

Field Description	Field Abbreviation	Field Length	Field Type	Field Version
Location of employment (Region)	XLOCGR01	4	Char	7.2.1

## 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
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## 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

The table FULLPC\_LOOKUP\_12NOV consists of 6 columns; Full Postcode (F\_FULLPC, VARCHAR2, 8), X coordinate (F\_OSEAST, NUMBER), Y coordinate (F\_OSNRTH, NUMBER), Region (F\_GOR, CHAR, 1), Country (F\_CTRY, VARCHAR2, 9) 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\_12NOV 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, 1); Country (F\_CTRY, VARCHAR2, 9) 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\_V6 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\_V6 and is assigned a value NOTK. All other country domicile codes should be matched in T\_OVERSEAS\_LOOKUP\_V6, F\_DOMICILE\_ISO. If any other code appears in EMPCOUNTRY that is not contained in T\_OVERSEAS\_LOOKUP\_V6, 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\_12NOV.F\_FULLPC, and FULLPC\_LOOKUP\_12NOV.F\_GOR is not blank, then return FULLPC\_LOOKUP\_12NOV.F\_GOR into TEMP.
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\_12NOV.F\_OUTPC, and OUTPC\_LOOKUP\_12NOV.F\_GOR is not blank, then return OUTPC\_LOOKUP\_12NOV.F\_GOR into TEMP.
5. Else, if set of trimmed characters from EMPPCODE found in OUTPC\_LOOKUP\_12NOV.F\_OUTPC, and OUTPC\_LOOKUP\_12NOV.F\_GOR is blank, then return OUTPC\_LOOKUP\_12NOV.F\_CTRY into TEMP.
6. Else, if set of trimmed characters from EMPPCODE not found in OUTPC\_LOOKUP\_12NOV.F\_OUTPC or EMPPCODE is Null, and EMPCOUNTRY is Null or ZZ, then return NOTK into TEMP.
7. Else, if set of trimmed characters from EMPPCODE not found in OUTPC\_LOOKUP\_12NOV.F\_OUTPC or

EMPPCODE is Null, and set of characters in EMPCOUNTRY found in T\_OVERSEAS\_LOOKUP\_V6.F\_DOMICILE\_ISO, then return T\_OVERSEAS\_LOOKUP\_V6.F\_REGION into TEMP.

8. Else, if set of trimmed characters from EMPPCODE not found in OUTPC\_LOOKUP\_12NOV.F\_OUTPC or EMPPCODE is Null, and set of characters in EMPCOUNTRY are not found in T\_OVERSEAS\_LOOKUP\_V6.F\_DOMICILE\_ISO, then return Null in TEMP (and subsequently 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\_V6's F\_DOMICILE\_ISO column. This is designed so that the derived process does not fail if an invalid EMPCOUNTRY code is processed).

9. Carry out additional processing on Temp to create XLOCGR01. (This is to transform any 4-char country codes found in the postcode lookup tables to the field's 2-char ISO codes valid entry format).

**Carry out processing top down:**

Employment. EMPPCODE (CHAR 8)	Employment. EMPCOUNTRY (CHAR 2)	TEMP (CHAR 4)
1. The contents of EMPPCODE to be converted to UPPER CASE		
2. EMPPCODE value found in FULLPC_LOOKUP_12NOV.F_FULLPC and FULLPC_LOOKUP_12NOV.F_GOR is not blank		FULLPC_LOOKUP_12NOV.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_12NOV.F_OUTPC (and OUTPC_LOOKUP_12NOV.F_GOR is not blank)		OUTPC_LOOKUP_12NOV.F_GOR
5. Set of characters in EMPPCODE (max. of 4) trimmed to first space (if there is one), found in OUTPC_LOOKUP_12NOV.F_OUTPC and OUTPC_LOOKUP_12NOV.F_GOR is blank		OUTPC_LOOKUP_12NOV.F_CTRY
6, 7, 8. Set of characters in EMPPCODE (max. of 4) trimmed to first space (if there is one) not found in OUTPC_LOOKUP_12NOV.F_OUTPC or EMPPCODE is Null	6. EMPCOUNTRY is Null or ZZ	NOTK
	7. Set of characters in EMPCOUNTRY found in T_OVERSEAS_LOOKUP_V6.F_DOMICILE_ISO	T_OVERSEAS_LOOKUP_V6.F_REGION
	8. Set of characters in EMPCOUNTRY not found in T_OVERSEAS_LOOKUP_V6.F_DOMICILE_ISO	Null
9. Additional processing below		

9. Additional processing on TEMP:

TEMP (CHAR 4)	XLOCGR01
If TEMP value is W (from F_GOR)	XI
If TEMP value is X (from F_GOR)	XH

TEMP (CHAR 4)	XLOCGR01
If temp value is Y (from F_GOR)	XG
If TEMP value is 5826 (from F_REGION)	XF
If TEMP value is 6826 (from F_REGION)	XI
If TEMP value is 7826 (from F_REGION)	XH
If TEMP value is 8826 (from F_REGION)	XG
If TEMP value is 3826 or 4826 (from F_REGION)	Z
Otherwise	Value in TEMP

Revision 6.1.1 2012-01-10 (Additional information added, identifying that from 2010/11 LOCEMP is based on two-character ISO codes. Other UK codes valid entry code XK and label UK region unknown added to mirror Student XDOMGR01 derived field. '5826' England region unknown changed to ISO code XF, 6826 Wales to XI, 7826 Scotland to XH, 8826 Northern Ireland to XG. Valid entry NOTK LOCEMP records 1782 (Not known and) 1783 (Stateless) replaced with to ZZ (Not known). Valid entry Guernsey, Jersey and the Isle of Man is now derived from ISO codes GG (Guernsey), JE (Jersey), IM (Isle of Man) and XL (Channel Islands not otherwise specified). Specification updated for 11NOV\_lookup table. Reference to LOCEMP NUMERIC country codes changed to 2 ALPHA codes. Change of T\_OVERSEAS\_LOOKUP\_V5 F\_DOMICILE column to F\_DOMICILE\_ISO column. Amended additional processing on temp values: If temp value (from F\_GOR) is W to XI, X to XH, Y to XG. Added additional processing on temp values: If temp value (from F\_REGION) is 5826 to XF, 6826 to XI, 7826 to XH, 8826 to XG) Separated out valid entry NOTK from Non-UK codes under its own heading.

Revision 6.1.2 2012-01-18 Clarification of technical specification text for point 6: ALPHANUMERIC replaced with ALPHA and NUMERIC

Revision 6.1.3 2012-01-25 Clarification of technical specification text for point 7: '2 ALPHA' characters replaced with 'ALPHA' to match functional requirement. Point 8 text update: addition of 'to highlight that either LOCEMP contains an invalid country code...'

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\_12NOV.F\_OUTPC but OUTPC\_LOOKUP\_12NOV.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.