

Postcode Grid Reference Specification

Data Files

The CSV product consists of 3 comma separated text files with a header record.

Files **PCL-GRD-UK-CSV_1** and **PCL-GRD-UK-CSV_2** represent all current live Postcodes with their respective grid references and latitude/ longitudes in the UK.

File **PCL-GRD-UK-CSV-Retired.csv** contains Postcodes which have now been retired from the Postal system and therefore are no longer in circulation. This file is supplied free of charge to provide a comprehensive 'history' of Postcodes and their position. It is recommended to use this data file in conjunction with the 'live' files above to achieve the maximum match rates for accurate analysis.

Table Structure

Field	Description
Postcode	The Full Postcode
Postcode Sector	The Postcode Sector
Postcode District	The Postcode District
Postcode Area	The Postcode Area
PQI	Positional Quality Indicator for the Grid Reference
X_Coord	X Co-ordinate OSGB Grid Reference
Y_Coord	Y Co-ordinate OSGB Grid Reference
Longitude	Longitude in WGS84 projection
Latitude	Latitude in WGS84 projection

The Postcode

Formerly a Postcode could contain between 1 and over 300 addresses. This is now restricted to a maximum of 100 although the average number of addresses per Postcode is 15.

Formerly a Postcode could cover addresses on up to 12 Thoroughfares. This is now restricted to 1 although some historic Postcodes may contain more.

Our files use the variable length e-GIF (e-Government Interoperability Framework) version of the Postcode which allows for a single space between the outward and inward parts of the Postcode.

PQI

Each grid reference is given a Positional Quality Indicator (PQI) to denote the accuracy of the grid reference, as follows:

- 1 - within the building of the matched address closest to the postcode mean,
- 2 - as for 1 above, except by visual inspection of Landline maps (Scotland only),
- 3 - approximate to within 50 metres,
- 4 - postcode unit mean (mean of matched addresses with the same postcode, but not snapped to an address),
- 5 - imputed by ONS, by reference to surrounding postcode grid references,
- 6 - postcode sector mean (mainly PO Boxes),
- 8 - terminated postcode, last known ONS grid reference used,
- 9 - no coordinates available.

Grid References

The majority of grid references are derived from the Ordnance Survey product OS MasterMap[®] that contains grid references for each address. Newly introduced postcodes initially have a grid reference that has been imputed by ONS Geography. In due course these are replaced by improved OS MasterMap[®] grid references which use data supplied by Ordnance Survey's field surveyors.

The grid references provided for Northern Ireland postcodes are derived from the LPS 'Pointer'[®] product and use the Irish National Grid system that covers all of Ireland and is independent of the British National Grid. These are then converted to the British National Grid system to ensure consistency across all Postcode records in the file.

Latitude/ Longitude

The degrees latitude and longitude are calculated from the 1 metre grid reference by converting the easting and northing to numeric and then one point shapefile is created for GB using the 'BritishNatGrid' coordinate system and another for Northern Ireland using 'Ireland 1965.ING'.

These files are then projected to GCS_WGS_1984, using an OSGB_1936_to_WGS_1984_Petroleum transformation for GB and a TM75_to_WGS_1984_2 transformation for NI. Latitude and longitude are then calculated from the resulting x and y coordinates.

No geographic coordinates are provided for postcodes in the Channel Islands and the Isle of Man.