Appendix 1
HEIFES04 re-creation algorithms

Purpose

1.   This appendix describes the method used to re-create HEIFES04 from the submitted 2004-05 ILR F04 data. It also describes the method used to generate the report on adjustments to grant for 2004-05 using 2004-05 ILR F04 data.

2.   This appendix is aimed at expert readers with in-depth knowledge of the data. Readers are advised to have a copy of 'Specification of the individualised learner record for 2004/05' (available from the LSC) and 'HEIFES04: Higher Education in Further Education: Students Survey 2004-05' (HEFCE 2004/32) to hand when using this appendix. They should also have copies of their institution's finalised 2004-05 grant tables.

Extraction and manipulation of 2004-05 ILR F04 data

3.   All 2004-05 ILR F04 data returned to and passed as valid by the LSC before 30 November 2005 have been processed using the methods described in this document.

2004-05 ILR F04 fields used in the re-creation

4.   Only certain fields, detailed in Table 3, were used to generate the comparison between HEIFES04 and 2004-05 ILR F04 data. Fields from the learner data set take the prefix ST_; those from the learning aim data set have the prefix QA_; those from the HE data set have the prefix HQ_; and all other fields are from the Learning Aim Database.

5.   Throughout this appendix, fields taken from the 2004-05 ILR F04 return are shown in capitals using the names given in Table 3, together with field code.

Using the individualised file

6.   When working through this appendix it is necessary to use the individualised file, STU04YYYYYY.ind, where YYYYYY is the provider number ST_UPIN (L01) for the college. Details of how to download this file are given in Annex E.

7.   The individualised file contains the allocation of students to cells within the HEIFES04 re-creation tables or, where relevant, details of why they were excluded. For institutions with individualised files that do not contain more than 65,530 records (the maximum number of records that can be viewed in Excel), the following guidance will assist them in the troubleshooting process:

a.   Open the individualised file STU04YYYYYY.ind, and click File, Open. You will need to specify 'All files' in the 'Files of type' box before the individualised file will appear in the list. Once you have selected the file, the 'Text Import Wizard' will appear. Ensure that 'Delimited' is selected near the top of the window, then click 'Next'. On the next page, uncheck 'Tab' and check 'Comma'. Click 'Finish' to open the file.

b.   Select the row containing the field headings.

c.   Select <filter> from the data menu and then <autofilter>.

d.   Click on the arrow in the column containing the data which you want to filter.

e.   Either select a specific value or select <custom> to apply a comparison operator other than equality.

To select records using multiple fields, repeat steps d and e for each field.

Table 3 **Fields used in the re-creation**

Field code	Description	Name	Data set	Column in individualised file*
L01	Contract/Allocation provider number	ST_UPIN	Learner	A
L02	Contract/Allocation type	ST_ALLNO	Learner	C
L03	Learner reference number	ST_REF	Learner	D
L09	Surname	ST_SURNA	Learner	CD
L11	Date of birth	ST_DOB	Learner	CB
L13	Gender	ST_SEX	Learner	CA
L17	Home postcode	ST_POSTC	Learner	CC
L24	Country of domicile	ST_DOMIC	Learner	BQ
L42[†]	Provider-specified learner data	ST_COLL1/ ST_COLL2	Learner	G H
A05	Sequence number	QA_SEQNO	Learning aim	E
A09	Learning aim reference	QA_AIM_R	Learning aim	L
A11	Source of funding other than the LSC	QA_FEHE1/ QA_FEHE2	Learning aim	BL BM
A27	Learning start date	QA_ST_DA	Learning aim	BN
A31	Learning actual end date	QA_EN_DA	Learning aim	BO
A48[†]	Provider-specified learning aim data	QA_COLL1/ QA_COLL2	Learning aim	I J
H09	Learner instance number	HQ_NUMHU	HE	F
H13	Type of programme year	HQ_PYTYP	HE	BE
H14	Mode applicable to HEIFES	HQ_MHESE	HE	AZ
H15	Level applicable to HEIFES	HQ_LHESE	HE	AY
H16	Completion of year of programme of study	HQ_COMPY	HE	AV
H17	Learner FTE	HQ_FTEHE	HE	AX
H18	Year of programme of study	HQ_PROGY	HE	BD
H19	Fee band	HQ_FEBND	HE	AW
H33, H34, H35	Proportion taught in Superclass 1, 2 and 3 subject	HQ_PERS1, HQ_PERS2, HQ_PERS3	HE	BA BB BC
AWARDING_BODY_ CODE	Awarding body code	AWARD_BO	Learning Aim Database	AN
ENGLAND_FE_HE_ STATUS_CODE	England FE/HE status	ENG_LEVE	Learning Aim Database	AQ

LEARNDIRECT_CODE	Learndirect code	LDCS_COD	Learning Aim Database	BW
LEARNING_AIM_TYPE_CODE	Learning aim type	QUAL_TYP	Learning Aim Database	BP
SUPERCLASS_CODE, SUPERCLASS2_CODE, SUPERCLASS3_CODE	The Superclass II subject classification	SUPERCL1, SUPERCL2, SUPERCL3	Learning Aim Database	BT BU BV

* The individualised data file, STU04YYYYYY.ind, downloadable from the web (see Annex E for further details).

† These fields are not used in the comparison but are included in the individualised file to assist identification of learning aims.

Linking between years

8. We have linked the 2004-05 ILR F04 data to previous years' data using the fields ST_REF (L03), ST_ALLNO (L02), ST_UPIN (L01), QA_SEQNO (A05) and HQ_NUMHU (H09).

9. The link was used to help determine the following:

a. Programme of study attributes for the first countable year for students who are generating two countable years.

b. FTE for final year students on non-standard academic years of programmes of study.

10. For sub-paragraph 9a above, only records from 2003-04 were included in the linking process. For 9b, records from 2001-02 onwards were used.

Description of derived fields

11. This section provides details of the derived fields in the individualised data file. These fields are used to build the key dimensions of the HEIFES04 re-creation.

Table 4 **Derived fields**

Field name	Description	Paragraph	Column in individualised file*
ANNIV	Anniversary of start date in academic year	18	AK
ATT_LINK	Flag indicating whether linking was used for course attributes	19	AL
AVRGLOAD	Average load	33	AM
DUPMATCH	Flag for successful duplicate match	56	CC
DUPPOP	Flag for duplicate matching publication	55	CB
D_FUND	Flag indicating whether the student is directly funded by HEFCE	57	CA
EXCL1 – EXCL64	Flags indicating reason(s) for a learning aim's exclusion	44-50	N-T
FTE_CASE	Non-standard academic year case	29-31	AS
FTE_LINK	Flag indicating whether a link was used to calculate FTE	26	AT

HEFCOL4	Flag indicating whether the student was included in HEIFES Column 4	51	W
HEFCOMP	Completion of year of programme of study indicator	41	X
HEFESFTE	FTE consistent with HEIFES definitions	34	AB
HEFEXCL	Exclusion reason(s)	42-43	M
HEFFEELV	Fee level	22	AJ
HEFLEVEL	Level of study	15	Z
HEFMODE	Mode of study	14	U
HEFQAIM	Recognised HE qualification aim	13	AU
HEFREG	Column 1 or 2 indicator	40	V
HEFTYPE	Fundability status	16	Y
ILRKEY	Unique learning aim identifier	12	K
LENGTH	Long or standard length years of programme of study	24	AA
MEDIAB	Proportion of media activity assigned to price group B	37	BF
MEDIAC	Proportion of media activity assigned to price group C	38	BG
MEDIAD	Proportion of media activity assigned to price group D	39	BH
PRGB PRGC PRGD PRGMEDIA PRGITT PRGINSET	Proportion of countable year in each price group	35-36	AC-AI
PROP	Proportion of FTE allocated to second countable year	32	BI
STUBID	Unique year of programme of study identifier	20-21	BR
STULOAYY	HQ_FTEHE in year YRSTULOA	27	BS
TAIL	Flag indicating last year programme of study	25	BX
YEARONE	New entrant flag	23	BY
YRSTULOA	Year STULOAYY taken from	28	BZ

* The individualised data file, STU04YYYYYY.ind, downloadable from the web (see Annex E for further details).

ILRKEY (Column K in individualised file STU04YYYYYY.ind)

12. This field uniquely identifies learning aims on the 2004-05 ILR F04 return.

HEFQAIM (Column AU in individualised file STU04YYYYYY.ind)

13. This field allocates qualification aims to broad recognised HE qualification aims.

Value	Description	Definition
FIRST	First degree	QUAL_TYP = 0394, 1406, 1407, 1408, 1409, 9000, 9002, 9107, E007 and ENG_LEVE = H
MASTER	Masters	QUAL_TYP = 0393, 1410, 2001, 9100, 9101, 9109 and ENG_LEVE = H
HIGHER	Higher degree	QUAL_TYP = E008, 1411, 1412 and ENG_LEVE = H
DIPHE	DipHE	QUAL_TYP = 9112 and ENG_LEVE = H
PGCE	PGCE	QUAL_TYP = 9103 and ENG_LEVE = H
CERTED	CertEd	QUAL_TYP = 9111 and ENG_LEVE = H
FOUDEG	Foundation degree	QUAL_TYP = 9110 and ENG_LEVE = H
FDBC	Foundation degree bridging course	QUAL_TYP = 9113 and ENG_LEVE = H
DIPSW	DipSW	QUAL_TYP = 1427 and ENG_LEVE = H
PGDIP	Postgraduate diploma	QUAL_TYP = 0125, 0126 and ENG_LEVE = H
HNC	HNC	QUAL_TYP = 0031 and ENG_LEVE = H and (AWARD_BO = EDEXCEL, SQA and UK higher education institutions*)
HND	HND	QUAL_TYP = 0032 and ENG_LEVE = H and (AWARD_BO = EDEXCEL, SQA and UK higher education institutions*)
UGOTHER	Other undergraduate	College-specific approvals for inclusion as recognised-HE in HEIFES (undergraduate)
PGOTHER	Other postgraduate	College-specific approvals for inclusion as recognised-HE in HEIFES (postgraduate)
OTHER	Other qualifications	Otherwise

* UK higher education institutions are identified where AWARD_BO = APU, BATHSPA, BIRKBECK, BNU, BOLTONINS, BRUNEL, BU, CAF, CITY, CU, DMU, DU, HAUC, HUAVA, HUDDU, HULLU, KACAA, KCL, LANU, LEEDU, LJM, LMU, LONDON, LONDONMET,LOUUI, LU, MIDU, MMU, NTU, OBU, UOLE, OU, PU, RAD,RAM, RCA, RCM, SALFU, SBU, SHU, SIAD, SINST, STAFFU, TCM, TVU, UCC, UCLAN, UCE, UEA, UK, UNIEXE, UNORTH, UOB, UOG, UOH, UOK, UOM, UON, UOS, UOSH, UOST, UOSX, UOSY, UOT, UOW, UOWR, UOY, UW, UWE, WU, UCNORTON,UNIBRI,UOBATH,UODE,UORG,UOPLY,UOWAR.

HEFMODE (Column U in individualised file STU04YYYYYY.ind)

14. This field allocates students to mode of study.

Value	Description	Definition
FTS	Full-time and sandwich	HQ_MHESE (H14) = 01
SWOUT	Sandwich year-out	HQ_MHESE (H14) = 02
PT	Part-time	HQ_MHESE (H14) = 03

HEFLEVEL (Column Z in individualised file STU04YYYYYY.ind)

15. This field allocates students to level of study.

Value	Description	Definition
FD	Foundation degree	HQ_LHESE (H15) = 10, 11 and HEFQAIM=FOUDEG
UGX	Undergraduate excluding foundation degree	HQ_LHESE (H15)=10, 11 and HEFQAIM ≠ FOUDEG
PG	Postgraduate	HQ_LHESE (H15) = 20, 21, 30, 31

HEFTYPE (Column Y in individualised file STU04YYYYYY.ind)

16. This field allocates students to fundability and status.

Value	Description	Definition
HOMEF	Home and EC HEFCE funded	QA_FEHE1 (A11A) = 001 or QA_FEHE2 (A11B) = 001
HOMEIF	Home and EC independently funded	QA_FEHE1 (A11A)= 002 or QA_FEHE2 (A11B) = 002 and not above
HOMENF	Home and EC non-fundable	ST_DOMIC (L24) = EC* and QA_FEHE1 (A11A) ≠ 001, 002 and QA_FEHE2 (A11B) ≠ 001, 002
ISOV	Island and overseas	Otherwise

* EC domiciled is identified where ST_DOMIC (L24) = 099, 299, 399, 599, 610, 614, 638, 639, 641, 651, 653, 656, 659, 661, 670, 671, 676, 678, 693, 700, 710, 727, 728, 751, 755, 772, 831, 833, 835, 850.

Second countable years of programme of study

17. Programmes of study that mainly consist of non-standard academic years, but where all activity for the final year of programme of study falls entirely within an academic year, will generate two countable years of programme of study in the final academic year.

ANNIV (Column AK in individualised file STU04YYYYYY.ind)

18. This field contains the anniversary of the start date during the 2004-05 academic year.

ATT_LINK (Column AL in individualised file STU04YYYYYY.ind)

19. This field indicates whether a link has been made to improve our estimate of attributes for the first year of programme of study, when two years of programme of study are generated.

Value	Description	Definition
1	Two years of programme of study generated	In 2004-05 data HQ_PYTYP (H13) = 1 and QA_ST_DA (A27) < 1 August 2004 and QA_EN_DA (A31) < 1 August 2005 and QA_EN_DA (A31) > ANNIV + 14 days In linked 2003-04 data HQ_PYTYP (H13) = 2, 3, 4
0	Single year of programme of study generated	Otherwise

STUBID (Column BR in individualised file STU04YYYYYY.ind)

20. This field uniquely identifies years of programme of study when used in conjunction with ILRKEY. Where a learning aim generates two years of programme of study within a single academic year we create two records. These records are distinguished using STUBID.

Value	Description
1	First year of programme of study
2	Second year of programme of study
0	One year of programme of study

21. When STUBID = 1 we use 2003-04 ILR F04 data to populate the following fields:

HQ_COMPY (H16)   QUAL_TYP   HQ_PROGY (H18)   HQ_LHESE (H15)

HQ_MHESE (H14)   HQ_FEBND (H19)   QA_FEHE1-2 (A11A and A11B)   HQ_PYTYP (H13)

HEFFEELV (Column AJ in individualised file STU04YYYYYY.ind)

22. This field contains the level of tuition fee chargeable to the student. The table below shows the hierarchy of values we use, with NHS bursaried courses being first in the hierarchy.

Value	Description	Definition
NHS	NHS bursaried courses	(((QA_FEHE1 (A11A) = 013 or QA_FEHE2 (A11B) = 013) and QA_FEHE1 (A11A) ≠ 001, 002 and QA_FEHE2 (A11B) ≠ 001, 002) or (QA_FEHE1 (A11A) = 009 or QA_FEHE2 (A11B) = 009)) and (HEFQAIM = FIRST or (QA_ST_DA (A27)< 31 December 2002 and HEFQAIM = DIPHE)) and (SUPERCL1* = PB, PF, PH, PJ or SUPERCL2* = PB, PF, PH, PJ or SUPERCL3* = PB, PF, PH, PJ)
FDBC	Foundation degree bridging course	HEFQAIM = FDBC and not above
1150	Undergraduate full fee	HQ_FEBND (H19) = 01 and not above
560	Undergraduate half fee	HQ_FEBND (H19) = 02 and not above
0	ERAMUS/SOCRATES students	HQ_FEBND (H19) = 03 and not above
OTHER	Other fee charged	Otherwise

* The first two characters of the field are used.

YEARONE (Column BY in individualised file STU04YYYYYY.ind)

23. This field indicates whether a student is a new entrant.

Value	Description	Definition
1	New entrant	(HQ_PYTYP (H13) = 1 and QA_ST_DA (A27) ≥ 1 August 2004 and QA_ST_DA (A27) < 1 August 2005) or (HQ_PYTYP (H13)=2, 4, 5 and QA_ST_DA (A27) ≥ 1 August 2003 and QA_ST_DA (A27) < 1 August 2004)
0	Not new entrant	Otherwise

LENGTH (Column AA in individualised file STU04YYYYYY.ind)

24. This field indicates whether the student is on a standard or long year of programme of study.

Value	Description	Definition
L	Long	HQ_LHESE (H15) = 11, 21, 31
S	Standard	Otherwise

TAIL (Column BX in individualised file STU04YYYYYY.ind)

25. This field indicates whether the year of programme of study is the end of a sequence of non-standard years of programme of study reported.

Value	Description	Definition
1	Last year of split FTE course	STUBID = 2 or (HQ_PYTYP (H13) = 2, 5 and QA_EN_DA (A31) ≥ 1 August 2004 and QA_EN_DA (A31) < 1 August 2005)
0	Otherwise	Otherwise

FTE_LINK (Column AT in individualised file STU04YYYYYY.ind)

26. This field indicates whether a successful link was made to improve our estimates of FTE for students studying on non-standard academic years. The link has only been made for students starting such courses after 31 July 2001 and completing them during academic year 2004-05.

Value	Description	Definition
1	Student load from first year used in calculating HEFESFTE	In 2004-05 data TAIL = 1 In linked data HQ_PYTYP (H13) = 2, 3 and QA_ST_DA (A27) in academic year
0	Otherwise	Otherwise

STULOAYY (Column BS in individualised file STU04YYYYYY.ind)

27. This field contains the value of HQ_FTEHE (H17), capped at 100, from the year of linked FTE data. The year the HQ_FTEHE (H17) is taken from is given in YRSTULOA. This field is only completed where FTE_LINK = 1.

YRSTULOA (Column BZ in individualised file STU04YYYYYY.ind)

28. This field contains the year the value in STULOAYY is taken from. For example, if YRSTULOA = 2001 then STULOAYY was taken from the ISR July 2001-02 record. This field is only completed if FTE_LINK = 1.

FTE_CASE (Column AS in individualised file STU04YYYYYY.ind)

29. For non-standard academic years or when two years of programme of study are generated, the method used to calculate HEFESFTE is dependent on the following factors:

a. Duration of the programme of study.

b. Number of years of programme of study generated in HEIFES04.

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

30. This field indicates which case of non-standard academic years of programme of study the year of programme of study satisfies.

Value	Description	Definition
0	Standard academic year	HQ_PYTYP (H13) = 1 and ATT_LINK = 0
1	Non-standard academic year, one year generated in HEIFES04 and the programme of study is in the final year and a link was made to the first year	FTE_LINK = 1 and ATT_LINK = 0
2	Non-standard academic year, one year generated in HEIFES04 and the programme of study is in the final year and a link was not made to the first year	FTE_LINK = 0 and ATT_LINK = 0 and TAIL = 1
3	Non-standard academic year, one year generated in HEIFES04, and the programme of study is not the final year	FTE_LINK = 0 and ATT_LINK = 0 and TAIL = 0
Two years generated in HEIFES04 and a link was made to the first year		
4a	First year	FTE_LINK = 1 and ATT_LINK = 1 and STUBID = 1
4b	Second year	FTE_LINK = 1 and ATT_LINK = 1 and STUBID = 2
Two years generated in HEIFES04 and a link was not made to the first year		
5a	First year	FTE_LINK = 0 and ATT_LINK = 1 and STUBID = 1
5b	Second year	FTE_LINK = 0 and ATT_LINK = 1 and STUBID = 2

31. We do not attempt to link across years to obtain FTE for full-time and sandwich and sandwich year-out students (HEFMODE = FTS, SWOUT) that do not generate two years of programme of study.

PROP (Column BI in individualised file STU04YYYYYY.ind)

32. This field contains the proportion of HQ_FTEHE (H17) that is allocated to the second year of programme of study where two years are generated. PROP is calculated as (QA_EN_DA (A31) − ANNIV) / (QA_EN_DA (A31) − 31 July 2004).

AVRGLOAD (Column AM in individualised file STU04YYYYYY.ind)

33. This field contains the arithmetic mean of HQ_FTEHE (H17) for all students on non-standard academic years of programme of study in their first academic year, with the same HQ_MHESE (H14) and QUAL_TYP at the same college.

HEFESFTE (Column AB in individualised file STU04YYYYYY.ind)

34. This field contains the FTE we assume for the year of programme of study. The table below shows the method of calculating HEFESFTE for different groups of non-standard academic years of programme of study. The table shows the hierarchy of values used, with 100 being first in the hierarchy.

Value	Definition
100	HEFMODE = FTS
50	HEFMODE = SWOUT
30	HEFQAIM = FDBC
HQ_FTEHE	FTE_CASE = 0 and not above
HQ_FTEHE + STULOAYY	FTE_CASE = 1 and not above
HQ_FTEHE + AVRGLOAD	FTE_CASE = 2 and not above
HQ_FTEHE	FTE_CASE = 3 and not above
(HQ_FTEHE + STULOAYY) – (HQ_FTEHE $\times$ PROP)	FTE_CASE = 4a and not above
HQ_FTEHE $\times$ PROP	FTE_CASE = 4b and not above
(HQ_FTEHE + AVRGLOAD) – (HQ_FTEHE x PROP)	FTE_CASE = 5a and not above
HQ_FTEHE x PROP	FTE_CASE = 5b and not above

Price groups

PRGB, PRGC, PRGD, PRGMEDIA, PRGPSYCH, PRGITT, PRGINSET (Columns AC-AI in individualised file STU04XXXXXX.ind)

35. Price group is assigned by mapping the three Superclass II fields, SUPERCL1 - SUPERCL3, to price groups as indicated in the table below. For initial teacher training (ITT) and INSET students the distribution based on superclass codes is not used and all activity is assigned to the ITT and INSET price groups respectively.

Field name	Superclass II code (SUPERCL1, SUPERCL2, SUPERCL3)	Value*
PRGB	PB, PE, RA, RC - RF, RH, SA, SB-SD, SG-SJ (excl. SJ.5 & SJ.61), SK, TL, TM, XH - XL, XP - XR, XT, YC - YE	sum of HQ_PERSX/100
PRGC[†][Φ]	CA - CH, CY, DC, FK, J, L, M, NA - NH, PA, PC, PD, PF - PK, PL - PQ, QA - QA.2, QA.4 - QA.8, QC - QG, RB, RG, SE, , SL - SO, TA - TK, W, XA - XF, XM, XN, XS, YA, YB	sum of HQ_PERSX/100
PRGD	A, B, CX, CZ, DA, DB, DD, DE, E, FB, FC, FJ, FL, G, H, KB, KC, NK - NN, Q (excl. QA - QA.2, QA.4 - QA.8, QC - QG), SE.2 - SF, SJ.5, SJ.61, SP, V, Z	sum of HQ_PERSX/100
PRGMEDIA	CY.3 - CZ, KA, KD - KJ	sum of HQ_PERSX/100
PRGITT	College specific	1
PRGINSET	QA_FEHE1 = 025 or QA_FEHE2 = 025	1

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* Where HQ_PERSX(H33X) is HQ_PERS1(H33), HQ_PERS2(H34), HQ_PERS3(H35). If HQ_PERS1-3 are set to 0 or blank, and HEFQAIM does not equal OTHER, we use the learndirect code from the Learner Aims Database to assign price group. Annex G of HEFCE 2004/32 contains details of which price group learndirect codes map to.

† All Certificate of Education activity (HEFQAIM = CERTED) is assigned to price group C

Φ All students on a sandwich year-out are now all funded at price group C rates.

36. For example, if the qualification a student is linked to has SUPERCL1 = PB, SUPERCL2 = DC and SUPERCL3 = RH and HQ_PERS1 = 060.0, HQ_PERS2 = 030.0 and HQ_PERS3 = 010.0; the price group fields will be completed as: PRGB = 0.6 + 0.1 = 0.7, PRGC = 0.3.

MEDIAB (Column BF in individualised file STU04YYYYYY.ind)

37. This field contains the proportion of media activity assigned to price group B.

MEDIAC (Column BG in individualised file STU04YYYYYY.ind)

38. This field contains the proportion of media activity assigned to price group C.

MEDIAD (Column BH in individualised file STU04YYYYYY.ind)

39. This field contains the proportion of media activity assigned to price group D.

HEFREG (Column V in individualised file STU04YYYYYY.ind)

40. This field indicates whether the student will appear in Column 1 or 2.

Value	Description	Definition
1	Included in Column 1	HQ_PYTYP (H13) = 2 to 5 or (HQ_PYTYP (H13) = 1 and ANNIV < 2 November 2004)
2	Included in Column 2	Otherwise

HEFCOMP (Column X in individualised file STU04YYYYYY.ind)

41. This field indicates whether the student will appear in Column 3 or 4.

Value	Description	Definition
3	Included in Column 3	HQ_COMPY (H16) = 2
4	Included in Column 4	Otherwise

HEFEXCL (Column M in individualised file STU04YYYYYY.ind)

42. This field contains the exclusion reason(s) for the learning aim. Learning aims included have HEFEXCL = 0.

Value	Description	Definition
1	Not active in academic year	QA_ST_DA (A27) > 31 July 2005 or QA_EN_DA (A31) < 1 August 2004
2	Non-recognised HE, FE, NVQ or QTS students	HEFQAIM = OTHER
4	Students explicitly excluded from the HEIFES04 population	HQ_LHESE (H15) = 99, blank or HQ_MHESE (H14) = 99, blank or HQ_COMPY (H16) = 9, blank
8	Students with an FTE of less than 3%	HEFESFTE < 3
16	Students on a non-standard academic year in the first academic year	QA_ST_DA (A27) > 31 July 2004 and QA_ST_DA (A27) < 1 August 2005 and HQ_PYTYP (H13) = 2, 3
32	Students who withdrew before 2 November 2004	QA_EN_DA (A31) < 2 November 2004 and HQ_COMPY (H16) = 2
64	No price group information	PRGB + PRGC + PRGD + PRGMEDIA + PRGINSET + PRGITT = 0 and HEFESFTE ≥ 3

43. The value in HEFEXCL will be the sum of all applicable exclusion codes for the learning aim. For example, if HEFEXCL = 13, then subtracting figures from the above table starting at the bottom, we see that the learning aim has an FTE of less than 3 per cent (HEFEXCL = 8), is explicitly excluded from the HEIFES04 learning aim population (HEFEXCL = 4) and is not active in the academic year (HEFEXCL = 1).

EXCL1 (Column N in individualised file STU04YYYYYY.ind)

44. Flag indicating students excluded due to non-activity in the academic year.

Value	Description	Definition
1	Not active in academic year	QA_ST_DA (A27) > 31 July 2005 or QA_EN_DA (A31) < 1 August 2004
0	Active in academic year	Otherwise

EXCL2 (Column O in individualised file STU04YYYYYY.ind)

45. Flag indicating students excluded because they are studying for a non-recognised HE, FE, NVQ or QTS programme of study.

Value	Description	Definition
1	Non-recognised HE, FE, NVQ or QTS qualification aim	HEFQAIM = OTHER
0	Recognised HE qualification aim	Otherwise

EXCL4 (Column P in individualised file STU04YYYYYY.ind)

46. Flag indicating students explicitly excluded by the college as 'Not in HEIFES population'.

Value	Description	Definition
1	Student explicitly excluded from the HEIFES04 student population	HQ_LHESE (H15) = 99, blank or HQ_MHESE (H14) = 99, blank or HQ_COMPY (H16) = 9, blank
0	Student not explicitly excluded from the HEIFES04 student population	Otherwise

EXCL8 (Column Q in individualised file STU04YYYYYY.ind)

47. Flag indicating whether a student was excluded due to an FTE of less than 3 per cent.

Value	Description	Definition
1	FTE of less than 3%	HEFESFTE < 3
0	FTE of at least 3%	Otherwise

EXCL16 (Column R in individualised file STU04YYYYYY.ind)

48. Flag indicating students excluded because they are in the first academic year of a non-standard academic year of programme of study.

Value	Description	Definition
1	Students on non-standard years of programme of study in the first academic year	QA_ST_DA (A27) > 31 July 2004 and QA_ST_DA (A27) < 1 August 2005 and HQ_PYTYP (H13) = 2, 3
0	Not above	Otherwise

EXCL32 (Column S in individualised file STU04YYYYYY.ind)

49. Flag indicating whether a student was excluded due to withdrawing before 2 November 2004.

Value	Description	Definition
1	Early withdrawal	QA_EN_DA (A31) < 2 November 2004 and HQ_COMPY (H16) = 2
0	Not above	Otherwise

EXCL64 (Column T in individualised file STU04YYYYYY.ind)

50. Flag indicating whether a student has a mismatch between price group apportioning and Superclass II code fields.

Value	Description	Definition
1	No price group information	PRGB + PRGC + PRGD + PRGMEDIA + PRGINSET + PRGITT = 0 and HEFESFTE ≥ 3
0	Not above	Otherwise

HEFCOL4 (Column W in individualised file STU04YYYYYY.ind)

51. This field indicates whether the student is included in Column 4.

Value	Description	Definition
1	Included in Column 4	HEFCOMP = 4 and HEFEXCL = 0
0	Not included in Column 4	Otherwise

Methods used for identifying potential franchised-in students

52. We have compared 2004-05 ILR F04 data to HESA's 2004-05 student record to identify potential franchised-in students. We have attempted to identify instances where students are franchised-in from an HEI and therefore have been incorrectly returned on 2004-05 ILR F04. We have matched students between the two data sources over the following student characteristics:

- gender (ST_SEX) (L13)

- date of birth (ST_DOB) (L11)

- postcode (ST_POSTC) (L17)

- mode (hefmode)

- surname (ST_SURNA) (L09).

ST_SURNA

53. The soundex surnames which are coded surnames (last name) index based on the way a surname sounds rather than the way it is spelled. Surnames that sound the same, but are spelled differently, like SMITH and SMYTH, have the same code and are filed together. The soundex coding system was developed so that you can find a surname even though it may have been recorded under various spellings.

54. The matching process is attempted using soundexed 2004-05 ILR F04 and HESA surname data. While the matching process is inexact we believe that we have removed the likelihood of random mismatches causing selection by setting a threshold for the number of matches for the same recognised HE qualification aim (HEFQAIM).

DUPPOP (Column CB in individualised file STU04YYYYYY.ind)

55. This field indicates whether the student is included in the duplicate matching population.

Value	Description	Definition
1	Included in the duplicate matching population	HEFEXCL = 0 and (ST_POSTC (L17) does not contain ZZ99 or 9ZZ or ST_POSTC (L17) ≠ blank) and ST_DOB (L11) ≠ blank
0	Not included in the duplicate matching population	Otherwise

DUPMATCH (Column CB in individualised file STU04YYYYYY.ind)

56. This field indicates whether the student has been matched to one or more records contained on the HESA 2004-05 student record.

Value	Description
1	Student has matched to a record on HESA
0	Student has not matched to a record on HESA

D_FUND (Column CA in individualised file STU04YYYYYY.ind)

57. This field indicates whether the student is directly funded by HEFCE. This only appears for those colleges that are both directly and indirectly funded.

Value	Description
1	Student is directly funded
0	Student is not directly funded

Funding for teaching

58. As part of the HEIFES04 re-creation we produce the following reports which show the calculation of grant adjustments:

a. Report on adjustments to grant for 2004-05 using 2004-05 July Individualised Learner Record (ILR F04).

b. Standard resource for 2004-05 using 2004-05 July Individualised Learner Record (ILR F04).

c. Assumed fee income for 2004-05 using 2004-05 July Individualised Learner Record (ILR F04).

59. Further details on the calculation of teaching grant can be found in 'Funding higher education in England: How HEFCE allocates its funds', (HEFCE 2004/23).

Cover sheet

60. The cover sheet of the HEIFES04 re-creation workbook consists of the following key statistics that are used in the thresholds to select colleges to respond to the exercise:

- difference in holdback for exceeding contract range
- difference in any grant adjustments relating to funding conditional upon delivery of growth.

61.   The data in the report on adjustments to grant (see paragraph 58a) are provided to help institutions identify errors in their data, not to present our definitive statement on grant adjustments.

<u>Difference in holdback for exceeding contract range</u>

62.   The difference in holdback for exceeding contract range is calculated by subtracting 'Contract range holdback' in the HEIFES04 grant adjustments report from the 'Contract range holdback' in the 'Report on adjustments to grant for 2004-05 using 2004-05 July Individualised Learner Record (ILR F04)'.

<u>Difference in any grant adjustments relating to funding conditional upon delivery of growth</u>

63.   The difference in any grant adjustments relating to funding conditional upon delivery of growth is calculated by adding the 'Funds due back' to the 'Funds to be held back' in the HEIFES04 grant adjustments report and subtracting the sum of the 'Funds due back' and the 'Funds to be held back' in the 'Report on adjustments to grant for 2004-05 using 2004-05 July Individualised Learner Record (ILR F04)'.

Grant adjustment report

64.   The figures shown in 'Report on adjustments to grant for 2004-05 using 2004-05 July Individualised Learner Record (ILR F04)' are sourced from 2004-05 ILR F04 data and the final 2004-05 individual grant tables. Figures that are sourced from the 2004-05 individual grant tables are described in the annex to Bridget Josselyn's letter of 1 March 2004.

The report on adjustments to grant is made up of the following sections:

- funding conditional upon delivery of growth

- provisional contract range holdback/divergence

- provisional consolidated 2003-04 holdback recovered

- adjustment to 2004-05 and 2005-06 grants.

Funding conditional upon delivery of growth

<u>Actual FTEs (HEFCE-fundable)</u>

65.   The students used to derive 'Actual FTEs (HEFCE-fundable)' can be identified by selecting HEFCOL4 = 1 and HEFTYPE = HOMEF, HOMEIF. 'Actual FTEs (HEFCE-fundable)' can be found by summing HEFESFTE and dividing by 100 for these students.

<u>Funds due back</u>

66.   If the 'Associated maximum funding (£)' for 'FTEs required to fully recover reductions in ASN funding' is 'Not applicable', we set 'Funds due back' to £0. Otherwise, if 'Actual FTEs (HEFCE-fundable)' is greater than '2004-05 Baseline FTEs', we subtract '2004-05 Baseline FTEs' from 'Actual FTEs (HEFCE-fundable)' and multiply this difference by 'Rate per FTE (£)' to give 'Funds due back'. If this calculation of 'Funds due back' is greater than the 'Associated maximum funding (£)', we adjust 'Funds due back' to equal the 'Associated maximum funding (£)'.

<u>Funds to be held back</u>

67.   If the 'Associated maximum funding (£)' for 'FTEs required to avoid reduction in ASN funding' is 'Not applicable', we set 'Funds to be held back' to £0. Otherwise, if 'Actual FTEs (HEFCE-fundable)' is less than

'FTEs required to avoid reduction in ASN funding', we subtract 'Actual FTEs (HEFCE-fundable)' from 'FTEs required to avoid reduction in ASN funding' and multiply this difference by 'Rate per FTE (£)' to give 'Funds to be held back'. If this calculation of 'Funds to be held back' is greater than the 'Associated maximum funding (£)', we adjust 'Funds to be held back' to equal the 'Associated maximum funding (£)'.

Provisional contract range holdback/divergence

68.   'Net mainstream teaching funds' is calculated by subtracting 'Funds to be held back' from 'Total mainstream teaching funds for 2004-05' and then adding 'Funds due back'.

69.   'Recalculated assumed fee income for 2004-05' is the total '2004-05 Assumed fees (average fee x the HEIFES04 re-creation FTE)' as described in paragraphs 87-94.

70.   'Recalculated assumed resource for 2004-05' is calculated by adding 'Net mainstream teaching funds' to 'Recalculated assumed fee income for 2004-05'.

71.   'Recalculated standard resource for 2004-05' is the total '2004-05 Standard resource' as described in paragraphs 77-86.

72.   'Difference' is calculated by subtracting 'Recalculated standard resource for 2004-05 from 'Recalculated assumed resource for 2004-05'.

73.   To calculate 'Percentage difference', 'Difference' is divided by 'Recalculated standard resource for 2004-05' and multiplied by 100. If 'Percentage difference' falls within the '2004-05 Contract range' then 'Divergence from contract range' is 0.0 per cent. If 'Percentage difference' is outside the '2004-05 Contract range', 'Divergence from contract range' is the variance between the 'Percentage difference' and the '2004-05 Contract range'.

74.   'Contract range holdback/divergence' is generated depending on whether the college is above or below its contract range. If the college is above its contract range, 'Provisional contract range holdback' is calculated by multiplying 'Divergence from contract range' by 'Recalculated standard resource for 2004-05'. If the college is below its contract range, 'Provisional contract range divergence' is also calculated by multiplying 'Divergence from contract range' by 'Recalculated standard resource for 2004-05'.

Provisional consolidated 2003-04 holdback recovered

75.   Colleges have an opportunity to recover any funding deducted from their baseline as a result of the consolidation of 2003-04 contract range holdback. This will be repaid to the extent that the reinstatement of funding keeps a college within its 2004-05 contract range. Further information was provided in Bridget Josselyn's letter of 1 March 2004 (paragraph 13 and Annex A paragraphs 39 to 42). Information on how we calculate 'Consolidated 2003-04 contract range holdback recoverable in 2004-05' and 'Difference between "Percentage difference" and top of contract range' can be found in the HEIFES explanatory notes, available as part of the download package with workbooks.

In-year moderation

76.   Information on how we calculate and moderate 'Provisional total funding adjustment for 2004-05 before moderation generated by the HEIFES04 re-creation', 'Provisional net funding adjustment to be applied in 2004-05 generated by the HEIFES04 re-creation' and 'Provisional estimated adjustment to 2005-06 baseline grant generated by the HEIFES04 re-creation' can also be found in the HEIFES explanatory notes.

Calculation of standard resource

77.   We calculate standard resource based on 2004-05 ILR F04 student data using:

*   2004-05 FTEs from the HEIFES04 re-creation

*   2004-05 FTEs weighted by price group

*   premiums applied to unweighted FTEs

*   premiums applied to FTEs weighted by price group

*   base price.

2004-05 FTEs from the HEIFES04 re-creation

78.   '2004-05 FTEs from the HEIFES04 re-creation' are identified by summing the FTE of students in each combination of length (LENGTH), level (HEFLEVEL), mode (HEFMODE) and price group. Examples of the assignment to price groups are described below.

Price group B

79.   To identify HEFCE-funded, long, full-time and sandwich foundation degrees assigned to price group B, from the individualised file, select HEFTYPE = HOMEF and LENGTH = L and HEFMODE = FTS and HEFLEVEL = FD and HEFCOL4 = 1, and PRGB > 0 or PRGMEDIA > 0. The number of '2004-05 FTEs from the HEIFES04 re-creation' can be found by adding the following totals:

*   multiply HEFESFTE by PRGB, sum the values and divide by 100 where PRGB > 0

*   multiply HEFESFTE by PRGMEDIA and MEDIAB, sum the values, and divide by 100 where PRGMEDIA > 0.

Price group C

80.   To identify HEFCE-funded, long, full-time and sandwich, and sandwich year-out undergraduates excluding foundation degrees assigned to price group C, from the individualised file, select HEFTYPE = HOMEF and LENGTH = L and HEFMODE = FTS, SWOUT and HEFLEVEL = UGX and HEFCOL4 = 1, and PRGC > 0 or PRGMEDIA > 0. The number of '2004-05 FTEs from the HEIFES04 re-creation' can be found by adding the following totals:

*   multiply HEFESFTE by PRGC, sum the values, and divide by 100 where PRGC > 0

*   multiply HEFESFTE by PRGMEDIA and MEDIAC, sum the values, and divide by 100 where PRGMEDIA > 0.

Price group D

81.   To identify HEFCE-funded, long, full-time and sandwich, undergraduates excluding foundation degrees assigned to price group D, from the individualised file, select HEFTYPE = HOMEF and LENGTH = L and HEFMODE = FTS and HEFLEVEL = UGX and HEFCOL4 = 1, and PRGD > 0 or PRGMEDIA > 0. The number of '2004-05 FTEs from the HEIFES04 re-creation' can be found by adding the following totals:

*   multiply HEFESFTE by PRGD, sum the values, and divide by 100 where PRGD > 0

- multiply HEFESFTE by PRGMEDIA and MEDIAD, sum the values, and divide by 100 where PRGMEDIA > 0.

2004-05 FTEs weighted by price group

82.   We calculate the '2004-05 FTEs weighted by price group' by multiplying '2004-05 FTEs from the HEIFES04 re-creation' by their price group weighting, for each combination of mode, level and length. The price group weightings are given in Table 5.

Table 5 **Price group cost weighting description**

Price group	Description	Cost weighting
B	Laboratory-based subjects (science, engineering and technology)	1.7
C	Subjects with a studio, laboratory or fieldwork element	1.3
D	All other subjects	1.0

Premiums applied to unweighted FTEs

Part-time (10%)

83.   We calculate 'Part-time (10%)' by multiplying '2004-05 FTEs from the HEIFES04 re-creation' by 0.1 for each combination of price group, level and length, where HEFMODE = PT.

Foundation degrees (10%)

84.   We calculate 'Foundation degrees (10%)' by multiplying '2004-05 FTEs from the HEIFES04 re-creation' by 0.1 for each combination of price group, length and mode, where HEFLEVEL=FD.

Premiums applied to FTEs weighted by price group

85.   Information on how we calculate 'Long courses ≥ 45 weeks (25%)', 'London weighting (inner = 8%, outer = 5%)', 'Institution-specific weights' and '2004-05 Standard resource' may be found in the grant letter annex on our web-site under Finance & assurance/Finance and funding.

86.   The base price (a basic amount of resource for a full-time student) is calculated by dividing all the money available to fund teaching (HEFCE grant plus assumed tuition fees) by the total number of weighted FTE students in the whole sector. More information can be found in the publication 'Funding higher education in England: How HEFCE allocates its funds', HEFCE 2005/34.

Calculation of assumed fee income

87. We calculate assumed fee income based on 2004-05 ILR F04 student data using:

- 2004-05 Estimated FTE students described in paragraph 88

- assumed fee income per FTE, shown in Table 6

- 2004-05 FTEs from the HEIFES04 re-creation.

2004-05 Estimated FTE students

88.   The headcount of students used to derive '2004-05 Estimated FTE students' is identified by selecting Home and EC (HEFTYPE $\neq$ ISOV) and non-ITT students (PRGITT = 0) included in the re-creation (HEFEXCL = 0) in each combination of level (HEFLEVEL) and mode (HEFMODE) for the fee levels (HEFFEELV) given in Table 8. For the purpose of this report HEFLEVEL = UG is the sum of foundation degrees (HEFLEVEL= FD) and undergraduates excluding foundation degrees (HEFLEVEL = UGX).

Table 6 **Fee levels**

HEFMODE	HEFLEVEL	HEFFEELV
FTS	UG	1150, 560, 0
FTS	PG	1150, 560, OTHER
SWOUT	UG	560
SWOUT	PG	560, OTHER
PT	UG	1150, 560, OTHER
PT	PG	1150, 560, OTHER

89.   For the sandwich year-out and part-time students selected above, the '2004-05 Estimated FTE students' is calculated by halving the number of students.

Total fee income

90.   We assume the fees for each combination of mode (HEFMODE), level (HEFLEVEL) and fee level (HEFFEELV) as given in Table 7. For the purpose of this report HEFLEVEL = UG is the sum of foundation degrees (HEFLEVEL =FD) and undergraduates excluding foundation degrees (HEFLEVEL = UGX).

91.   For each estimated FTE we assume a fee for their mode, level and fee level. See Table 7 for a breakdown of the assumed fees. To calculate 'Total fee income' for each combination of mode and level, we sum the assumed fees for each estimated FTE within that mode and level.

Derived average fee per estimated FTE

92.   We calculate the 'Derived average fee per estimated FTE' by dividing the 'Total fee income' by the '2004-05 Estimated FTE students' for each combination of mode and level.

2004-05 FTEs from the HEIFES04 re-creation

93.   The students used to derive '2004-05 FTEs from the HEIFES04 re-creation' can be identified for each combination of mode (HEFMODE) and level (HEFLEVEL) by selecting HEFCOL4 = 1 and HEFTYPE = HOMEF. '2004-05 FTEs from the HEIFES04 re-creation' can be found by summing HEFESFTE and dividing by 100 for these students. This total will match the '2004-05 FTEs from the HEIFES04 re-creation' total on the standard resource table. For the purpose of this report HEFLEVEL=UG is the sum of foundation degrees (HEFLEVEL=FD) and undergraduates excluding foundation degrees (HEFLEVEL=UGX).

2004-05 Assumed fees (average fee x HEIFES04 re-creation FTE)

94.   We calculate '2004-05 Assumed fees (average fee x the HEIFES04 re-creation FTE)' for each combination of mode and level by multiplying 'Derived average fee per estimated FTE' by '2004-05 FTEs from the HEIFES04 re-creation.'

Table 7 **Assumed fees**

HEFMODE	HEFLEVEL	HEFFEELV	Assumed fees (£)
FTS	UG	1150	1,150
FTS	UG	560	560
FTS	UG	0	0
FTS	PG	1150	1,150
FTS	PG	560	560
FTS	PG	OTHER	3,484
SWOUT	UG	560	1,120
SWOUT	PG	560	1,120
SWOUT	PG	OTHER	3,484
PT	UG	1150	1,120
PT	UG	560	1,120
PT	UG	OTHER	1,150
PT	PG	1150	1,120
PT	PG	560	1,120
PT	PG	OTHER	3,832