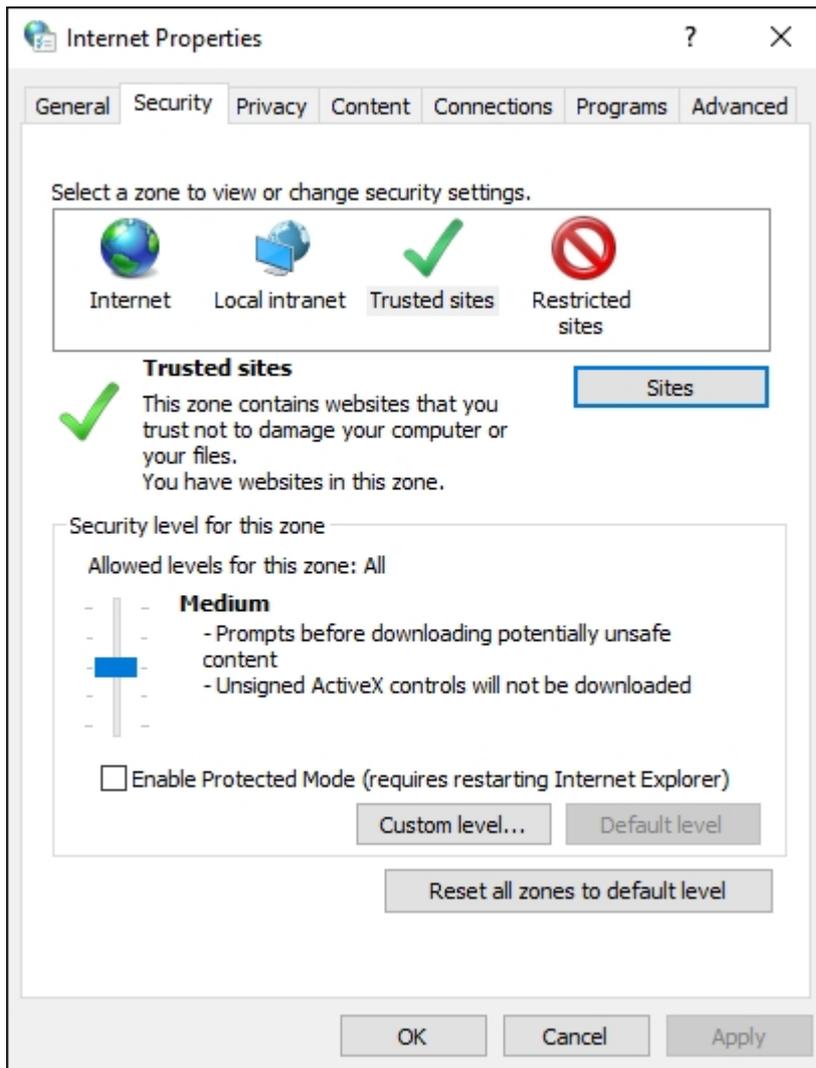
The submission system has been designed to work with a variety of browsers. It has been tested on, and verified to work with, the latest versions of Google Chrome, Mozilla Firefox, Internet Explorer, Microsoft Edge, Apple's Safari, and Opera.



Compatibility is dependent on the development tool used, and the REF uses Angular. A guide can be found on their website - <https://angular.io/guide/browser-support>.

Please note the following:

- In order for the submission system to function, it is essential that JavaScript is enabled within your browser.
- In Safari, you may need to enable tabbing through each item on a web page via the browser **Preferences**.
- Internet Explorer 8, 9 and 10 are no longer supported by Microsoft owing to security vulnerabilities, and so you should ensure that you are using the latest versions of Microsoft's products.
- If you are using Microsoft's latest version of Internet Explorer, or Edge, you need to ensure that the submission system URL <https://submissions.ref.ac.uk/> is saved in the **Trusted sites** zone. You can do this by selecting the **Windows Control Panel**, followed by **Internet Options**, and then displaying the **Security** tab:



With **Trusted sites** selected, click the **Sites** button, and add <https://submissions.ref.ac.uk/> to the list of trusted websites.

CHAPTER 4

Data validation

Character and word limits	20
Validation errors	21

Character and word limits

Text fields have limits on the numbers of characters and words allowed.

Character limits are not displayed, but are enforced in the code wherever possible, so that, when you reach the limit (specified for the different fields in the [Import/Export tables](#)), you will not be able to enter further characters.

 Where a limit cannot be enforced, any entry that exceeds it will result in a **Save error**.

Word limits are typically displayed alongside the associated fields, and exist to enforce business rules. Although you will typically be able to save forms with fields that exceed the word limits (provided that they do not exceed the character limits), each instance will be flagged with a **Submit error**.

 All text fields support Arial Unicode MS characters.

Validation errors

The forms and fields in the submission system are subject to validation rules. Validation errors fall into the categories described below.



All categories of error are displayed for each form in the **Assistance pane**, so that you can work on forms incrementally and decide which errors to fix now and which to address later.

Warning

If a form contains data that is unexpected (for example an incorrect check digit), an amber **Warning message** is displayed advising you that the data should be verified, and then modified where appropriate. Although it is possible for submissions containing such warnings to be submitted, the individual warnings should be addressed wherever possible.

Submit error

If a form contains data that breaks a submission validation rule, a red **Submit error** is displayed, listing what will need to be corrected in order for the associated data to be submitted successfully.

Submit errors do not need to be fixed straight away: you can save a page or form that has such errors and fix them at a later date.



Any **Submit errors** that are not fixed prior to submission will result in **Submit validation errors** (refer to [Introduction to the Submission process](#)).



You can use the **Validate** feature at any time, in order to generate periodic validation reports (refer to [Introduction to Validation reporting](#)).



A full list of validation rules is available on the [REF website](#).

Save error

This kind of error typically arises because some mandatory data is missing that will prevent you from saving the form (refer to [Mandatory fields](#)), although such errors can also be generated by character limits being exceeded (refer to [Character and word limits](#)).

Mandatory fields

Those fields for which entries are required in order to save a form, are marked with an asterisk (*). Other fields are optional, although it is always advisable to complete as many as possible. An omission of an entry in a mandatory field will typically result in a **Save error**.

CHAPTER 5 Administration

Introduction to Administration	24
Submission management	25
User administration	39
News items	47
HESA data files	49

Introduction to Administration

This part of the system, which allows the creation and configuration of submissions and users, and the performance of the other system tasks detailed on the previous page, is usually only available to system administrators.

If your role is only concerned with the input of data, then go straight to [Introduction to Data entry](#) or, if you are importing the data, to [Import process](#).

Submission management

The **Submission management** feature allows a system administrator, or a user associated with the **Submission management** user function (refer to **Managing individual users**), to set up and manage the submissions, including *multiple* and *joint* submissions, that will be made to the various sub-panels listed in **What is REF 2021?**.



It is recommended that submissions are created before any non-administrative users are set up, owing to the fact that user permissions are set in relation to the existing submissions (refer to **User administration**).

To access the **Submission management** feature, select **Administration > Submission management**. The UOAs that have been previously selected for submission are then displayed in the **Submission management** table. This table has two tabs: the **Submissions tab** and the **Special requests tab**.

Special requests tab

Before creating any submissions via the **Submissions tab**, you should make any associated special requests, that is to say:

- If you know that you are going to need to enter more than one submission for a Unit Of Assessment (UOA), you should gain request approval prior to creating the UOA submission (refer to **Request multiple submissions**).



Normally, HEIs make a single submission to a single UOA. Multiple submissions to a UOA can be made in exceptional circumstances and can be created in the submission system if pre-approved by the REF team. For more information on multiple submissions, please refer to paragraphs 178 to 186 of the **Panel criteria and working methods (2019/02)**.

- If the combined Full-Time Equivalent (FTE) of staff employed with significant responsibility for research in the unit, is lower than five FTE, you can make a request for an exception from submission (refer to **Request small unit exception**).



The other required criteria are that the research focus of the staff must fall within the scope of a single UOA, that it must be clearly academically distinct from other submitting units in the HEI, and that the environment for supporting research and enabling impact of each proposed **Submitting unit** is clearly separate and distinct from the other submitting units in the HEI. When making requests for small unit exceptions, submitting units should apply the tariffs set out in Annex L of the **Guidance on submissions (2019/01)**. Requests must be accompanied by a supporting statement that includes information on the context of the unit (for example, size, proportion of those with declared circumstances), how the circumstances affected the unit's output pool and why this was determined to be disproportionate, and how this complies with the process set out in the institution's code of practice.

- If security clearance is needed for certain impact case studies, then you should create a single upload for the HEI, as described in **Impact case studies requiring security clearance**.

For general information on impact case study templates, refer to **REF3: Introduction to impact case studies** in this document, and to Annex G of the **Guidance on submissions (2019/01)**.



Please [click here](#) for general information on special requests, and the cut-off points.

Special requests are made under the **Special requests** tab, on which you can click following the selection of **Administration > Submission management**. When you first access the tab, any existing requests for multiple submissions and exceptions to submission for small units are displayed, broken down into the following columns:

Special requests tab

Column	Description
Name	The name of the submission (that is to say, the name of the UOA).
Request type	Indicates whether the request is for a 'Multiple submission' or 'Small unit exception'.
Request status	Indicates the current status of the request, which can be any of the following: <ul style="list-style-type: none"> • New: The request has been saved but not submitted. • Submitted: The request has been submitted for approval. • Approved: The request has been approved and you can make the associated submissions. • Declined: The request has been declined.
Last updated	Indicates when the special request was last modified.
View/Edit	Click View to display the request. If the request has yet to be approved, and you have the appropriate permissions, you can click Edit to modify it.
Delete	Click this to remove the request, and all the associated data, from the database permanently. <div style="border: 1px solid #ccc; border-radius: 5px; padding: 5px; margin-top: 5px;">  This option is not available after the request has been submitted. </div>

Request multiple submissions

At the top of the **Special requests tab**, click the **Request multiple submissions** button, to open the associated page.

Proceed as follows:

1. Select the required UOA from the **Unit of assessment** drop-down.
2. After **Reason for request**, indicate whether the request stems from the fact that is part of a joint submission (refer to **Creating a joint submission (Lead HEI)**) and/or whether it is down to the nature of the discipline (for example, the UOA may be split across several departments).



In the case of UOA 26, 'Modern Languages and Linguistics', you will also be able to select a separate 'Celtic Studies' option as a reason for the request.

3. After **Proposed multiple submissions**, assign a name to each different submission that you propose to submit. Click **Add** and **Delete** to add and remove submissions as required.
4. Enter the **Justification for request** (up to 300 words).
5. If you do not want to submit the request immediately, click **Save** to display the request under the **Special requests tab**, where it appears next to a **Delete** button in case you wish to remove it. Otherwise, go to the next step.

6. Provided that the request has been approved by the head of your HEI, select the confirmation message at the bottom of the page.
7. Click **Submit Request**.
8. The request is displayed under the **Special requests tab**, with a status of **Submitted**.

Once a multiple submission request has a status of **Approved**, you can create the associated submissions in accordance with **Creating multiple submissions for a single unit**.



You cannot request both multiple submissions and a small unit exception for the same UOA.



Multiple submission requests are not binding. Therefore, an HEI may decide to make only one submission in a UOA where they have already been given prior approval for multiple submissions.

Request small unit exception

At the top of the **Special requests tab**, click the **Request small unit exception** button, to open the associated page.

Proceed as follows:

1. Select the required UOA from the drop-down.
2. After **Previous submission**, indicate whether the UOA was previously submitted in REF2014.
3. After **FTE**, enter the Full-Time Equivalent for the UOA (which must be less than 5.00).
4. Enter the current **Head count**.
5. For each staff member included in the **Head count**, enter a valid HESA staff identifier (or a non-HESA staff identifier if your HEI does not use HESA identifiers). Use the **Add** button to keep adding new identifier fields.
6. Enter the **Justification for request** (up to 300 words).
7. If you do not want to submit the request immediately, click **Save** to display the request under the **Special requests tab**, where it appears next to a **Delete** button in case you wish to remove it. Otherwise, go to the next step.
8. Provided that the request has been approved by the head of your HEI, select the confirmation message at the bottom of the page.
9. Click **Submit Request**.
10. The request is displayed under the **Special requests tab**, with a status of **Submitted**.

The status of the small unit request is displayed beneath the UOA on the **Create submission** page.



You cannot request both multiple submissions and a small unit exception for the same UOA.

Impact case studies requiring security clearance

At the top of the **Special requests tab**, click the button with the above title, to display the page allowing you to upload a single file for the HEI containing outline information to support the request (s) for security clearance.

For each impact case study requiring security clearance (typically, one for each UOA requiring clearance), you should complete a copy of the Word file entitled 'Request to submit impact case studies requiring security clearance form', that was sent from the REF team. Each copy should include outline supporting information of up to 300 words, and should be converted to a PDF.

If you created only one PDF, upload it as it is. If there is more than one, create a single zip file containing all the PDFs, and then upload the zip file. Following a successful upload, the filename and submitted date will appear at the bottom of the page.



The request for security clearance relates to **REF3: Introduction to impact case studies**. Only one request is allowed for each HEI.

Submissions tab

All the existing submissions (that is to say, all the UOAs that have been previously selected for submission) are displayed under the **Submissions** tab when you select **Administration > Submission management**. They are broken down into the following columns:

Column	Description
Locked	Indicates whether or not the associated submission is locked. Refer to Lock/Unlock .
Name	The name of the UOA selected for submission.
Submit validation status	Indicates whether or not the individual submission passed validation when the overall submission set was validated during the Submit process.
Joint submission	Indicates whether or not the submission is a joint one, and allows you to act accordingly: <ul style="list-style-type: none"> • If you see a Create link, the submission is a 'normal' one (that is to say, not joint), and you can click on the link to convert it into a joint one (refer to Creating a joint submission (Lead HEI)). • If you see a Configure link, the submission is already a joint one, and you can click on the link to modify it as required. • Lead is shown for joint submissions if yours is the HEI that initiated the joint submission. This is followed by the funding split and the method used (FTE or Percentage). • Accept is shown for joint submissions if your HEI has been invited to form part of the joint submission. Click on Accept to become a Member. • Member is shown for joint submissions if your HEI has been invited to form part of the joint submission, and you have accepted the invitation.
Lock/Unlock	Available to system administrators, and other users associated with the Locks user function, who can do the following: <ul style="list-style-type: none"> • Click Lock to prevent the submission from being modified by anyone. Locked by admin appears in the Locked column. • Click Unlock to allow the submission to be modified once more.

Column	Description
Delete	<p>Click this to remove the submission, and all the associated submission data, from the database permanently.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  A Delete button is only displayed for non-joint submissions. To delete a joint submission, you must first revert it to a normal submission (refer to Reverting a joint submission (Lead HEI)). </div>

Creating submissions

1. Click **Create submissions** at the top of the **Submissions tab**. The *Create submissions* page opens, displaying a table of the UOAs shown in [What is REF 2021?](#).
2. Select one or more of the UOAs that are not yet checked.



You can check **Select all** against a main panel at the top of the table, in order to select all the UOAs associated with that panel.

3. Click **Create** at the bottom of the page.

The submissions are created and a confirmation box is displayed. Click **Return to submission management** to return to the **Submissions tab** and view the added submissions. They are added as 'normal' submissions. However, you will note that they each have a **Create** link against them under **Joint submission** should you wish to convert any of them into a joint submission - refer to [Creating a joint submission \(Lead HEI\)](#).

Once a UOA has been selected for submission, the REF forms in the *Data entry* part of the system can be completed (refer to the [REF forms that make up a submission](#)).

Creating multiple submissions for a single unit

This section assumes that the relevant UOA has been approved for the creation of multiple submissions (refer to the [Special requests tab](#)).



For more information on multiple submissions, please refer to paragraphs 178 to 186 of the [Panel criteria and working methods \(2019/02\)](#).

Click **Create submissions** at the top of the **Submissions tab**, to open the *Create submissions* page. Approval of any multiple submissions is indicated by a coloured **Configure** button against the particular UOA, as shown in the example below:

Main panel C	Main panel D
<input type="checkbox"/> Select all	<input type="checkbox"/> Select all
<input type="checkbox"/> 13 - Architecture, Built Environment and Planning	<input type="checkbox"/> 25 - Area Studies
<input type="checkbox"/> 14 - Geography and Environmental Studies	<input type="checkbox"/> 26 - Modern Languages and Linguistics (Multiple submissions available) Configure
<input type="checkbox"/> 15 - Archaeology	<input type="checkbox"/> 27 - English Language and Literature
<input checked="" type="checkbox"/> 16 - Economics and Econometrics	

Proceed as follows:

1. Click the **Configure** button for the required UOA, to display the pop-out window shown in the following example:

Configure multiple submissions

Configure multiple submission for unit of assessment 26 - Modern Languages and Linguistics

Do not create a submission

Create a single submission

Create multiple submissions

- Celtic studies
- French
- Spanish

Cancel
Save



You can opt to create a single normal submission instead by clicking **Create a single submission**. This option is provided in case you no longer wish to create multiple submissions for the UOA. You can also opt not to create any form of submission.

2. If you wish to proceed with the multiple submissions, leave the default **Create multiple submissions** option selected, check the individual submissions that you wish to create, and click **Save**. The selected, individual submissions are then shown under the **Configure** button, for example:

Main panel C	Main panel D
<input type="checkbox"/> Select all	<input type="checkbox"/> Select all
<input type="checkbox"/> 13 - Architecture, Built Environment and Planning	<input type="checkbox"/> 25 - Area Studies
<input type="checkbox"/> 14 - Geography and Environmental Studies	<input type="checkbox"/> 26 - Modern Languages and Linguistics (Multiple submissions available)
<input type="checkbox"/> 15 - Archaeology	<input checked="" type="checkbox"/> A - Celtic studies Configure
<input checked="" type="checkbox"/> 16 - Economics and Econometrics	<input checked="" type="checkbox"/> B - French
<input type="checkbox"/> 17 - Business and Management Studies	<input checked="" type="checkbox"/> C - Spanish

3. Click **Create** at the bottom of the page.

If you opted to **Create multiple submissions**, the individual multiple submissions are created, and a confirmation box is displayed. Click **Return to submission management** to return to the **Submissions tab** and view the added submissions.

The number of the UOA is followed by letters of the alphabet, for example, 26A, 26B and 26C to differentiate between the different Modern Languages.

Submission management [Help me with this page](#)

Submissions Special requests

Create submission Clear submission data

Locked	Name	Submit validation status	Joint submission	
	22 - Anthropology and Development Studies			Create Lock Delete
	23 - Education			Create Lock Delete
	24 - Sport and Exercise Sciences, Leisure and Tourism			Create Lock Delete
	26A - Modern Languages and Linguistics: Celtic studies			Create Lock Delete
	26B - Modern Languages and Linguistics: French			Create Lock Delete
	26C - Modern Languages and Linguistics: Spanish			Create Lock Delete

Items per page: 10 21 - 26 of 26 << < > >>



They each have a **Create** link against them should you wish to convert any of them into a joint submission - refer to [Creating a joint submission \(Lead HEI\)](#).



If you remove any of the multiple submissions, then the remaining submissions will be alphabetically reshuffled. Therefore, there is a possibility that some will be renamed. For example, if you were to remove *26B - Modern Languages and Linguistics: French* in the above example, *26C - Modern Languages and Linguistics: Spanish* would be renamed to *26B - Modern Languages and Linguistics: Spanish*.

Creating a joint submission (Lead HEI)

HEIs that undertake research collaboratively may submit a joint submission to REF 2021 that fully illustrates the combined research activity.



A *joint* submission is always completed by more than one HEI. This is not to be confused with the concept of *multiple* submissions, which are made by a single HEI when the research activities within a single **Submitting unit** are sufficiently diverse to justify it (refer to [Creating multiple submissions for a single unit](#)).

One HEI creates the joint submission, and by doing so becomes the **Lead** HEI in terms of the management and data security of the joint submission. It then invites other HEIs to become members of the joint submission. When an HEI accepts an invitation it becomes a **Member** HEI (refer to [Accepting an invitation to a joint submission \(Member HEI\)](#)).

In the case of a joint submission, the following REF forms are submitted by the **Lead** HEI on behalf of all the **Member** HEIs involved in the joint submission: RG (Research Group), REF3 (refer to [REF3: Introduction to impact case studies](#)), and REF5b (refer to [REF5b: UOA-level environment template](#)).

All HEIs involved in the joint submission need to validate and submit their part of the part of the joint submission.



For more information about joint submissions, refer to paragraphs 78 to 84 of the [Guidance on submissions \(2019/01\)](#).

To create a joint submission:

1. Create a 'normal' submission as in [Creating submissions](#).
2. Under the **Submissions tab**, click **Create** in the **Joint submission** column, on the row associated with the required UOA. The *Configure joint submission* page opens.
3. Complete the **Joint submission** section as follows:

Joint submission section

Field	Description
Joint submission name	(Optional) A name for the joint submission.

Field	Description
Funding split method	<p>The method through which, post assessment, funding should be allocated to the HEIs included in the joint submission.</p> <ul style="list-style-type: none"> • FTE: Funding to be allocated based on the number of full time equivalent staff members included with the submission. • Percentage: Funding to be allocated based on a percentage (to be specified) for each HEI participating in the joint submission. Select Publish split if the allocation is to be published.

4. In the **Member HEIs** section, your HEI is shown as the **Lead HEI**. Click **Add** at the bottom of the panel to display a blank field in which you can add a **Member HEI**. In this blank field, enter the first few letters of one of the names of the HEI that is to be configured as an HEI (for example, 'exe' to select 'University of Exeter').



Try and enter a string that will return a unique match or narrow list of matches - otherwise, you will have a selection of names. For example, 'aber' returns 'Aberystwyth University', 'University of Aberdeen' and 'University of Abertay Dundee'.



Multiple words in the search text are considered as a single string, which must appear in the title of the HEI exactly to return any matches. For example, the search text 'royal music' will not find 'Royal College of Music' because the system does not search for 'royal' AND 'music'.

5. Repeat the previous step as required, to add further **Member HEIs**.
6. If the **Funding split method** is **Percentage**, enter the % **split** for both the **Lead** and **Member HEIs**. The total must equal 100%.
7. Once there are no further HEIs to add, click **Save**. The joint submission is created and you are returned to the **Submissions tab**, where you can view the added submission. As it was your HEI that initiated the joint submission, it has the status of **Lead HEI**. Invitations are automatically sent to the other HEIs added to the joint submission.

Accepting an invitation to a joint submission (Member HEI)

When another HEI creates a joint submission, as the **Lead HEI**, and invites your HEI to form part of the joint submission, your HEI, together with all the other invited HEIs, must accept the invitations to the joint submission in order to participate in it as **Members**.

To accept an invitation to a joint submission:

1. Open the **Submissions tab**.
2. There is a new row at the top of the table for the invitation to the joint submission. The cell in the **Joint submission** column reads **Member FTE – Accept**. Click **Accept** to become a **Member** of the joint submission, and then confirm when prompted.

The acceptance will fail in either of the following two cases:

- You have already entered data into any of the RG (Research Group), REF3 or REF5b forms, for a submission to the same UOA (in which case, the data must be cleared before you can accept the invitation).

- You have already created a submission for the same UOA as part of a different joint submission (in which case, you need to leave that joint submission before you can accept the current invitation).
3. If acceptance was successful, the *Configure joint submission* page opens, which shows the details of the joint submission (refer to **Configuring a joint submission (Lead and Members)**). In the list of **Member HEIs**, your HEI now has an entry with the **Status** of **Member**. The HEI that initiated the joint submission process has the status of **Lead**.



It may be the case that your HEI has previously created *multiple* submissions for the UOA that is now part of the *joint* submission. If this is the case and the approved multiple submissions have been created, then, when you click **Accept**, you will be given the option of selecting which of the multiple submissions should form part of the joint submission. Simply select the required multiple submission and click **Accept**.

The system administrators at the HEIs in the joint submission will need to grant you access to the relevant REF forms across the submission (refer to **Configuring a joint submission (Lead and Members)**). If your input is required in any of the forms, then you will need to be given Write access to them. In addition, the administrator at your HEI will need to provide your user account with Write permissions for the same forms (refer to **Managing user permissions**).

For example, if you (as a user at a **Member HEI**) require Write access to any of the forms for which the **Lead** HEI is responsible (that is to say, forms RG (Research Group), REF3 and REF5b), then the system administrator at the **Lead** HEI will need to set Write access for those forms when configuring the submission. In addition, the administrator at your HEI will need to provide your user account with Write permissions for the same forms (refer to **Managing user permissions**).



In the case of forms RG, REF3 and REF5b, these will be listed under the **Lead** HEI in the left hand navigation during data entry (refer to **Introduction to Data entry**), even though you may be responsible for entering data into them.

Configuring a joint submission (Lead and Members)

To open the *Configure Joint submission* page, open the **Submissions tab** and click **Configure** on the row of the relevant submission.



If you are the **Lead** HEI, you can remove an HEI from the joint submission by clicking **Delete** on the relevant row, although this option is only available if the HEI to be removed has an invitation that is **Awaiting response**.

By default, no other HEIs can access your REF forms (other than RG, which is set to Read access). To configure access to your HEI's forms by the other HEIs in the joint submission, click **Set permissions** at the top of the page. The **Joint submission access permissions** page opens, displaying the grid that allows you to set the permissions for the Research Groups and different REF forms for the joint submission, for example:

 Forms RG, REF3 and REF5b are managed for joint submissions by the **Lead** HEI, and it is therefore up to the **Lead** HEI to configure the appropriate access to each of these forms for each of the **Member** HEIs if they are to have input into these forms.

To set the permissions for a REF form:

1. Click on a box next to the form, to display the dialog shown in the following example:

2. Select the required radio button on the left to select the type of permissions to be applied to the form when it is accessed by any of the other HEIs in the joint submission:

Permission	Allows user:
None	No access, meaning that the associated forms are hidden.  This is not applicable to Research Groups.
Read	Read only access, meaning that the associated forms and records cannot be modified, and that the Edit buttons are hidden.
Reduced read	Read only access to just the following staff details in forms REF1a and REF1b: <ul style="list-style-type: none"> • Name • HESA staff identifier • Staff reference code

Permission	Allows user:
Write	Write access, meaning that the associated forms and records can be modified. In addition, if the user has the Delete data function associated with their record (refer to Managing individual users), Write access allows records to be removed.

- Repeat from step 1 as required.
- When you have configured permissions for all the forms, click **Apply permissions**. The modified permissions are saved with the joint submission.



After you have configured the relevant REF form access for the other HEIs, you need to ensure that the appropriate users at your HEI are granted the relevant access to each of the forms to which you have been afforded access by the other HEIs in the submission (refer to [Managing user permissions](#)). This is so that, for example, if you are a **Member** HEI, and have been granted Write access to form REF3 (refer to [REF3: Introduction to impact case studies](#)) by the **Lead** HEI, which is responsible for its submission, you need to select the users at your HEI who are to be allowed to create the impact case studies. These users will then see the REF3 form under the **Lead** HEI in their left hand navigation during data entry and will be able to create and modify the form (refer to [Introduction to Data entry](#)).

Once you have completed all your modifications for the joint submission, click **Save**. You are returned to the [Submissions tab](#), where you can view the modified submission.

Locking forms in a joint submission (Lead and Members)

The **Lead** HEI can lock any joint submission in the [Submissions tab](#) - refer to [Lock/Unlock](#). This means that **all** the forms in the joint submission are locked and cannot be modified, including the shared forms (that is to say the forms RG (Research Group), REF3 and REF5b that are all managed by the **Lead** HEI).

If a **Member** HEI locks a joint submission, only the forms that are not shared are locked. The lock does not affect any **Member** HEI other than the one that placed the lock.

Leaving a joint submission (Member HEI)

If you are a **Member** HEI (as opposed to the **Lead**), you can leave the joint submission following acceptance. Proceed as follows:

- Open the [Submissions tab](#) and click **Configure** on the row of the relevant submission. The *Configure joint submission* page opens.
- In the **Member HEIs** table, click **Leave** on the relevant row. This creates a new, *normal* (that is to say, non-joint) submission for your HEI, and moves any data that your HEI had entered as part of the joint submission, into this new submission.

In addition, the invitation to join the joint submission is reinstated (so there are two entries with the same name in the [Submissions tab](#): one is the reinstated invitation; the other is the new sole submission). The invitation can be removed by the **Lead** HEI from their end.



If you were now to re-accept the invitation to join the joint submission, your existing normal submission and its data would become part of the joint submission, and you would see only a single row in the **Submissions tab** for the joint submission.

Reverting a joint submission (Lead HEI)

If you are the **Lead** HEI, you can revert the joint submission to a normal submission, once all the **Member** HEIs have either failed to accept the invitations (refer to **Accepting an invitation to a joint submission (Member HEI)**), or have left the submission (refer to **Leaving a joint submission (Member HEI)**).

To revert a joint submission to a *normal* submission:

1. Open the **Submissions tab** and click **Configure** on the row of the relevant submission. The *Configure Joint submission* page opens.
2. Remove all the **Member** institutions from the **Member institutions** table, by clicking **Delete** against each one.



You can only remove an HEI when that HEI's invitation is in the **Awaiting response** state – that is to say, the HEI either has not responded or has left the joint submission.

3. Click the **Revert to normal submission** button that now appears next to the **Lead** institution.
4. You are returned to the **Submissions tab**, where you can see that the submission now has **Create** against it in the **Joint submission** column, indicating that it has returned to its normal state.

Clearing submission data

The **Clear submission data** feature allows you to remove from selected submissions all the form data related to a particular REF section. For example, choosing to clear 'Research outputs (REF2)' will delete all the REF2 data from the selected submissions.



In order to be able to clear the data from the REF forms in a submission, a user needs to be associated with both the **Submission management** and **Delete data** user functions (refer to **Managing individual users**).



The submission data cannot be recovered once it has been cleared.

Proceed as follows:

1. Open the **Submissions tab** and click **Clear submission data** to open the associated page. Select the submissions from which you would like to clear data, and click **Next**.
2. Select which sections of the selected submissions you would like to clear and click **Next**.



The data for each sub-section within a section will need to be removed independently, and so, for example, to remove staff details completely, you will need to opt to remove both REF1a and REF1b.

3. Click **Finish**. The selected sections are removed from the selected submissions.



If a record within any of the submission sections selected is currently locked, then none of the records within that section will be cleared. For example, if another user is currently viewing or modifying a REF2 form, no REF2 forms can be cleared from that submission.



If REF2 data is cleared, then any research outputs that have previously been attributed will automatically be deattributed on deletion, which may affect the 'minimum of one' requirement for the associated staff members.

Deleting a submission

To delete a submission, open the **Submissions tab** and click the **Delete** icon on the far right of the row of the submission to be removed.



The icon will not be available for any joint submissions. If you wish to remove one of these, you will first need to revert it to a normal submission (refer to **Reverting a joint submission (Lead HEI)**).



Deleting a submission will also remove all the data associated with it.

User administration

It is advisable to have more than one user with system administrative access at each HEI so that, if one of them is unavailable, an alternative administrator can take over the required functions. Therefore, prior to any data entry into the REF2021 submission system by an HEI, the nominated *technical contact* to whom the initial invitation to access the system was sent, or the *system administrator* to whom the invitation may have been forwarded, needs to set up any further administrative accounts that may be required. This is done by creating one or more users with an **Account type** of **Administrator** (refer to [Creating users](#)).

Following the creation of any further system administrators, the next step is for an administrator, or else a user associated with the **Submission management** user function (refer to [Managing individual users](#)), to create the required submissions (refer to [Creating submissions](#)). The administrator can then create any non-administrative user accounts that may be required to enter or import data against the submissions.



It is advisable to create the submissions prior to the users, because permissions for the different users are set in relation to the submissions. If you create any submissions **after** the users have been created, then you will then need to go and modify all the user permissions to include the newly created submissions.



A *user* is not the same thing as a *staff member* included in a submission. (You include staff members in a submission in the **Data entry** part of the system, using [REF1a/b: Staff details page](#).)

To access the *User administration* page, select **Administration > User administration**. The table on this page lists all the user accounts that currently exist at your HEI.



If there is a long list of users, and you wish to search for a particular one, enter a search string, consisting of part of the user's **Name** or **Email**, into the **Search** field shown above.

A user record is in three parts:

- **User details:** General user details such as name, email address, restriction and account expiry date (these are displayed in the [User administration table](#) below).
- **User functions:** These enable access to specific parts of the system, for example the **Institution-level forms**, for example REF5a, which provides details about the environmental impact of an HEI's research as a whole (refer to [REF forms that make up a submission](#)).
- **Permissions:** These enable access to the Research Groups, and those of the REF forms listed in the [REF forms that make up a submission](#), that are applicable to that user for each selected submission. These do not apply to system administrators, as they have access to everything by default.



Access to **User functions** and **Permissions** do not have to be specifically provided to system administrators, as they have access to everything by default. To set up types of access to different REF forms for selected users, refer to [Managing user permissions](#). To set up permissions for a single standard user, refer to [Managing individual users](#).

The accounts are broken down into the following columns:

User administration table

Column	Description
Locked	Indicates whether or not the associated user account is currently locked.
Name	<p>The name of the account.</p> <p>The account type can be any of the following:</p> <ul style="list-style-type: none"> • Administrator: Has full access to the system. • Standard user: The level of access depends on the user functions and permissions set in the user account. • Automated user: Can only log in via the API Gateway, for which authorisation needs to be supplied via an API key in the particular API endpoint header (refer to the separate API Gateway documentation). The level of access depends on the user functions and permissions set in the user account. If this type of user is created, the API Key field is displayed. <p>System administrator accounts have the type of account '(Administrator)' appended to the names. Standard user accounts do not have anything appended. Automated user accounts have '(Automated)' appended to the names.</p>
Email	The email address associated with the account.
Account expires	The date following which the account will no longer be valid.
Last login	The time and date on which the user last logged in.
Restriction	The restriction on the user account: Read only , No access , or None (if there are no restrictions, as is the case with a system administrator account).
Edit	Takes you to the account so that you can modify it. Refer to Managing individual users .

To create a new user, click on **Create user** at the top of the page, and then proceed as in [Creating users](#).

To create permissions for the standard users in the table, click on **Manage permissions** at the top of the page, and then proceed as in [Managing user permissions](#).

Creating users

When you click **Create user** at the top of the [User administration](#) page, the *Create user* page is displayed, inviting you to make entries in the following fields:

Create user fields

Column	Description
Account type	<p>Select the appropriate type from the drop-down.</p> <p>The account type can be any of the following:</p> <ul style="list-style-type: none"> • Administrator: Has full access to the system. • Standard user: The level of access depends on the user functions and permissions set in the user account. • Automated user: Can only log in via the API Gateway, for which authorisation needs to be supplied via an API key in the particular API endpoint header (refer to the separate API Gateway documentation). The level of access depends on the user functions and permissions set in the user account. If this type of user is created, the API Key field is displayed.
Email	Enter the email address associated with the account.
Name	Enter the name of the user.
API Key	This field is displayed immediately following the creation of an Automated user . Click View API key to display the key.
Restriction	<p>This field determines how the user account is to be restricted, the available selections being: Read-only, No access, or None (that is to say, no restrictions).</p> <div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <p> In the case of a Standard or Automated user, None means access to whichever permissions are going to be applied to the user, but no permissions initially. In the case of an Administrator, None means immediate access to everything, as no restrictions constitute the default for an administrative user.</p> </div>
Account expires	Enter the date, in the format <code>dd/mm/yyyy</code> , following which the account will no longer be valid. You can either enter the date via the keyboard or use the date picker to the right of the field. The date cannot be in the past.

Once you click **Save**, the user account is created. You then need to inform the user that an account has been created (with their email address as the username), and refer them to [New user login](#).

The **Manage user** page is displayed so that you can assign functional and HEI-level permissions to the account. Refer to [Managing individual users](#).

Managing user permissions

When you click on **Manage permissions** at the top of the [User administration](#) page, the associated page is displayed, showing all the submissions that have been created (refer to [Creating submissions](#)), so that you can associate them with the required users.

Proceed as follows:

1. If you wish to associate all the created submissions with the same selection of users, then click on **Select all submissions** at the top of the page. Otherwise, you can click on **Select all** at the top of a particular panel to select all the submissions for that panel, or, for a cross-panel selection, click on individual submissions.

- Once you have made your selections, click **Next** at the bottom of the screen, to display the grid that allows you to set the permissions for the Research Groups and different REF forms for the selected submissions:

Submission	RG	REF1a	REF1b	REF2	REF3	REF4a	REF4b	REF4c	REF5b
1 - Clinical Medicine	Read	None	None	None	None	None	None	None	None
2A - Public Health, Health Services and Primary Care: Health Services	Read	None	None	None	None	None	None	None	None
2B - Public Health, Health Services and Primary Care: Primary Care	Read	None	None	None	None	None	None	None	None
2C - Public Health, Health Services and Primary Care: Public Health	Read	None	None	None	None	None	None	None	None
4 - Psychology, Psychiatry and Neuroscience	Read	None	None	None	None	None	None	None	None

Available users: John Green, Robert John Green

Selected users: (empty)

Buttons: >>, <<, Back to UoA selection, Apply permissions, Cancel

 As you will see, each standard user by default has Read access to the Research Groups (RGs), but nothing else.

- To apply permissions, click on a box next to a UOA, to display the dialog shown in the following example:

2A - Public Health, Health Services and Primary Care: Health Services
Research staff details (REF1a)

None
 Read
 Write
 Reduced read

Entire row (all forms in this submission)
 Entire column (this form for all submissions)

Buttons: Cancel, Apply

Select the required radio button on the left to select the type of permissions to be applied, from those shown below:

Permission	Allows user:
None	No access, meaning that the associated forms are hidden.  This is not applicable to Research Groups.
Read	Read only access, meaning that the associated forms and records cannot be modified, and that the Edit buttons are hidden.
Reduced read	Read only access to just the following staff details in forms REF1a and REF1b: <ul style="list-style-type: none"> • Name • HESA staff identifier • Staff reference code
Write	Write access, meaning that the associated forms and records can be modified. In addition, if the user has the Delete data function associated with their record (refer to Managing individual users), Write access allows records to be removed.

You can select whether the permissions are to apply across the **Entire row** (that is to say, they are to apply to all the forms in the selected submissions) or down the **Entire column** (that is to say, they are to apply to this particular form for all the selected submissions).

- When you click **Apply** on the above dialog, the grid is updated with the selected permissions.



If you clicked on a box in the REF1a or REF1b column, and selected **Reduced read** in conjunction with the **Entire row**, then forms REF1a and REF1b are set to **Reduced read** for the UOA, but the other forms are simply set to **Read**.

If you need to return to the **Manager user permissions** page to select further UOAs, click **Back to submission selection**. Otherwise, move onto the next step.

- In the **Available users** list, highlight the user(s) to whom you wish to assign the selected permissions, and click the  icon to move the user(s) across to the **Selected users** list. (To move users back, click the icon with the arrows pointing in the opposite direction.)
- Click **Apply permissions** at the bottom of the **Apply form permissions** grid, to assign the permissions to the **Selected users**, replacing any existing user permissions for the selected submissions. All other permissions currently set for the other (none selected) submissions are retained.
- When you click **Close** in the resultant confirmation box, you are returned to **User administration**.

Managing individual users

Whenever you create a new user (refer to [Creating users](#)), or click **Edit** against an existing user in the [User administration table](#), the **Manage user permissions** page is displayed. This page allows you to not only refine the details created via [Creating users](#) and the permissions created via [Managing user permissions](#), but also to set the **User functions** to which the user has access (refer to [A user record is in three parts](#)).

The **Manage user** page is displayed as in the following example:

Manage user

This record was last updated on 11/3/2019 at 15:35:26 by John Robert Green

User details

Account type: Standard user ▼

Email:

Name: Robert John Green

Restriction: None ▼

Account expires: 30/04/2019

(dd/mm/yyyy)

User functions

Delete data Output matching
 Import Submission management
 Export News Items

Institutional level forms

REFS: None
 Read
 Write

User permissions

Submission	Form permitted
2A - Public Health, Health Services and Primary Care: Health Services	RG , REF1a , REF3

Proceed as follows:

1. To modify the details created via **Creating users**, click the top **Edit** button and proceed as in **Create user fields**. Click **Save** to keep your changes.



It is not possible to remove user accounts from the database as their audit trail would be lost. However, you can prevent a user from accessing the system by either setting the **Restriction** field to **No access**, or by setting **Account expires** to today's date.

2. To modify the user's access to the various functions, click the **Edit** button under **User functions** and select the functions that you require the user to be able to carry out. These are described in the following table:

User function	Allows user to:
Delete data	<p>Delete the following data records (assuming that the user has Write access to them):</p> <ul style="list-style-type: none"> • News • Submissions • Staff details • Research Groups • Outputs • Impact case studies <div style="border: 1px solid #0070C0; border-radius: 5px; padding: 5px; margin-top: 10px;">  It is not necessary for a user to be associated with the Delete data function in order to be able to remove submission intentions and the associated research specialisms </div>
Import	Import any REF forms to which the user has access, and the associated user accounts (see Import process).
Export	Export any REF forms to which the user has access, and the associated user accounts (see Export process).
Output matching	<p>Access the citation count retrieval from the external matching service.</p> <div style="border: 1px solid #0070C0; border-radius: 5px; padding: 5px; margin-top: 10px;">  Users must have Write access to REF2 in order to use this function (refer to REF forms that make up a submission). </div>
Bulk Crossref lookup	<p>Perform a bulk retrieval of output details using DOIs that have previously been entered into outputs within REF2.</p> <div style="border: 1px solid #0070C0; border-radius: 5px; padding: 5px; margin-top: 10px;">  Users must have Write access to REF2 in order to use this function. </div>
Submission management	<ul style="list-style-type: none"> • Create and modify submissions (refer to Creating submissions). • Create and configure joint submissions (refer to Creating a joint submission (Lead HEI) and Configuring a joint submission (Lead and Members)). <div style="border: 1px solid #0070C0; border-radius: 5px; padding: 5px; margin-top: 10px;">  In order to use the Clear feature for submissions (refer to Clearing submission data), a user must also be associated with the Delete data function. </div>
News	Create and modify news items (refer to News items).
Submission intentions	<ul style="list-style-type: none"> • Create, modify and delete submission intentions. • Create, modify and delete the associated research specialisms.

Click **Save** to keep your changes.

- To modify the user's access to form REF5a, click the **Edit** button under **Institution-level forms** and select **None**, **Read** or **Write** as required. Click **Save** to keep your changes.

4. To modify the user's permissions, first click the **Edit** button under **User permissions** to display the **View user permissions** page. Then, if you wish to go ahead and modify the permissions, click the **Edit** button and proceed as in [Managing user permissions](#).

News items

News items are notices such as information about REF 2021 deadlines, any system outages, and so on. News items can be published by a system administrator, a user with access to the **News** user function (refer to [Managing individual users](#)), or by a member of the REF team.

Published news items are displayed on the [Homepage](#), which is displayed immediately following a successful login to the REF submission system, and also whenever you click the **Home** button.

To access the *News items* page select **Administration > News**, where the existing news items are displayed.

To create a new item, click **Create new item** and proceed as in [Creating news items](#). To modify an existing item, click **Edit** under the required item, and proceed as in [Modifying news items](#).



Items on the *News items* page are ordered first by **Status (Draft, Published and Expired)**, then by **Urgency**, and finally by **Expiry date** (with items without expiry dates appearing first, followed by the remainder in expiry date order - the later the expiry date, the earlier they appear in the list).

If a member of the REF team publishes a news item, all HEIs will be able to see it. If a user at your HEI publishes a news item, only users at your HEI will be able to see the item.

Creating news items

Once **Create new item** has been selected on the *News items* page (refer to [News items](#)), the *Create a news item* page opens and you can proceed as follows to create the item:

1. Complete the following fields:



The **Status** field is set automatically, starting at **New** for a newly created item, but being set subsequently to **Draft, Published or Expired** as appropriate.

Field	Description
Headline	The headline (title) of the news item that users will see once it has been published.
Content	The text content of the news item. A rich text editor is available to help you, and hyperlinks are permitted.
Urgent	If this is ticked, then the news item is listed above non-urgent news items.
Expiry date	If you specify an expiry date, the news item is removed from the Homepage at 00:01 on that date. If you specify a date in the past, the news item is listed as Expired when you save the record. Expired news items remain available in <i>News items</i> so that you can modify and republish them as required.

2. Click **Save** to save the news item to a **Draft** state, or **Publish** to publish it straight to the

Homepage.



Draft and **Expired** news items are not displayed on the *Homepage*.

Modifying news items

Once **Edit** has been selected on the *News items* page for a particular item (refer to [News items](#)), the *Manage news* page opens.

To modify the news item, click **Edit** for the relevant news item, then modify the fields in accordance with [Creating news items](#).

Update button

When you modify a news item, there is an **Update** button available.

For a **Draft** or **Published** news item, clicking **Update** applies (and saves) any changes you make to the news item and preserves the **Status** of the news item as either **Draft** or **Published**.

For an **Expired** news item, if you now specify either no expiry date or an expiry date in the future, then clicking **Update** changes the status of the news item to **Draft**.

HESA data files

From this page you can download data to help you with the completion of forms [REF4a: Research doctoral degrees awarded](#) and [REF4b: Research income](#).



Data related to form [REF4c: Research income-in-kind](#) will be sent out separately by UKRI and the Health Research funding bodies.

The data are held in the form of downloadable Excel workbooks, and have been extracted from HESA (Higher Education Statistics Agency) student and finance records for your HEI.



The data are supplied in accordance with paragraphs 340 and 348 of the [Guidance on submissions \(2019/01\)](#), and relate to the academic years 2013-14, 2014-15, 2015-16, 2016-17 and 2017-18. The next data despatch, planned for March 2020, will also include data for the reporting year 2018-19.

The files that can be downloaded from the page are as follows:

- **Guidance document**

This document outlines the processes used to extract the counts of research doctoral degrees awarded from the HESA student records, and the research income from the HESA finance records. It also explains how this data will be used for validating the submission of your HEI's environment data.

- **Workbook 1: DoctoralDegrees**

This workbook contains the following three separate worksheets:

- **DoctoralUOA:** Counts of research doctoral degrees awarded in each academic year, by REF2014 unit of assessment.
- **DoctoralCC:** Counts of research doctoral degrees awarded in each academic year, by HESA cost centre.
- **Individual:** Details of student instances included in the counts of Research doctoral degrees awarded.

- **Workbook 2: ResearchIncome**

This workbook contains a single worksheet with the research income in each academic year, split by HESA cost centre and source of income.

CHAPTER 6

Clear cache

This option appears under **Tools** on the menu bar at the top of the page (refer to [Navigating the submission system](#)).

With a single click, the option clears the items that the REF2021 submission system has stored in memory. This will ensure that your browser is loading the latest version of the system.



The **Clear cache** option does not remove any stored passwords.

CHAPTER 7

Submission intentions

Introduction to the Survey of submission intentions	52
Displaying the existing submission intentions	53
Creating a new submission intention	54
Submission intention summary page	56
Submitting your submission intentions	58

Introduction to the Survey of submission intentions

Each HEI intending to participate in REF 2021 needs to submit their responses to the *Survey of submission intentions*, in accordance with paragraph 90 of the [Guidance on submissions \(2019/01\)](#), and the [Survey of submission intentions webpage](#). The results of the survey will assist the REF team in appointing sub-panel members in the appropriate numbers and areas of expertise.



Where the combined FTE of staff employed in the **Submitting unit** who have significant responsibility for research is lower than five FTE, and you have made a small unit exception request (refer to [Request small unit exception](#)) that has been approved or is pending approval, then you do not need to submit a submission intention for that unit.

In accordance with paragraph 89 of the [Guidance on submissions \(2019/01\)](#), the REF2021 submission system will allow the HEIs to start submitting their responses from 30 September 2019.

An invitation has been sent out to each HEI requesting the email address of each authorised 'submitter' (up to two for each HEI). Only these 'submitters' can submit an HEI's intentions. By submitting the intentions, the authorised 'submitters' confirm the accuracy of the data submitted, and also adherence to the submitted HEI code of practice. All responses need to be submitted by noon on 6 December 2019 (refer to [Submitting your submission intentions](#)). HEIs can unsubmit and modify any of their responses prior to this date.

Responses take the form of a different submission intention for each **Submitting unit** that is to form part of the final **Submission set**. Each submission intention should contain details of numbers of staff and outputs, together with details of the different areas of impact for which case studies are eventually going to be submitted.



For the particular requirements relating to joint submissions, please refer to paragraph 17 of the separate [Survey of submission intentions guidance \(Annex A\)](#); for those relating to multiple submissions, please refer to paragraphs 18 and 19 of the same document.

Each submission intention must be associated with at least one **Research specialism**. The specified specialisms allow the REF team to estimate the workload on existing sub-panel members and ascertain where additional expertise may be needed. This will help to ensure that, for the assessment phase, the sub-panels have the requisite numbers of members, with the appropriate levels of expertise.

The specialisms are listed in the spreadsheet at [Annex B](#) of the *Survey of submission intentions* webpage, and the selection options relating to this list for the different UOAs are given in Table 2 of the separate [Survey of submission intentions guidance \(Annex A\)](#).



Although the specification of at least one *research specialism* is mandatory for each submission intention, there is no such requirement for the final **Submission set**, and the sub-panels will judge the research content of the material submitted even if no research specialisms are specified.

Displaying the existing submission intentions

To either display the existing intentions that are to be submitted as your HEI's responses to the *Survey of submission intentions*, or to create a new intention, proceed as follows:

1. Log into the main REF2021 submission system (refer to either **New user login** or **Existing user login**, depending on whether or not you are new to the system).
2. Click **Submission intentions** on the main menu.
3. Provided that you have the **Submission intentions** user function associated with your user profile (refer to **Managing individual users**), then the *Survey of submission intentions* page will be displayed, confirming the survey submission deadline of 6 December 2019, and showing the table listing any submission intentions that have already been created for your HEI.

From the *Survey of submission intentions* page, you can do any of the following:

- Click **Create new submission intention** and then proceed as in **Creating a new submission intention**.



In the case of a new survey, the creation of the first intention will serve to initialise the survey.

- View or modify an existing submission intention, by clicking the **View/Edit** button on the relevant row.
- Remove an existing submission intention, by clicking the **Delete** button on the relevant row. You are then asked to confirm the deletion.



Once you click **Yes**, you will not be able retrieve the intention.

- Submit the existing intentions, provided that you are an authorised 'submitter' (in which case, the **Submit response to survey** button is displayed), and that there are no errors or submissions (in which case, the button is active). Refer to **Submitting your submission intentions**.



On clicking the **Submit response to survey** button, the authorised 'submitter' will be asked to confirm the HEI's participation in REF 2021.

- Click **Export to Excel**, to export the survey to an Excel file. This will take you to the Export submission intention page. On this page you can create new export jobs and download previous exports.

Creating a new submission intention

You should create a submission intention for each **Submitting unit** that is to form part of an HEI's final **Submission set**.



For the remainder of the submission criteria, please refer to **Submitting your submission intentions**. For the particular requirements relating to joint submissions, please refer to paragraph 17 of the separate **Survey of submission intentions guidance (Annex A)**; for those relating to multiple submissions, please refer to paragraphs 18 and 19 of the same document.

To add an intention, proceed as follows:

1. In the **UOA** box at the top of the screen, select, from the drop-down, the Unit of Assessment (in the range 1-34 - refer to **What is REF 2021?**) for which the submission intention is to be created.
2. In the **Staff** box, enter both the following figures:
 - The **Total headcount of Category A submitted staff** working within the remit of the UOA (refer to **Category A eligible**).
 - The **Total FTE of Category A submitted staff** working within the remit of the UOA (refer to **Full-Time Equivalent (FTE)**), to two decimal places. However, bear in mind the following note: **Where the combined FTE of staff employed in the Submitting unit who have significant responsibility for research is lower than five FTE, and you have made a small unit exception request (refer to Request small unit exception) that has been approved or is pending approval, then you do not need to submit a submission intention for that unit.**
3. If the unit is to be submitted jointly with one or more other HEIs, then select the box **Involved in a joint submission** and, in the **Institutions involved** box, enter the names of the HEIs.
4. In the **Outputs** box, the **Total number of outputs to be submitted** is set by default to 2.5 times the **Total FTE of Category A submitted staff** entered in the **Staff** box, rounded up or down. You can modify this default if required.

You should apportion a percentage of the **Total number of outputs to be submitted**, to each of whichever of the following types of output are relevant, ensuring that the apportionments total 100%:

- *Books*
- *Parts of books*
- *Journal articles*
- *Other documents*
- *Physical artefacts*
- *Digital artefacts*
- *Exhibitions and performances*
- *Other*

Against **Approximate number of interdisciplinary outputs**, you should enter an estimate of the number of outputs that will meet the definition of interdisciplinary research (refer to **Interdisciplinary**).

5. In the **Impact** box, enter, for each of the impact areas shown, the approximate number of impact case studies to be submitted, followed by a **Supporting statement** (up to 150 words). For the completion of such statements, refer to the separate **Survey of submission intentions guidance (Annex A)**.



For the purposes of REF 2021, *impact* is defined as an effect on, or change or benefit to, the economy, society, culture, public policy or services, health, the environment or quality of life - beyond academia.

You are expected to provide information related to one or more of the following impact areas:

- *Impacts on the health and wellbeing of people, and animal welfare*
- *Impacts on creativity, culture and society*
- *Impacts on social welfare*
- *Impacts on commerce and the economy*
- *Impacts on public policy, law and services*
- *Impacts on production*
- *Impacts on practitioners and delivery of professional services, enhanced performance or ethical practice*
- *Impacts on the environment*
- *Impacts on understanding, learning and participation.*



There will be a submission error if at least one *Impacts* field is not completed. If you are involved in a joint submission, please refer to paragraph 17 of the separate [Survey of submission intentions guidance \(Annex A\)](#).



If security clearance is required for any of the case studies, this should be requested prior to 6 December 2019 (refer to [Impact case studies requiring security clearance](#) and the [cut-off points](#) for special requests).

The final impact case studies will be entered via form REF3 in the full, eventual submission (refer to [REF3: Introduction to impact case studies](#)).

6. Click **Save** at the bottom of the page, to create the initial intention. You are then taken to the [Submission intention summary page](#).

Submission intention summary page

A summary page for each new submission intention is displayed following its creation, giving the details entered, as follows:

- The **Total headcount of Category A submitted staff**.
- The **Total FTE of Category A submitted staff**.
- Under **Joint submission**, a response of **Yes** if the **Submitting unit** is to form part of a joint submission with one or more other HEIs, and a list of the other HEIs.
- Under **Outputs**, the **Total number of outputs to be submitted**, followed by:
 - The **Approximate proportion of total outputs in each output collection**, showing the apportioned percentages of the **Total** for the different types of output to be submitted.
 - The **Approximate number of interdisciplinary outputs** (refer to **Interdisciplinary**).
- Under **Impact**, for each of the impact areas selected, the approximate number of impact case studies to be submitted, followed by a **Supporting statement** (up to 150 words).

You can do any of following from the summary page:

- Click **Edit submission intention** to modify any of the information displayed. Proceed as in **Creating a new submission intention**.
- Click **Add research specialism** to create a research specialism in accordance with **Adding a research specialism**.
- View or modify an existing specialism, by clicking **View/Edit** on the relevant specialism row at the bottom of the screen.
- Remove an existing specialism, by clicking the **Delete** button on the relevant specialism row at the bottom of the screen. You are then asked to confirm the deletion.



Once you click **Yes**, you will not be able retrieve the specialism.

- Click **Back to submission intentions** to return to the existing responses (refer to **Displaying the existing submission intentions**), so that you can either create a new submission intention or submit the completed responses.

Adding a research specialism

Each submission intention must be associated with at least one **Research specialism**. The specified specialisms allow the REF team to estimate the workload on existing sub-panel members and ascertain where additional expertise may be needed. This will help to ensure that, for the assessment phase, the sub-panels have the requisite numbers of members, with the appropriate levels of expertise.

Proceed as follows to add a *research specialism* to a submission intention:

1. Click **Add research specialism** on the **Submission intention summary page**.
2. In the **Name of research specialism** box, enter up to 20 words to describe the specialism, from the list given in the spreadsheet at **Annex B** of the *Survey of submission intentions* webpage, and in accordance with Table 2 of the separate **Survey of submission intentions guidance (Annex A)**.
3. In the **Approximate number of outputs** box, enter the estimated number of outputs to be submitted for the specified specialism (either in the range 1-10, or, if it is more than 10, to the nearest 5).

4. If you are intending to submit any outputs in languages other than English, then, in the **Language of any outputs not in English** box, provide an estimate of the number of outputs for each of the languages specified, and then enter the **Total number of outputs in other languages**.



If any languages in which you wish to submit are not specified, enter a comma-separated list of them in the **Other languages** box. Ensure that you include the total number of intended outputs in these languages in the **Total number of outputs in other languages**.

5. In the event that any outputs will need to be cross-referred from the submitting UOA to the sub-panels of other UOAs, then, in the **Cross-referral requests** box, enter, for each relevant UOA, the number of outputs for the specialism that may need to be cross-referred.
6. Click **Save** at the bottom of the page, to associate the specialism with the submission intention and display the **Submission intention summary page** for the particular UOA.

Submitting your submission intentions

Your responses to the *Survey of submission intentions* needs to be submitted by noon on 6 December 2019, but, until this date, the intentions that make up the responses can be unsubmitted and modified by an authorised 'submitter'.

Submission of the intentions is only possible once the **Submit response to survey** button is active on the top right of the *Survey of submission intentions* page (described in **Displaying the existing submission intentions**). The button is only active once the following criteria have been met, and any other displayed errors and omissions have been cleared:

- The **Total headcount of Category A submitted staff** is not null.
- The **Total FTE of Category A submitted staff** is not null.
- The **Total number of outputs to be submitted** is not less than one.
- There is at least one submission intention.
- For each intention:
 - If **Involved in a joint submission** is selected, then there must be an entry in the **Institutions involved** box.
 - If **Involved in a joint submission** is **not** selected, then:
 - at least one impact area must be complete in terms of both case studies and supporting statement, and each impact area for which a number of case studies have been entered, must have an accompanying statement of less than 150 words.
 - at least one **Research specialism** must have been entered, and each specialism specified must be associated with a number of outputs.

The procedure is as follows:

1. An authorised 'submitter' clicks the button **Submit response to survey**.
2. The authorised 'submitter' is asked to confirm the HEI's participation in REF 2021.
3. Confirmation of submission is displayed, and the UOAs on the *Survey of submission intentions* page then appear as **View** only.
4. If further edits to the survey are required, an authorised 'submitter' can click the button **Unsubmit and edit survey** that is now available. Following your acknowledgement of this action, the **Edit** and **Delete** options re-appear.

CHAPTER 8

Data entry

Introduction to Data entry	60
Research Groups (RGs)	61
REF1a/b: Staff details page	62
REF2: Introduction to research outputs	68
REF3: Introduction to impact case studies	91
REF4a/b/c: Introduction to quantitative environment data	97
REF5a/b: Introduction to the research environment submission requirements	100
REF6a/b: Output reductions owing to staff circumstances	106

Introduction to Data entry

There are three ways of creating submission data within the REF2021 submission system:

- Manually, in the **Data entry** part of the submission system (discussed in this section).
- Import from file, using the **Import** tool (refer to **Import process**).
- Import the data via the API Gateway, using the endpoint `POST /api/importjobs` (refer to the separate **API Gateway** documentation for how to import records using API endpoints on **Swagger UI**).

To use the **Data entry** method, proceed as follows:

1. Click **Data entry** on the main menu. The created submissions to which you have Read or Write access are displayed.
2. Select the required submission.



You also have the option of selecting REF5a if you have **Write** access to **Institution-level forms** (refer to **Managing individual users**). This would allow you to supply the information related to the HEI's strategy and resources to support research and enable impact.

3. You are taken to the submission.

The REF forms to which you have access are displayed on the left of the screen within the submission. Simply click them to navigate between them.

When you are navigating the REF forms for a joint submission (refer to **Configuring a joint submission (Lead and Members)**), the forms are broken down by HEI, with your HEI at the top.

The forms RG, REF3 and REF5b, which are managed for joint submissions by the **Lead** HEI, will always be listed under the **Lead** HEI (regardless of whether you are the **Lead** HEI or a **Member** HEI). Access to these forms is as follows:

- If you are a user at the **Lead** HEI, then you will only see these forms if your administrator has granted you access to them.
- If you are a user at the **Member** HEI, then you will only see these forms if:
 - the **Lead** HEI has granted your HEI access to them; and
 - your administrator has also granted you access to them.

4. Click the form into which you wish to enter submission data.



You will need to have been granted Write access to the particular form in order to enter or modify data.

Research Groups (RGs)

A Research Group is simply a label that you can apply to staff members and outputs, so that you can group staff members and outputs to reflect the distinct research activities within your HEI. However, a Research Group is not mandatory for a submission, and neither the presence nor absence of a Research Group is assumed.

In this part of the system, you merely create the Research Group labels. You will then need to apply these labels to staff members (on the REF1a and REF1b form), outputs (on the REF2 form), and, where requested, on the environment template (form REF5b).

Notes

- You can define up to 36 Research Groups for each submission (codes A-Z inclusive, plus numbers 0-9 inclusive). Refer to [Creating, modifying and removing Research Groups](#).
- On forms REF1a and REF1b, any staff member can have up to a maximum of four Research Groups associated with them.
- An output on form REF2 can have one Research Group applied, which must be one of the Research Groups already associated with a staff member. Refer to [Research outputs \(REF2\) page](#).

Creating, modifying and removing Research Groups

To create a Research Group:

1. Click **Data entry** on the main menu. The created submissions to which you have access are listed.
2. Select the required submission. The list of REF forms to which you have access are displayed on the left of the screen.
3. Click **RG**.
Any RGs (Research Groups) that have already been created for the selected submission are shown. You can sort them by clicking on the sort arrows to the right of either the **Code** or **Description** column header.
4. Click **Add** to create a new RG.
5. Enter a single character **Code**. This is a single upper case character (in the range A-Z) or number (in the range 1-9), and is used to identify the Research Group within a submission. If you enter a lower case letter, then this will automatically be converted to upper case.
6. Enter a **Description** for the RG.
7. Click **Save**. The RG is created and added to the list. When you next go into the RG form, the RGs will be sorted into **Code** alphanumeric order.

To modify an RG, go to the relevant table row, click in the **Code** or **Description** field as required, and make the required text modifications. Be sure to click **Save** again.

To remove an RG, click the **Delete** button to the right of the relevant table row.



You will need to be associated with the **Delete data** user function in order to remove an RG (refer to [Managing individual users](#)). Staff members and outputs associated with the removed RG are not themselves deleted - the RG is simply unassigned from the applicable staff members and outputs.

REF1a/b: Staff details page

The REF2021 submission system requires details of the following:

- Those current members of staff in post on the **Census date** who have significant responsibility for research.
- Those former staff members (if any) to whom research outputs can be attributed.

The *Staff details (REF1a/b)* page lists the above staff members who have been added to the submission, and allows you to modify these records and add new ones.

Proceed as follows to display the *Staff details (REF1a/b)* page:

1. Click **Data entry** on the main menu. The created submissions to which you have access are listed.
2. Select the required submission. The list of REF forms to which you have access are displayed on the left of the screen.
3. Click **REF1a/b**. Any staff details that have already been created for the selected submission are shown under the two different tabs (**REF1a - Current staff** and **REF1b - Former staff**). Links are given to the staff members' outputs.

If you wish to create a new record for a current member of staff, click **New current staff member** and go to **REF1a: Creating a record for a current member of staff**. If you wish to create a new record for a former member of staff, click **New former staff member** and go to **REF1b: Creating a record for a former member of staff**.

If you wish to modify the details of an existing staff member, click **Edit** and amend the fields in accordance with either **REF1a: Creating a record for a current member of staff** or **REF1b: Creating a record for a former member of staff**.



There is a **Search** box to the right of the page that allows you to enter search strings that are part of any of the following: **Initials**, **Surname**, **HESA staff identifier**. You can also sort the records by **Surname** or **HESA staff identifier**.

If you wish to remove a staff member, click **Delete** next to the member. You will need to be associated with the **Delete data** user function in order to do this (refer to **Managing individual users**).



Deleting a staff member does not delete their outputs. These simply become unattributed in REF2.

View outputs link

Against each staff member there will be a link to view all the outputs attributed to that staff member. The link will be followed by the number of outputs attributed to that staff member. Clicking on the view output link will take the user to a separate page. On this page there will be a list of all outputs attributed to that staff member. There will be an option to **view/edit** the output, **deattribute** the output from the staff member and to **delete** the output (this will delete the REF2 record).

Additionally from this page the user can **attribute an existing output** to a staff member and they can **create a new output** that will be attributed to that staff member on save.



In order to be able to clear the data from the REF forms in a submission, a user needs to be associated with both the **Submission management** and **Delete data** user functions (refer to **Managing individual users**).

REF1a: Creating a record for a current member of staff

To create a record for a new staff member for the submission, proceed as follows:

1. Click **New current staff member** on the [REF1a/b: Staff details page](#). A new form **REF1a** opens.
2. Complete the **Personal details** shown in the following table:

Field	Description/notes
Initials	Initials of the staff member.
Surname	Surname of the staff member.
Date of birth	Date of birth, in the format dd/mm/yyyy.
HESA staff identifier	Enter this identifier to allow data associated with the staff member to be reconciled with the data collected by HESA.
ORCID	This has already been prefaced for you with https://orcid.org/ . Complete the field by entering just the staff member's unique ORCID identifier.

3. Complete the **Institution details** fields shown in the table below.

	Description/notes
Contracted FTE	Enter the FTE value, in the range 0.2 to 1.0, associated with the qualifying contract of the staff member on the Census date . Staff whose salary is calculated on an hourly or daily basis are eligible only if they meet the definition in paragraph 117 of the Guidance on submissions (2019/01) , and, on the Census date , have a contract of employment of at least 0.2 FTE per year over the length of their contract.
Evidence of substantive connection	For staff employed on minimum fractional contracts (in the range 0.20 to 0.29 FTE) on the census date, evidence is required of a clear connection of the staff member to the submitting unit. If the staff member's circumstances are covered by one of the instances in paragraphs 126 and 127 of the Guidance on submissions (2019/01) , then tick the appropriate box from the following: Caring responsibilities, Personal circumstances, Approaching retirement, Discipline practice . Otherwise, enter a short statement of up to 200 words, stating the clear connection of the staff member to the HEI, in accordance with paragraph 123 of the same Guidance .

4. Indicate the **Employment status on the census date** by completing the fields shown in the table below.

	Description/notes
Fixed term contract	Tick this box if the staff member was on a fixed term contract ¹ on the Census date . Staff whose salary is calculated on an hourly or daily basis are eligible only if they meet the definition in paragraph 117 of the Guidance on submissions (2019/01) , and, on the Census date , have a contract of employment of at least 0.2 FTE per year over the length of their contract.
Fixed term contract start date	If Fixed term contract is selected, enter the contract start date, in the format dd/mm/yyyy.
Fixed term contract end date	If Fixed term contract is selected, enter the contract end date, in the format dd/mm/yyyy.
Unpaid leave	Tick this box if the staff member was on unpaid leave on the census date.
Unpaid leave start date	If the Unpaid leave box is ticked, enter the Unpaid leave start date in the format dd/mm/yyyy. This date can be no earlier than 31 July 2018 (i.e. the Census date minus two years).
Unpaid leave end date	If the Unpaid leave box is ticked, enter the Unpaid leave end date in the format dd/mm/yyyy. The difference between the start and end dates can be no greater than 2 years.
Secondment	Tick this box if the staff member was on secondment on the census date.
Secondment start date	If the Secondment box is ticked, enter the Secondment start date in the format dd/mm/yyyy. This date can be no earlier than 31 July 2018 (i.e. the Census date minus two years).
Secondment end date	If the Secondment box is ticked, enter the Secondment start date in the format dd/mm/yyyy. The difference between the start and end dates can be no greater than 2 years.



In accordance with paragraph 120c of the **Guidance on submissions (2019/01)**, if academic staff are on unpaid leave of absence, or on secondment to an organisation other than a UK HEI, on the **Census date**, and are contracted to return to normal duties up to two years from the start of their period of absence or secondment, either the seconded staff member or any staff recruited to cover their duties who meet the eligibility criteria should be considered **Category A eligible**.

¹ Staff on rolling contracts, or a series of renewable fixed-term contracts, will be regarded as fixed term for the purposes of the submissions. However, HEIs may wish to draw attention to their use of rolling contracts in the textual part of their submissions, especially where a fixed-term contract has an expiry date soon after the census date.

- Under **Research Groups**, you can select up to four Research Groups for the staff member from the displayed drop-downs.



The selections are totally optional, but the system will validate, on Save, that, if a Research Group (RG) is associated with an output, then this RG must also be associated with the staff member attributed to the output.

- Click **Save**.

REF1b: Creating a record for a former member of staff

To create a record for a new staff member for the submission, proceed as follows:

- Click **New former staff member** on the **REF1a/b: Staff details page**. A new form **REF1b** opens.
- Complete the **Personal details** shown in the following table:

Field	Description/notes
Initials	Initials of the staff member.
Surname	Surname of the staff member.
Date of birth	Date of birth, in the format dd/mm/yyyy.
Staff identifier	Enter a unique identifier for this staff member.
ORCID	This has already been prefaced for you with https://orcid.org/ . Complete the field by entering just the staff member's unique ORCID identifier.

- Complete the employment record section for the period during which the attributed output(s) were first made publicly available. The member of staff can be associated with multiple employment records where attributed outputs were first made publicly available during different contracted periods of employment.
- Different periods of employment should be added as separate employment records in the section below.
- For each employment record complete the **Institution details** fields shown in the table below.

Field	Description/notes
HESA staff identifier	Enter this identifier (if available) to allow data associated with the staff member to be reconciled with the data collected by HESA for this particular contract.
REF-eligible contract start date	Enter the start date of the Category A eligible contract.
REF-eligible contract end date	Enter the end date of the Category A eligible contract. (The end date must be in the period 1 January 2014 - 30 July 2020)
FTE of REF-eligible contract	This is the FTE value associated with the qualifying contract of the staff member. Enter a value in the range 0.2 to 1.0.

Field	Description/notes
Evidence of substantive connection	For staff employed on minimum fractional contracts (in the range 0.20 to 0.29 FTE), evidence is required of a clear connection of the staff member to the submitting unit. If the staff member's circumstances are covered by one of the instances in paragraphs 126 and 127 of the Guidance on submissions (2019/01) , then tick the appropriate box from the following: Caring responsibilities, Personal circumstances, Approaching retirement, Discipline practice . Otherwise, enter a short statement of up to 200 words, stating the clear connection of the staff member to the HEI, in accordance with paragraph 123 of the same Guidance .

6. Indicate the **Employment status when the output(s) were first made publicly available** by completing the fields shown in the table below.



In accordance with paragraph 211b of the [Guidance on submissions \(2019/01\)](#), an output attributable to a former staff member is eligible if it was attributed to a former staff member and was first made publicly available while the staff member was on an unpaid leave of absence or secondment period (whether to another UK HEI, or beyond Higher Education/Overseas), where the period of secondment or unpaid leave was no greater than two years.

Field	Description/notes
Unpaid leave	Tick this box if the staff member was on unpaid leave when any outputs attributed to them for this employment record were first made publicly available.
Unpaid leave start date	If the Unpaid leave box is ticked, enter the Unpaid leave start date in the format dd/mm/yyyy.
Unpaid leave end date	If the Unpaid leave box is ticked, enter the Unpaid leave end date in the format dd/mm/yyyy. (The end date must be inside the period 1 January 2014 - 31 July 2020.) The difference between the start and end dates can be no greater than 2 years.
Secondment	Tick this box if the staff member was on secondment when any outputs attributed to them for this employment record were first made publicly available.
Secondment start date	If the Secondment box is ticked, enter the Secondment start date in the format dd/mm/yyyy.
Secondment end date	If the Secondment box is ticked, enter the Secondment end date in the format dd/mm/yyyy. (The end date must be inside the period 1 January 2014 - 31 July 2020.) The difference between the start and end dates can be no greater than 2 years.

6. Under **Research Groups**, you can select up to four Research Groups for the staff member from the displayed drop-downs.



Whilst option, if a research group (RG) Research Group (RG) is associated with an output, then this RG must also be associated with the staff member attributed to the output.

7. Click **Save**.
8. If you wish to create a further employment record, click **Add employment record**, and proceed from **Complete the Personal details shown in the following table:** for the next contract.

REF2: Introduction to research outputs

The REF2021 submission system requires details of the assessable outputs that each **Submitting unit** has produced during the **Publication period**.

Submissions must include a set number of items of research output equal to 2.5 times the combined FTE of **Category A submitted** staff included in the submission (refer to **REF1a/b: Staff details page**). This number will be adjusted, as appropriate, to take account of requests for output reductions owing to individual circumstances entered via forms **REF6a/b: Output reductions owing to staff circumstances**.



Rounding up from .5 to the nearest whole number will be applied, to give a whole number of outputs for each submission.

For each **Category A submitted** staff member, a minimum of one output is required that has been produced or authored solely, or co-produced or co-authored, by that staff member (refer to the **'Minimum of one' requirement**). There can, however, be requests for reductions where individual circumstances apply - refer to **REF6a/b: Output reductions owing to staff circumstances**.

There can be further outputs up to the total required for the submitting unit (2.5 times the combined FTE), taking into account any applicable reductions for staff circumstances. A maximum of five outputs may be attributed to an individual staff member, whether they are **Category A submitted** staff or former staff whose outputs are eligible for submission.



The attribution of the maximum number of outputs to a staff member does not preclude the submission of further outputs for which that staff member is a co-author, where these are attributed to other eligible staff in the **Submitting unit**.

For output eligibility, please refer to **Part 3 Section 2: Research outputs (REF2)**, particularly paragraph 205, of the **Guidance on submissions (2019/01)**. As a summary, each output must be:

- The product of research, briefly defined as a process of investigation leading to new insights, effectively shared.
- A product of research that was first brought into the public domain during the publication period 1 January 2014 to 31 December 2020 or, in the case of a confidential report, that was lodged with the body to whom it is confidential, during this same period.
- Attributable to a current or former member of staff who made a substantial research contribution to the output. The output must have been produced or authored solely, or co-produced or co-authored, by that staff member, who must be either:
 - A **Category A submitted** staff member, regardless of where he or she was employed at the time the output was produced.

Or

- A former staff member who was employed by the submitting HEI according to the **Category A eligible** definition when the output was first made publicly available.
- Available in an **Open access** form, where the output is *in scope* for **Open access requirements**, unless an exception applies (refer to **Open access status**).



Units may submit a maximum of five per cent *in scope* outputs that are **Not compliant** with **Open access**, or one *in-scope* output that is **Not compliant**, whichever is the higher, per submission.

Please refer to the [Research outputs \(REF2\) page](#) to view any outputs that have already been created for the submission, and, on a separate tab, details of the staff who created them.



There is also an [Excluded outputs tab](#) and a [Reserve outputs tab](#).

Research outputs (REF2) page

Proceed as follows to display the *Research outputs (REF2)* page:

1. Click **Data entry** on the main menu. The created submissions to which you have access are listed.
2. Select the required submission. The list of REF forms to which you have access are displayed on the left of the screen.
3. Click **REF2** to display the *Research outputs (REF2)* page. The number of outputs already entered in the submission are given. The outputs are listed individually under the different tabs described below.

The target number of outputs for the UOA is displayed at the top of the page. It is calculated as the rounded value returned after multiplying the combined FTE of **Category A submitted** staff included in the submission, by 2.5. This target number cannot be exceeded.

The page also displays both the count and percentage of those *in scope* outputs that are **Not compliant** with **Open access** (refer to [Open access status](#)). This allows you to adjust your outputs, bearing in mind that units may submit a maximum of five per cent *in scope* outputs that are **Not compliant** with **Open access**, or one *in-scope* output that is **Not compliant**, whichever is the higher, per submission.

4. To create a new output without initially assigning it to a staff member, proceed in accordance with [Creating a new output](#). Alternatively, if you wish to start by selecting the staff member to whom you wish to attribute the new output, move to the [Research outputs \(REF2\) page](#) and follow the instructions there.

Outputs tab

Each output is shown in a box, which contains the output title followed by the **Output identifier**, details of the staff member attributed to the output (if the user has the relevant permissions to view staff data), and the following buttons:

- **View/edit output:** Allows you to view or modify the output (refer to [Output summary and completion](#)).
- **Citations:** Proceed as in [Citations](#).
- **Delete:** Allows you to remove the output.



If an output that is attributed to a staff member is deleted, then it will be deattributed automatically, and you need to bear in mind that the 'minimum of one' requirement for the staff member may be affected.



In order to be able to clear the data from the REF forms in a submission, a user needs to be associated with both the **Submission management** and **Delete data** user functions (refer to **Managing individual users**).

Reserve outputs tab

This tab lists each output that has been selected as a reserve output for a double-weighting request (refer to **Double-weighting reserve output**).

You can **Remove** a reserve output as required and select a different one.



A reserve output is not included in the output counts. However, should one be used, it will then be included in the counts for the staff member(s) to whom it is currently attributed.

Excluded outputs tab

This tab lists outputs that have been excluded from submission, and has the same buttons as the **Outputs tab**.

To exclude an individual output, go to the **Outputs** tab, select the **View/edit REF2** button under the required output. Then, having selected **Edit** on the output's REF2 form, tick the **Exclude from submission** box, followed by **Save**.

Searching, filtering and sorting

The **Search** box in the top right hand corner of the page allows you to filter records that match a particular search string.

The **Filter** drop down allows you to filter outputs to view those that have been attributed to a staff member, those that have not been attributed to a staff member or all outputs.

The **Sort outputs by** box allows you to sort records within a particular tab by title, **Output identifier** or staff member surname, in either ascending or descending order.

Creating a new output

To create a new output, proceed as follows:

1. On the **Research outputs (REF2) page**, click **New output**. The *Select output type* page opens, listing the available output types.
2. Select an output type, and then click **Create output**.
3. The *Create output* page opens. Verify that the output type at the top of the page is as required before proceeding.



The broad definition of each output type, together with the collection formats, are described in Annex K of the **Guidance on submissions (2019/01)**. Refer also to Annex B of the **Panel criteria and working methods (2019/02)** for a **Summary of additional information about outputs**.

4. The fields that you need to complete are dependent on the output type. For the full possible list, please refer to the table below.

REF2 fields

Field	Description	Appropriate to the following output types:	Notes
Digital Object Identifier (DOI)	<p>If the output belongs to one of the types listed in the next column, specify a DOI wherever available.</p> <p>The maximum length of the field is 1024 characters. The expected format is 10.<4 or 5 digits>/<suffix>, for example 10.12345/abcde.987.</p> <p>The maximum length of the field is 1024 characters.</p> <p>If you wish to use the DOI to fill in the remainder of the output automatically, click Fill form using DOI and proceed as in Retrieving details for a single output.</p>	<p>Optional for the following output types:</p> <ul style="list-style-type: none"> • A - Authored book • B - Edited book • C - Chapter in book • D - Journal article • E - Conference contribution • N - Research report for external body • O - Confidential report for external body • R - Scholarly edition • S - Research datasets and 	<p>Refer also to Supplementary information for journal article or conference contribution, Output format and Retrieving details for a single output.</p>

Field	Description	Appropriate to the following output types:	Notes
		databases <ul style="list-style-type: none"> • T - Other • V - Translation Not relevant to the remainder of the output types.	
Output identifier	Enter a string of up to 24 characters to identify the output within the submission.	Mandatory for all output types.	
Place	The place of publication. The maximum length is 256 characters.	Mandatory for output types I, L, M and P. Not relevant to the remainder of the types.	The actual name of the field will vary according to the output type. For types L and P, it will be Location ; and for types I and M, it will be Venue(s) .
Publisher	The name of the publisher. The maximum length is 256 characters.	Mandatory for output types A, B, C, G, N, O, T and U. Optional for types P, Q, R and V. Not relevant to the remainder of the types.	The actual name of the field will vary according to the output type - for types A, B, C, Q, R and V, it will be Publisher ; for type G, it will be Name of software house ; for types N and O, it will be Commissioning body ; for type P, it will be Manufacturer ; for type T, it will be Brief description ; and for type U, it will be Platform .

Field	Description	Appropriate to the following output types:	Notes
Volume title	The title of the output volume, if appropriate. The maximum length is 256 characters.	Mandatory for the following output types: <ul style="list-style-type: none"> • C - Chapter in book • D - Journal article • E - Conference contribution • R - Scholarly edition This field is not relevant to the remainder of the output types.	The actual name of the field will vary according to the output type. For type C, it will be Book title ; for type D, it will be Title of journal ; for type E, it will be Title of conference/published proceedings ; and, for type R, it will be Title of edition .
Output title	If the output has no name or title, then a description is required (maximum length 7,500 characters).	Mandatory for all output types.	The actual name of the field will vary according to the output type. For example: for type C, it will be Chapter title ; for type D, it will be Article title ; and, for type G, it will be Name of software .

Field	Description	Appropriate to the following output types:	Notes
Article number	If appropriate, the number of the article. The maximum length is 32 characters.	Only applies to output type D, for which it is mandatory if the First page (below) is not supplied.	
First page	If appropriate, the number of the page within the publication on which the article/contribution starts (up to 8 characters).	Only applies to output types D and E. It is mandatory for type E, and also for type D if the Article number (above) is not supplied.	
Volume	The volume number of the publication in which the output can be found, if appropriate. For example, the April 2017 publication of a monthly magazine first published in 2009 would be entered as, "volume 10, issue 4". The maximum length is 16 characters.	Only applies to output types D and E. It is mandatory for type D, and optional for type E.	
Issue	If appropriate, the issue number of the publication in which the output can be found. The maximum length is 16 characters.	Only applies to output types D and E, for both of which it is optional.	

Field	Description	Appropriate to the following output types:	Notes
ISBN	The 13-digit ISBN (International Standard Book Number).	Mandatory for the following output types: <ul style="list-style-type: none"> • A - Authored book • B - Edited book • C - Chapter in book Optional for type R - Scholarly edition. This field is not relevant to the remainder of the output types.	
ISSN	The 8-digit ISSN (International Standard Serial Number).	Only applies to output types D and E. It is mandatory for type D, optional for type E.	

Field	Description	Appropriate to the following output types:	Notes
<p>Open access status</p>	<p>Indicates the status of the output with regard to the Open access policy, as set out in paragraphs 223 to 255 of the Guidance on submissions (2019/01).</p> <p>If it is not <i>in scope</i>, simply select Out of Scope for open access requirements.</p> <p>If it is <i>in-scope</i> and fully compliant with the policy, select Compliant.</p> <p>If the output is <i>in scope</i> and one of the exceptions applies that are listed in paragraphs 252 to 255 of the Guidance on submissions (2019/01), then enter the relevant one from the following:</p> <ul style="list-style-type: none"> • Deposit exception • Access exception • Technical exception • Exception within 3 months of publication (That is to say, deposited within 3 months of its earliest publication date, but not deposited within 3 months of its acceptance date. This exception does not apply retrospectively to outputs that were deposited within 3 months of their publication date, where this date was between 1 April 2016 to 1 April 2018, but which were otherwise compliant.) • Other exception (Owing to circumstances beyond the control of the HEI, for example staff circumstances or software problems.) <p>If the output is <i>in scope</i> but is not compliant with the Open access policy, as set out in paragraphs 223 to 255 of the Guidance on submissions (2019/01), and has no valid exceptions, then select Not compliant.</p>	<p>Mandatory for output types D and E, but only if the output has an ISSN (see the previous field).</p> <p>This field is not relevant to the remainder of the output types.</p>	<p>An output is <i>in scope</i> if: a) it is a journal article (output type D) or a conference contribution (output type E) with an ISSN; and b) the date of acceptance of the output for publication is after 1 April 2016. It does not, however, apply to output types such as monographs and other long-form publications, non-text outputs, working papers or outputs submitted to pre-print systems that are not the version 'as accepted for publication', the data that underpins some research, or confidential reports that are not published because of commercial or other sensitivity.</p> <p>A Submitting unit may submit either a maximum of five per cent Not compliant in scope outputs (rounded up or down to the nearest whole output number), or one Not compliant in scope output, whichever is the higher, per submission.</p> <p>If an HEI wishes to proceed with a</p>

Field	Description	Appropriate to the following output types:	Notes
			<p>submission that exceeds the tolerated number of Not compliant <i>in scope</i> outputs, it will be invited to identify which outputs should be removed as ineligible.</p> <p>Refer to paragraph 231 of the Guidance on submissions (2019/01).</p> <p>The open access field is available for other output types where it may apply as an optional field.</p>
Patent number	<p>For a granted patent, the patent number. For a published patent application, the publication number of the application.</p> <p>The maximum length is 24 characters.</p>	Only applies to output type F, for which it is mandatory.	
Year of publication	The full 4-digit year in which the output first entered the public domain. One of <i>2014, 2015, 2016, 2017, 2018, 2019, 2020</i> .	Mandatory for all output types.	
Month of publication	If the output is linked to a former member of staff (refer to paragraph 264b of the Guidance on submissions (2019/01)), specify the month of the output, by entering characters in one of the following ranges: <i>1–12, January–December</i> or <i>Jan–Dec</i> .	Mandatory for all output types linked to former members of staff.	

Field	Description	Appropriate to the following output types:	Notes
URL	<p>The URL of the output, if published online. The maximum length is 1024 characters.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">  <p>You should ensure that this is a valid URL returning a 2xx status code (refer to List of HTTP status codes). As an example, you can check the response status codes in the Chrome browser by right-clicking the URL, selecting Inspect to open the developer tools, and then selecting the Network tab.</p> </div>	Mandatory for output type H (Website content), optional for all other types.	
Output format	<p>The default Electronic setting applies to uploads via a URL (refer to URL), DOI (refer to Digital Object Identifier (DOI)) or PDF.</p> <p>Only select the Physical setting if the output type is one of the following: A, B, C, E, F, I, J, K, L, M, N, P, Q, R, T, or V; and either physical material needs to be sent to the REF team, or digital/electronic material needs to be submitted on a media storage device (for example a USB or CD). For specifics, refer to the Physical output (deposit to REF warehouse) column of the table in Annex K of the Guidance on submissions (2019/01).</p>	<p>Applies to all outputs other than those of the following types, for which Electronic is automatically assumed owing to the nature of the output:</p> <ul style="list-style-type: none"> • D (Journal article). • H (Website content), for which a URL is mandatory (refer to URL). 	<p>An individual output cannot be submitted both electronically via the REF submission system and as a physical output. In the case of multiple items that represent one single output, all the items must be provided in either Electronic or Physical format; never as a mixture of the two.</p>

Field	Description	Appropriate to the following output types:	Notes
Media of output	Media of output should be used to describe the version of the electronic output being returned where it has not been possible to submit the final version in electronic form. For example, proof, author accepted manuscript, or other equivalent version of the output.	Optional for all electronic format outputs.	
Number of additional authors	For a co-authored output, enter the number of additional authors (refer to paragraphs 268 to 272 of the Guidance on submissions (2019/01)).	Optional for all output types.	There is a panel-specific approach to determining how co-authored outputs may be submitted, and details can be found in paragraphs 216 to 236 of the Panel criteria and working methods (2019/02) .

Field	Description	Appropriate to the following output types:	Notes
<p>Additional information includes details on</p>	<p>This field allows you to specify any clarifying information where requested by the associated sub-panels. Proceed as follows:</p> <ul style="list-style-type: none"> • Tick Significant material published prior to 01/01/2014 if the output includes significant material in common with an output submitted to REF 2014, in accordance with paragraph 259 of the Guidance on submissions (2019/01). Then specify, in the Additional information box below, the amount that the earlier work was revised to incorporate new material (maximum 100 words). <p>And/or</p> <ul style="list-style-type: none"> • Tick Research process and/or content if the research process and/or content is not evident within the output itself. Then specify, in the Additional information box below, the appropriate information for the particular sub-panel, as specified in Additional information for outputs, paragraph 252 onwards, of the Panel criteria and working methods (2019/02) (maximum 300 words). <p>And/or</p> <ul style="list-style-type: none"> • Tick Factual information about significance of output if the output relates to UOA 11 or 12, and factual information about the significance of the output is not evident within the output itself. Then specify, in the Additional information box below, additional factual evidence, in accordance with paragraphs 256 and 257 of the Panel criteria and working methods (2019/02) (maximum 100 words). <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p> The maximum number of words allowed in the Additional information text box is determined by the selections above it. If all boxes are ticked, the maximum number of words allowed is 500 (100+300+100).</p> </div>	<p>Where requested by the associated sub-panels (please refer to paragraphs 248 to 272, and to Annex B, of the Panel criteria and working methods (2019/02)).</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>Refer also to paragraph 284 of the Guidance on submissions (2019/01).</p> </div>	<p>Additional information should only be submitted if specifically requested in the Panel criteria and working methods (2019/02) - otherwise, it will be disregarded.</p> <p>The information provided should not comprise a synopsis of the output, a volunteered opinion as to the quality of the output, or citation data. Information of this nature will be disregarded.</p>

Field	Description	Appropriate to the following output types:	Notes
Sub-profile	<p>If the output relates to UOA 3 (Allied Health Professions, Dentistry, Nursing and Pharmacy) or UOA 12 (Engineering), this field allows you to assign the output to a distinct Sub-profile, in accordance with in paragraphs 181 and 183 of the Panel criteria and working methods (2019/02). Select the required sub-profile from the drop-down, or, if none are relevant to the current output, leave the blank row selected.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  The sub-panels will judge the research content of the material submitted regardless of whether a Sub-profile is selected. </div>	<p>Optional for all outputs associated with UOAs 3 and 12.</p> <p>This field is not relevant to the other sub-panels.</p>	<p>An output sub-profile is not expected to be provided where there are few staff associated with the output (typically less than five FTE).</p>
Output allocation	<p>From the taxonomy provided, specify the keyword(s) most appropriate to the current output. Refer to the guidance on the REF website.</p> <p>The information will be used purely to assist in allocating outputs to readers, and not for any other purpose.</p>	<p>Mandatory for all outputs associated with UOAs 7, 10, 11, 12, 26, 27, 28, 29, 33 and 34.</p> <p>This field is not relevant to the other sub-panels.</p>	<p>The information will be used purely to assist in allocating outputs to readers, and not for any other purpose.</p>
Request cross-referral	<p>If required, select another UOA to which the output should be cross-referred for advice (refer to What is REF 2021?).</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  For further information on cross-referral, please refer to paragraphs 399 to 404 of the Panel criteria and working methods (2019/02). </div>	<p>Optional for all output types.</p>	

Field	Description	Appropriate to the following output types:	Notes
<p>Output has been delayed by COVID-19</p>	<p>Tick this box if the output has been delayed by due to the effects of COVID-19.</p>	<p>Optional for all output types.</p>	<p>If the output has been delayed by COVID-19 the year of publication should be 2021 or left blank. Refer to the Guidance on Revisions paras 28-40.</p> <p>If the output has been delayed by COVID-19 it may be the case that some data items relating to the output are not yet available. To account for this submit errors have been downgraded to warnings for data relating to the output except for Output title and Open access status. Institutions should return data in all fields where available.</p>

Field	Description	Appropriate to the following output types:	Notes
COVID-19 affected output statement	Where a delayed output is submitted that is not yet in the public domain in its final form, and optional statement (100 words max) may be provided to explain the form of the submitted output to the panels. A statement should only be provided in this circumstance; panels do not expect a statement to be provided for all delayed outputs.	Optional for all output types.	The statement is optional. Refer to the Guidance on Revisions paras 53-62.
Forensic science	<p>Tick this box if the output embodies research in forensic science.</p> <div style="border: 1px solid black; padding: 5px;">  For information on forensic science and the associated outputs, please refer to paragraphs 275 and 276 of the Guidance on submissions (2019/01). </div>	Optional for all output types.	<p>The output should be returned to the most appropriate UOA for assessment, according to the descriptors given in Part 2 of the Panel criteria and working methods (2019/02).</p> <div style="border: 1px solid black; padding: 5px;">  It may be necessary to Request cross-referral or set the Interdisciplinary flag. </div>
Criminology	<p>Tick this box if the output embodies research in criminology.</p> <div style="border: 1px solid black; padding: 5px;">  For information on criminology and the associated outputs, please refer to paragraphs 277 and 278 of the Guidance on submissions (2019/01). </div>	Optional for all output types.	

Field	Description	Appropriate to the following output types:	Notes
Interdisciplinary	<p>Tick this box if the output embodies interdisciplinary research, as defined in paragraph 273 of the Guidance on submissions (2019/01). Such research is understood to achieve outcomes (including new approaches) that could not be achieved within the framework of a single discipline. Interdisciplinary research features significant interaction between two or more disciplines and/or moves beyond established disciplinary foundations in applying or integrating research approaches from other disciplines.</p>	Optional for all output types.	<p>This process is distinct from a request by an HEI for cross-referral to another specific sub-panel (refer to Request cross-referral). For more information on interdisciplinary research, please refer to paragraphs 273 and 274 of the Guidance on submissions (2019/01).</p> <p>Sub-panels will consider the most appropriate means of assessing the output, with advice from the interdisciplinary advisers.</p>
Conflicted panel members	<p>You can use this box to identify sub-panel members who should not view the output for reasons of conflicts of interest (up to 512 characters).</p> <div style="border: 1px solid #ccc; border-radius: 10px; padding: 10px; margin-top: 10px;">  For more information, please refer to Annex D of the Panel criteria and working methods (2019/02). </div>	Optional for output type O (Confidential report for external body). This field is not relevant to the remainder of the output types.	

Field	Description	Appropriate to the following output types:	Notes
Exclude this output from publication	<p>Tick this box to exclude the output from publication, for example for reasons of confidentiality or security.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  All outputs of type O automatically have this flag set. </div>	Optional for all output types.	
Exclude this output from submission	<p>Tick this box to exclude the output from the current submission for the time being. Excluded outputs are moved to the Excluded outputs tab.</p>	Optional for all output types.	<div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  There can be no output records with this flag set at the time of final submission. </div>

5. Having completed the required fields, click **Save** to validate and save the output. You are informed of any incorrect or missing information (refer to **Validation errors**).



You will need to rectify any **Save errors** immediately (refer to **Validation errors**). However, the **Submit errors** can be rectified later on, provided that the corrections occur prior to final validation of the **Submission set**.

6. You are taken to the summary page (refer to **Output summary and completion**), from where you can take any further actions that are appropriate to the particular output, for example:

- **Staff member/Research Groups**
- **Double-weighting** and **Double-weighting reserve output**
- **Pending publication** and **Output summary and completion**
- **Non-English**
- **Citations**



If the output is of type D or E and is associated with one of UOAs 1-9, 11 or 16, then, in order to return one or more possible citation matches, you are advised to make use of Crossref in conjunction with the **Digital Object Identifier (DOI)**. Either enter the DOI and then select **Fill form using DOI**, or enter **Title of journal/conference** (refer to **Volume title**), **Article/output title** (refer to **Output title**) and **ISSN**, and then click **Get DOI from details below**.

- **Supplementary information for journal article or conference contribution**

Output summary and completion

The *View output* page displays a summary of the output fields that have been successfully validated up until this point. If you do not wish to modify the output further at this stage, then click **REF2** in the left hand menu to go back to the list of outputs under the **Outputs tab**. Otherwise, you now have the opportunity to modify the output fields (after clicking **Edit** in the output's **Details** box), and/or to add other information to the output, including:

- **Upload PDF**

This box indicates whether or not a PDF has been uploaded. It does not apply where a valid DOI or URL has been supplied. If you have not supplied a URL, or the box indicates that an invalid DOI has been returned, then you should upload a PDF. You do this by clicking **Edit**, to go to the **Upload PDF** field, where you can browse to the file to be uploaded. The maximum PDF file size allowed is 100Mb.

The system verifies that the output has **Electronic** as the **Output format** (this is assumed for output type D), and that the output type is appropriate for the uploading of a PDF, in accordance with Annex K of the [Guidance on submissions \(2019/01\)](#).

Once you have uploaded the PDF, it cannot be modified (only viewed). However, you can upload a different PDF to overwrite the currently uploaded file. You can also delete the uploaded file (by clicking **Delete PDF**) - this does not remove any file from your local machine: it only removes the uploaded file from the REF server.

- **Staff member/Research Groups**

This box gives you access to the following actions:

- Attribute the output to a staff member.
- Attribute the output to a Research Group (RG).
- If the output is for submission in UOAs 1-6 or UOA 9 (Physics), and the output is co-authored or co-produced, enter an **Author contribution statement** (refer to 'Co-authored outputs', which starts at paragraph 216 of the [Panel criteria and working methods \(2019/02\)](#)).

To proceed, click **Edit** and then proceed from step 3 of [Attributing outputs](#).

- **Citations**

This box is only displayed if the output is of type D or E and is associated with one of UOAs 1-9, 11 or 16 (refer to [What is REF 2021?](#)). It shows the **Match result** status, as follows:

- If a citations match has not yet been attempted, then the **Match result** is **Match not yet attempted**.
- If a match has already been successfully attempted, then the **Match result** is **Matched**, and the **Citation count** is displayed beneath it.
- If, following a successful match, the output has been modified in terms of key data such as the **DOI**, **Title of journal/conference**, **Article/output title** and **ISSN** then the **Match result** is **Rematch required**.

To view the citations, or invoke a rematch, click the **Citations** button to invoke the external matching service (refer to [Retrieving a single citation count](#)).



Prior to submission, at least one attempt must have been made to match each and every journal article or conference contribution associated with UOAs 1-9, 11 and 16.



For further information on the citation data used by Main Panels A, B and C, please refer to paragraphs 288 to 292 of the [Guidance on submissions \(2019/01\)](#). For information on whether, and how, the different panels make use of the data, please refer to paragraphs 274 to 282 of the [Panel criteria and working methods \(2019/02\)](#).

- **Double-weighting**

Where a request for a double-weighted output is accepted, it will count as two outputs attributed to a single staff member (unless it is attributed to two staff members - refer to [Attribution to an additional member of staff](#), in which case the output is counted as the required 'minimum of one' for each staff member). If you wish to request that the sub-panel double-weights the current output, then change the response to field **Proposed double-weighting** to **Yes**, and enter a statement of up to 100 words to justify the request.



Double-weighting requests must be made in accordance with the minima and maxima requirements for attributing outputs to staff. Therefore, HEIs must ensure that, if such a request is accepted, or if it is not and the reserve output is assessed instead, then the **'Minimum of one' requirement** continues to be met for each **Category A submitted staff member** (unless individual circumstances apply, as specified in [REF6a/b: Output reductions owing to staff circumstances](#)). They must also ensure that no more than five outputs continue to be attributed to any single member of current or former staff.

Attribution to an additional member of staff

If you wish to attribute the output to an additional staff member, in accordance with paragraph 271 of the [Guidance on submissions \(2019/01\)](#), go down to **Additional attributed staff member**, click **Select staff member** and click **Select** next to the required current or former staff member in the resultant list, followed by **Save**.



It is then possible to **Change** or **Deattribute** this additional staff member as required.

If the double-weighting has been attributed to more than one staff member, and is rejected, then the rejected output will be attributed to the original staff member as a single output, and the attribution will be removed from the second staff member, whose count will therefore be reduced by one.

Double-weighting reserve output

You can optionally select an output that is to act as the reserve output should the request for 'double-weighting' be rejected.

Click **Select reserve** to display the eligible outputs (that is to say, unreserved outputs from the same UOA that are not already marked as either double-weighted or pending). There is a **Search** box that allows you to search for the unique HEI identifier for the eligible reserve output (the maximum length of this identifier is 24 characters). Once you have located the required reserve output, click **Select** against it, followed by **Save**. The selected reserve output then appears on the [Reserve outputs tab](#).



You can then select a different reserve if required, by clicking **Change reserve**, or remove it completely from the current output, by clicking **Remove reserve**.

A reserve output is not originally included in the count of outputs to be submitted, and it may be attributed to a staff member other than the staff member to whom the original output was attributed. Should the reserve output be used, then it will be included in the count of outputs to be submitted, against the staff member to whom it is currently attributed.



If no reserve is selected, and the request for 'double-weighting' is rejected, then the count of outputs to be submitted will be reduced by one, and this may affect the numbers of outputs attributed to staff members.



For further information on double-weighting reserve outputs, please refer to paragraphs 282 and 283 of the [Guidance on submissions \(2019/01\)](#).



HEIs must ensure, that, if a double-weighting request is accepted, or if it is not and the reserve output is assessed instead, the '**Minimum of one**' requirement continues to be met for each **Category A submitted** staff member (unless individual circumstances apply, as specified in [REF6a/b: Output reductions owing to staff circumstances](#)). They must also ensure that no more than five outputs continue to be attributed to any single member of current or former staff.

- **Pending publication**

The functionality that supported outputs that may not have been published before the original REF submission deadline is no longer required, as the revised submission deadline falls after the publication period (31 December 2020). Data relating to outputs that have been flagged as pending publication needs to be removed. Any outputs marked as being a reserve output for outputs pending publication will need to be removed or submitted as ordinary outputs before the submission deadline (31 March 2021). Refer to the [Guidance on revisions](#) paras 44-45).

The Submission system will raise a submit error if:

- The pending publication checkbox is checked for an output
- If an output has a pending publication reserve output recorded against it

- **Non-English**

If the output is not in the English language, click **Edit**, tick the **Non-English** box, and enter an English abstract of no more than 100 words. You should take care to specify the original language (s) used for the output and any other non-English languages that are extensively quoted. For further information, please refer to paragraphs 285 to 287 of the [Guidance on submissions \(2019/01\)](#).



The requirement to enter an abstract is waived for outputs submitted in UOA 26 (Modern Languages and Linguistics) if the output is produced in any of the languages within the remit of that UOA: that is to say, all Celtic, Slavonic, Germanic and Romance languages.

- **Supplementary information for journal article or conference contribution**

In accordance with paragraph 88a of the [Guidance on submissions \(2019/01\)](#), where supplementary information has been published for an output of type D or E, and its DOI differs from the DOI of the submitted output, then the submission must also include this DOI (or URL if no DOI is available). The maximum length is 1024 characters.

Attributing outputs

Prior to submission, outputs can be saved in the database without being attributed to any staff members. These are referred to as 'unattributed' outputs.

To create a link between an output and staff member, you can do either of the following:

- Start by selecting the output and then attribute the staff member to it (refer to [Attributing an output to a staff member](#));
- Start by selecting the staff member and then attribute the staff member to the output (refer to [Attributing a staff member to an output](#)).

Attributing an output to a staff member

1. To select an unattributed output and then attribute it to a staff member:
2. Select either the **Outputs** or the **Excluded outputs** tab, as required, on the **Research outputs (REF2)** page.
3. View the required output summary via the **View/edit output** button.
4. In the resultant **Output summary and completion** click **Edit** under **Staff member/Research Groups**. The **Attribute staff member** page opens.
5. Click **Select staff member** and then either set the **Staff filter** as required (**All staff**, **Current staff** or **Former staff**) or use the search box on the right of the page to find the required staff member. You can also page through the results from **First to Last**, or sort the results by either **Surname** or **Staff Identifier**, in ascending or descending order.
6. In the relevant staff member's box, click **Select**. The details of the selected staff member are displayed, including any other outputs that are currently attributed to the staff member, and the **Research Group(s)** to which he or she is assigned.
7. If the **Research Groups** shown are not appropriate for the output, select a different staff member. (The system will validate, on **Save**, that, if a **Research Group (RG)** is associated with an output, then this **RG** must also be associated with the staff member attributed to the output.)
8. If required, in the **Research Groups** field, select an **RG** for the output from the drop-down, bearing in mind the previous note.
9. If the output is for submission to **Main Panel A (UOAs 1-6)**, or **sub-panel 9 (Physics)**, you can enter an **Author contribution statement** under **Additional details**.
10. Click **Save** to go to the **Output summary and completion**.

Deattributing outputs

You can do either of the following:

- Start by selecting the output and then deattribute the staff member from it (refer to [Deattributing an output from a staff member](#));
- Start by selecting the staff member and then deattribute the staff member from the output (refer to [Deattributing a staff member from an output](#)).

Deattributing an output from a staff member

To deattribute an output from a staff member:

3. Select either the **Outputs** or the **Excluded outputs** tab, as required, on the **Research outputs (REF2)** page.
4. View the required output summary via the **View/edit output** button.

5. In the **Staff member/Research Group** box, click **Edit**. The *Attribute staff member* page opens.
6. Click **Deattribute staff member**.



When deattributing an output from a staff member, you will need to remember that the 'minimum of one' requirement for the particular staff member may be affected.

Deattributing a staff member from an output

User instructions related to this section will be available once the associated forms have been released in the submission system.

REF3: Introduction to impact case studies

The REF3 part of a submission requires the inclusion of a specific number of case studies giving specific examples of *impacts* that occurred during the **Assessment period**.



For the purposes of REF 2021, an *impact* is defined as an effect on, or change or benefit to, the economy, society, culture, public policy or services, health, the environment or quality of life - beyond academia. The case studies must be underpinned by excellent research carried out by the **Submitting unit** during the period 1 January 2000 to 31 December 2020.



If an impact case study requires security clearance, you should first obtain permission to submit the case study. Refer to **Impact case studies requiring security clearance**.

Each case study needs to be completed using a template, blank versions of which can be downloaded from the **Impact case studies (REF3) page** or Annex G of the **Guidance on submissions (2019/01)**. Indicative guidance is provided within the template about the permitted length of each section of the case study. However, HEIs can exceed the specified limits where necessary, provided that the length of the case study as a whole does not exceed five A4 pages, and that the remainder of the formatting specified in Annex F of the **Guidance on submissions (2019/01)** is adhered to.

The number of case studies required is determined by the number (FTE) of **Category A submitted** staff returned in the submission. The table in paragraph 309 of the **Guidance on submissions (2019/01)** outlines the required numbers of impact case studies according to the FTE of **Category A-submitted** staff within the submitting unit.



For further details on the submission of impact case studies, please refer to **Part 3 Section 3: Impact (REF3)** of the **Guidance on submissions (2019/01)**. Refer to Annex G of the same document for the **Impact case study template and guidance**. Refer also to paragraph 324 of the **Panel criteria and working methods (2019/02)** for guidance on **Preparing impact case studies**, and to paragraphs 300 to 302 of the same document for information on how the panels will assess impact case studies.

In the case of a joint submission (refer to **Creating a joint submission (Lead HEI)**), the REF3 form must be submitted by the **Lead** HEI on behalf of all the **Member** HEIs.



'Impact case studies' are often referred to as simply 'case studies' in the remainder of this document, and in other REF documentation.

Impact case studies (REF3) page

Proceed as follows to display the *Impact case studies (REF3)* page:

1. Click **Data entry** on the main menu. The created submissions to which you have access are listed.
2. Select the required submission. The list of REF forms to which you have access are displayed on the left of the screen.
3. Click **REF3**.

Any case studies that have already been created for the selected submission are listed against their identifiers in the **Impact case studies** table. The number of case studies required for the current submission is also displayed. Click **Edit** against a case study to modify the fields in accordance with **Adding a case study**, or **Delete** to remove the study.

Click **Download template** to download the template from which the remaining required case studies can be created.



Both templates have changed recently to .docx format from .doc. If you are using a .doc version, please re-save your template in Microsoft Word as the file type: "Word Document (.docx)".

The borderless template has been re-formatted, please ensure you are using the latest version which is available for download on the Impact case studies page.



The template is also provided in Annex G of the **Guidance on submissions (2019/01)**.

The Word version of the template should be saved for future use, and different copies should be generated from it (one for each required case study).

The tasks for creating a new case study are as follows:

1. Download the Word template if you have not already done so.
2. Make a copy of the template, and use it to prepare the case study in accordance with Annex G of the **Guidance on submissions (2019/01)**. Be sure to save the file.

The version of MS Word used can be any version from 2007 onwards. The copy created here will need to be uploaded as a Word file to allow the REF team to extract the data for inclusion in the impact case study database containing the published studies.



You will not need to upload the Word version if, due to its confidential nature, either: a) you create a redacted version at step 4, in which case that copy will be used instead; or b) you select **Not for publication**, in which case no Word copy will be required for upload. Refer to **Adding a case study**.

3. Generate a PDF from your Word document. This will become the version to be provided to the panels for assessment, and, if it is not redacted, the version to be published (unless you select **Not for publication**).



All case studies will be published as they are unless there are specific reasons for redaction or not publishing.

4. If you require a redacted version for publication, then make a further copy of your Word document and redact it.



This Word version will need to be uploaded in preference to the version created at step 2, to allow the REF team to extract the data for inclusion in the impact case study database (refer to **Adding a case study**).

5. Generate a PDF from the redacted Word document.



This will become the version to be published, together with the rest of the submission data (in preference to the PDF created at step 3).

6. Click **Add case study** and proceed in accordance with **Adding a case study**.

Adding a case study

1. Display the [Impact case studies \(REF3\) page](#).
2. Click **Add case study**, to display the *Manage case study* page.
3. Enter the case study details by completing the fields in the following table:

Case study details

Field	Description/notes
Identifier	A short label that allows you to identify the case study.
Title	Title of the case study.
Conflicted panel members	<p>(Optional) You can use this box to identify panel members who are not to view the content of the case study for commercial reasons.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  For details about conflicts of interest please refer to paragraphs 307 and 308 of the Guidance on submissions (2019/01). For details of how they are managed in the panels, please refer to Annex D of the Panel criteria and working methods (2019/02). </div>
Request cross-referral to	<p>If required, request that the case study is cross-referred to another sub-panel for advice (refer to What is REF 2021?).</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  For further information on cross-referral, please refer to paragraphs 399 to 404 of the Panel criteria and working methods (2019/02). </div>

4. Click **Save**.
5. In the **Template for assessment** box, click **Choose file**, browse to the PDF that you created at step 3 of the [The tasks for creating a new case study are as follows](#); and **Upload** it.
6. In the **Template for publication** box, select from the following:
 - **Not redacted** (the default): Leave **Template in PDF** blank, as the PDF uploaded for assessment in the previous step will also become the one to be published. However, in the **Template in Word (for case study database)** box, you need to browse to the Word file that was created at step 2 of the [The tasks for creating a new case study are as follows](#); and **Upload** it. (This will allow the REF team to extract the data for inclusion in the impact case study database.)
 - **Redacted**: Click **Upload template for publication** and browse to the redacted PDF file created at step 5 of the [The tasks for creating a new case study are as follows](#). Then proceed to the **Template in Word (for case study database)** box, browse to the redacted Word file that was created at step 4 of the [The tasks for creating a new case study are as follows](#); and **Upload** it.



The deadline for submitting the redacted version is 1 June 2021 (refer to [After the submission deadline](#)).

- **Not for publication**: This means that you do not need to upload anything further, and no version will be published following assessment.



Once a file has been uploaded, the file is renamed by the system and neither this name nor the file itself can be modified (you are permitted only to view it). However, you can upload a different file, which will have the effect of overwriting the currently uploaded file. You can remove any of the uploaded templates (including the redacted ones), by clicking **Delete**. This does not remove any files from your local machine; it only deletes the uploaded file from the REF server.

2. HEIs are required to provide to the REF team, by 1 June 2021, the corroborating evidence held for submitted impact case studies. (This will be held by the REF team and will not be routinely provided to the sub-panels.) The REF team request that all corroborating evidence be submitted in a single ZIP file. Therefore, in the **Corroborating evidence** box, click the **Upload** box and browse to the ZIP file containing the necessary evidence.
3. The **Corroborators** box towards the bottom of the screen displays a list of up to five people who can be contacted by the REF team to corroborate the claims made in the case study. To add details of corroborators, click **Add a corroborator** and proceed to **Enter the Contact details, including name, job title and email address in the dialog box**.
4. The **COVID-19 affected case study statement** should be completed if a case study has been significantly affected by COVID-19. You may **optionally** enter a statement (max. 100 words) to provide contextual information to panels to explain the disruption to impact activities and / or the collection of key corroborating evidence. (Refer to the **Guidance on revisions** paras 53-62.) Where publication of the statement is likely to cause harm to an individual or organisation, you may also choose to tick the **checkbox** to indicate that the statement is **not for publication**.
5. The **Additional contextual information** box at the bottom of the screen displays the information associated with the case study that will enable research funders to track and evaluate the impact of their funding. This information will not be provided to the panels and will not form part of the five-page limit for impact case studies. It will be included in the impact case study database. To add contextual information to your case study complete the optional fields described in the following table:

Contextual information

Field	Description	Notes
Grant number	The number of the research grant.	Click Add to enter details of further grants, or Delete to remove them.
Value of grant	The amount of the grant, in pounds sterling.	
Name of funders	The name of the organisation funding the research.	Click Add to enter names of further funders, or Delete to remove them.
Global research identifiers	The Global Research Identifier of the Funder , derived from: https://www.grid.ac/	Click Add to add further Ids, or Delete to remove them.
Funding programmes	The name of the funding programme.	

Field	Description	Notes
Formal partners	The names of any formal partners.	Click Add to enter further Formal partners , or Delete to remove them.
Countries	Specify the country(ies) in which the impact occurred. Where the impact occurred specifically within one country that is part of the UK (for example, Wales), this country rather than 'UK' should be specified.	Click Add to enter further Countries , or Delete to remove them.
Researcher ORCIDs	This has already been prefaced for you with https://orcid.org/ - complete the field by entering just the researcher's unique ORCID identifier.	Click Add to enter further ORCIDs , or Delete to remove them.

- Repeat step 4 as required to add any further contextual information. When there are no more to add, go to the next step.
- Click **Save** to update the case study. When you click REF3 in the left hand menu to go back to the [Impact case studies \(REF3\) page](#), you will see that the new case study will have been added as a row in the in the **Impact case studies** table.

Adding corroborators

In the REF3 template, you can provide up to 10 references to sources of different types, including reports, statements from people, reviews, and so on, that could, if requested by the sub-panels, provide corroboration of specific claims made in the case study.

Where some of the corroborating sources include individuals who can be contacted in order to corroborate the claims made about the impact, the details of up to five people can be entered into the REF3 form (outside the template), as follows:

- On the *Impact case studies (REF3)* page, select the row of the table for the relevant case study, to open the individual *Impact case study* page.
- Go to the **Corroborators**.
- To add a corroborator, click **Add corroborator** and go to the next step.
- Enter the **Contact details**, including name, job title and email address in the dialog box.
- Click **Save** to add the contact as a new entry in the **Corroborators** table.
- Proceed from step 3 as required, to add the details of further corroborators (up to five).
- Corroborators can be edited or deleted from the edit impact case study page.

Deleting a case study

To delete a case study, proceed as follows:

- Display the [Impact case studies \(REF3\) page](#).
- In the **Impact case studies** table, click the **Delete** button on the far right of the row associated

with the case study to be removed.

3. You are asked for confirmation. Click **Yes** to proceed with the deletion.



In order to be able to clear the data from the REF forms in a submission, a user needs to be associated with both the **Submission management** and **Delete data** user functions (refer to **Managing individual users**).

REF4a/b/c: Introduction to quantitative environment data

REF 2021 requires the gathering of quantitative data related to research doctoral degrees awarded, research income, and income-in-kind, for the **Assessment period**.

The REF sub-panels will create an environment sub-profile for each submission by assessing the information submitted via the following means, but taken as a whole:

- REF5a (the HEI-level statement).



This will not be separately scored, but will be used to inform and contextualise the assessment of REF5b.

- REF5b (the environment template).
- Form **REF4a: Research doctoral degrees awarded**.
- Form **REF4b: Research income**.
- Form **REF4c: Research income-in-kind**.

The quantitative data on both doctoral degrees awarded and research income will be considered in the context of the narrative provided in REF5b (the environment template), taking account of the size of the **Submitting unit**, its areas of specialism, Research Groups, research strategy, and different levels of research funding available.



It is not a requirement of the sub-panels that quantitative data provided by HEIs in REF4a/b/c is reported by Research Group.

Following the REF 2014 process, the data on research doctoral degrees awarded and research income will once more be aligned with HESA returns, and the data on research income-in-kind with information held by the Research Councils and the health research funding bodies (as listed in paragraph 347 of the **Guidance on submissions (2019/01)**). As described in **Part 3, Section 4** of the **Guidance on submissions (2019/01)**, the REF2021 submission system will limit the extent to which such data submitted by an HEI can exceed their prior returns to HESA.



If you wish to view the HESA (Higher Education Statistics Agency) environment data files for your HEI to help you complete forms **REF4a: Research doctoral degrees awarded** and **REF4b: Research income**, the system administrator can download them for you via **Administration > HESA data files**. There is also a downloadable **Guidance document** that outlines the processes used to extract the counts of research doctoral degrees awarded from the HESA student records, and the research income from the HESA finance records. Refer to **HESA data files**.

Normally, when entering data in the submission system, the data is validated as each form is saved, and any validation errors or warnings are displayed on the form. In the REF4 forms, however, validation does not happen when the forms are saved; instead, validation is performed when you create a validation report (refer to **Introduction to Validation reporting**), or when your data is validated once the **Submit** feature has been used (refer to **Introduction to the Submission process**). This is because some REF4 validation is performed on all the submissions as a whole for your HEI, rather than on a single submission.

REF4a: Research doctoral degrees awarded

Each submission must include the number of research doctoral degrees awarded to students supervised within the submitted unit, for each academic year between 2013–14 and 2019–20, inclusive (where an 'academic year' runs from 1 August to 31 July).



For help with completing form REF4a, please refer to paragraphs 339 to 345 of the [Guidance on submissions \(2019/01\)](#), and to [HESA data files](#).

Proceed as follows to display the *Research doctoral degrees awarded (REF4a)* page:

1. Click **Data entry** on the main menu. The created submissions to which you have access are listed.
2. Select the required submission. The list of REF forms to which you have access are displayed on the left of the screen.
3. Click **REF4a**.
The number of research doctoral degrees awarded is shown, broken down by academic year.
4. For each of the academic years, enter and/or update the number of research doctoral degrees awarded. Values of up to two decimal places can be entered.
5. Click either **Save** to keep your changes, or **Undo** to revert to the previous saved state.

REF4b: Research income

Each submission must include data on the HEI's external research income for each academic year from 2013–14 to 2019–20 (inclusive)¹.



For help with completing form REF4b, please refer to paragraphs 346 to 352 of the [Guidance on submissions \(2019/01\)](#), and to [HESA data files](#).

Proceed as follows to display the *Research income (REF4b)* page:

1. Click **Data entry** on the main menu. The created submissions to which you have access are listed.
2. Select the required submission. The list of REF forms to which you have access are displayed on the left of the screen.
3. Click **REF4b**.
Any existing income sources are listed in a table, with their contributions broken down by academic year.
4. For each of the academic years, enter and/or update the income amounts by clicking in the relevant cells and then entering the required numbers.



Values must be entered as whole numbers in pounds sterling.

5. Click either **Save** to keep your changes, or **Undo** to revert to the previous saved state.



In order to be able to clear the data from the REF forms in a submission, a user needs to be associated with both the **Submission management** and **Delete data** user functions (refer to [Managing individual users](#)).

¹ Definition of research income is in accordance with the HESA definitions of research income in the Finance Record, Table 5, broken down by source of income.

REF4c: Research income-in-kind

The estimated value of Research Council facility time allocated through peer review and used by researchers at submitted units, will be provided to HEIs for use in preparing submissions, and should be returned via form REF4c. For submissions in UOAs 1–6, the estimated value of equivalent income-in-kind from the health research funding bodies listed in paragraph 347 of the [Guidance on submissions \(2019/01\)](#) will also be provided.



For help with completing form REF4c, please refer to paragraphs 353 to 358 of the [Guidance on submissions \(2019/01\)](#).

Proceed as follows to display the *Research income-in-kind (REF4c)* page:

1. Click **Data entry** on the main menu. The created submissions to which you have access are listed.
2. Select the required submission. The list of REF forms to which you have access are displayed on the left of the screen.
3. Click **REF4c**.
Any existing income-in-kind sources (for example "UKRI Research Councils" and "UK health research funding bodies") are listed in a table, with their respective contributions broken down by academic year.
4. For each of the academic years, enter and/or update the income amounts.



Values must be entered as whole numbers in pounds sterling.

5. Click either **Save** to keep your changes, or **Undo** to revert to the previous saved state.



In order to be able to clear the data from the REF forms in a submission, a user needs to be associated with both the **Submission management** and **Delete data** user functions (refer to [Managing individual users](#)).

REF5a/b: Introduction to the research environment submission requirements

REF sub-panels will form an environment sub-profile by assessing the information submitted in REF5b (refer to [REF5b: UOA-level environment template](#)), while being informed by the data submitted in REF 4a/b/c (refer to [REF4a/b/c: Introduction to quantitative environment data](#)) and REF5a (refer to [REF5a: Institution-level environment statement](#)).

In respect of REF5a/b, REF 2021 requires the following environment information for the **Assessment period**:

- REF5a: information related to the HEI's strategy and resources to support research and enable impact. Other than the cases outlined in the note below, one overall statement is required for each submitting HEI. Refer to [REF5a: Institution-level environment statement](#).



Small and specialist HEIs that make a submission in one UOA only will not be required to provide a REF5a statement, but may choose to submit one where this is the most appropriate way of representing the HEI's research environment. For these HEIs, where a REF5a statement is not submitted, the pilot panel will review the submitted REF5b template. In this case, HEIs should ensure that sufficient information is provided in the REF5b template, bearing in mind the guidance set out in paragraphs 48 to 50 of the [Panel criteria and working methods \(2019/02\)](#). Additionally, where there is any distinction between the research and impact strategies, policies, facilities and resources between the HEI and the submitting UOA, this should be clearly identified in the REF5b template.

- REF5b: information related to the environment for research and enabling impact for each submitting UOA.

For both REF5a and REF5b, the required information needs to be completed using a template, blank versions of which can be downloaded from the relevant form ([REF5a: Institution-level environment statement](#) or [REF5b: UOA-level environment template](#)), or, alternatively, from the relevant Annex of the [Guidance on submissions \(2019/01\)](#) (Annex H for REF5a, or Annex I for REF5b).

Each completed template needs to adhere to the guidance on formatting outlined in Annex F of the [Guidance on submissions \(2019/01\)](#). The permitted upper word limit for each completed template is dependent on the number (FTE) of **Category A submitted** staff returned in the submission (refer to Table F1 in Annex F for REF5a, and to Table F2 for REF5b).

The tasks for creating a new statement/template are as follows:

1. Download the REF5a/REF5b template in Word format if you have not already done so.
2. Make a copy of the template, and use it to prepare the case study in accordance with Annex H or Annex I of the [Guidance on submissions \(2019/01\)](#).



The version of MS Word used can be any version from 2007 onwards.

3. Generate a PDF from your Word document. This will become the version to be uploaded for eventual submission.
4. If you require a redacted version for publication, then make a further copy of your Word document and redact it.
5. Create a PDF of this redacted version.

6. Proceed in accordance with either **REF5a: Institution-level environment statement** or **REF5b: UOA-level environment template**, as appropriate.

REF5a: Institution-level environment statement

This section describes how to provide a completed environment statement for the HEI as a whole.

Information about the approach to assessing REF5a, as well as guidance on completing the associated statement, is available in **Part 3, Section 5: Environment (REF5a/b)** of the **Guidance on submissions (2019/01)**, and in **Part 3, Section 5: Environment** of the **Panel criteria and working methods (2019/02)**.



This section assumes that you have **Write** access to **Institution-level forms** (refer to **Managing individual users**).

Proceed as follows to complete and upload the statement:

1. Click **Data entry** on the main menu.
2. Click **REF5a - Institution-level environment statement** to display the *Institutional-level environment (REF5a)* page.

3. Complete the fields in the following table:

HEI-level environment statement details

Field	Description/notes
Environment template	<p>If you do not already have a copy of the template from which the statement can be created, click Download template and save it. Then complete it (and the redacted version if required) by following the steps in REF5a/b: Introduction to the research environment submission requirements, and generate the required PDF (s).</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  The template is also provided in Annex H of the Guidance on submissions (2019/01). The PDF that you create from it can contain only text characters - that is to say, it should not consist of any scanned images of the pages of Annex H. </div>
Word limit	To ensure that the number of words specified does not exceed the limit for the Submitting unit , refer to Table F1 in Annex F of the Guidance on submissions (2019/01) .
Completed statement	<p>Click Upload PDF and browse to the PDF that you created of the statement. Following upload of the PDF, the page is refreshed and the initial uploaded PDF appears. Prior to submission, you can upload a different file, which will have the effect of overwriting the currently uploaded file. You can also remove the current statement, by clicking Delete PDF. This does not remove the file from your local machine; it only deletes the uploaded file from the REF server.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;">  Ensure that the required file to be circulated for assessment is on the REF5a form immediately prior to submission (refer to Introduction to the Submission process). </div>
Requires redaction?	<p>If you are happy for the PDF uploaded for submission in the previous field to be published following assessment, then simply allow Requires redaction to default to No.</p> <p>If a redacted version is required for publication, then set Requires redaction to Yes and move to the next field.</p>
Redacted statement	<p>Click Upload PDF and browse to the redacted statement that you created. Following upload of the PDF, the page is refreshed and the initial redacted PDF appears. Prior to 1 June 2021, which is the final deadline for redacted statements (refer to After the submission deadline), you can upload a different file, which will have the effect of overwriting the currently uploaded file. You can also remove the current statement, by clicking Delete PDF. This does not remove the file from your local machine; it only deletes the uploaded file from the REF server.</p>

Field	Description/notes
Covid-19 annex	<p>Institutions are invited to describe the particular changes affecting their environment as a result of COVID-19 and how the institution has responded in the fact part of the assessment period. (Refer to the Guidance on revisions paras 63-71.)</p> <p>You should provide your optional 500 word statement in the free text area.</p> <p>The COVID-19 annex, along with the wider publication of those parts of submissions that contain factual data and textual information about research activity, will be published at the end of the exercise. Where an institutional level environment statement (REF5a) is identified as requiring redaction a redacted version of the COVID-19 annex may also be provided, where necessary. A redacted version must be provided through the submission system by 1 June 2021.</p> <p>If you are making a submission in one UOA only, and are not providing a REF5a statement, and you wish to submit a redacted COVID-19 annex please contact usersupport@ref.ac.uk.</p>

REF5b: UOA-level environment template

This section describes how to provide a completed environment template for a submitting unit.

Information about the approach to assessing REF5b, as well as guidance on completing the associated template, is available in **Part 3, Section 5: Environment (REF5a/b)** of the [Guidance on submissions \(2019/01\)](#), and in **Part 3, Section 5: Environment** of the [Panel criteria and working methods \(2019/02\)](#).

Proceed as follows to complete and upload the template:

1. Click **Data entry** on the main menu. The created submissions to which you have access are listed.
2. Select the required submission. The list of REF forms to which you have access are displayed on the left of the screen.
3. Click **REF5b** to display the *Unit-level environment template (REF5b)* page.

4. Complete the fields in the following table:

UOA-level environment template details

Field	Description/notes
Environment template	<p>If you do not already have a copy of the blank template from which the environment template can be created, click Download template and save it. Then complete it (and the redacted version if required) by following the steps in REF5a/b: Introduction to the research environment submission requirements, and generate the required PDF(s).</p> <div style="border: 1px solid #ccc; padding: 5px; margin-bottom: 5px;">  Both templates were updated recently to .docx from .doc. If you are using a .doc template, please re-save the template using Word as the file type: "Word Document (.docx)" </div> <div style="border: 1px solid #ccc; padding: 5px;">  The template is also provided in Annex I of the Guidance on submissions (2019/01). The PDF that you create from it can contain only text characters - it should not consist of any scanned images of the pages of Annex I. </div>
Word limit	<p>To ensure that the number of words specified does not exceed the limit for the Submitting unit, refer to Table F2 in Annex F of the Guidance on submissions (2019/01). The system will display a Submit error message if the uploaded template exceeds the word count required based on the current FTE entered into the system. Where tables are included in the template these should be included in a format that means they contribute to the word count.</p>
Completed PDF template	<p>Click Choose File for 'Completed PDF template' and browse to the PDF that you created of the template.</p> <p>Following upload of the PDF, the page is refreshed and the initial uploaded PDF appears. Prior to submission, you can upload a different file, which will have the effect of overwriting the currently uploaded file. You can also remove the current statement, by clicking Delete PDF. This does not remove the file from your local machine; it only deletes the uploaded file from the REF server.</p> <div style="border: 1px solid #ccc; padding: 5px;">  Ensure that the required file to be circulated for assessment is on the REF5b form immediately prior to submission (refer to Introduction to the Submission process). </div>
Completed Word template	<p>As set out in the Guidance on Submissions a Word version of the template is also required for Submission. Click Choose file for 'Completed Word template' and browse to the Word version of the template that you have completed.</p>
Requires redaction?	<p>If you are happy for the PDF uploaded for submission in the previous field to be published following assessment, then simply allow Requires redaction to default to No.</p> <p>If a redacted version is required for publication, then set Requires redaction to Yes and move to the next field.</p>

Field	Description/notes
Redacted PDF template	<p>Click Choose file and browse to the redacted template that you created.</p> <p>Following upload of the PDF, the page is refreshed and the initial redacted PDF appears. Prior to 1 June 2021, which is the final deadline for redacted templates (refer to After the submission deadline), you can upload a different file, which will have the effect of overwriting the currently uploaded file. You can also remove the current template, by clicking Delete PDF. This does not remove the file from your local machine; it only deletes the uploaded file from the REF server.</p>

REF6a/b: Output reductions owing to staff circumstances

The funding bodies, advised by the Equality and Diversity Panel (EDAP), recognise that there are specific circumstances which, taken either in isolation or collectively, may significantly constrain the ability of submitted staff to produce outputs or to work productively throughout the period 1 January 2014 to 31 July 2020. In such circumstances, it is possible for HEIs to apply reductions in the required number of outputs.

The full policy on **Staff circumstances** is outlined in paragraphs 151 to 201 of the [Guidance on submissions \(2019/01\)](#). The specific equality-related circumstances under which reductions can be made are outlined in paragraph 160, and Annex L, of the same document.

The removal the 'minimum of one' requirement for individual staff members in a submitting unit, and reductions to the output requirement for a submitting unit overall, are made via forms REF6a and REF6b respectively.



HEIs were invited to submit requests for output reductions in advance in March 2020, following which the REF6 forms were locked. The results of these advance requests have now been returned to the HEIs and the REF6 forms are now open again. HEIs can apply any recommendations following the advance process and are able to apply new reductions which will be reviewed after the Submission deadline (31 March, 2021).



It is the responsibility of the HEI to ensure that the personal data for output reductions is submitted in compliance with current data protection legislation – **General Data Protection Regulation (EU) 2016/679** and the **Data Protection Act 2018** – and all other legal obligations, for example the **Gender Recognition Act 2004**.

Form REF6a

All **Category A submitted** staff must, by default, be returned with a minimum of one output attributed to them in the submission with which they are associated. However, where an individual's circumstances have had an *exceptional* effect on their ability to work productively throughout the period 1 January 2014 to 31 July 2020, such that the individual has not been able to produce an eligible output, the 'minimum of one' requirement can be removed. The applied reduction will be submit to review by EDAP. This is done via form REF6a (refer to [Applied REF6a: Removal of the 'minimum of one' reduction](#)). Where the reduction is accepted, an individual can be returned with no outputs attributed to them in the submission, and the total outputs required by the unit will be reduced by one.



For more information on REF6a, please refer to paragraphs 178 to 183 of the [Guidance on submissions \(2019/01\)](#).

Form REF6b

Where there are a high proportion of staff in a submitting unit whose circumstances have affected productivity during the assessment period, so that the size of the total output pool has been disproportionately affected, a unit reduction may be applied. Unit reductions are subject to review by EDAP. A unit reduction reduces the number of outputs required for submission without penalty in the

assessment. This is done via form **Applied REF6b: Unit reductions**. Such reductions should be made at UOA level, and can also, if appropriate, include reductions arising from the removal of the 'minimum of one' requirement is also being made via form REF6a.



For more information on REF6b, please refer to paragraphs 184 to 191 of the **Guidance on submissions (2019/01)**.

HEIs must ensure that the proposed reductions submitted via form REF6b would not result in a smaller total output requirement than the number of **Category A submitted** staff in the unit for whom a 'minimum of one' output is required.

Notes for both REF6a and REF6b

The combined total across forms REF6a and REF6b will set out the submitting unit's reduction in outputs (refer to **REF6 Applying reviewed reductions**).

To access forms REF6a and REF6b, display the **Unit reductions (REF6a/b) page**.

Unit reductions (REF6a/b) page

Proceed as follows to display the *Unit reductions (REF6a/b)* page:

1. Click **Data entry** on the main menu. The created submissions to which you have access are listed.
2. Select the required submission. The list of REF forms to which you have access are displayed on the left of the screen.
3. Click **REF6a/b**.

Any reductions that have already been created or applied for the selected submission are listed under the two different tabs (**REF6a** and **REF6b**).
4. Select from the following:
 - If you wish to make a new reduction to remove the 'minimum of one' output requirement from a member of staff, click the **Add reduction** button under **Remove the 'minimum of one'** under the REF6a tab and then proceed as in **Applied REF6a: Removal of the 'minimum of one' reduction**.
 - If you wish to enter a reduction for output reductions for a member of staff on behalf of the submitting unit, click **Add staff member** under the REF6b tab and then proceed as in **Applied REF6b: Unit reductions**.
 - If you wish to create or modify the rationale for the overall unit reductions, click **Edit rationale for unit reductions** under the REF6b tab and, in the dialog, enter the required justification text (in accordance with paragraph 193c of the **Guidance on submissions (2019/01)**, Annex B of the **Invitation to submit staff circumstances reduction requests** and the webinar on **staff circumstances and output reduction requests** (October 2019)). This statement is for submission to the REF Equality and Diversity Panel (EDAP), and should provide the rationale for requesting the overall unit-based reductions, based on the HEI's code of practice and the REF guidance (maximum 300 words). Remember to click **Save** to keep your edits.
 - If you wish to view the summary of the reductions click the **Reduction summary** tab and refer to **REF6 Applying reviewed reductions**.

Applied REF6a: Removal of the 'minimum of one' reduction

To apply a new removal of the 'minimum of one' output requirement for a current member of staff, proceed as follows:

1. On the Staff circumstances (REF6a/b) page, click the Add reduction button under the REF6a tab. The page Remove the minimum of one (REF6a) is displayed.
2. Enter the HESA/staff identifier.
3. Select one or more of the following equality-related Circumstance types, which are described in paragraphs 160a-e of the Guidance on submissions (2019/01):
 - a. Early career researcher (as defined in paragraphs 148-149 of the Guidance on submissions (2019/01)).
 - b. Secondment/Career break (outside the HE sector);
 - c. Family-related leave;
 - d. Junior clinical academic (as defined in paragraphs 162-163 of the Guidance on submissions (2019/01)). This field is only displayed if the submission is in Main Panel A (that is to say, if the UOA is in the range 1–6).
 - e. Requiring judgement (to be selected for circumstances that require a judgement about the appropriate reduction in outputs, as defined in paragraph 160e of the Guidance on submissions (2019/01)). (For Disability, refer to Table 1: Summary of equality legislation in paragraph 32 of the Guidance on codes of practice.)
4. Enter the Supporting information for your selection(s) (maximum 200 words), in accordance with paragraph 192c of the Guidance on submissions (2019/01) and Annex B of the Invitation to submit staff circumstances reduction requests.
5. Click Save to return to the Staff circumstances (REF6a/b) page, where the new reduction is now displayed under the REF6a tab.

Applied REF6b: Unit reductions

Where staff have been affected by circumstances that may have constrained their ability to work productively throughout the period 1 January 2014 to 31 July 2020, in accordance with paragraphs 160a-e and Annex L of the [Guidance on submissions \(2019/01\)](#), this screen allows you to add a staff member to the unit reductions, the overall total for which is displayed in the [REF6 Applying reviewed reductions](#).



In addition to the REF6b records the unit rationale statement needs to be entered, click **Edit rationale for unit reductions** under the REF6b tab, in order to enter the required justification text (in accordance with paragraph 193c of the [Guidance on submissions \(2019/01\)](#) and Annex B of the [Invitation to submit staff circumstances reduction requests](#)). Remember to click **Save** to keep your edits.

To add a staff member to the unit reductions, proceed as follows:

1. On the **Unit reductions (REF6a/b)** page, click the following button under the REF6b tab: **Add staff member**. The *Output reduction* page is displayed.
2. Enter the HESA/staff identifier.
3. To add a **Circumstance type**, click **Add**.
4. Select, from the drop-down, one of the equality-related **Circumstance types**. These are described in paragraphs 160a-e of the **Guidance on submissions (2019/01)** and are as follows:
 - a. **Early career researcher** (as defined in paragraphs 148-149 of the **Guidance on submissions (2019/01)**).
 - b. **Secondment/Career break** (outside the HE sector);
 - c. **Family-related leave**;
 - d. **Junior clinical academic** (as defined in paragraphs 162-163 of the **Guidance on submissions (2019/01)**). This field is only displayed if the submission is in Main Panel A (that is to say, if the UOA is in the range 1–6).
 - e. **Requiring judgement** (to be selected for circumstances that require a judgement about the appropriate reduction in outputs, as defined in paragraph 160e of the **Guidance on submissions (2019/01)**). (For **Disability**, refer to **Table 1: Summary of equality legislation** in paragraph 32 of the **Guidance on codes of practice**.)
5. If you selected one of 4a-c above, a **Band** field is displayed, allowing you to select, from the drop-down, a tariff band corresponding to the cited circumstances.



Where appropriate, the **Bands** map to the rows of **Table L1 (Early career researchers: Permitted reduction in outputs)** or **Table L2 (Secondments or career breaks: Permitted reduction in outputs)** in Annex L of the **Guidance on submissions (2019/01)**. There are no **Bands** associated with **Junior clinical academic**, for which a reduction request of 1.0 is generated automatically.

If you selected **Requiring judgement** instead of one of 4a-d, you are prompted to enter a supporting statement, in accordance with paragraph 193b of the **Guidance on submissions (2019/01)**, followed by the reduction in outputs (up to 1.5) in a separate box. The statement is for submission to the REF Equality and Diversity Panel (EDAP). It should provide a brief outline (maximum 200 words) of the circumstances that occurred, and describe how the circumstances affected the staff member's ability to research productively, and how the HEI arrived at the proposed reduction.

6. If you selected one of 4a-c, you can add a further set of circumstances where appropriate, by clicking **Add** and repeating steps 4-5. The reduction in outputs is updated automatically following each addition, but is always capped at 1.5.



For combining circumstances, refer to paragraphs 10 to 13 of Annex L of the **Guidance on submissions (2019/01)**, and Annex B of the **Invitation to submit staff circumstances reduction requests**.



If a staff member has any other defined circumstances in combination with **Requiring judgement**, then only **Requiring judgement** should be recorded as the **Circumstance**

type, and all the circumstances should be covered in the supporting statement, together with details of how the HEI determined an appropriate reduction, referring as required to the tables in Annex L of the [Guidance on submissions \(2019/01\)](#).

7. When there are no more reductions to add, click **Save** to return to the **Unit reductions (REF6a/b) page**, where the new reduction is now displayed under the **REF6b** tab.

REF6 Applying reviewed reductions

The review process for advance reduction requests has now been completed, HEIs have received reduction recommendations from EDAP and the REF6 forms are now open again for any HEIs wishing to apply reductions to their submissions.

In applying the reductions that have received advance recommendation for approval from EDAP at the submission deadline, institutions must ensure that these reductions still accurately reflect the circumstances pertaining to submitted staff. Where there are changes to the staff included in requests or the nature of their circumstances since the request was made, institutions must update the information in the REF6a/b forms before applying reductions, including information provided in the unit rationale statement.

New reductions

New reductions can be applied to a unit (both REF6a and REF6b), the REF6b unit rationale should be updated to reflect the total reduction pool for the unit. New reductions will be subject to EDAP review after the point of submission.

Recommended reductions no longer required

It may be the case that recommended reductions are no longer required, in which case you should choose to not apply these reductions to the submission.

Reviewed REF6a tab

The reviewed REF6a tab shows a list of REF6a requests (removing the minimum of one requirement) that were reviewed by EDAP following advance submission in March 2020. The table shows each reduction requested, the outcome of the review (recommended / not recommended) and a choice to **'Apply / Do not apply'**.

If you wish to apply a reduction to the unit you need to click the **'Apply'** link. The reduction will be displayed in the table of "Reductions to be applied" and will also show on the Applied REF6a tab.

If you do not wish to apply a reduction to the unit you need to click the **'Do not apply'** link. This will move the reduction to the "Not applied reductions" table and the reduction will not be included in the overall reductions count for the unit. Each of the reviewed reductions should be moved to the appropriate place before the submission deadline.

Irrespective of the recommendation made, an institution may apply any reviewed REF6a reduction. Where applying a reduction that was 'not recommended', HEIs should note that the case will be reviewed by EDAP again following submission. In these instances, HEIs are advised to edit previous information submitted.

Where applying a reviewed REF6a reduction, this can be edited (where required) from either the Applied REF6a or the Reviewed REF6a tab. You will be presented with a complete read-only version of the original request submitted to EDAP in March 2020 and an editable REF6a form which will be pre-populated with the same data. You can edit the data in the form and save the changes.

Reviewed REF6b tab

The REF6b unit reduction is comprised of two parts: the unit rationale statement and the individual staff circumstance reductions. Both parts were reviewed by EDAP and as such the unit rationale statement and each individual staff circumstance reduction will have received a recommendation from EDAP.

Rationale statement

The reviewed REF6b tab shows the unit rationale statement that was submitted in March 2020, the recorded outcome and a choice to **'Apply / Do not apply'**. To apply a unit reduction in March 2021, you will need to **'apply'** the unit rationale statement. You should edit the statement if it does not accurately reflect the unit reductions you are submitting.

If you wish to apply a unit reduction that was 'not recommended' (for example, where additional staff have subsequently declared circumstances, or where the overall impact is greater than was originally described), the rationale statement should be edited before the submission deadline. In this instance, the overall unit reduction (rationale statement and any new or amended staff circumstances) applied at the point of submission will be subject to EDAP review.

REF6b staff circumstances

The reviewed REF6b reductions table shows a list individual REF6b staff member requests that were reviewed by EDAP following advance submission in March 2020. The table shows each staff reduction, the reduction type (defined or requires judgement), the original reduction requested, the EDAP recommended reduction and a choice to **'Apply / Do not apply'**.

If you wish to apply a reduction to the unit you need to click the **'Apply'** link. The reduction will be displayed in the table of "Reductions to be applied" and will also show on the Applied REF6b tab.

If you do not wish to apply a reduction to the unit you need to click the **'Do not apply'** link. This will move the reduction to the "Not applied reductions" table and the reduction will not be included in the overall reductions count for the unit. Each of the reviewed individual staff reductions should be moved to the appropriate place before the submission deadline.

Reviewed and applied REF6b reductions can be edited, and this can be done from either the Applied REF6b tab or the Reviewed REF6b tab. You will be presented with a complete read-only version of the original request submitted to EDAP in March 2020 and an editable form which will be pre-populated with the same data. You can edit the data in the form and save the changes.

Irrespective of the recommendation made, an institution may apply any reviewed REF6b reduction. Where a REF6b reduction is edited and applied with a greater reduction than recommended (for example, where additional circumstances are recorded), it will be subject to EDAP review after the point of submission. Where applying a reduction that was 'not recommended', HEIs should note that the case will be reviewed by EDAP again following submission. In this instance, HEIs are advised to edit previous information submitted.

Please note that for the REF6b unit reduction to be submitted in March 2021 you will need an applied Unit rationale statement along with your individual REF6b staff reductions.

Reduction Summary

This page shows the total numbers of output reductions for both REF6a and REF6b, for the unit. The table displays the recommended reductions to be applied and the number of reductions newly applied to the submission, followed by a grand total of reductions for REF6 and REF6b. Also displayed is the Rationale for unit reduction (refer to the Staff circumstances s (REF6a/b) page).

The Reduction summary totals are not rounded. However, rounding will be applied in the submission system to give a whole number of outputs for the REF2 target number (refer to Research outputs (REF2) page).

CHAPTER 9

Import and export

Introduction to import and export	114
Import/Export tables	117
Import process	130
Export process	133

Introduction to import and export

For those HEIs that wish to input their submission data by bulk import, and to subsequently export it, import and export tools are provided in the REF2021 submission system. Information and examples related to these tools are provided in documents on the [Submission system data requirements](#) web page. Some of that information is replicated in this user guide for the sake of user convenience.



Prior to import, you need to have manually created all the submission records that your import file is going to reference (refer to [Submission management](#)).

Valid file formats

The import/export tools will break down the submission data into the following tables, based on the different [REF forms that make up a submission](#) and the Research Groups (covered in [Creating, modifying and removing Research Groups](#)).

REF form	Table	Name	XML	JSON	MS Excel
RGs	Research Groups (refer to Research Groups table).	researchGroup	•	•	•
REF1a	Staff in post (refer to Current staff table (REF1a)).	currentStaff	•	•	•
REF1b	Former staff (refer to Former staff table (REF1b)).	formerStaff	•	•	•
	Former staff contracts (refer to Former staff contract table (REF1b)).	formerStaffContract	•	•	•
REF2	Outputs (refer to Outputs table).	Outputs	•	•	•
	Link between staff and outputs (refer to Table linking staff to outputs).	staffOutputLink	•	•	•
REF3	Impact case studies (refer to Impact case studies table).	impactCaseStudy	•	•	Use MS Word template
	Impact case study grants (refer to Impact case study grants table).	impactCaseStudyGrants	•	•	
	Impact case study contacts (refer to Impact case study contacts table).	impactCaseStudyContact	•	•	

REF form	Table	Name	XML	JSON	MS Excel
REF4a	Research doctoral degrees awarded (refer to Research doctoral degrees awarded (REF4a)).	researchDoctoralDegrees	•	•	•
REF4b	Research income (refer to Research income (REF4b)).	researchIncome	•	•	•
REF4c	Research income in-kind (refer to Research income-in-kind (REF4c)).	researchIncomeInKind	•	•	•
REF5a	HEI-level environment statement (refer to HEI-level environment statement (REF5a)).	institutionEnvironmentStatement	•	•	Use MS Word template
REF5b	UOA-level environment statement (refer to UOA-level environment statement (REF5b)).	environmentStatement	•	•	
REF6a	Requests to remove the 'minimum of one' requirement (refer to Request to remove the 'minimum of one' requirement for a member of staff (REF6a)).	removeMinimumOfOneRequests	•	•	•
REF6b	Staff circumstances staff list (refer to Request for overall unit output reduction based on special circumstances (REF6b)).	unitCircumstances	•	•	•
	Staff circumstances UOA statement (refer to Rationale for overall unit reduction (REF6b)).	unitRationaleStatement	•	•	•

• = Supported



All free text fields included in the import/export files should not contain any formatting, and in nearly all cases there is a character limit applied to the fields during validation.

Merging and replacing data

It is possible to enter some of the REF data manually in accordance with [Introduction to Data entry](#), and import the remainder of it (or vice-versa). To facilitate this, there is a switch that allows you to decide whether to **Merge** or **Replace** data - refer to [Update preference](#).



Care must be taken with this switch because, if you select **Replace**, and then leave some of the fields listed in the [Import/Export tables](#) blank in the import file, any existing records corresponding to that table in the submission system database will be removed. This particularly applies to the optional Research Groups table, which may be overlooked. If you are using Research Groups, and intend to use the **Replace** setting, you should ensure that the [Research Groups table](#) in the import file contains **all** of the Research Groups that you wish to be present within each submission.

Import / export and Joint submissions

HEIs that are members of joint submissions are able to import and export data from forms within member HEIs parts of the submission provided that user permissions have been granted. See [user administration](#) for details.

When validating and exporting there is a checkbox to be ticked if you want to include other member institutions in your import or export job.

For export, data is identified using the UKPRN of the HEI to which it belongs. For XML and JSON formats the data belonging to each HEI will be placed inside the institution field. In Excel, each row of data will have the UKPRN of the HEI to which it belongs.

For import the format of the import files should follow the same pattern as export.

It is vital and HEIs grant the appropriate permissions to other members of a joint submission if they want others to import and export. Note that read only permissions will enable members of the Joint submission to export the data. Members will require write permissions to be granted to enable them to import into other members' forms.

Joint submissions involving a multiple submission

If your joint submission contains any members who have identified their part of a joint submission as a multiple submission there is additional data required in the import format to identify the multiple submission.

If your HEI has a multiple submission and you are wishing to import data into your own part of the joint submission **and** into other members' forms you will need to identify the submission with the additional field of "MultipleSubmissionIdentifier" which will be an upper case letter. You will need to include the same MultipleSubmissionIdentifier in the submission field for **all** members of the joint submission.

Conversely if your HEI does not have a multiple submission but a member of the joint submission does then you do not need to include the multiple submission identifier in any of the Submissions being imported.

The submission system will be able to identify all parts of the joint submission.

Import/Export tables

This section covers the fields that appear in the currently available import/export tables.

Fields common to every table

In MS Excel file format, the following fields must appear in every table. In the hierarchical file formats (XML and JSON), they need appear only once in the hierarchy.

Field name	Type	Notes
institution	String	This should be in the form of the UK Provider Reference Number (UKPRN) for the HEI importing the records. It is 8 characters long.
unitOfAssessment	Number	The number of the UOA into which the records will be imported. A digit in the range 1-34.

Research Groups table

This section covers the import/export table that relates to [Research Groups \(RGs\)](#).

RGs

Field name	Type	Notes
code	Character	An alphanumeric character.
name	String	Maximum length 128 characters.

REF1 tables

This section covers the import/export tables that relate to [REF1a/b: Staff details page](#).

Current staff table (REF1a)

Field name	Type	Restrictions	Comments
hesaStaffIdentifier	String	Must be 13 characters long.	
surname	String	Maximum length 64 characters.	
initials	String	Maximum length 12 characters.	
dateOfBirth	Date		

Field name	Type	Restrictions	Comments
orcid	String	Must be 37 characters.	This will automatically be prefaced with https://orcid.org/ , so simply enter the staff member's unique ORCID identifier without the https://orcid.org/ prefix.
contractedFTE	Decimal	Two decimal places.	
researchConnection	String	Maximum length 7,500 characters.	Refer to paragraphs 123 to 127 of the Guidance on submissions (2019/01) .
reasonsForNoConnectionStatement	String	One or more of: CaringResponsibilities, PersonalCircumstances , ApproachingRetirement and/or DisciplinePractice.	
isEarlyCareerResearcher	Boolean		Only required for staff members without a HESA staff identifier.
isOnFixedTermContract	Boolean		
contractStartDate	Date		
contractEndDate	Date		
isOnSecondment	Boolean		
secondmentStartDate	Date		
secondmentEndDate	Date		
isOnUnpaidLeave	Boolean		
unpaidLeaveStartDate	Date		
unpaidLeaveEndDate	Date		
researchGroups	Character	An alphanumeric character.	Can be repeated up to 36 times, although in the hierarchical file formats (XML and JSON), they need appear only once in the hierarchy.

Former staff table (REF1b)

Field name	Type	Restrictions	Comments
staffidentifier	String	Maximum length 24 characters.	

Field name	Type	Restrictions	Comments
surname	String	Maximum length 64 characters.	
initials	String	Maximum length 12 characters.	
orcid	String	Must be 37 characters.	This will automatically be prefaced with https://orcid.org/ , so simply enter the staff member's unique ORCID identifier without the https://orcid.org/ prefix.
excludeFromSubmission	Boolean		Indicates that the staff should not be included in the submission.

Former staff contract table (REF1b)

For each former staff member, the following information may be repeated for each contract.



For the MS Excel file format, the **staffIdentifier** field from the [Former staff table \(REF1b\)](#) must also be included in the table.

Field name	Type	Restrictions	Comments
hesaStaffIdentifier	String	Must be 13 characters long.	
contractedFTE	Decimal	Two decimal places.	
researchConnection	String	Maximum length 7,500 characters	Refer to paragraphs 123 to 127 of the Guidance on submissions (2019/01) .
reasonsForNoConnectionStatement	String	One or more of: CaringResponsibilities, PersonalCircumstances, ApproachingRetirement and/or DisciplinePractice.	
startDate	Date		
endDate	Date		
isOnSecondment	Boolean		
secondmentStartDate	Date		
secondmentEndDate	Date		
isOnUnpaidLeave	Boolean		

Field name	Type	Restrictions	Comments
unpaidLeaveStartDate	Date		
unpaidLeaveEndDate	Date		
researchGroup	Character	An alphanumeric character	Where there is more than one Research Group (up to four are allowed), a semi-colon-delimited list should be provided in the single field in the MS Excel file format. In the hierarchical file, formats (XML and JSON), the nodes can simply be repeated in the file.

REF2 tables

For the GUI fields that correspond to the fields in the **Outputs table** below, refer to **Creating a new output**.



If you import any REF2 form that has a pending or double-weight reserve output value (refer to **pendingPublicationReserve** and **doubleWeightingReserve**), then either: the reserve output must already exist in the submission system database; or the record in the import file that creates the reserve output must appear earlier in the file than the record that creates the REF2 form with a reserve output value (as the former will be processed first).

Outputs table

Field name	Type	Notes
outputIdentifier	String	Maximum length 24 characters.
outputType	Character	A letter in the range A–V.
title	String	Maximum length 7,500 characters
place	String	Maximum length 256 characters
publisher	String	Maximum length 256 characters
volumeTitle	String	Maximum length 256 characters
Volume	String	Maximum length 16 characters
issue	String	Maximum length 16 characters
firstPage	String	Maximum length 8 characters
articleNumber	String	Maximum length 32 characters
isbn	String	Maximum length 24 characters

Field name	Type	Notes
issn	String	Maximum length 24 characters
doi	String	Maximum length 1024 characters
patentNumber	String	Maximum length 24 characters
month	String	Characters from one of the following ranges: <i>1–12, January–December</i> or <i>Jan–Dec</i> .
year	String	One of <i>2014, 2015, 2016, 2017, 2018, 2019, 2020</i> .
url	String	Maximum length 1024 characters
isPhysicalOutput	Boolean	
supplementaryInformationDOI	String	Maximum length 1024 characters
numberOfAdditionalAuthors	Number	An optional integer
isPendingPublication	Boolean	[deprecated]
pendingPublicationReserve	String	[deprecated]
isForensicScienceOutput	Boolean	
isCriminologyOutput	Boolean	
isNonEnglishLanguage	Boolean	
englishAbstract	String	Maximum length 7,500 characters
isInterdisciplinary	Boolean	
proposeDoubleWeighting	Boolean	
doubleWeightingStatement	String	Maximum length 7,500 characters
doubleWeightingReserve	String	Maximum length 24 characters
conflictedPanelMembers	String	Maximum length 512 characters
crossReferToUoa	Number	Between 1 and 34
additionalInformation	String	Maximum length 7,500 characters
researchGroup	Character	An alphanumeric character

Field name	Type	Notes
openAccessStatus	String	Enter the string, in the particular import format, that relates to the required status, from: <i>Compliant, NotCompliant, DepositException, AccessException, TechnicalException, ExceptionWith3MonthsOfPublication, OtherFurtherException</i> or <i>OutOfScope</i> .
outputAllocation	String	Maximum length 128 characters
outputSubProfileCategory	String	Maximum length 128 characters
requiresAuthorContributionStatement	Boolean	
isSensitive	Boolean	
excludeFromSubmission	Boolean	
outputPdfRequired	Boolean	Export only
outputPdf	Binary	
isDelayedByCovid19	boolean	
covid19Statement	String	Maximum length 7,500 characters

Table linking staff to outputs

The following table links staff to outputs, so that the submission system can check the number of outputs submitted per staff member.

Field name	Type	Notes
hesaStaffIdentifier	String	Must be 13 characters long.
staffIdentifier	String	Maximum length 13 characters.
outputIdentifier	String	Maximum length 13 characters.
authorContributionStatement	String	Maximum length 7,500 characters.

Field name	Type	Notes
isAdditionalAttributedStaffMember	Boolean	Enter "FALSE" to import the staff member as the primary attributed staff member. Enter "TRUE" to import the staff member as the additional attributed staff member.

REF3 tables

This section lists the import/export tables that are covered on the [Impact case studies \(REF3\) page](#).

Impact case studies table

Field name	Type	Restrictions	Comments
caseStudyIdentifier	String	Maximum length 24 characters	An identifier provided by the HEI for the case study. The identifier must be unique within a submission to a unit of assessment.
title	String	Maximum length 256 characters	
redactionStatus	String	One of <i>NotRedacted</i> , <i>RequiresRedaction</i> or <i>NotForPublication</i> .	Refer to Adding a case study .
conflictedPanelMembers	String	Maximum length 512 characters	The name(s) of the panel member(s) who may have conflicts of interest for commercial reasons. Refer to Annex D of the Panel criteria and working methods (2019/02) .

Field name	Type	Restrictions	Comments
caseStudyPdf	Binary		 Fields of type <i>Binary</i> are only supported in the text-based file formats (XML and JSON). The binary data needs to be BASE64-encoded.
caseStudyDocument	Binary		
crossReferToUoa	Number	Between 1 and 34	(Optional) The UOA to which the output should be cross-referred for advice by another sub-panel.  For further information, please refer to paragraphs 399 to 404 of the Panel criteria and working methods (2019/02) .
isCovid19StatementNotForPublication	boolean		
covid19Statement	String	Maximum 7,500 characters	

Impact case study grants table

Field name	Type	Restrictions	Comments
grantNumber	String	Maximum length 256 characters	

Field name		Type	Restrictions	Comments
funders	name	String	Maximum length 256 characters	For multiple funders and programmes, a semi-colon-delimited list should be provided in the single field in the MS Excel file format. In the hierarchical file, formats (XML and JSON), the nodes can simply be repeated in the file.
	globalResearchIdentifier	String	Maximum length 256 characters	
fundingProgrammes		String	Maximum length 256 characters	
amountOfGrant		Number	Positive integer	
researcherOrcids		String	Must be 37 characters	This will automatically be prefaced with https://orcid.org/ , so simply enter the researcher's unique ORCID identifier without the https://orcid.org/ prefix. For multiple researchers, a semi-colon-delimited list should be provided in the single field in the MS Excel file format. In the hierarchical file, formats (XML and JSON), the nodes can simply be repeated in the file.
formalPartners		String	Maximum length 256 characters	For multiple entries, a semi-colon-delimited list should be provided in the single field in the MS Excel file format. In the hierarchical file, formats (XML and JSON), the nodes can simply be repeated in the file.
countries		String		

Impact case study contacts table

For each impact case study, the following information may be repeated for each contact.



For the MS Excel file format, the **caseStudyIdentifier** field from the **Impact case studies table** table must also be included in the table.

Field name	Type	Restrictions	Comments
number	Number	Between 1 and 5	

Field name	Type	Restrictions	Comments
contactType	String	One of <i>ContactDetail</i> or <i>FactualStatement</i> .	
name	String	Maximum length 64 characters	
jobTitle	String	Maximum length 64 characters	
emailAddress	String	Maximum length 128 characters	
alternateEmailAddress	String	Maximum length 128 characters	
phone	String	Maximum length 24 characters	
organisation	String	Maximum length 128 characters	
addressLine1	String	Maximum length 64 characters	
addressLine2	String	Maximum length 64 characters	
addressLine3	String	Maximum length 64 characters	
addressLine4	String	Maximum length 64 characters	
addressLine5	String	Maximum length 64 characters	
postcode	String	Maximum length 10 characters	
country	String	Maximum length 64 characters	
corroborateText	String	Maximum length 512 characters	Refer to Adding corroborators .

REF4 tables

This section covers the import/export tables that relate to [REF4a/b/c: Introduction to quantitative environment data](#).

Research doctoral degrees awarded (REF4a)

Field name	Type	Restrictions	Comments
year	String	One of <i>2013, 2014, 2015, 2016, 2017, 2018, 2019</i> .	
degreesAwarded	Decimal	Two decimal places.	

Research income (REF4b)

Field name	Type	Restrictions	Comments
source	Number	Between 1 and 15.	The income sources are the same as the ones used on the HESA Finance record.
income2013	Integer	Values must be entered as whole numbers in pounds sterling.	
income2014			
income2015			
income2016			
income2017			
income2018			
income2019			

Research income-in-kind (REF4c)

Field name	Type	Restrictions	Comments
source	Number	16 and 17	The income sources are the same as the ones used on the HESA Finance record.
income2013	Integer	Values must be entered as whole numbers in pounds sterling.	
income2014			
income2015			
income2016			
income2017			
income2018			
income2019			

REF5 tables

This section lists the import/export tables that are covered in [REF5a/b: Introduction to the research environment submission requirements](#)

HEI-level environment statement (REF5a)

Unlike all the other tables listed, the HEI-level environment statement will not include the `unitOfAssessment` or `multipleSubmission` fields (refer to [Fields common to every table](#)).

Field name	Type	Restrictions	Comments
<code>requiresRedaction</code>	Boolean		
<code>covid19Statement</code>	String	Maximum 7,500 characters	
<code>statement</code>	Binary		 Fields of type <i>Binary</i> are only supported in the text-based file formats (XML and JSON). The binary data needs to be BASE64-encoded.
<code>redactedStatement</code>			

UOA-level environment statement (REF5b)

Field name	Type	Restrictions	Comments
<code>requiresRedaction</code>	Boolean		
<code>statement</code>	Binary		 Fields of type <i>Binary</i> are only supported in the text-based file formats (XML and JSON). The binary data needs to be BASE64-encoded.
<code>redactedStatement</code>			

REF6 tables

This section lists the import/export tables that are covered in [REF6a/b: Output reductions owing to staff circumstances](#).

Request to remove the 'minimum of one' requirement for a member of staff (REF6a)

For the GUI fields that correspond to the fields below, please refer to [Applied REF6a: Removal of the 'minimum of one' reduction](#).

Field name	Type	Notes
hesaStaffIdentifier	String	Must be 13 characters long.
staffIdentifier	String	Maximum length 24 characters. Only required if there is no HESA staff identifier.
circumstance	String	<p>One of: <i>ECR, SecondmentsOrCareerBreaks, FamilyRelatedLeave, JuniorClinicalAcademic, RequiresJudgement.</i></p> <p>Should be repeated for each circumstance type that applies. For multiple types, a semi-colon-delimited list should be provided in the single field in MS Excel file format. In the hierarchical file, formats (XML and JSON), the nodes can simply be repeated in the file.</p>
supportingStatement	String	Maximum length 7,500 characters

Request for overall unit output reduction based on special circumstances (REF6b)

For the GUI fields that correspond to the fields below, please refer to [Applied REF6b: Unit reductions](#).

Field name	Type	Notes
hesaStaffIdentifier	String	Must be 13 characters long.
staffIdentifier	String	Maximum length 24 characters.
typeOfCircumstance	String	<p>One of: <i>ECR, SecondmentsOrCareerBreaks, FamilyRelatedLeave, JuniorClinicalAcademic, RequiresJudgement.</i></p> <p>Should be repeated for each circumstance type that applies. For multiple types, a semi-colon-delimited list should be provided in the single field in MS Excel file format. In the hierarchical file, formats (XML and JSON), the nodes can simply be repeated in the file.</p>
tariffBand	Number	Between 0 and 3.
supportingInformation	String	Maximum length 7,500 characters

Rationale for overall unit reduction (REF6b)

For the GUI field that corresponds to the field below, please refer to the [Unit reductions \(REF6a/b\) page](#).

Field name	Type	Notes
supportingStatement or unitRationaleStatement	String	Maximum length 7,500 characters

Import process

The **Import** tool allows you to import submission data into the submission system database. This can be either instead of, or in addition to, the data entered manually via data entry (refer to [Introduction to Data entry](#)).



Refer also to the separate **API Gateway** documentation for how to import records using API endpoints on **Swagger UI**.

Procedure overview

1. Ensure that you have created all the submission records that your import file is going to reference. Otherwise, the import will fail. Refer to [Submission management](#).
2. Create your import file.



It is advisable to download an example import file in the format that you wish to use (XML, JSON or Excel), from the [Submission system data requirements](#) web page, and adapt it for your own use.

3. **Perform the import.**



The process respects the user permissions (refer to [Managing user permissions](#)), and so, if a non-administrative user is asked to perform the process, then the required permissions will need to be set up in advance.

Perform the import

1. From the main menu, click **Import**. The *Import* page opens, showing the statuses and outcomes of previous import jobs (refer to [Import jobs queue and logs](#)).
2. Click **New import job**.
3. In the **Import file format** box, select the format of the file (XML, JSON or Excel).



Files of the selected format can be contained within a zip file (refer to [Zipped file](#)).

4. Go to the **Options** box, and, next to the **File to import** field, click **Choose file** and browse to the file to be uploaded.
5. Once you have selected the required file, complete the remaining fields in accordance with the table below.

Import Options fields

Field	Description/notes
Zipped file	Tick this box if your import file is zipped.

Field	Description/notes
Update preference	<p>The default action is Merge imported data with existing submission data, which means that, for each UOA that has some data included in the import file, the data will be merged with the existing submission data for that UOA.</p> <p>However, if you would prefer that, for each UOA that has some data included in the import file, the existing submission data for that UOA is overwritten by the imported data for the UOA, then tick Replace submission data with imported data.</p> <div style="border: 1px solid red; padding: 5px; margin-top: 10px;">  Take care when using the <code>Replace</code> option, as the presence of the smallest amount of data in the import file for a form (for example, Research Groups) within a UOA will result in all the existing data for that form within the UOA being overwritten. This means that any existing records for the form that do not exist in the new file will be removed. </div>
Retrieve citation counts for outputs	<p>Tick this box to initiate a batch job that, following a successful import, will invoke the external matching service in order to retrieve bulk citation counts for the imported outputs.</p>
Allow data to be imported even if there are validation errors	<p>When you import data, it is automatically validated by the system. An error is written to the validation report for each Warning, Submit error and Save error (refer to Validation errors).</p> <p>A Submit error or Save error, will, by default, cause the system to abort the import following the creation of the validation report, and to then roll the database back to its pre-import state.</p> <p>However, if you tick Allow data to be imported even if there are validation errors, then the import will not be aborted, and all the records that generated the validation errors will be imported regardless. Once you have examined the validation report, you can either modify the import file and then re-import it, or else rectify the errors manually in the submission system.</p>
Report filename	<p>This refers to the validation report that is generated on completion of an import job (see Import validation report). The default filename is <code>REFImport<yyyymmdd>-<hhmm></code>. You can modify this name as required.</p>
Report format	<p>Select the validation report format (Excel 2007 or later, or JSON).</p>

- Click **Import**. You are informed that your import job has been added to the queue, and this is displayed on the *Import* page when you click **Return**. Details about the outcome of the job can be found in the **Outcome** column of the job table and the log file (refer to [Import jobs queue and logs](#)), and in the [Import validation report](#).

Import jobs queue and logs

Each import job is placed in a queue, shown on the *Import* page. This page lists the current and previous import jobs, giving details and creation dates, together with the job start and finish times, and the statuses and outcomes (see the tables below).



Only your own jobs are shown, not those of other users. Click **Refresh page** to ensure that the information is up to date.

The **Status** column provides information on the progress of each job:

Possible job statuses

Job status	Description
Processing	Job is being processed.
Completed	Job has completed being processed.
Failed	The job did not complete for some reason and there is no file to download.

The **Outcome** column provides information on the outcome of each job:

Possible job outcomes

Job outcome	Description
Success	No validation errors or warnings were found.
Errors	Validation errors were found.
Failed	The job did not complete.

Each job generates a log that provides details about the job. To view a log, click **View log** in the row of the table for the relevant job. The following possible events are provided in the log:

Possible log event types

Log event type	Description
Information	Processing step, for example how many records were processed.
Warning	Validation warning, for example unexpected file extension.
Error	Unhandled error.

Errors are sometimes logged in the following format:

```
Record: <form>-<submission>-<identifier>. Error: <error text>.
```

Import validation report

The validation report is generated on the successful completion of an import job. It tells you what data was imported and, for each REF form, the number of validation errors and warnings.

To view the import validation report, click **Download** on the far right of the row of the table for the relevant import job.

Export process

The **Export** tool allows you to export your data from the submission system database in XML, JSON or Excel format.



Refer also to the separate **API Gateway** documentation for how to export records using API endpoints on **Swagger UI**.

To perform an export:

1. From the main menu, click **Export**. The *Export* page opens.
2. Click **New export job**.
3. Select an **Export file format** (XML, JSON or Excel), and then click **Next**. The *Select submission(s) to export* page opens.
4. Select all the submissions that you wish to export, and click **Next**. The *Select form(s) to export* page opens.
5. Select all the REF forms that you wish to export, and then click **Next**.
6. Optionally, edit the name of the export file. The default filename is `REFExport<yyyymmdd>-<hhmm>`. All export files are zipped, and have the `.zip` suffix.
7. Click **Export**. You are informed that your export job has been added to the queue, and, if the job is successful, the associated **Download** is displayed on the *Export* page when you click **Return**. Details about the outcome of the job can be found in the **Outcome** column of the job table and the log file (refer to [Export jobs queue and logs](#)). For details of the fields exported in the event of a successful job, please refer to [Import/Export tables](#).



The process respects the user permissions (refer to [Managing user permissions](#)), and so, if a non-administrative user is asked to perform the process, then the required permissions will need to be set up in advance.

Export jobs queue and logs

Each export job is shown on the *Export* page. Only your own jobs are shown, not those of other users. The page shows job progress, from waiting in the queue through to completion.



To download the export file following the successful completion of a job, click **Download** on the far right of the row of the table for the particular job.

The **Status** column provides information on the progress of each job:

Possible job statuses

Job status	Description
Processing	Job is being processed.
Completed	Job has completed being processed.
Failed	The job did not complete for some reason and there is no file to download.

The **Outcome** column provides information on the outcome of each job:

Possible job outcomes

Job outcome	Description
Success	No errors or warnings were found.
Failed	The job did not complete.

Each job generates a log that provides details about the job. To view a log, click **View log** in the row of the table for the relevant job. The following possible events are provided in the log:

Possible log event types

Log event type	Description
Information	Processing step, for example how many records were processed.
Error	Unhandled error.

CHAPTER 10

DOI lookup

Retrieving DOIs and output data via Crossref136

Retrieving DOIs and output data via Crossref

The DOI validation and retrieval features use external matching provided by the **Crossref system**. This is only available where:

- The output type is one that is appropriate for DOI retrieval (refer to **Digital Object Identifier (DOI)** and Annex K of the **Guidance on submissions (2019/01)**).
- You have the **Bulk Crossref lookup** user function enabled in your user account.
- You have Read or Write access to form REF2 for the selected submission(s).



If you only have Read access to form REF2, you can view the retrieved outputs, but you cannot invoke Crossref or copy the resultant details into form REF2.

You can retrieve data from Crossref by proceeding in accordance with **Retrieving details for a single output**.

In addition, you can:

- Send multiple DOIs to Crossref to retrieve corresponding output details and copy them into form REF2 (refer to **Retrieving bulk outputs using REF2 DOIs**).

Retrieving details for a single output

You can retrieve output details from a DOI by proceeding as follows:

1. Enter the **Digital Object Identifier (DOI)** into form REF2 and click **Fill form using DOI**.
The DOI is sent to Crossref and key REF2 data corresponding to the DOI is retrieved and displayed on the *Retrieved output details* page.
2. To use this data to populate your REF2 form, click **Use these details**.

Retrieving bulk outputs using REF2 DOIs

This section describes how you can perform the bulk retrieval of output details using DOIs that have previously been entered into outputs within form REF2 (refer to **Digital Object Identifier (DOI)**).

Access to this feature is only available if you have:

- the **Bulk Crossref lookup** user function enabled in your user account;
- Write access to REF2 for the selected submissions.



If you only have Read access to REF2, you will not be able to create a batch request for the submissions. If your permissions change from Write to Read only, you will be able to view any previously created batches, but you will not be able to copy the results for the submissions to REF2.

To attempt to retrieve output details from DOIs:

1. From the main menu, click **Output matching** followed by **Get output details by DOI**, to display the *Get output details by DOI* page. This page contains a table displaying information on the lookup requests that have been created.
2. Click **Get output details**.
3. Optionally, edit the default PDF **Report filename** (`DoiLookUpReport<yyyymmdd>-<hhmm>`) click **Next**.

4. Select the submissions for which you would like to retrieve output details, and click **Next**.
5. Click **Create job**. The batch request is created.



This section of the submission system is dependent on the **Crossref system**. During busy times, Crossref may have a large queue to process, consisting of requests from both the REF2021 submission system and other systems. Because of this, it is possible that a batch request may remain pending for an extended amount of time.

Copying retrieved output details to REF2

Once the output details have been retrieved, you can proceed as follows to copy them to form REF2:

1. From the *Get output details by DOI* page, click **View results**: for the batch that you would like to copy to REF2.
2. Click **Copy results to REF2**.
3. Click **Yes** on the confirmation page that is displayed. All outputs with a uniquely matched DOI in the selected batch are now copied to the form REF2.



If there are match results that contain output details which you do not wish to be copied to form REF2, you should first delete these by selecting **Delete result** for each output. After these match results have been removed from the output batch, you can then select **Copy results to REF2** to copy the remaining match results.

It is not possible to copy output details for multiple batches. However, it is possible to copy one set of output details at a time, by selecting **View result** for each individual output and clicking **Use these details** (refer to [Retrieving details for a single output](#)).



It is not possible to reuse a lookup batch if the associated submissions have been cleared and their data has been re-imported. This is true even if the re-imported data contains no changes. A new lookup batch needs to be created in every instance.



It is possible for Crossref to return incorrect output details for a DOI, and so all output details that are added to the REF2021 submission system using this procedure should be thoroughly checked prior to final submission.

CHAPTER 11

Generating citation data

Invoking the external matching service	140
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Invoking the external matching service

Citation data is generated using the [External matching service](#), and is used by Main Panels A, B and C. For information on how the panels make use of the citation data for assessment, please refer to paragraphs 288 to 292 of the [Guidance on submissions \(2019/01\)](#), and to paragraphs 274 to 282 of the [Panel criteria and working methods \(2019/02\)](#).



Although the absence of citation data for an output will not be taken to mean an absence of academic significance, the sub-panels associated with UOAs 1-9, 11 and 16 will make use of citation matches wherever available.

Attempts at citation matches are only possible where:

- The output is a journal article or conference proceeding and is associated with a UOA for which citation data is applicable (that is to say, UOAs 1-9, 11 and 16 - refer to [What is REF 2021?](#)).



Prior to submission, at least one attempt must have been made to match each and every journal article or conference contribution associated with UOAs 1-9, 11 and 16.

- You have the [Output matching](#) user function enabled in your user account.
- You have Write access to form REF2 for the selected submissions.



If you only have Read access to form REF2, you can view the citation statuses of outputs, but you cannot invoke the external matching service.

To invoke the external matching service for a single output, proceed as in [Retrieving a single citation count](#).

To invoke the service for bulk outputs, proceed as in [Retrieving a bulk citation count](#).



Bulk citation counts can also be carried out as part of importing (refer to [Import process](#)).

Viewing the existing matches and citation counts

To view the existing matches and citation counts, click [Output matching](#) from the main menu, followed by [Find citation counts](#). The *Citation counts* page opens, showing all the outputs that are *applicable* to your HEI.



The term *applicable* means all the journal articles or conference proceedings associated with submissions for UOAs 1-9, 11 and 16. You can filter the outputs by submission and search for specific outputs by entering search strings in the [Search for output](#) box.

The outputs are split between two tabs:

- The **Matched outputs** tab lists all outputs with the result of **Matched**, and the associated citation counts. Click [View citation summary for this output](#) to open the *Matching service output* page, where you can click on the citation count to view the associated, individual citations. If required, you can verify that certain results are correct (refer to [Querying the match result with the external matching service](#)), reject any where required (refer to [Rejecting the match result](#)), and then rematch them (via the [Match again](#) button).
- The **Ambiguous or not matched outputs** tab lists all outputs that do not have a citation count, typically because matches have not yet been attempted. You will also find in this tab your outputs

that require a rematch due to updated details, outputs that have failed to match, and outputs that have multiple matches. To match any individual output, you can click **View citation summary for this output** to open the *Matching service output* page, and then click **Match** (refer to [Retrieving a single citation count](#)). If an output has returned multiple matches, you can select the correct match within this page. To match outputs in bulk, click the **Match outputs** button above the tabs, to display the **Request bulk output match** page, and proceed from [Select the submissions for which you want to attempt citation count retrieval](#).



Within each tab, you can sort the outputs based on their match results, match time and submission.

The following information is displayed for each output:

- The output title (with identifier in brackets).
- The submission (UOA).
- The match status, and, for matched outputs, the date and time at which the match result was last updated.
- The citation count information (only shown for matched outputs).
- The **View citation summary for this output** button (see above).

Retrieving a single citation count

To retrieve a citation count from the external matching service, proceed as follows:

1. Display the *Match output to external citation database* page by doing any of the following:
 - Click the **Citations** button on the **Outputs** tab of the [Research outputs \(REF2\) page](#).
 - Click the **Match** button in the **Citations** box on the REF2 [Output summary and completion](#).
2. Click **Match**, or else **Match again** if there was a previous match (for example if **Rematch required** is displayed following the modification of 'key' data in the output).



'Key' data include the **Digital Object Identifier (DOI)**, **Title of journal/conference** (refer to **Volume title**), **Article/output title** (refer to **Output title**) and **ISSN**.

3. The REF2021 submission system communicates with the external matching service in an attempt to find a match, and the match results are displayed in a box under the heading *Results retrieved from matching database*.



Prior to submission, at least one attempt must have been made to match each and every journal article or conference contribution associated with UOAs 1-9, 11 and 16.

4. If there is a single match to an entry in the external matching database, then the result is returned as **Matched**, for example:



For the matched entry, the associated Web of Science Identifier is displayed below the article details (this is a Unique Tag of up to 15 characters that can assist the external matching service in the citation process).



The most recent citation count from the external matching service is displayed, and you can click on the count to view the list of articles that cite the current output. Citation counts in the submission system are updated automatically every seven days with the latest counts from the external matching service, and so the count shown is never more than seven days old.

5. If a single, suitable match has been found, then no further action is required. Otherwise, take the appropriate action from the following:
 - If there are several potential matches, click **Select** against the required title to accept the match and provide a citation count. If no suitable, potential matches are shown, then click **None of these** to reject them all.
 - If the selected output, or single matched output, is not suitable, click **Reject this match result**. Refer to [Rejecting the match result](#).
 - If there is no suitable match and you wish to modify any of the key data before attempting a further match, click **Return** to go back to the [Output summary and completion](#). From here, you can click **Edit** in the output's **Details** box, in order to modify the required fields.

The list of all possible matching outcomes, and the associated actions to be taken, are summarised in the following table:

Match results

Match result	Description	Further action
Matched	A single match to an entry in the matching database.	None required.

Match result	Description	Further action
Multiple matches	Several matches found.	Either click Select next to the required match or None of these .
Rematch required	The data on the Research outputs (REF2) page has changed, thereby invalidating the match.	Click Match again .
The match has been rejected	Either you, or another user at your HEI, has rejected the match (by clicking Reject this match result - refer to Rejecting the match result below).	None required. Optional: query the match result with the external matching service (refer to Querying the match result with the external matching service), or modify the REF2 data, and then click Match again .
No matches found	The system could not match the output in the external matching database using the output details provided.	

Rejecting the match result

For any **Matched** result, or any result selected from a list of multiple matches, you can click **Reject this match result**.

There are various reasons why you may wish to do this:

- You selected the wrong output from the list of multiple matches by mistake. Click **Reject this match result**, click **Match again**, and then select the correct match from the returned list.
- You realise that the data in the REF2 form is incorrect, resulting in an incorrect match. Click **Reject this match result**, modify the REF2 data, and then click **Match again**.
- You dispute the match returned by the external matching service. Click **Reject this match result**. No further action is required, unless you wish to query the match result with the external matching service in an attempt to obtain a different match (refer to [Querying the match result with the external matching service](#)).

Querying the match result with the external matching service

For all match results, you can query the result with the external matching service, for example because you wish to dispute the found match, or query why a match was not found. Click **Contact Clarivate support** to open the contact page. This contains information on what to do and how queries will be processed. If the matching service data changes as a result of your query, click **Match again** when instructed to do so by the REF team.

Retrieving a bulk citation count

To retrieve a citation count for outputs that have yet to be matched:

1. Click **Output matching** from the main menu, followed by **Citation counts**, to display the *Citation counts* page.
2. Click the **Match outputs** button, to display the **Request bulk output match** page.
3. Select the submissions for which you want to attempt citation count retrieval.
4. Click **OK**. The request for bulk citation count retrieval is submitted, and a confirmation screen displayed.

The results are displayed under the heading *Results retrieved from external matching service*.



Any output that is included in a bulk request or any import job that has not yet completed, has a match status of **Pending**.

5. On the confirmation page, click **Return** to go back to the main page to view the results (refer to [Viewing the existing matches and citation counts](#)).

CHAPTER 12

Validation reporting



Introduction to Validation reporting

The **Validate** feature, accessed direct from the main menu, allows you to generate a report (in either Excel or JSON formats) on the validation of selected elements of the data that you intend to submit.

It is recommended that you use this feature at regular intervals as you enter your submission data, in order to check the validity of the data prior to any attempts at submission.



This **Validate** feature is not part of the submission process. **Submit validation** includes all standard data validation in addition to HEI wide validation to ensure the whole submission is valid (refer to **Introduction to the Submission process**). Submit validation is only available to system administrators.

A validation report lists any record that breaks a validation rule, resulting in either a **Submit error** or **Warning message** (refer to **Validation errors**).



To display the previously generated validation reports, and generate a new one, refer to the **Validation report page**.

Validation report page

When you select **Validate** from the main menu, the *Validation report* page is displayed, showing a table of all your own validation jobs (not those of other users), including those that have been completed and any that still being processed, with the most recent at the top. (This table is not created until the first job has been generated.)



The reports can be generated in either Excel or JSON format (refer to [Generating a new validation report](#)). Those that have already been created can be downloaded from the column on the far right of the table.

The **Status** column provides information on the progress of each job:

Possible job statuses

Job status	Description
Waiting	Job is waiting to be processed.
Processing	Job is being processed.
Finished	Job has completed.

The **Outcome** column provides information on the outcome of each job as it completes:

Possible job outcomes

Job status	Description
Success	Job has completed and there are no validation errors.
Failed	Job has failed during processing.
Warnings	Job has completed with warnings
Errors	Job has completed but there are validation errors.

Each job generates a log that provides details about the job. To view a log, click **View log** in the row of the table for the relevant job. The job log lists the steps that have occurred during the validation job process.

Validation report contents

(Note: for Excel versions of the validation reports it is necessary to click 'enable editing' at the top of the worksheet to enable the UOA/form identifiers to be displayed.)

A validation report contains two sections:

- **Summary section:** This shows the overall numbers of errors and warnings for each of the REF forms of each submission selected for validation (or '0' where there are no errors or warnings).
- **Full report section:** Each line of this section lists an individual error or warning for a particular record. For example, a REF1a record containing five errors related to the current staff submission would generate five lines in the full report, one for each error. Each line is broken down into the following:

- **Institution code:** The HEI identifier.
- **Submission:** The number of the submission (UOA).
- **Form:** The REF form.
- **Record:** The individual data record identifier and title where appropriate.
- **Error/Warning:** The type of validation failure, either **Error** or **Warning** (as referenced in **Validation errors** as either **Submit error** or **Warning message**, respectively).
- **Rule identifier:** The identifier of the validation rule that has been broken.
- **Rule description:** The associated rule description.



A full list of validation rules is available on the [REF website](#).

To generate a new report, proceed as in [Generating a new validation report](#).

Generating a new validation report

To generate a new validation report:

1. Click **New validation job** at the top of the *Validation report* page.
2. Select the preferred file format for the report (Excel or JSON).
3. Optionally, modify the default file name (which is in the format `REFValidation<yyyymmdd>-<hhmm>`).
4. Click **Next**.
5. Select the required submission(s) (or click **Select all submissions**).
6. Click **Next**.
7. Select all the REF forms to be reported on for the selected submission(s) (or click **Select all forms**).



Form REF5a (refer to [REF5a: Institution-level environment statement](#)) is validated at the HEI rather than UOA level, and so you are invited to select it for the whole institution.

8. Click **Validate**.

You can view the progress of the job on the [Validation report page](#), and then download the Excel or JSON report once the job has completed successfully.

CHAPTER 13
Submission process



Introduction to the Submission process

The **Submit** feature can be used to:

1. Perform a **Submit validation** on the entire **Submission set** at your HEI (refer to **Validating all submissions**).



A **Submit validation** is the dedicated validation that must be passed in order for final submission to proceed. This is not the same as selecting **Validate** on the main menu to generate a validation report on selected submissions (refer to **Introduction to Validation reporting**). Only system administrators - users with an **Account type** of **Administrator** (refer to **Creating users**) - can perform a **Submit validation**.

2. **Submit** the entire set (refer to **Submitting**), if there has been an error-free **Submit validation**.



Only an authorised 'submitter' can perform a final submission.

To access the **Submit** feature, select **Administration > Submit**, to display the *Submit to REF 2021* page, which lists all the submissions created via **Submission management**, and the current **Submit status** of each individual one. The page also shows the overall Submit status for the HEI.



A **Submit status** of **Passed** indicates that, during a previous submission process, the individual submission passed **Submit validation** even though the overall **Submission set** may not have.



The deadline for submissions is midday, Wednesday 31 March 2021. However, refer to **After the submission deadline**.

Joint submissions

If you have any joint submissions, these follow slightly different rules (refer to **Validating a joint submission** and **Submitting a joint submission**).

Submit status

At any given time, your **Submission set** has a **Submit status**, which can be any of the following:

Submit status	Description
Requires successful validation	<p>The set of submissions can be in a state of <i>Requires successful validation</i> for any of the following reasons:</p> <ol style="list-style-type: none"> 1. No Submit validation job has yet been run. Click Validate all submissions to run one. 2. The most recent Submit validation job was unsuccessful. Once the errors have been fixed, click Validate all submissions again. 3. The most recent Submit validation job ran successfully (without any warnings or errors), but at least one submission has now been unlocked by an administrator at your HEI. Once the necessary changes have been made to the submission(s) click Validate all submissions again. 4. The most recent Submit validation job ran successfully, but, subsequently, for one of your joint submissions, an administrator at another HEI has unlocked their part of the submission. Once the necessary changes have been made to this submission, all HEIs in the joint submission must validate again. 5. One or more joint submissions have not yet been successfully validated.
Ready to submit	The most recent Submit validation job ran successfully (without any warnings or errors). The set of submissions can now be submitted.
Ready to submit (with warnings)	The most recent Submit validation job ran without any errors, but there were some validation warnings. Submission is possible, provided that the 'submitter' acknowledges the presence of the warnings at the time of submission.
Submitted	The set of submissions has been both validated and submitted.

Refresh

It is important to remember that there are multiple users who can access the Submit function (all administrators and authorised submitters). It is recommended that before undertaking any actions on the submit page that the page is refreshed using the **Refresh** button to ensure that it reflects the most up to date status messages on the page.

After the submission deadline

Following the submission deadline all submissions will be locked except for:

- The upload of redacted impact case studies (REF3), where they have been identified as requiring redaction at the submission deadline.
- ZIP files of corroborating evidence for impact case studies.
- The upload of redacted Institutional level environment statements (REF5a) and Unit level environment templates (REF5b) where they have been identified as requiring redaction at the submission deadline (including the redacted COVID-19 annex).

These redacted documents should be uploaded into the system by 1st June 2021.

The import engine will be disabled after the submission deadline so all post-submit updates must be made via the user interface.

Approved extensions for submitting narrative elements

Further contingency measures following the COVID-19 pandemic has provided HEIs with the option of requesting an extension to submit narrative templates up until 14th May 2021.

REF3/REF5a/REF5b extension

For HEIs with an approved extension, impact case study PDF and word documents, REF5a and REF5b templates can be uploaded until the agreed extended deadline. If HEIs have agreed an extension but have documents ready before the submission deadline they may choose to upload for the point of submission. However, if the documents are present at the point of submission, even if there is an agreed extension in place, these documents will be accepted as the final form and cannot be changed after 31 March 2021.

Documents will be validated on save. Should these be incorrectly formatted or exceed word/page counts the document will not be saved.

Documents can be saved and reuploaded until the agreed deadline.

HEIs can also amend the affected case study statement on impact case studies, and the COVID-19 annex on REF5a until the agreed deadline.

Once all final forms of documents are uploaded into the system, HEIs should email the REF team to confirm their final submission and these elements will then be locked.

Redacted versions for these documents can still be uploaded up until 1st June 2021.

Validating all submissions

When you select **Administration > Submit**, to display the *Submit to REF 2021* page, and the submit status is displayed as **Requires successful validation**, then, provided that you have administrative rights, you can perform a submit validation as detailed in the steps below.



Prior to the submission, you must ensure that there are no required REF2 records that still have the **Exclude this output from submission** flag set, as these will result in validation errors.

1. Click **Validate all submissions**.
2. Optionally, edit the default report filename, which is of the form:
REFSubmitValidation<yyyymmdd>-<hhmm>
3. Click **Finish**. The submit validation job starts: all submissions that are not currently validated are added to the submit validation job queue and are validated in turn. (Submissions validated in a previous submit validation job that the system detects as unchanged since that submit validation are not validated again.) The progress of the job is displayed.

The **Status** column provides information on the progress of each job:

Possible job statuses

Job status	Description
Waiting	Job is waiting to be processed.
Processing	Job is being processed.
Completed	Job has completed being processed.
Failed	The job did not complete for some reason and there is no file to download.

The **Outcome** column provides information on the outcome of each job:

Possible job outcomes

Job outcome	Description
Success	No validation errors or warnings were found.
Warnings	Validation warnings were found but no errors.
Errors	Validation errors were found.
Failed	The job did not complete.

During submit validation, all submissions in the submission set are locked. During and after processing, you can view the log of the validation process by clicking **View log**. This shows detailed information on various parts and stages of the validation process.

Once the submit validation job is complete, you can download the validation report by clicking **Download**.

If any individual submission in the **Submission set** completes with errors, then **those** the submissions are unlocked at the end of the submit validation (but they are still all validated in turn in order to generate a full validation report).

If all the submissions in the submission set pass validation, then **all** the submissions are locked to all users, such that Only a user with access to the submission management screen can unlock them (via the **Lock/Unlock** column of the **Submissions** tab).

Validating a joint submission

In the case of a joint submission, the following REF forms are submitted by the **Lead** HEI on behalf of all the **Member** HEIs involved in the joint submission: RG (Research Group), REF3 (refer to **REF3: Introduction to impact case studies**), and REF5b (refer to **REF5b: UOA-level environment template**).

All HEIs involved in the joint submission need to validate and submit their part of the part of the joint submission.

The submit validation will verify the output count for the who joint submission based on the FTE of staff entered across the whole joint submission (minus any reductions applied across the whole of the joint submission).

All members of the joint submission will see errors or warnings triggered by the following checks:

- overall counts of outputs entered into the joint submission
- number of in-scope outputs that are non-compliant for Open Access
- number of impact case studies supplied
- redacted documents waiting upload

Validation errors and warnings relating to individual staff or outputs will only be visible by the member HEI in which they are entered (this includes any reporting related to REF6).

All members of a joint submission will be able to view the latest Submit status of all parts of the joint submission on the Submit page.

Remember to Refresh the page to ensure you have the most up-to-date information.

Once all member parts of the joint submission have been successfully validated and are locked, one or all of the member HEIs may submit their University's submission set. When any part of the joint submission has been submitted the whole joint submission is submitted, and all parts of the joint submission are locked.

Parts of a joint submission can only be unlocked if all parts are unsubmitted.

Submitting

When you select **Administration > Submit**, to display the *Submit to REF2021* page, and the status is displayed as **Ready to submit**, then, provided that you are an authorised 'submitter', you can submit the **Submission set** as detailed in the steps below.

1. Click **Submit**. A confirmation box is displayed, which contains terms and conditions regarding submitting data for assessment, and also a prompt to confirm that you would like to submit.
2. Click **Submit to REF 2021** to proceed with the submission. Once the submission is complete, the status is **Submitted**. The system sends an e-mail notification to each authorised 'submitter' and to institutional and technical REF contacts that your HEI has nominated. A news item will be generated and appear on the home page of the submission system so that all users are informed that the Institution has submitted to the REF 2021 and that all data is now read only.



If you decline the confirmation and cancel the submission, you are returned to the *Submit to REF2021* page, where you will see that the status of the submission set has been reverted to *Ready to submit*.

Once a submission is complete, all areas of the system become Read only, other than those listed below:

- News
- User administration
- Uploading a redacted REF3 impact case study template (refer to **Adding a case study**), a redacted REF5a HEI level environment statement (refer to **REF5a: Institution-level environment statement**, or a redacted REF5b UOA-level environment template (refer to **REF5b: UOA-level environment template**). Refer to **After the submission deadline** Links are provided to the outstanding items.
- REF3 impact case study template uploads, REF5a and REF5b templates - where an extension has been previously agreed by the REF team and no document has been uploaded already.



For a joint submission, please refer to **Submitting a joint submission**.

Unsubmitting

Between the time of submission and the **Submission deadline**, an authorised 'submitter' has the opportunity to unsubmit the entire **Submission set** if required, following which the status of the set reverts to *Ready to submit*.

To do this, click **Unsubmit** on the *Submit to REF 2021* page. A confirmation page is displayed, containing a prompt to confirm that you would like to unsubmit.



Unsubmitting does not unlock any submissions, as this can only be done by user with access to the submission management page. If any submission is unlocked, a **Submit validation** must be repeated and the HEI must resubmit the entire set (refer to **Introduction to the Submission process**).



In the case of a joint submission, each participating HEI is required to unsubmit its entire submission set before the joint submission can be unlocked and then modified.



For a joint submission, please refer to **Unsubmitting a joint submission**.

Submitting a joint submission

Once all member parts of the joint submission have been successfully validated and are locked, one or all of the member HEIs may submit their University's submission set. When any part of a joint submission has successfully submitted, the joint submission is submitted and all parts of the joint submission are locked.

Parts of a joint submission can only be unlocked if all parts are unsubmitted.

Unsubmitting a joint submission

If an HEI wishes to work on a joint submission that has previously been submitted, then each of the participating HEIs must unsubmit its submission set, in accordance with [Unsubmitting](#), so that a system administrator at each HEI requiring changes can unlock the joint submission.

Each HEI must then revalidate all their submissions in order to fully validate the joint submission. Following successful validation each member HEI will be able to resubmit.

CHAPTER 14

Submission reports



Introduction to submission reports

User instructions related to this section will be available once the associated forms have been released in the submission system.

The **Reports** feature allows you to generate PDFs containing selected elements of your completed submission data, for your own reference and checking.

There are two types of PDF that you can generate:

- **Report job:** A pre-defined report on staff and/or research outputs for a selected submission (refer to [Available report types](#) for the full list of pre-defined reports that the REF team have created for you).
- **Print job:** A PDF of the data that you have entered for selected REF forms within selected submissions.



Reports can only return data to which you have the required access, as defined via the permissions in your user account (refer to [Managing user permissions](#)). For example, if you want to generate a report containing REF2 data, you need either Read or Write access set for REF2 in the permissions part of your user account.

To display the previously generated reports, and generate new ones, refer to the [Reports page](#).

Reports page

When you select **Reports** from the main menu, the *Reports* page is displayed, showing a table of all report and print jobs that have been requested by any user at your HEI, including those that have been completed and are still being processed, with the most recent at the top. (This table is not created until the first report or print job has been generated at your HEI.)

The PDFs that have already been created can be downloaded from the column on the far right of the table.

The **Status** column provides information on the progress of each job:

Possible job statuses

Job status	Description
Waiting	Job is waiting to be processed.
Processing	Job is being processed.
Finished	Job has completed.

The **Outcome** column provides information on the outcome of each job as it completes:

Possible job outcomes

Job status	Description
Success	Job has completed and there are no validation errors.
Failed	Job has failed during processing.
Warnings	Job has completed with warnings
Errors	Job has completed but there are validation errors.

Each job generates a log that provides details about the job. To view a log, click **View log** in the row of the table for the relevant job. The job log lists the steps that have occurred during the validation job process.

Creating a new job

If you wish to create a new job, click on either of the following at the top of the page:

- **New report job:** Generates a PDF associated with a particular query. Proceed in accordance with [Generating a new report](#).
- **New print job:** Generates a PDF for selected REF forms within selected submissions. Proceed in accordance with [Generating a new print job](#).



You can request further report or print jobs at any time. You do not need to wait for the ones that are still being processed to finish.

Generating a new report

To generate a new report:

1. Click **New report job** at the top of the [Reports page](#).
2. Select the required report from the [Available report types](#).
3. Click **Next**.
4. Select the required submission from the drop-down.
5. Optionally, select *Include other joint submission members*, to include data from any other HEIs participating in the submission.
6. Click **Next**.
7. Optionally, modify the default PDF file name (which is in the format `REFReport<yyyymmdd>-<hhmm>`).
8. Click **Finish**. The report job is requested and added to the queue.



You can view the progress of the job on the [Reports page](#), and then download the PDF once the job has completed successfully.

Available report types

The pre-defined reports available within the submission system are as follows:

Report	Description/notes
Citation counts for research outputs	Lists research outputs and their citation counts (refer to Citations and Invoking the external matching service).
Confidential reports	Lists outputs that have been identified as Type O (Confidential reports) (refer to paragraph 261 and Annex K of the Guidance on submissions (2019/01)).
Duplicate DOIs	Lists DOIs that have been included more than once in your HEI's submissions, together with the outputs to which they have been assigned.
Excluded research outputs	Lists outputs that have been marked to be excluded from the submission (refer to Exclude this output from submission).
Interdisciplinary research outputs	Lists outputs that have been identified in REF2 as resulting from interdisciplinary research (refer to Interdisciplinary).

Report	Description/notes
Journal articles that could not be retrieved	<p>Lists the journal articles that the REF 2021 submission system has not been able to retrieve. For three weeks after an output's DOI has been entered into the system, the REF 2021 submission system will attempt to locate an electronic copy of the journal article, and, after this time, it will appear on this report. The articles listed need to be uploaded to the submission system before it closes on 31 March 2021.</p> <div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;">  <p>To ensure that this report is generated correctly and that all outputs of types D and E (as referred to in Annex K of the Guidance on submissions (2019/01)) which need their journal articles supplied, are listed, no outputs within the submission should be removed and re-added, or have their DOIs changed, for a period of three weeks before the report is run. If some outputs have been altered in this way, then the three-week count held against them will be reset and they will appear on the report later than the outputs which have not been modified.</p> </div>
Journal articles without DOIs	Lists the outputs of types D and E (as referred to in Annex K of the Guidance on submissions (2019/01)) for which the DOIs are either missing or invalid.
Outputs not for publication	Lists the outputs that have been identified as not for publication (refer to Exclude this output from publication).
Outputs to be provided to the warehouse	Lists details of the outputs to be provided to the warehouse (refer to Output format).
Outputs with PDF files attached	Lists the outputs that have PDF files attached (refer to Upload PDF).
Outputs without PDF files attached	Lists the outputs that do not have PDF files attached.
Unattributed outputs	Lists the outputs that have not been attributed to staff members (refer to Attributing outputs). Such outputs will not be considered as part of the submission, and those that need to be considered must be attributed prior to being uploaded to the submission system before it closes on 31 March 2021.
Impact case studies (REF3)	Lists the impact case studies that have been submitted via the Impact case studies (REF3) page .
Standard data analyses	<p>Lists the analyses of data for staff, outputs, doctoral degrees awarded, and research income. For system administrator use only. Refer to Annex J of the Guidance on submissions (2019/01).</p> <p>When the sub-panels are provided with a submission, they will also be supplied with a standard analysis of the data submitted via REF4 (refer to REF4a/b/c: Introduction to quantitative environment data, and some of the data submitted for REF1 (refer to REF1a/b: Staff details page or obtained through the HESA staff records.</p> <div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;">  <p>Such data will be supplied in respect of each submission in the particular UOA, and aggregated for all submissions in the UOA.</p> </div>

Generating a new print job

To generate a new print job:

1. Click **New print job** at the top of the [Reports page](#).
2. Select the required submission(s) (or click **Select all submissions**).
3. Click **Next**.
4. Select the required REF forms to be reported on for the selected submission(s) (or click **Select all forms**).



In accordance with the Data Protection Impact Assessment, the data from forms REF6a and REF6b (refer to [REF6a/b: Output reductions owing to staff circumstances](#)) are only generated in summary form (that is to say, no staff details are exposed). In addition, only system administrators have the right to generate these REF6 reports, and, by extension, the *Overall HEI staff summary (OHSS)*, which is a combination of the REF1 (refer to [REF1a/b: Staff details page](#)) and summarised REF6 data.

5. Click **Next**.
6. Optionally, select *Include other joint submission members*, to include data from any other HEIs participating in the submission.
7. Click **Next**.
8. Optionally, modify the default PDF file name (which is in the format `REFReport<yyyymmdd>-<hhmm>`).
9. Click **Finish**. The report job is requested and added to the queue.



You can view the progress of the job on the [Reports page](#), and then download the PDF once the job has completed successfully.

GLOSSARY

Assessment period

The period from 1 August 2013 to 31 July 2020 during which the following are assessed: research impacts, the research environment, and data about research income and research doctoral degrees awarded (refer to [REF4a/b/c: Introduction to quantitative environment data](#)).

Census date

The date for determining the affiliation of research staff to a particular [HEI](#), being 31 July 2020.

Crossref

A not-for-profit network founded on publisher collaboration, with a mandate to make reference linking throughout online scholarly literature efficient and reliable. It is also the official DOI® link registration agency for scholarly and professional publications. Refer to [Retrieving DOIs and output data via Crossref](#).

Category A eligible

Those academic members of staff with a contract of employment of 0.2 FTE or greater (refer to [Full-Time Equivalent \(FTE\)](#)), whose primary employment function is to undertake either 'research only' or 'teaching and research', and who:

- in the case of current staff, are on the payroll of the submitting [HEI](#) on the [Census date](#);
- in the case of former staff, were employed by the HEI as when the attributed output(s) was first made publicly available, including:
 - staff who remain employed at the HEI, but are no longer employed as Category A eligible on the census date (for example, senior administrative staff),
 - staff who were an unpaid leave of absence or secondment (whether to another UK HEI, or beyond HE/ overseas), where the leave or secondment period was no greater than two years.



Refer to [Eligibility of outputs produced or authored by former staff](#) in the [Guidance on submissions \(2019/01\)](#), in particular paragraph 211.

Category A eligible staff should have a substantive research connection with the [Submitting unit](#) (refer to paragraphs 123 to 127 of the [Guidance on submissions \(2019/01\)](#)). Staff on 'research only' contracts should meet the definition of 'independent researcher' (refer to paragraphs 128 to 134 of the [Guidance on submissions \(2019/01\)](#)).

Category A submitted

Those members of staff, defined as **Category A eligible**, who have been identified as having significant responsibility for research on the **Census date**, or, in the case of former staff, were employed by the HEI when the attributed output(s) was first made publicly available.

Staff on 'teaching and research' contracts will be included in accordance with the approaches outlined in paragraph 135 of the **Guidance on submissions (2019/01)**.

External matching service

The sub-panels associated with UOAs 1-9, 11 and 16 will make use of citation matches for REF2 research outputs wherever available (refer to **Invoking the external matching service**). The matching service for the REF2021 submission system is provided by Clarivate Analytics, who are responsible for mapping the research output data to Web of Science identifiers for the purpose of providing citation data and other bibliographic contexts.



Prior to final submission, it is mandatory that a **Submitting unit** attempts to match each journal article and conference proceeding that is associated with UOAs 1-9, 11 and 16.

Full-Time Equivalent (FTE)

The proportion of hours worked by one employee on a full-time basis. The FTE is the proportion of hours worked by one employee on a full-time basis. The combined FTE of **Category A submitted** staff will be used to calculate the number of outputs required from each **Submitting unit**.

HEI

Higher Education Institution, sometimes referred to simply as an "institution".

Joint submission

A submission where, instead of an HEI making their own individual submission to a **Unit Of Assessment (UOA)**, the submission is made jointly by two or more HEIs, where one HEI becomes the **Lead**, and the other HEI(s) become(s) the **Member(s)**. Refer to **Creating a joint submission (Lead HEI)**.

'Minimum of one' requirement

All **Category A submitted** staff must be returned with a minimum of one output attributed to them in the submission, including staff with individual circumstances. However, where an individual's circumstances have had an exceptional effect on their ability to work productively throughout the assessment period (1 January 2014 to 31 July 2020), such that the individual has not been able to produce an eligible output, a request may be made for the 'minimum of one' requirement to be removed (refer to **Applied REF6a: Removal of the 'minimum of one' reduction**). Where the request is accepted, an individual may be returned with no outputs attributed to them in the submission, and the total outputs required for the **Submitting unit** will be reduced by one.

Multiple submissions

The submission type whereby, with prior approval from the funding bodies following a special request from an HEI (refer to the [Special requests tab](#)), the HEI submits more than one submission to a particular **Unit Of Assessment (UOA)**. When you attempt to create a submission for the pre-approved UOA, the system will prompt you to create the multiple submission at that point.



For more information on multiple submissions, please refer to paragraphs 178 to 186 of the [Panel criteria and working methods \(2019/02\)](#).

Output sub-profile

Sub-panels 3 and 12 recognise that HEIs may wish to submit outputs within specific distinct areas of a UOA, and will therefore provide appropriate sub-profiles for ease of categorisation (refer to paragraphs 181 and 183 of the [Panel criteria and working methods \(2019/02\)](#)), and to [Sub-profile](#)). Sub-profiles are not mandatory, and the sub-panels will judge the research content of the material submitted even if no sub-profiles are selected.

Publication period

For research outputs submitted via REF2 (refer to [REF2: Introduction to research outputs](#)), this is the period (from 1 January 2014 to 31 December 2020), during which the output must have been first either made publicly available (that is to say, published, performed or exhibited), or, in the case of a confidential report, lodged with the body to whom it is confidential.

Research specialism

Research specialisms are required for the *Survey of submission intentions*, and are listed in the spreadsheet at [Annex B](#) of the *Survey of submission intentions* webpage. The selection options relating to this list for the different UOAs are given in Table 2 of the separate [Survey of submission intentions guidance \(Annex A\)](#).

The specialisms allow the REF team to estimate the workload on existing sub-panel members and ascertain where additional expertise may be needed. This will help to ensure that, for the assessment phase, the sub-panels have the requisite numbers of members, with the appropriate levels of expertise. Each submission intention that is submitted as a response to the *Survey of submission intentions* (refer to [Introduction to the Survey of submission intentions](#)) must be associated with at least one research specialism.

Reserve output

You can specify an output to act as the 'reserve' output should a request for a double-weighted output fail to be upheld (refer to [Double-weighting reserve output](#)).

In the event that a 'reserve' output is assessed, the HEI must ensure that the requirement to submit a minimum of one for each [Category A submitted](#) staff member is still met, and that the limit of five outputs attributed to any one current or former staff member is not exceeded.

Submission

A *submission* usually refers to the complete dataset of Staff, Outputs, Impact and the Environment submitted by an HEI to a sub-panel by a single **Submitting unit**. There is a sub-panel for each of the 34 UOAs shown in **What is REF 2021?**.

In addition, in **Submission management**, *submission* is the name given to the record that holds such a dataset.

Submission set

The entire collection of submitting units (refer to **Submitting unit** for an HEI, inclusive of any joint submissions (refer to **Joint submission**) and multiple submissions (refer to **Multiple submissions**).

Submission deadline

The last date on which an HEI may submit its **Submission set** to REF 2021. This is Wednesday, 31 March 2021 (with a deadline of midday).

Submitting unit

This refers to the group or groups of research staff members identified by the HEI as working primarily within the remit of a particular **Unit Of Assessment (UOA)**, together with evidence of the research produced during the **Publication period**, examples of impact underpinned by research in the unit, and the structures and environment that support the research and its impacts. Once the unit has been submitted, it may be referred to as a **Submitted unit**.

The term is used to reflect the fact that the group of research staff members submitted within a particular UOA may not correspond directly to any of the single departments within an HEI.

It is sometimes simply referred to as a "unit".

Substantive connection

For current staff employed on minimum fractional contracts (0.20 to 0.29 FTE) on the **Census date**, or for former staff employed on minimum fractional contracts, the HEI will need to provide a short statement (up to 200 words) evidencing the clear connection of the staff member to the **Submitting unit**. The range of indicators likely to evidence such a connection can be found in paragraph 123 of the **Guidance on submissions (2019/01)**.

Unattributed output

A research output that is created via REF2 (refer to **Creating a new output**) without being attributed to a staff member. If left unattributed when it comes to final submission, an error will be returned by pre-submission validation.

Unit Of Assessment (UOA)

An area of research identifying the remit of a particular **Submitting unit**. Submissions are made within 34 discipline-based UOAs in REF 2021. There is an expert sub-panel for each UOA, and the sub-panels are grouped under four main panels (refer to **What is REF 2021?**).

INDEX

A

- Accepting an invitation to a joint submission 33
- Account expiry 40
- Account locking 40
- Adding a research specialism 56, 167
- Adding an impact case study's details 93
- Adding corroborator to case study 95
- Additional information for outputs 80
- Administration 24
- Administrative users 40-41
- Allow data to be imported even if there are validation errors 131
- Ambiguous or not matched outputs 140
- Angular 16
- Append after import 116
- Arial Unicode MS 20
- Assessment period 165
- Assistance pane 15
- Attributing a staff member to an output 86
- Attributing outputs 89
- Automated users 40-41
- Available report types 162

B

- Breadcrumb trail 14
- Browser notes 16
- Bulk citation count retrieval 131, 140, 144
- Bulk Crossref lookup 45
- Bulk DOI Look up 136

Index

- Bulk output matching 136, 140, 144
 - Request 141
- Bulk retrieval of output details by DOI 136
- C**
- Category A eligible 165
- Category A submitted 166
- Census date 3, 165
- Character limits 20
- Citation count
 - Single
 - Retrieve 141
- Citation counts 140, 144
 - Updates 142
- Citation summary
 - View 141
- Citations 86
- Clarivate 140
- Clear cache 50
- Clearing forms from a submission 37
- Clearing submission data 37
- Configuring a joint submission 34
- Conflicted panel members 84, 93
- Copying retrieved output details to REF2 137
- Corroboration of case study 95
- COVID-19 82
- Creating a new output 70
- Creating news items 47
- Creating submissions 29
- Creating users 40
- Criminology 83
- Cross-referral of outputs 81
- Cross-referral requests 57
- Cross-referral UOA 93
- Crossref 165
- Crossref system 137
 - Retrieving data 136
- Crossref, retrieving data from 136

Current staff member

 Create 63

Current staff members 62

Current staff table 117

D

Data entry

 Introduction 60

Deattributing a staff member from an output 90

Deattributing an output from a staff member 89

Deattributing outputs 89

Delete data 45

Deleting

 Impact case study 95

 Outputs 69

 Staff members 62

 Submissions 38

 Users 44

Digital Object Identifier See **DOI**

DOI 71

Double-weighting request 87

Double weighting reserve 87

E

Environment data 97

Environment statement

 HEI-level 100-101

Environment template

 UOA-level 100, 103

Errors

 Validation 21

Evidence of substantive connection 63, 66

Exclude from submission 85

Exclude this REF2 from publication 85

Excluded outputs 70

Existing matches and citation counts

 Viewing 140, 144

Existing user login 10

Index

- Export 45, 114
 - Jobs queue and logs 133
 - process 133
 - Valid file formats 114
- Export submission intentions to Excel 53
- External matching service 166
 - Output 141
 - Results retrieved 141, 144

F

- Finding
 - Users 39
- Finding outputs 70
- Fixed term contract 64
- Former staff contract table 119
- Former staff member
 - Create 65
- Former staff members 62
- Former staff table 118
- Frequently asked questions 5
- FTE 166
 - Contracted 63, 65
- Funding split method 33

G

- Gender Recognition Act 106
- General Data Protection Regulation 106
- Generating a new report 162
- Generating a new validation report 149
- Glossary 165

H

- HEI 166
- HEI-level environment statement 101
 - Import/Export 128
- Help desk 5
- HESA data files 49
- HESA staff identifier 62-63, 65
- Homepage 11, 48

I

- Impact case studies 55, 91
 - Adding details 93
 - Introduction 91
 - Requiring security clearance 25, 27
- Impact case studies table
 - Import/Export 123
- Impact case study
 - Deleting 95
 - Template and guidance 91
- Impact case study contacts table
 - Import/Export 125
- Impact case study grants table
 - Import/Export 124
- Import 45, 60, 114
 - Jobs queue and logs 131
 - Process 130
 - Valid file formats 114
 - Validation report 132
- Import/Export tables 117
- Import/Export tools 114
- Importing REF2 forms with a reserve output 120
- Individual staff circumstances 106
- Institution-level environment statement 101
- Interdisciplinary 84
- Introduction to REF2021 2
- Introduction to submission intentions 52

J

- Joint submission 28-29, 166
 - Access permissions 34
 - Configuring 34
 - Creating 32
 - Leaving 36
 - Locking forms 36
 - Reverting 37
 - Validating 156

Index

K

Known issues 5

L

Lead HEI 32, 60

Leaving a joint submission 36

Locked Account 40

Locking forms

 Joint submission 36

Logging in 8

 Existing user 10

Logging out 12

M

Managing individual users 43

Managing user permissions 41

Mandatory fields 21

Matched outputs 140

Member HEI 32-33, 60

Minimum of one 108, 128, 166

Mixing manual data entry with data import 116

Modifying a joint submission 34

Modifying news items 48

Multiple submissions 29, 167

 Creating 29

 Request 25-26

N

Navigation 14

New user login 8

News 45

News items 11, 47

 Creating 47

 Modifying 48

Non-English output 88

O

Open access 76

Output

 Attribute staff member to it 86

- Creating 70
- Non-English 88
- Output allocation 81
- Output format 78
- Output matching 45, 136, 140, 144
- Output reductions
 - Staff circumstances 106
- Output reductions across UOA 108
- Output sub-profile 81, 167
- Output summary 86
- Outputs 68-69
 - Attributing 89
 - Deattributing 89
 - Deleting 69
 - Exclude from submission 85
 - Excluded 70
 - Finding 70
 - Reserve 70
 - Searching 70
- Outputs not in English 57
- Outputs tab 69
- Outputs table
 - Import/Export 120
- Overview of submission system 6
- Overwrite after import 116

P

- Panels 2
 - Main 2
 - Sub 2
- Pending publication 88
- Permissions 39-41
- Publication period 167

Q

- Quantitative environment data 97

R

- Reduction requests summary 110
- REF 4 100

Index

- REF guidance documents 5
- REF1 tables
 - Import/Export 117
- REF1a 3, 117
- REF1a/b 62
- REF1b 3, 118
- REF2 3, 68-69, 140, 160
 - Import with reserve 120
- REF2 tables
 - Import/Export 120
- REF2021 2
- REF3 3, 55, 91
- REF3 tables
 - Import/Export 123
- REF4 97
- REF4 tables
 - Import/Export 126
- REF4a 3, 98, 127
- REF4b 3, 98, 127
- REF4c 3, 99, 127
- REF5 100
- REF5 tables
 - Import/Export 128
- REF5a 3, 97, 100-101
- REF5b 3, 97, 100, 103
- REF6 tables
 - Import/Export 128
- REF6a 4, 106-108, 128
- REF6a/b 106-107
- REF6b 4, 106-108, 129
- Remove 'minimum of one' requirement 107-108, 128
- Reports feature 160
- Reports page 161, 164
- Request
 - Multiple submissions 25-26
 - Overall UOA output reduction 108, 129
 - Removal of 'minimum of one' requirement 108, 128
 - Small unit exception 25, 27

- Requests
 - Special 25
- Research doctoral degrees awarded 98
 - Import/Export 127
- Research Groups See **RGs**
- Research Groups table
 - Import/Export 117
- Research income 98
 - Import/Export 127
- Research income-in-kind 99
 - Import/Export 127
- Research outputs 69
 - Introduction 68
- Research specialism
 - Adding 56, 167
- Reserve
 - Double-weighted 87
- Reserve output 167
- Reserve outputs 70
- Results retrieved from external matching service 141, 144
- Retrieve citation counts for outputs 131
- Reverting a joint submission 37
- RGs 61, 117
 - Creating 61
 - Modifying 61
 - Removing 61
- S**
- Searching outputs 70
- Secondment 64, 66
- Security clearance for case study
 - Request 27
- Set permissions
 - Joint submission 34
- Small unit exception
 - Request 25, 27
- Special requests 25
- Staff circumstances 106-107
- Staff details 62

Index

- Staff member
 - Remove 62
- Standard users 40-41
- Sub-panel 2
- Submission 168
- Submission data
 - Clearing 37
- Submission deadline 153, 168
- Submission intention summary 56
- Submission intentions
 - creating 54
 - Introduction 52
 - Permissions 45
- Submission management 25, 28, 45
- Submission process 152
- Submission report
 - Generating 162
- Submission report types available 162
- Submission reports 160
- Submission reports page 161, 164
- Submission set 168
 - Submitting 157
 - Validate 155
- Submission system overview 2, 6
- Submissions
 - Creating 29
 - Deleting 38
- Submissions tab 28
- Submit error 21
- Submit feature 152
- Submit status 152
- Submit to REF2021 157
- Submit validation 152, 155, 157
- Submit validation status 28
- Submitting 152, 157-158
- Submitting survey of submission intentions 58
- Submitting the survey of submission intentions 56
- Submitting unit 168

- Substantive connection 168
- Summary of reduction requests 110
- Supplementary information 88
- Supporting statement for overall UOA reduction 129
- Survey of submission intentions 52-53
 - Submitting 58

T

- Table linking staff to outputs
 - Import/Export 122
- Taxonomies 81
- Trusted sites 16-17
- Type of user account 41

U

- Unattributed output 168
- Unicode support 20
- Units Of Assessment See **UOAs**
- Unlocking an account 40
- Unpaid leave 64, 66
- Unsubmitting 157
- UOA 168
- UOA-level environment statement
 - Import/Export 128
- UOA-level environment template 103
- UOA output reduction
 - Request 108, 129
- UOAs 2
- User account type 41
- User administration 39
- User permissions
 - Managing 41
- Users
 - Creating 40
 - Deleting 44
 - Finding 39
 - Logging in for the first time 8
 - Managing 43

Index

V

- Valdate prior to Submit 152, 155
- Valid file formats 114
- Validate 21
- Validate feature 146-147
- Validating a joint submission 156
- Validating all submissions 155
- Validation errors 21
- Validation report
 - Contents 147
 - Generating 149
- Validation report page 147
- Validation reporting 146
- Validation rules 21
- Viewing existing matches and citation counts 144

W

- Warning message 21
- Web of Science 140
- Weighting 2
- What is REF2021? 2
- Word limits 20

Y

- Year of publication of outputs 77