

## **AMD Postcode Boundaries, UK**

#### Version

2016 Q2

# **Product Description**

Low-resolution postcode sector, district and area boundaries (e.g.RG40 1, RG40 and RG) derived from the Boundaries Pro product. These boundaries have had complex intermediate vertices removed, allowing quicker drawing times and online applications. These reduced boundaries still contain the same attributes and records as the Pro product, and have only lost 1% accuracy as a result of their simplification.

#### What's new?

The following new postal sectors have been added in this release:

- MK11 4
- PO 7 3
- RH12 0
- DA10 1
- AB39 8

As part of an ongoing project, AMD boundaries are being manually edited to more accurately represent the distribution of unit postcodes affiliated with each sector, district and area (where possible). In this release, boundaries in the south west of England have been edited. This will continue in forthcoming releases.

# What's key?

- Low-resolution postcode boundaries for UK
- Lower price than competing products
- Allows quick drawing times
- Suitable for online applications
- British national Grid and lat/long co-ordinates both provided

## **Release Summary**

This release includes corrected boundaries as well as an updated postcode count.

Layer	<b>Total Number of Objects</b>
AMD Pro Postcode Area Centroids, UK	124
AMD Pro Postcode Area Boundaries, UK	124
AMD Pro Postcode District Centroids, UK	2841
AMD Pro Postcode District Boundaries, UK	2841
AMD Pro Postcode Sector Centroids, UK	9564
AMD Pro Postcode Sector Boundaries, UK	9564



## **Fields**

Postcode Sector boundaries and centroids

Field	<b>ESRI Field Name</b>	Description	Example
PostSect	PostSect	Postcode sector name using 'commercial' format i.e. no fixed length	EX5 7
Structured PostSect	Structured	Postcode sector name; fixed length format	EX 5 7
PostDist	PostDist	Postcode district name using 'commercial' format i.e. no fixed length	EX5
Structured PostDist	Structur00	Postcode district name; fixed length format	EX 5
PostArea	PostArea	Postcode area name using 'commercial' format i.e. no fixed length	EX
Postcode Count	Postcode_C	The count of all unit postcodes contained within each sector	34
AREA_KM	AREA_KM	Sector Area (Square Kilometres)	1.34543
AREA_MI	AREA_MI	Sector Area (Square Miles)	0.519474
X_coord	X_coord	Centroid easting grid co-ordinate in meters	300,372
Y_coord	Y_coord	Centroid northing grid co-ordinate in meters	95,168
Longitude	Longitude	Centroid longitude grid co-ordinates	-3.413568
Latitude	Latitude	Centroid latitude grid co-ordinates	50.747476

### Postcode District boundaries and centroids

Field	ESRI Field Name	Description	Example
PostDist	PostDist	Postcode district name using 'commercial' format i.e. no fixed length	EX5
Structured PostDist	Structured	Postcode district name; fixed length format	EX 5
PostArea	PostArea	Postcode area name using 'commercial' format i.e. no fixed length	EX
Postcode Count	Postcode_C	The count of all unit postcodes contained within each district	34
AREA_KM	AREA_KM	Sector Area (Square Kilometres)	233.29206
AREA_MI	AREA_MI	Sector Area (Square Miles)	90.074571
X_coord	X_coord	Centroid easting grid co-ordinate in meters	300,372
Y_coord	Y_coord	Centroid northing grid co-ordinate in meters	95,168
Longitude	Longitude	Centroid longitude grid co-ordinates	-3.413568
Latitude	Latitude	Centroid latitude grid co-ordinates	50.747476



### Postcode Area boundaries and centroids

Field	<b>ESRI Field Name</b>	Description	Example
PostArea	PostArea	Postcode area name using 'commercial' format i.e. no fixed length	EX
Postcode Count	Postcode_C	The count of all unit postcodes contained within each area	34
AREA_KM	AREA_KM	Sector Area (Square Kilometres)	1.34543
AREA_MI	AREA_MI	Sector Area (Square Miles)	0.519474
X_coord	X_coord	Centroid easting grid co-ordinate in meters	300,372
Y_coord	Y_coord	Centroid northing grid co-ordinate in meters	95,168
Longitude	Longitude	Centroid longitude grid co-ordinates	-3.413568
Latitude	Latitude	Centroid latitude grid co-ordinates	50.747476

Tables in the Access database (Changes since last release)

Tables III the Access database	(Changes since last release)
Table	Description
Area Boundaries Geometry Modified	Postcode areas where the geometry has changed since the last release
District Boundaries Geometry Modified	Postcode district where the geometry has changed since the last release
Modified Area Centroids	Postcode area centroids where the coordinates have changed since the last release
Modified District Centroids	Postcode district centroids where the coordinates have changed since the last release
Modified Sector Centroids	Postcode sector centroids where the coordinates have changed since the last release
New Areas	New postcode areas added in this release
New Districts	New postcode districts added in this release
New Non Geographic Districts	List of postcode districts that have been derived from the full unit postcode but don't meet the rules for creating a boundary. These are often PO boxes or large businesses.
New Non Geographic Sectors	List of postcode sectors that have been derived from the full unit postcode but don't meet the rules for creating a boundary. These are often PO boxes or large businesses.
New Sectors	New postcode sector added in this release
Sector Boundaries Geometry Changed	Postcode sector centroids where the coordinates have changed since the last release



### Postcode boundary creation rules

MAPMECHANICS AMD Postcode boundaries are constructed by taking unit postcodes, aggregating them and building highly accurate boundaries that follow natural features such as roads or rivers.

In some cases, the resulting postcode sectors can be 'complex' (made up of more than one polygon). This can be where unit postcodes may be separated by natural features, such as islands off of a coastline or where some unit postcodes fall within the 'wrong' postcode sector. MAPMECHANICS AMD Postcode boundary products have been created to minimise the creation of complex polygons and create postcode sectors that are characterised by just one complete polygon.

In order to avoid having sectors divided up into multiple polygons, a range of criteria must be met.

Number of unit postcodes within a potential new sector has to be greater than 4

There must be more than 4 different unit postcodes to make up a new sector. Any less and the resulting postcode sector will be too small.

- Number of DISTINCT XY pairs (coordinates) has to be greater than 4 The new sector must contain a count of distinct XY coordinates greater than 4, as the postcodes that they are assigned to must have some degree of spatial distribution. This resolves the issues associated with tight non-spatial clustering of postcodes such as 'vertical streets' or PO boxes whereby unit postcodes are stacked upon one another and have the same XY coordinates.
- The ratio of the distinct XY pairs to number of postcodes within that sector is greater than 0.5

This combination of the previous two criteria ensures that there are sufficient numbers of spatially distributed unit postcodes that make a postcode sector. For example, without these criteria a new sector could be created with 100 postcodes held in 4 locations (4 distinct XY pairs). As the ratio of XY pairs to postcodes is so small the spatial variation between all the postcode points is miniscule. This results in a sector that would contain high levels of vertical stacking of postcodes and not cover a large enough area to justify the creation of a new sector.

### **Formats Available**

AMD Pro Postcode Boundaries are available in most common GIS formats including Geoconcept, MapInfo TAB, ESRI Shapefile (.shp) and in CSV format. If required MAPMECHANICS can directly provide the data in other GIS, 'flat', or database formats. Please contact MAPMECHANICS for more information.

### **Projection**

British National Grid or Lat/long WGS84

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