

## Annex E: Submission and quality assurance of HESES14

Completed workbooks for HESES14 must be uploaded to the HEFCE extranet no later than **noon on Tuesday 9 December 2014**.

This annex explains the data checks that each institution must undertake before uploading its completed workbook to the HEFCE extranet, and many of the data checks that we will carry out as part of the data verification process once we have received the completed workbook.

### Data preparation and submission

1. An Excel workbook with spreadsheet versions of the tables in Annex C will be available in November 2014 on the HEFCE extranet, <https://data.hefce.ac.uk/>. Heads of institutions and HESES contacts will be issued with a key (unique to their institution and to the HESES14 survey) to enable access to this workbook via the HEFCE extranet. Institutions will need to upload the completed workbook to the same web-site. In addition to the extranet key, heads of institutions and HESES contacts will be issued with guidance on how to use the extranet and a checklist (also available in Annex R) for use before submission of the completed workbook.
2. Returns must be uploaded to the HEFCE extranet no later than **noon on Tuesday 9 December 2014**. We will not give extensions to this deadline.
3. The data do not need to be formally signed off by the Accountable Officer at this stage. However, it is good practice for someone independent of the compiler of the return to review it carefully to ensure that the figures (including indicative funding implications) make sense in relation to the supporting data, and that basic inputting errors have not occurred. A senior member of the institution should also agree the return prior to submission.
4. Where an institution fails to return data on time, or the returned data are not credible, we may allocate funds and monitor student numbers based on our own estimate of student activity. Institutions that do not submit credible data on time are more likely to be audited.
5. Good practice guidance for preparing the HESES return can be found in the shaded boxes in paragraphs 31 to 44 of this annex, and throughout this publication.

### Data verification and sign-off of HESES14 data

6. A number of validation and credibility checks are carried out automatically within the workbook (detailed in paragraphs 13 to 17 below and in Appendices 1 and 2).
  - a. **Validation checks** ensure numerical consistency within the return (for example, that particular figures on a table match related figures on another).
  - b. **Credibility checks**. Some of these are built into the HESES Excel workbooks and will generate warning messages if certain thresholds are breached. In addition, HEFCE staff check the credibility of all data returns and will question

institutions about them. Credibility checks will relate to data values or changes that, while possible, appear unexpected or unlikely.

7. The workbook contains a worksheet showing the estimated student number control grant adjustments for 2014-15 (described in Appendix 3). Other worksheets are included which will enable institutions to model their indicative funding allocations for 2013-14, 2014-15 and 2015-16 (described in Appendix 4). The appendices are available to download alongside this document at [www.hefce.ac.uk/pubs](http://www.hefce.ac.uk/pubs).

8. Where credibility warnings are present in the submitted workbook (either in the form of first-stage credibility warnings in Tables 1 to 6 or automatic check highlighting in the comparison tables, as described in paragraphs 18 and 20 of this annex), institutions must inform us of the reasons why the data are credible. An e-mail detailing these reasons should be sent to [dataverification@hefce.ac.uk](mailto:dataverification@hefce.ac.uk) by 9 December 2014. Such explanations will inform the subsequent data verification process as detailed below.

9. When we receive the HESES14 returns, we will review the data and e-mailed explanations for outstanding credibility warnings. During December, we will e-mail institutions, attaching their HESES data and the comparison and grant adjustment reports generated from them. Institutions will be asked to:

- verify that the data are accurate, or make corrections
- answer any questions we may have about the data and the explanations already provided
- submit any appeals against student number control grant adjustments.

The timetable for this is tight: if corrections to data are made, we will then reissue the data for re-verification by institutions, and may ask further questions as appropriate. We expect institutions to answer any questions about data within five working days. We may refuse to revise allocations once data have been verified.

10. Verification checks will be carried out by a small team of data verification specialists at HEFCE. Any questions throughout the data verification process should be e-mailed to [dataverification@hefce.ac.uk](mailto:dataverification@hefce.ac.uk). This e-mail inbox will be checked frequently by the data verification team. To discuss any queries we raise, or your institution's data, contact the individual named in the initial e-mail that details our queries.

11. By 15 January 2015, all institutions must have signed off their HESES data as correct as at 1 December 2014. Given its significance to the institution's funding, we require the Accountable Officer (normally the head of institution) to sign off the finalised HESES return. This requires them to have an understanding of our data collection requirements, to ensure that the institution has systems capable of producing an accurate, complete return and that the preparer of the return has compiled it competently. If it is anticipated that the Accountable Officer will be unavailable to sign off the data during the data verification period, institutions should e-mail [dataverification@hefce.ac.uk](mailto:dataverification@hefce.ac.uk) to agree interim arrangements. We will expect the Accountable Officer to sign off the data on their return.

12. If an institution fails to meet the deadline for signing off data, or we believe the data to be inaccurate, we reserve the right to use our own estimates of data to inform funding

and monitor student numbers (see paragraph 29 of 'Memorandum of assurance and accountability between HEFCE and institutions: Terms and conditions for payment of HEFCE grants to higher education institutions', [HEFCE 2014/12](#)). We cannot guarantee to increase allocations to reflect any amendments to data after 15 January 2015.

### **Validation checks on Tables 1 to 6**

13. Each worksheet contains a number of validation checks which help to ensure that incorrect data are not submitted. If an error or inconsistency is detected in a completed worksheet, a message reading **Validation: Failure (see below table)** will appear above the column where there is a validation failure, and the values in the cells which are causing the error will turn red. Below the table, the error will be described in more detail. These errors **must be corrected** before submitting the completed workbook: we will not accept workbooks that contain validation failures. If the source of the error cannot be identified, institutions should e-mail us for advice at [heses@hefce.ac.uk](mailto:heses@hefce.ac.uk). The validation checks themselves are described in more detail in Appendix 1.

### **Credibility checks**

14. The HESES14 workbook contains a series of credibility checks in the form of first-stage credibility warnings on Tables 1 to 6 and automatic check highlighting on the comparison tables to help institutions check data credibility prior to submission. Where first-stage credibility warnings or automatic check highlighting are shown, institutions should check that the data they have entered are correct and meet the guidance and definitions set out in the relevant section of this publication.

15. The automatic checks included in the workbook are not exhaustive. Institutions are expected to conduct their own credibility checks to ensure the data are reasonable prior to submission.

16. Once the data have been submitted, we will use these checks and tables to assess whether they are reasonable. Institutions will be asked to explain any apparent anomalies, or to correct the data, before signing off the data as correct. This data verification process is described in more detail in paragraphs 9 to 11 of this annex.

### **First-stage credibility warnings on Tables 1 to 6**

17. The worksheets contain a number of first-stage credibility warnings. These checks are intended to warn institutions that they have entered data which may be (but are not necessarily) erroneous. If potentially erroneous data are detected in a completed worksheet, a message reading **First-stage credibility: Warnings (see below table)** will appear above the column containing them. Below the table, the warning will be described in more detail. Completed workbooks with first-stage credibility warnings may be submitted, but institutions must inform us of the reasons why the data are credible as described in paragraph 8 of this annex. If the source of the warning cannot be identified, institutions should e-mail us for advice at [heses@hefce.ac.uk](mailto:heses@hefce.ac.uk). The first-stage credibility warnings are described in more detail in Appendix 2.

### **Automatic check highlighting on the comparison tables**

18. The workbook also incorporates a series of comparison tables within the 'Funding' and Comparison 1 to 4 worksheets. These tables contain comparisons of:

- funding allocations between different years and stages of the three-stage recalculation process
- the data submitted in HESES14 with data submitted in HESES13 and other sources.

This information is provided to allow identification of any material changes in data which may indicate errors in the submission. The tables on the 'Funding' worksheet will be used to identify differences at a high level; the tables on the four comparison sheets will then be used to look at the differences in more detail.

19. Automatic check highlighting will highlight (in yellow) data which may be (but are not necessarily) anomalous or represent a significant year-on-year change. Completed workbooks that have automatic check highlighting present may be submitted, but institutions must inform us of the reasons why the data in the Comparison 1 and 2 worksheets are credible as described in paragraph 8 of this annex. If the reason for the highlighting cannot be identified, institutions should e-mail us for advice at [heses@hefce.ac.uk](mailto:heses@hefce.ac.uk). The automatic check highlighting and the comparison tables are described in more detail in Appendix 2. As well as the automatic check highlighting we may also query other significant changes in the data.

20. The Comparison 3 and 4 worksheets are provided for institutional use only. Institutions need not provide explanations for any automatic check highlighting on these sheets. The comparison tables in them will not routinely be questioned during the data verification process, but we may query any large differences.

### **Grant adjustments worksheet**

21. In addition to the tables which must be completed in the HESES14 workbook (Tables 1 to 6, as described in [Annex D](#)), there is a worksheet called 'HBK' which contains the estimated student number control grant adjustments for 2014-15.

22. Institutions should check the figures shown on this worksheet before uploading the completed workbook to the extranet to ensure that any estimated grant adjustments are not the result of data error. Any queries about estimated grant adjustments should be addressed to the relevant HEFCE higher education policy adviser in the first instance (contact details for policy advisers, searchable by institution, are available at [www.hefce.ac.uk/contact/contactsforinstitutions/](http://www.hefce.ac.uk/contact/contactsforinstitutions/)). The worksheet is described in more detail in Appendix 3.

### **Indicative funding for 2013-14, 2014-15 and 2015-16 worksheets**

23. A further three worksheets contain tables that will enable institutions to model the following indicative funding:

- final funding for 2013-14
- adjusted funding for 2014-15
- funding for 2015-16.

These worksheets do not incorporate any new scaling factors, which will be confirmed in early 2015. They contain cells that institutions need to populate and are described in more detail in Appendix 4. Institutions should use these worksheets before uploading the

completed workbook to the extranet to ensure that any estimated funding implications are not the result of data error.

### **Checklist**

24. In November 2014, we will issue
- a letter to heads of institutions and HESES contacts containing the key to access the HESES survey
  - a checklist for use before submission of the completed workbook.

This checklist will contain a series of self-check questions to which an institution must be able to answer 'yes' before uploading the completed workbook to the extranet. We also recommend that this checklist is reviewed when final checks are carried out before the data are signed off. The checklist can also be found in Annex R.

### **Data assurance**

25. We will continue to consider aspects of the HESES return for audit activity on a risk basis, and review aspects of the data used for funding and student number purposes. Institutions should therefore keep an adequate audit trail recording how the data have been derived. This is especially important when institutions are including estimates or forecasts, or making judgements. Institutions must ensure that estimates and forecasts are reasonable and have sufficient supporting data. Evidence of enrolment should be available for inspection. Where appropriate, our auditors will also seek to rely on any relevant internal audit work that has been carried out on the student record system or the method for compiling the HESES return.

26. We no longer audit the HESES return on a cyclical basis, but audit particular areas of data related to the return on a risk basis. The data audits that we carry out test institutions' systems and processes in preparing the aspect of the data return under review. This may involve desk-based work, and visits to institutions for the following purposes.

- a. To review their management information systems.
- b. To review the documentation that provides an audit trail showing how the return was produced.
- c. To test the values reported on the return and the assumptions underpinning it. This will involve selecting samples (or whole populations) of students and testing how they have been reported in the return.

The audits often include a review of the outturn position of students at the end of the academic year, to assess the reasonableness of how they have been included in the HESES return.

27. Data reconciliation occurs in the following academic year. We use the Higher Education Statistics Agency (HESA) individualised student record to construct a HESES return reflecting the final outturn position. Where differences between the original and re-created HESES return result in significant funding discrepancies, the institution is selected to go through a funding and monitoring data reconciliation exercise. This involves explaining the reasons for data differences and, if necessary, submitting

amendments to the HESA data. At the end of the process, we will treat the final (amended) HESA data as superseding the original HESES return, and will implement any consequential funding and student number adjustments for all relevant years (subject to an appeals process where appropriate).

28. As part of our audit and reconciliation processes we will also compare HESA data with a variety of other data, most notably further education colleges' individualised learner records, National Pupil Database data and Student Loans Company data as these become available. Details of how we expect to compare HESES with HESA data are given in 'Higher Education Statistics Agency funding and monitoring data (FAMD) 2013-14: web facility' [HEFCE Circular letter 28/2014](#).

29. Paragraph 9 of 'Memorandum of assurance and accountability' ([HEFCE 2014/12](#)) states that the annual report of the institution's audit committee must include the committee's conclusions on the adequacy and effectiveness of the institution's arrangements for the management and quality assurance of data submitted to HESA, HEFCE and other funding bodies. This is to ensure adequate governance oversight of the systems used to generate data by the institution, since poor data may represent a significant financial risk for institutions. Further guidance for audit committees on data assurance can be found at [www.hefce.ac.uk/whatwedo/reg/assurance/guidance/auditarrangements/](http://www.hefce.ac.uk/whatwedo/reg/assurance/guidance/auditarrangements/).

30. Previous audits of HESES data have identified a number of areas where some institutions were incorrectly interpreting the HESES definitions, or where internal institutional systems and practices did not facilitate the production of the HESES return. These have included:

- inadequate recording of entry qualifications
- incorrect application of the rules on student completion (particularly those around the requirement for submission of the final assessment in all modules intended to be studied in the year)
- inadequate recording of submission dates of final assessments, for the purpose of determining completion status
- failure to identify students' study intentions for the year for the purpose of determining completion status
- lack of robustness in estimating of non-completions and forecasting countable years
- incorrect calculation of full-time equivalence and incorrect assignment of multiple instances to part-time students following modular programmes
- incorrect assignment of activity to price groups
- incorrect identification of mode of study
- incorrect classification of students as old- or new-regime
- poor communication in collaborative arrangements

- inadequate audit trail between the student record system and the HESES return
- lack of systems notes for recording data on student activity and for the HESES preparation process
- lack of analytical review of figures in the return to identify anomalies and ensure that the data make sense
- lack of reconciliation between HESES and HESA returns before submission to HESA.

31. To assist with future compliance, we strongly recommend that each institution undertakes a formal review of existing arrangements, taking into account the shaded 'Good practice' sections in this and other annexes. As new areas of risk arise we need to gain assurance over these areas, so our data assurance activity is continuously developing. Institutions should give particular attention to any new developments within HESES14, and ensure they have assurance over all aspects of the return in case of audit activity. As we develop audit programmes we will publish them on our web-site at [www.hefce.ac.uk/whatwedo/invest/institns/funddataaudit/](http://www.hefce.ac.uk/whatwedo/invest/institns/funddataaudit/).

## **Good practice**

### Audit trail

32. An adequate audit trail between student record systems and the HESES return should be retained for at least five years. This should include a record of the basis for making estimates of non-completions and forecast countable years, along with any relevant electronically stored data, printouts and working papers used in completing the return. Source documents such as registration forms should also be retained, including information on students' detailed study intentions for the academic year and their qualifications on entry.

33. There should be an audit trail to individual figures in the return for all Column 1 figures in Tables 1 to 4 and 6, identifying individual students within those figures. During audit we ask for a sample of these figures to be rebuilt. In the case of the estimates and forecasts (that is, Columns 2 and 3 in Tables 1 to 4 and 6 and all of Table 5), there must be a clear rationale for the figures, and backup data justifying what is being returned.

34. Where the institution is involved in franchise or other collaborative arrangements, the audit trail must include evidence for the inclusion or exclusion of students, and forecasts relating to such students.

### Knowledge management and staff training

35. At many institutions, the knowledge required to prepare the HESES return is undocumented and sometimes lies with only one person. This creates a risk that in that person's absence, particularly at crucial times of the year, the institution may not be able to prepare the return on time and to the appropriate standard. A good audit trail helps to reduce this risk, but we also consider it good practice for all institutions to manage this risk by ensuring that at least two people can produce the information for the return and prepare the return itself.

36. All relevant staff, including experienced staff, should consider the HESES guidance each year and make any necessary changes to their systems.

37. In addition, institutions should ensure that the relevant processes are adequately documented and that this documentation is kept up to date.

38. There are, quite reasonably, differences between academic regulations of institutions and the rules relating to the counting of students for funding purposes. It is essential that individuals involved in completing student data fields which are used for funding purposes fully understand the fields they are completing in the student record. For these fields, student activity should be reported with regard to funding rules and not in accordance with the institution's own academic regulations and progression rules. This is discussed in more detail in [Annex I](#).

39. Although institutions have academic regulations and procedures for managing student data in their student record systems, there can be inconsistent practice within institutions. In general, institutional practices for collecting and recording data should be applied consistently across all departments and faculties where data requirements are the same. However, some departments may have additional requirements which they will also have to meet. For example, faculties of health studies often have requirements beyond those of the rest of the institution.

40. Data quality will be improved if staff who input data into, manage and maintain the student record system understand and take into account the requirements of users of these data. Many instances have been found where staff responsible for completing key fields required for funding purposes had no training on the funding rules governing their completion. In many cases the data required to complete those fields correctly were not recorded on the main student record system, so robust centralised systems could not be implemented, and reliance was placed on inadequately trained staff. All users should be trained in the institution's data requirements, with reference to any differences between academic regulation requirements and funding rule requirements, so that they understand why they are asked to perform particular tasks.

#### Analytical reviews and data reconciliations

41. A reconciliation between HESES14 and the 2014-15 HESA individualised student record should be made before the HESA data are submitted. Differences should be examined as part of the process for identifying possible data error, and amendments made to the HESA data if necessary. This will be useful preparation for the HESA-HESES funding and monitoring data reconciliation exercise if differences are substantial. It should also help to eliminate inconsistencies in students' treatment in the two returns for future reference, and reduce systems problems with the way students are returned in HESA data before submission. In summer 2015 we will give institutions access to a web facility that will be able to re-create an institution's HESES14 data from its HESA 2014-15 return. An equivalent exercise carried out on the previous year's return during summer 2014 may highlight errors in HESES13 that can be avoided in HESES14.



Implementing new student record systems

42. Implementing a new student record system is a major undertaking. It is essential that institutions manage this process carefully to ensure that the system does not fall into disrepute before the process is complete.

43. One problem we find with new systems (even proprietary systems) is the lack of ability to draw out management information and basic reports from the system. As part of the overall implementation project, it is essential to include the requirements both for everyday reports needed by academic and administrative staff and for top-level management reports, and to make arrangements to ensure that they are delivered.

Management information

44. In gaining assurance we do not ask for any reports that could not reasonably be expected to be used in everyday activity. However, some institutions have great difficulty in extracting these standard data from the student record system, and many do not even hold the required data. Data that cannot be extracted and reported on are of limited value.

45. Developing exception reporting, and using it to highlight data issues for review and subsequent amendment, will help to ensure that high-quality data are returned. Data quality is also enhanced by data management reviews by those with a good understanding of the data.