Appendix 7

RAS03 re-creation algorithms

Purpose

1. This appendix describes the method used to re-create forms R1a, R1b, R2a and R2b of RAS03 from the HESA 2003-04 individualised student record.

2. This appendix is aimed at expert readers with an in-depth knowledge of the data. Readers are advised to have copies of the 2003-04 HESA individualised student record coding manual and 'Research Activity Survey 2003' (HEFCE 2003/49) to hand when using this appendix.

3. Our mapping of subject code to Unit of Assessment was derived from an analysis of HESA 2002-03 staff data. Units of Assessment (UoA) are assigned to broad subject groups using the mapping below:

Broad subject group	UoA
Clinical Subjects	01 – 03
Subjects Allied to Medicine	04 – 11
Sciences	12 – 25, 32
Engineering Subjects	26 – 31
Social Sciences	33 – 44, 69
Humanities	45 – 63
Arts	64 – 67
Education	68

HESA fields used in the re-creation of Forms R1a, R1b, R2a and R2b

4. Only certain fields, detailed in Table 10, were used to generate the comparison between the RAS03 and HESA 2003-04 student data. The field numbers shown relate to the combined record format of the HESA student record.

5. Throughout this appendix, fields taken from the HESA return or derived as part of the re-creation are shown in capitals using the names given in Tables 10 and 11.

Using the individualised file

6. When working through this appendix it is necessary to use the individualised file RASR03XXXX.ind, where XXXX is the HESA identifier for the institution. Full details of how to access this file are given in Annex G. This appendix will show the allocation of students to cells within the tables and, where relevant, details of why they were excluded.

Table 10 **Fields used in the re-creation of forms R1a, R1b, R2a and R2b**

Field number	Description	Name	Column in individualised file*
2	HESA institution identifier	INSTID	A
4	Student identifier	HUSID	B
26	Date of commencement of programme	COMDATE	X
30	Year of student on this programme	YEARSTU	AZ

35	Date left institution or completed the programme of study	DATELEFT	Y
41	General qualification aim of student	QUALAIM	AI
43-45	Subject of qualification aim	SBJQA1-3	AL-AN
46	Proportion indicator	SBJBID	AK
49	Expected length of study programme	SPLENGTH	AO
50	Units of length	UNITLGTH	AT
65	Fundability code	FUNDCODE	AD
66	Fee eligibility	FEEELIG	AB
67	Fee band	FEEBAND	AA
70	Mode of study	MODE	AF
71	Location of study	LOCSDY	AE
72	Year of programme	YEARPRG	AY
74	Student FTE	STULOAD	AR
149†	Institution's own identifier for student	OWNSTU	D
150†	Institution's own programme of study identifier	OWNPSD	E
151	Student instance number	NUMHUS	C
153	Type of programme year	TYPEYR	AS

* The individualised student data file RASR03XXXX.ind, downloadable from the HEFCE extranet (see Annex G).

† These fields are not used in the comparison but are included in the individualised file to allow easy identification of students.

Description of derived fields for re-creation of forms R1a, R1b, R2a and R2b

7. This section details the derived fields contained on the individualised data file. These fields are used to build the key dimensions of the re-creation of RAS03 for postgraduate research students.

Table 11 **Description of derived fields used to re-create forms R1a, R1b, R2a and R2b**

Field name	Description	Paragraph	Column in individualised file*
ANNIV	Anniversary of commencement date in academic year	11	U
AVRGFTE	Average FTE	30	V
AVRGPOP	Flag indicating whether student's STULOAD contributed to AVRGFTE	31	W
ELAPSED	Expected length of the course in days	37	Z
FTE_TYPE	Method used to return FTE for non-standard academic years	22-26	AC

MODEYPS	Mode for the year of programme of study	9	AG
MSUB	The submission identifier for UoAs where multiple submissions were made to the 2001 Research Assessment Exercise	45	P
PRIKEY†	Unique programme of study identifier	11	F
PRVYRFTE	STULOAD returned on previous HESA record	29	AH
RAS_CASE	Indicator showing how RASFTE was calculated	27-28	AJ
RASFTE	FTE consistent with RAS definitions	34-35	T
RASMODE	Mode of study for research degree	10	Q
RASTYPE	Fundability status	36	R
RASUOA1-3	Units of assessment	15-19	M-O
RASYEAR	Year of programme of study as returned to RAS03	12-14	S
REXCL1, REXCL2, REXCL4, REXCL8, REXCL16	Flag indicating reason(s) for a student's exclusion	40-44	H-L
RSTUEXCL	Reason for exclusion from the RAS student population	38-39	G
STUBID†	Unique countable year of programme identifier	31-34	AP
STUFTEYY	STULOAD field from HESA record in year YRSTUFTE	32	AQ
UOAP1-UOAP3	Proportion of time spent in each subject area, used to scale FTE	20-21	AU-AW
WUP_LINK	Flag indicating whether linking was used for writing-up students	8	AX
YRSTUFTE	Year STUFTEYY is taken from	33	BA

* The individualised data file RASR03XXXX.ind, downloadable from the HEFCE extranet (see Annex G).

† The algorithms for deriving these fields are given in Appendix 1.

WUP_LINK (Column AX in individualised file RASR03XXXX.ind)

8. This field indicates whether a link has been made to improve our estimate of MODE for writing-up students.

Value	Description	Definition
1	MODE from HESA 2002-03 assumed	In 2003-04 data MODE = 43, 44 and HIN link can be made to 2002-03 data
0	MODE from HESA 2003-04	Otherwise

MODE is included in column AF in the individualised file RASR03XXXX.ind.

MODEYPS (Column AG in individualised file RASR03XXXX.ind)

9. This field contains the MODE we have used in the re-creation. We make an assumption about the mode of students that are assumed to start writing-up after 1 December 2003. Details of this assumption are given in paragraph 6 of Appendix 9.

RASMODE (Column Q in individualised file RASR03XXXX.ind)

10. This field allocates students to mode of study.

Value	Description	Definition
FT	Full-time and sandwich and sandwich year-out	MODEYPS = 01, 52, 53 or (MODEYPS = 23, 24 and (FEEBAND ≠ 02, 42 or (FEEBAND = 02, 42 and LOCSDY = D, E, F, G)))
PT	Part-time	Otherwise

MODEYPS, FEEBAND and LOCSDY are included in columns AG, AA and AE in the individualised file RASR03XXXX.ind.

ANNIV (Column U in individualised file RASR03XXXX.ind)

11. This field contains the anniversary of commencement date during the academic year 2003-04.

RASYEAR (Column S in individualised file RASR03XXXX.ind)

12. This field contains the year of programme returned on RAS03 as shown in the table below.

Value	Description
YEARSTU - 1	ANNIV > 1 December 2003 and if YEARSTU > 1
YEARSTU	ANNIV < 1 December 2003

ANNIV, YEARSTU and COMDATE are included in columns U, AZ and X in the individualised file RASR03XXXX.ind.

13. Full-time students that exceed their third year of study are calculated as RASYEAR = 4+ where RASMODE = FT and YEARSTU ≥ 4. Part-time students that exceed their seventh year of study are calculated as RASYEAR = 7+ where RASMODE = PT and YEARSTU ≥ 7.

14. We make an assumption for students returned as dormant for part of the year. Details of this assumption are given in paragraph 16 of Appendix 9.

RASUOA1, RASUOA2, RASUOA3 (Columns M-O in individualised file RASR03XXXX.ind)

15. RASUOA1, RASUOA2, RASUOA03 contain the student's UoAs.

RASUOA1, RASUOA2, RASUOA3,	Description	SBJQA1, SBJQA2, SBJQA3
01	Clinical Laboratory Science	
02	Community-based Clinical Subjects	
03	Hospital-based Clinical Subjects	A1, A3, A9 *
04	Clinical Dentistry	A2, A4
05	Pre-Clinical Studies	
06	Anatomy	
07	Physiology	B1†
08	Pharmacology	
09	Pharmacy	B2**
10	Nursing	B7, B9, P9

11	Other Studies and Professions Allied to Medicine	B5, B6, B8
13	Psychology	C8
14	Biological Sciences	C1, C2, C3, C4, C5, C7, C9, D5
15	Agriculture	D3, D4, D7, D9
16	Food Science and Technology	B4, D6, J7
17	Veterinary Science	D1, D2
18	Chemistry	F1
19	Physics	F3, F5
20	Earth Sciences	F6
21	Environmental Sciences	F7, F9
22	Pure Mathematics	
23	Applied Mathematics	G1[††]
24	Statistics and Operational Research	G3
25	Computer Science	G4, G5, G6, G7, G9
26	General Engineering	H1, H9, J1
27	Chemical Engineering	H8
28	Civil Engineering	H2,J6
29	Electrical and Electronic Engineering	H5,H6
30	Mechanical Aeronautical and Manufacturing Engineering	H3, H4, H7, J9
31	Mineral and Mining Engineering	
32	Metallurgy and Materials	F2, J2, J4
33	Built Environment	K1, K2, K3, K9
34	Town and Country Planning	K4, N8, N9
35	Geography	F8, L7
36	Law	M1, M2, M9
37	Anthropology	L6
38	Economics and Econometrics	L1
39	Politics and International Studies	L2, L9
40	Social Policy and Administration	L4
41	Social Work	L5
42	Sociology	B3, L3
43	Business and Management Studies	G2, N1, N2, N3, N5, N6, N7, T4
44	Accounting and Finance	N4
45	American Studies	T7, V2
46	Middle Eastern and African Studies	Q4, T5, T6
47	Asian Studies	T1, T2, T3
48	European Studies	

49	Celtic Studies	Q5
50	English Language and Literature	Q2, Q3, R6
51	French	R1, R9, T9
52	German, Dutch and Scandinavian Studies	R2
53	Italian	R3
54	Russian, Slavonic and East European Languages	R7
55	Iberian and Latin American Languages	Q9, R4, R5
56	Linguistics	Q1
57	Classics, Ancient History, Byzantine and Modern Greek Studies	Q6, Q7, Q8
58	Archaeology	F4, V4
59	History	V1[Φ]
60	History of Art, Architecture and Design	V3
61	Library and Information Management	P1
62	Philosophy	V5
63	Theology, Divinity and Religious Studies	V6
64	Art and Design	J3, J5, W1, W2, W7, W9
65	Communication, Cultural and Media Studies	P2, P3, P4, P5, V9, W6
66	Drama, Dance and Performing Arts	W4, W5, W8
67	Music	W3
68	Education	T8, X1, X3, X9
69	Sports-related subjects	C6, X2

* Some activity in subject codes A3 and A9 could be naturally assigned to Hospital-based Clinical Subjects or Physiology; for this mapping we have assumed such activity is Hospital-based Clinical Subjects.

† Some activity in subject code B1 could be naturally assigned to Anatomy or Physiology; for this mapping we have assumed such activity is Physiology.

** Some activity in subject code B2 could be naturally assigned to Pharmacology or Pharmacy, for this mapping we have assumed such activity is Pharmacy.

†† Some activity in subject code G1 could be naturally assigned to Pure Mathematics or Applied Mathematics, for this mapping we have assumed such activity is Applied Mathematics.

Φ Some activity in subject code V1 could be naturally assigned to History or History of Art, Architecture and Design, for this mapping we have assumed such activity is History.

16. We make assumptions about assigning activity to UoAs. Details of these assumptions are given in paragraph 12-14 of Appendix 9.

UoA to subject mapping

17. To create this mapping, staff were extracted from the 2002-03 HESA staff record that were category A, A* or C staff during the 2001 RAE. Both selected and non-selected staff are included, ie RESACT = (1,2).

18. The full-time equivalences (FTEs) of the staff extracted were then summarised by academic discipline (field 18 of the staff record). For each academic discipline, the UoA with the highest total FTE was selected as the appropriate mapping.

19. We feel that this method represents the most objective and analytical mapping between subject and UoA across all the institutions. However, we are aware that the re-mapping is often a source of discrepancy between actual and re-created RAS data, therefore the facility exists to override this mapping. See paragraph 12 of Appendix 9 for further information.

UOAP1, UOAP2, UOAP3 (Columns AU-AW in individualised file RASR03XXXX.ind)

20. UOAP1, UOAP2 and UOAP3 indicate the proportion of activity in the UoAs returned in RASUOA1, RASUOA2 and RASUOA3 respectively.

SBJBID	SBJQA3	UOAP1	UOAP2	UOAP3
blank	blank	1.00	0.00	0.00
blank	Not blank	0.34	0.33	0.33
1	blank	0.50	0.50	0.00
2	blank	0.65	0.35	0.00

Method of reporting FTE

21. The method of reporting FTE to HESA affects the way we calculate FTE for the year counted on the RAS. This information was sought by HESA in a letter of 19 August 1996, 'Completion of Field 74 (Student FTE) for students following a non-"standard" academic year'. Some institutions have since changed their method of returning FTE, and we have updated our records accordingly. Institutions that wish to change their method of returning FTE should seek our agreement beforehand.

FTE_TYPE (Column AC in individualised file)

22. This field is used to identify the institution's method of returning FTE for students on non-standard academic years. Students are on a standard academic year if all activity for the year of programme of study falls within a single academic year (1 August – 31 July). Students where this is not the case are on a non-standard academic year. As most research students are on full-year programmes nearly all students are on non-standard academic years.

Value	Description
1	No students on non-standard academic years
2	Split FTE
3	100:0
4	0:100

No students on non-standard academic years

23. Where all the institution's activity for years of programme of study are within one academic year.

Split FTE

24. Where activity for a year of programme of study spans two academic years the FTE is split proportionally across them.

100:0

25. Where activity for a year of programme of study spans two academic years the whole of the FTE is reported in the academic year in which the year of programme of study begins.

0:100

26. Where activity for a year of programme of study spans two academic years the whole of the FTE is reported in the academic year in which the year of programme of study ends.

RAS_CASE (Column AJ in individualised file RASR03XXXX.ind)

27. For non-standard academic years the method used to calculate RASFTE is dependent on the following factors:

a. Method used to return FTE.

b. Whether the year of programme of study is the first or not.

c. Whether the year of programme of study is the last or not.

28. The table below shows how we identify different cases of non-standard academic years of programme of study when calculating FTE.

Value	Description	Definition
0	Standard academic year	TYPEYR = 1
1a	100:0 and commenced before 2 December and first year of programme	FTE_TYPE = 3 and ANNIV < 2 December 2003 and COMDATE > 31 July 2003
1b	100:0 and commenced before 2 December and not first year of programme	FTE_TYPE = 3 and ANNIV < 2 December 2003 and COMDATE < 1 August 2003
1c	100:0 and commenced after 1 December and not last year of programme	FTE_TYPE = 3 and ANNIV > 1 December 2003 and DATELEFT > 31 July 2004 or DATELEFT = blank
1d	100:0 and commenced after 1 December and last year of programme	FTE_TYPE = 3 and ANNIV > 1 December 2003 and DATELEFT < 1 August 2004
2a	0:100 and commenced before 2 December and first year of programme	FTE_TYPE = 4 and ANNIV < 2 December 2003 and COMDATE > 31 July 2003
2b	0:100 and commenced before 2 December and not first year of programme	FTE_TYPE = 4 and ANNIV < 2 December 2003 and COMDATE < 1 August 2003
2c	0:100 and commenced after 1 December and not last year of programme	FTE_TYPE = 4 and ANNIV > 1 December 2003 and DATELEFT > 31 July 2004 or DATELEFT = blank
2d	0:100 and commenced after 1 December and last year of programme	FTE_TYPE = 4 and ANNIV > 1 December 2003 and DATELEFT < 1 August 2004

3a	Split FTE and commenced before 2 December and first year of programme	FTE_TYPE = 2 and ANNIV < 2 December 2003 and COMDATE > 31 July 2003
3b	Split FTE and commenced before 2 December and not first year of programme	FTE_TYPE = 2 and ANNIV < 2 December 2003 and COMDATE < 1 August 2003
3c	Split FTE and commenced after 1 December and not last year of programme	FTE_TYPE = 2 and ANNIV > 1 December 2003 and DATELEFT > 31 July 2004 or DATELEFT = blank
3d	Split FTE and commenced after 1 December and last year of programme	FTE_TYPE = 2 and ANNIV > 1 December 2003 and DATELEFT < 1 August 2004

TYPEYR, FTE_TYPE, ANNIV, COMDATE and DATELEFT are included in columns AS, AC, U, X and Y in the individualised file RASR03XXXX.ind.

PRVYRFTE (Column AH in individualised file RASR03XXXX.ind)

29. This field contains the value of STULOAD returned for the student in the HESA 2002-03 student return. PRVYRFTE is capped at 100. PRVYRFTE is assumed to be 0 where a link to HESA 2002-03 student data cannot be made.

AVRGFTE (Column V in individualised file RASR03XXXX.ind)

30. AVRGFTE is the arithmetic mean of STULOAD for all students on non-standard academic years of programme of study in their last academic year, with the same MODE and QUALAIM at the same institution.

STULOAD, MODE and QUALAIM are included in columns AR, AF and AI in the individualised file RASR03XXXX.ind.

AVRGPOP (Column W in individualised file RASR03XXXX.ind)

31. This field indicates students that have been included in the calculation of AVRGFTE.

Value	Description	Definition
1	Included in AVRGFTE calculation	FTE_TYPE = 2, 4 and TYPEYR = 2, 5 and DATELEFT > 31 July 2003 and DATELEFT < 1 August 2004
0	Not included in AVRGFTE calculation	Otherwise

FTE_TYPE, TYPEYR and DATELEFT are included in columns AC, AS and Y in the individualised file RASR03XXXX.ind.

STUFTEYY (Column AQ in individualised file RASR03XXXX.ind)

32. This field contains the value of STULOAD, capped at 100, from the first year of the programme. The year the STULOAD is taken from is given in YRSTUFTE.

YRSTUFTE (Column BA in individualised file RASR03XXXX.ind)

33. This field contains the year the value in STUFTEYY is taken from. For example if YRSTUFTE = 1998 then STUFTEYY was taken from the HESA 1998-99 student record. YRSTUFTE contains the year that the programme of study commenced.

RASFTE (Column T in individualised file RASR03XXXX.ind)

34. This field contains the FTE we assume in the RAS03 re-creation. When the year of programme of study is contained in a standard academic year RASFTE is taken to be STULOAD. The table below shows the method of calculating RASFTE for different groups of non-standard academic years of programme of study.

RAS_CASE	RASFTE
0	STULOAD
1a	STULOAD
1b	STULOAD
1c	PRVYRFTE
1d	PRVYRFTE
2a	AVRGFTE
2b	STULOAD
2c	STULOAD
2d	STULOAD
3a	STULOAD + AVRGFTE
3b	STULOAD
3c	STULOAD
3d	STULOAD + STUFTEYY

STULOAD, PRVYRFTE, AVRGFTE and STUFTEYY are included in columns AR, AH, V and AQ in the individualised file RASR03XXXX.ind.

35. RASFTE is capped at 100. RASFTE is set to 100 for all full-time and sandwich years of programme of study (RASMODE = FT).

RASTYPE (Column R in individualised file RASR03XXXX.ind)

36. This field contains the fee-paying status of the student.

Value	Description	Definition
HOMEEC	Home and EC student	FUNDCODE = 1, 4
ISOV	Island and overseas students	Otherwise

FUNDCODE is included in column AD in the individualised file RASR03XXXX.ind.

ELAPSED (Column Z in individualised file RASR03XXXX.ind)

37. This field contains the length of the course in days. The values are rounded up to the nearest whole day.

Value	Definition
365 x SPLENGTH	UNITLGTH = 1
365/12 x SPLENGTH	UNITLGTH = 2
365/52 x SPLENGTH	UNITLGTH = 3
2191	UNITLGTH = 9
0	Otherwise

UNITLGTH is included in column AT in the individualised file RASR03XXXX.ind.

RSTUEXCL (Column G in individualised file RASR03XXXX.ind)

38. This field indicates whether the student is included in the RAS03 re-creation. For students excluded from the re-creation RSTUEXCL contains the sum of all applicable values from the table below. Students included in the re-creation have RSTUEXCL = 0.

Value	Description	Definition
1	Student with qualification aim other than PG research degree	QUALAIM ≠ 02, 04, 06, 14
2	Students not active on census date	COMDATE > 1 December 2003 or DATELEFT < 1 December 2003 or STUBID = 1
4	Student studying wholly outside UK	LOCSDY = 7 and FUNDCODE ≠ 1
8	Dormant, sabbatical or writing-up student	MODEYPS = 51, 61 to 64 or (MODE = 41 to 44 and (COMDATE + ELAPSED) < 2 December 2003)
16	No Unit of Assessment information	SBJQA1 = blank or ((SBJQA1 = blank or SBJQA2 = blank) and SBJBID = 1, 2)

QUALAIM, COMDATE, DATELEFT, STUBID, LOCSDY, FUNDCODE, MODEYPS, MODE, ELAPSED, SBJQA1-2 and SBJBID are included in columns AI, X, Y, AP, AE, AD AG, AF, Z, AL-AM and AK in the individualised file RASR03XXXX.ind.

39. The value in RSTUEXCL will be the sum of all applicable codes for a student. For example, if RSTUEXCL = 12, then subtracting figures from the above table starting at the bottom, we see that the student is dormant, sabbatical or writing-up (RSTUEXCL = 8) and studying wholly outside the UK (RSTUEXCL = 4).

REXCL1 (Column H in individualised file RASR03XXXX.ind)

40. This flag indicates whether the student was excluded due to non-postgraduate research qualification aim.

Value	Description	Definition
1	Student with other qualification aim	QUALAIM ≠ 02, 04, 06, 14
0	Postgraduate research degree student	Otherwise

QUALAIM is included in column AI in the individualised file RASR03XXXX.ind.

REXCL2 (Column I in individualised file RASR03XXXX.ind)

41. This flag indicates whether the student was excluded due to non-activity on 1 December 2003.

Value	Description	Definition
1	Non-active on census date	COMDATE > 1 December 2003 or DATELEFT < 1 December 2003 or STUBID = 1
0	Active on census date	Otherwise

COMDATE, DATELEFT and STUBID are included in columns X, Y and AP in the individualised file RASR03XXXX.ind.

REXCL4 (Column J in individualised file RASR03XXXX.ind)

42. This flag indicates whether the student was excluded due to studying wholly outside the UK.

Value	Description	Definition
1	Student studying wholly outside UK	LOCSDY = 7 and FUNDCODE ≠ 1
0	Student not studying wholly outside UK	Otherwise

LOCSDY and FUNDCODE are included in columns AE and AD in the individualised file RASR03XXXX.ind.

REXCL8 (Column K in individualised file RASR03XXXX.ind)

43. This flag indicates whether the student was excluded due to being dormant, sabbatical or writing-up.

Value	Description	Definition
1	Dormant, sabbatical or writing-up student	MODEYPS = 51, 61 to 64 or (MODE = 41 to 44 and (COMDATE + ELAPSED) < 2 December 2003)
0	Not dormant, sabbatical or writing-up student	Otherwise

MODEYPS, MODE, COMDATE and ELAPSED are included in columns AG, AF, X and Z in the individualised file RASR03XXXX.ind.

REXCL16 (Column L in individualised file RASR03XXXX.ind)

44. This flag indicates whether the student was excluded due to not having subject of qualification aim information.

Value	Description	Definition
1	No Unit of Assessment information	SBJQA1 = blank or ((SBJQA1 = blank or SBJQA2 = blank) and SBJBID = 1, 2)
0	Unit of Assessment information	Otherwise

SBJQA1-2 and SBJBID are included in columns AL-AM and AK in the individualised file RASR03XXXX.ind.

MSUB (Column P in individualised file RASR03XXXX.ind)

45. This field indicates the submission identifier for UoAs where multiple submissions were made to the 2001 Research Assessment Exercise. MSUB = Z except where institution specific algorithms have been provided to attribute the activity to another submission identifier.

Funding for research

46. As part of the re-creation we produce the following report 'RAS re-creation: calculation of quality-related (QR) funding for 2004-05 using HESA 2003-04 student data and HEFCE funding data' which shows the calculation of research funding.

47. This report is made up of the following sections:

- UoA, Multiple submission, 2001 Rating
- 2004-05 funding rate per unit volume (for UoA and quality rating)
- 2004-05 Model category A staff from general funds
- 2004-05 Model NHS funded staff from specific funds
- 2004-05 Model research assistants
- 2004-05 Model research fellows
- 2004-05 Model charities income (average of 2 years) (£)
- 2004-05 Model weighted research students
- 2004-05 Model volume measure
- 2004-05 Mainstream QR allocation (£).

48. Students selected from the re-creation are those with RSTUEXCL = 0. All these eligible students are then summarised by mode, year and Unit of Assessment (UoA) to appear on the re-created RAS forms, which then feed into this funding report.

49. Further details on the calculation of research funding can be found in 'Funding higher education in England: How HEFCE allocates its funds' (HEFCE 2004/23).

UoA, Multiple submission, 2001 Rating

50. The UoA, Multiple submission and 2001 Rating data are collected from the 2001 Research Assessment Exercise (RAE), which is an exercise whose primary purpose is to assess the quality of research and to produce ratings of research quality, which are used to inform funding decisions.

UoAs

51. There are 68 UoAs in the 2001 Research Assessment Exercise (RAE). The UoA number is listed in the 'UoA' column and the title is included in the 'Unit of assessment' column. Each unit covers a broad subject area. For example, Mechanical, Aeronautical and Manufacturing Engineering are included within one unit; Drama, Dance and Performing Arts are included in another.

Multiple submissions

52. Multiple submissions occur where an institution makes more than one submission to a UoA.

2001 Rating

53. The institutions were awarded a rating for each UoA submitted to the RAE. This rating was based on an assessment of research information provided by the institutions, published on the Hero web-site www.hero.ac.uk under Research/Research Assessment Exercise 2001/2008/Results.

2004-05 funding rate per unit volume (for UoA and quality rating)

54. A funding rate for each UoA per institution (funding rate per unit volume) is determined by the total amount of funding allocated to each UoA (2004-05 Model total QR quanta for whole unit of assessment (£)) divided by the quality weighted volume for the UoA (2004-05 Model total quality-weighted volume for whole unit of assessment). These two variables can be found in columns Q and P of the 2004-05 quality-related research funding spreadsheet, available from the HEFCE website under Research/Funding/Quality-related research (QR) funding data.

55. This amount is then multiplied by the RAE ratings converted into funding weights (see Table 12).

The 2004-05 Model total QR quanta for whole unit of assessment (£)

56. The 2004-05 Model total QR quanta for whole unit of assessment is calculated in the research funding model and will vary depending on the total amount of research funding available in the financial year.

The 2004-05 Model total quality-weighted volume for whole unit of assessment

57. The 2004-05 Model total quality-weighted volume for whole unit of assessment is the sum of the 2004-05 Model volume measure (that is calculated using the method explained in paragraph 62) across each UoA multiplied by the funding weight.

2004-05 Model category A staff from general funds and 2004-05 Model NHS funded staff from specific funds

58. These columns contain the FTE of the research-active academic staff funded from general funds and NHS funded staff from specific funds that were selected for assessment in the 2001 RAE. These figures are calculated by multiplying the FTE of the Category A and A* members of staff by the percentage of salary that is allocated to general funds and NHS funds. These percentages were submitted to the 2001 RAE but the data is not published on the HERO web-site due to its confidential nature.

2004-05 Model research assistants and 2004-05 Model research fellows

59. These columns contain the FTE of the research assistants and research fellows that were collected in Form R3: Table of research assistants and research fellows in the RAS03.

2004-05 Model charities income (average of 2 years) (£)

60. This column contains the average of the 2002-03 and 2001-02 income from charities that were collected in the RAS03 and RAS02. The figures in the 'Income from UK-based charities, FY 2002-03 (£) (for volume calculation)' column in Form R4: Table of external research income from charities in 2002-03 in RAS03 is added to the 'Income from UK-based charities, FY 2001-02 (£) (for volume calculation)' column in Form R4: Table of external research income from charities in 2001-02 in RAS02 and the total is halved.

2004-05 Model weighted research students

61. This column contains the FTE of postgraduate research students in their second and third years of full-time study, taken from Form R1a: All full-time research students by year of programme, and third to sixth years of part-time study, taken from Form R1b: All part-time research students by year of programme. This figure is then weighted by 1.75 to give 3.5 years of fundable study.

2004-05 Model volume measure

62. This is calculated by multiplying each of the five components explained in paragraphs 58-61 by the funding weights include in Table 13, then adding these weighted components together.

2004-05 Mainsteam QR allocation (£)

63. This is calculated by multiplying the 2004-05 Model Volume measure by the 2004-05 funding rate per unit volume (for UoA and quality rating).

Table 12 **RAE ratings converted into funding weights for each unit of assessment**

2001 RAE rating	Funding weights in QR model
1	0
2	0
3b	0
3a	0
4	1
5	2.793
5*	3.362

Table 13 **Volume rates in QR model**

Volume components	Volume weights in QR model
2004-05 Model category A staff from general funds and 2004-05 Model NHS funded staff from specific funds (research-active academic staff)	1
2004-05 Model research assistants and 2003-04 Model research fellows	0.1
2004-05 Model charities income (average of 2 years) (£) (research income from charities)	0.177/25,000
2004-05 Model weighted research students (postgraduate research students)	0.15