Field Description	Field Abbreviation	Field Length	Field Type	Field Version
Location of employment (Region)	**XLOCGR01**	**4**	**Char**	**7.4.1**

VALID ENTRIES

England region codes:

A	North East
B	North West
D	Yorkshire and The Humber
E	East Midlands
F	West Midlands
G	East of England
H	London
J	South East
K	South West

Other UK codes:

XK	UK region unknown
XF	England region unknown
XI	Wales
XH	Scotland
XG	Northern Ireland
Z	Guernsey, Jersey and the Isle of Man

Non-UK codes:

GREU	Geographic region - Other European Union
GRAF	Geographic region - Africa
GRAS	Geographic region - Asia
GRAU	Geographic region - Australasia
GRME	Geographic region - Middle East
GRNA	Geographic region - North America
GROE	Geographic region - Other Europe
GRSA	Geographic region - South America

Not known code:

NOTK	Not known

ADDITIONAL INFORMATION

This field is an aggregation of UK postcode for place of employment (Employment.EMPPCODE) and Country of employment (Employment.EMPCOUNTRY), sorting UK postcodes into UK Region (Office for National Statistics) and overseas countries into overseas regions. Region (Office for National Statistics) in this context are the nine England Regions (formerly Government Office Region) and codes for Wales, Scotland and Northern Ireland.

The EMPCOUNTRY coding frame is determined by the National Statistics Country Classification 2006 (NSCC), which is based on the two-character ISO 3166-1 codes.

Valid entry Z (Guernsey, Jersey and the Isle of Man) is derived from EMPCOUNTRY entries GG (Guernsey), JE (Jersey), IM (Isle of Man) and XL (Channel Islands not otherwise specified). The smaller Channel Islands of Alderney and Sark are included under the Bailiwick of Guernsey.

Officially, the Crown Dependencies of Guernsey, Jersey and the Isle of Man are not part of the UK or the EU. However, for HESA analysis purposes they are often grouped with and generally assumed to be part of the United Kingdom.

Code XF is the National Statistics Country Classification (NSCC) code for England, but is used in this field as England region unknown, when data cannot be assigned to one of the nine England region codes.

The definition of the European Union is as at 1 December in the academic year to which the data relates.

Valid entry NOTK (Not known) includes those for whom location of employment information is not applicable (EMPPCODE or EMPCOUNTRY is Null), plus records returned to HESA with EMPCOUNTRY coded ZZ (Not known).

DEPENDENT FIELDS

XLOCN01

TECHNICAL SPECIFICATION

Please note: in the following specification, the table suffix '_(Y2)NOV' refers to a year-specific reference derived from the reporting year. For 2012/13, Y1 is 12 and Y2 is 13, thus for 2012/13 the table suffix would be 13NOV, and for 2013/14 the suffix would be 14NOV, and so on.

The table FULLPC_LOOKUP_(Y2)NOV consists of 6 columns; Full Postcode (F_FULLPC, VARCHAR2, 8), X coordinate (F_OSEAST, NUMBER), Y coordinate (F_OSNRTH, NUMBER), Region (F_GOR, CHAR, 2), Country (F_CTRY, VARCHAR2, 2) and County/Unitary Authority Entry (F_XDOMUC01, VARCHAR2, 4). This table has been supplied in an Oracle table provided by Data Management.

The table OUTPC_LOOKUP_(Y2)NOV consists of 7 columns; Outward Postcode (F_OUTPC, VARCHAR2, 4); Full Postcode (F_FULLPC, VARCHAR2, 8); X coordinate (F_OSEAST, NUMBER); Y coordinate (F_OSNRTH, NUMBER); Region (F_GOR, CHAR, 2); Country (F_CTRY, VARCHAR2, 2) and County/Unitary Authority code (F_XDOMUC01, VARCHAR2, 4). This table has been supplied in an Oracle table provided by Data Management.

The table T_OVERSEAS_LOOKUP_V7 consists of 3 columns; Country of domicile (F_DOMICILE, VARCHAR2, 4), Region of domicile (F_REGION, VARCHAR2, 4) and Country of domicile (ISO entry) (F_DOMICILE_ISO, VARCHAR2, 2). This table has been supplied in an Oracle table provided by Data Management.

Unknown EMPCOUNTRY value (ZZ Not known) does not appear in T_OVERSEAS_LOOKUP_V7 and is assigned a value NOTK. All other country domicile codes should be matched in T_OVERSEAS_LOOKUP_V7, F_DOMICILE_ISO. If any other code appears in EMPCOUNTRY that is not contained in T_OVERSEAS_LOOKUP_V7, the function should return a Null to be picked up by impossible values testing to highlight this issue.

Validation exists to ensure that EMPPCODE is completed with a valid postcode (EMPCOUNTRY must be returned based on a set of schema enumeration values), and either EMPPCODE or EMPCOUNTRY are returned where coverage dictates. Although unlikely, validation is switchable for these fields. Consequently the technical specification steps have been designed to account for all possible permutations of data returned to HESA - allowing for possible validation switches.

The function is to be performed top down, as follows.

1. The contents of EMPPCODE to be converted to UPPER CASE.

2. If set of characters from EMPPCODE found in FULLPC_LOOKUP_(Y2)NOV.F_FULLPC, and FULLPC_LOOKUP_(Y2)NOV.F_GOR is not blank, then return FULLPC_LOOKUP_(Y2)NOV.F_GOR into XLOCGR01.

3. Else, trim characters in EMPPCODE (maximum of 4 characters) up to first space (if there is one).

4. If set of trimmed characters from EMPPCODE found in OUTPC_LOOKUP_(Y2)NOV.F_OUTPC, and OUTPC_LOOKUP_(Y2)NOV.F_GOR is not blank, then return OUTPC_LOOKUP_(Y2)NOV.F_GOR into XLOCGR01.

5. Else, if set of trimmed characters from EMPPCODE found in OUTPC_LOOKUP_(Y2)NOV.F_OUTPC, and

OUTPC_LOOKUP_(Y2)NOV.F_GOR is blank, then return OUTPC_LOOKUP_(Y2)NOV.F_CTRY into XLOCGR01.

6. Else, if set of trimmed characters from EMPPCODE not found in OUTPC_LOOKUP_(Y2)NOV.F_OUTPC or EMPPCODE is Null, and EMPCOUNTRY is Null or ZZ, then return NOTK into XLOCGR01.

7. Else, if set of trimmed characters from EMPPCODE not found in OUTPC_LOOKUP_(Y2)NOV.F_OUTPC or EMPPCODE is Null, and EMPCOUNTRY is GG, JE, XL or IM, then return Z into XLOCGR01.

8. Else, if set of trimmed characters from EMPPCODE not found in OUTPC_LOOKUP_(Y2)NOV.F_OUTPC or EMPPCODE is Null, and set of characters in EMPCOUNTRY found in T_OVERSEAS_LOOKUP_V7.F_DOMICILE_ISO, then return T_OVERSEAS_LOOKUP_V7.F_REGION into XLOCGR01.

9. Else, if set of trimmed characters from EMPPCODE not found in OUTPC_LOOKUP_(Y2)NOV.F_OUTPC or EMPPCODE is Null, and set of characters in EMPCOUNTRY are not found in T_OVERSEAS_LOOKUP_V7.F_DOMICILE_ISO, then return Null in XLOCGR01.

Null is not a XLOCGR01 valid entry, and are to be identified at impossible values testing and flagged to HESA's Data Management team.

(The deriving to a Null is an error, highlighting that a value in the collection's EMPCOUNTRY code list is not contained within T_OVERSEAS_LOOKUP_V7's F_DOMICILE_ISO column. This is designed so that the derived process does not fail if an invalid EMPCOUNTRY code is processed).

Carry out processing top down:

Employment. EMPPCODE (CHAR 8)	**Employment. EMPCOUNTRY (CHAR 2)**	**XLOCGR01**
1. The contents of EMPPCODE to be converted to UPPER CASE		
2. EMPPCODE value found in FULLPC_LOOKUP_(Y2)NOV. F_FULLPC and FULLPC_LOOKUP_(Y2)NOV.F_GOR is not blank		FULLPC_LOOKUP_(Y2)NOV. F_GOR
3. Trim characters (max. of 4) to first space (if there is one), from EMPPCODE		
4. Set of characters in EMPPCODE (max. of 4) trimmed to first space (if there is one), found in OUTPC_LOOKUP_(Y2)NOV.F_OUTPC (and OUTPC_LOOKUP_(Y2)NOV.F_GOR is not blank)		OUTPC_LOOKUP_(Y2)NOV. F_GOR
5. Set of characters in EMPPCODE (max. of 4) trimmed to first space (if there is one), found in OUTPC_LOOKUP_(Y2)NOV.F_OUTPC and OUTPC_LOOKUP_(Y2)NOV.F_GOR is blank		OUTPC_LOOKUP_(Y2)NOV. F_CTRY
6, 7, 8, 9. Set of characters in EMPPCODE (max. of 4) trimmed to first space (if there is one) not found in OUTPC_LOOKUP_(Y2)NOV. F_OUTPC or EMPPCODE is Null	6. EMPCOUNTRY is Null or ZZ	NOTK
	7. Set of characters in EMPCOUNTRY is GG, JE, XL or IM	Z
	8. Set of characters in EMPCOUNTRY found in T_OVERSEAS_LOOKUP_V7. F_DOMICILE_ISO	T_OVERSEAS_LOOKUP_V7. F_REGION
	9. Set of characters in EMPCOUNTRY not found in T_OVERSEAS_LOOKUP_V7. F_DOMICILE_ISO	Null

Revision 7.1.1 2012-10-11 (No change to valid entry output, but significant change to Technical specification with source data changing from LOCEMP to two C11018 (2011/12) XML structure fields EMMPCODE and EMPCOUNTRY. Change in functional output step 5 with F_CTRY being returned rather than NOTK (as per C10018) where EMPPCODE is found in OUTPC_LOOKUP_(Y2)NOV.F_OUTPC but OUTPC_LOOKUP_(Y2)NOV.F_GOR is blank. Null added as an impossible values capture when value not found, rather than causing the function to fail).

Revision 7.2.1 2013-03-22 (Correction to a transpose error in technical specification Step 6. Employment.EMPCOUNTRY column text corrected to '6. EMPCOUNTRY is Null or ZZ'. No change required to SDev function code - as this is treating this correctly).

Revision 7.3.1 2013-09-30 (Technical specification revised to remove the TEMP processing stage, which is no longer required with the complete move of the source data tables to ISO-3166-1 and the consequent removal of old-style HESA country codes in the postcode lookup tables for F_CTRY; and W, X and Y region codes in F_GOR. T_OVERSEAS_LOOKUP_V6 updated to T_OVERSEAS_LOOKUP_V7 to reflect the move to ISO_3166-1 codes in F_REGION. Table suffixes changed to be non-year specific, with explanatory sentence added).

Revision 7.4.1 2013-12-04 (Technical specification revised to add a new stage 7, which maps codes of GG, JE, XL or IM in EMPCOUNTRY directly to code Z in XLOCGR01, rather than relying on a lookup to T_OVERSEAS_LOOKUP_V7.F_REGION. Existing stages 7 and 8 renumbered 8 and 9 respectively).