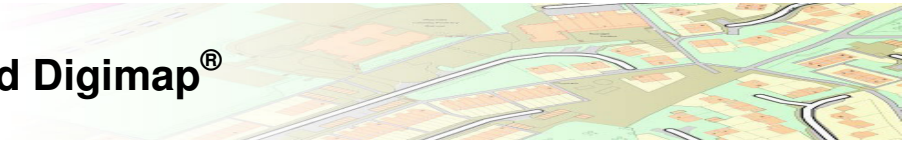


# OS MasterMap<sup>®</sup> and Digimap<sup>®</sup>

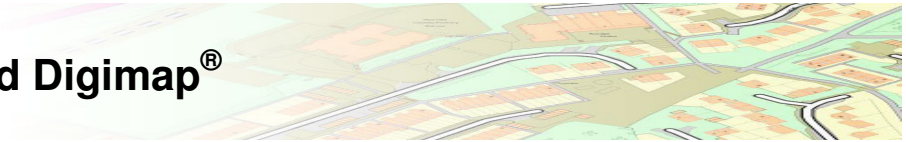


## Features and Benefits of OS MasterMap

The following are some of the main **Features** of OS MasterMap

- **Cleaner Data** - Land-Line has gone through data validation and topology structuring procedures that removes slivers, overshoots, undershoots and unnecessary vertices.
- **Polygonised Data** - Land-Line data has been polygonised where appropriate to form structured polygonal objects such as buildings, parks, roads and rivers.
- **Seamless datasets** - the data is not limited by tile boundaries but forms a logically continuous database where features are not arbitrarily split at tile boundaries.
- **TOID<sup>®</sup>** - the TOID or Topographic Object Identifier is a 16 digit number that is assigned to every object when it is created. The TOID is a persistent identifier that remains constant for an object over its life-cycle.
- **Additional attribution** - objects have additional thematic and descriptive attribution.
- **Additional metadata** - information about creation and modification dates and changes are included in the data.
- **Change Only Update (COU)** - COU is the ability to supply only those features that have changed since a specified date. This can be used to keep a data holding current without having to reload the whole dataset, or to identify changes over time in the data.
- **GML (Geography Markup Language)** - GML is an XML encoding for the transport and storage of geographic information. It is a standard data format defined by the Open Geospatial Consortium (OGC). OS MasterMap data will be supplied in GML format.
- **Continuously maintained** - the underlying source database is continually maintained by Ordnance Survey and is there most up-to-date and accurate product with national coverage.
- **Consistent framework** - in the future other products (with different scales, content etc.) will be supplied within the MasterMap framework.
- **Multiple Layers** - Topography and ITN (Integrated Transport Network) layers will be available.

## OS MasterMap<sup>®</sup> and Digimap<sup>®</sup>



These features provide a number of **Benefits** to Digimap Users; both for creating maps and downloading the data for further analysis, including:

1. The provision of TOIDS for each object means that a consistent framework can be used to link additional sources of data together. TOIDS facilitate the linking of user and OS data and also the sharing of derived data. This can be a major benefit for teaching and research where specific objects can be identified and research data can be directly linked to the base map data for easy reference.
2. The additional attribution of the data with information such as theme, descriptive group, descriptive term etc. increases the flexibility of the data and increases the potential uses of the data for both cartography and data analysis.
3. The cleaning of the data (removing small gaps, slivers, undershoots, unnecessary vertices etc) and the subsequent structuring of the data into polygons provides significant benefits for a number of applications, including cartography as area features can be 'filled' with whatever representation is appropriate. There is also added intelligence in the data that can be used in further analysis such as 'what lies next to this building?'
4. Because the data is not limited to tiles, neither is a user. Downloaded data can be for any arbitrary rectangular area (possibly irregular areas at a later date). The structuring of the data into themes also allows the user to be more specific about the data that they actually require so they can download the data they want for the area they want and so reduce data duplication and data storage requirements.
5. In time, a Change Only Update mechanism will be provided. This will provide users with the ability to keep their data holding up- to-date, while reducing the amount of data needed to be downloaded. It will also allow users to maintain historical archives of their local data holdings for temporal and historical studies.
6. GML has the advantage of being human readable, globally standard, vendor neutral transfer format. The benefit to the user is that GML can be transferred between systems without loss of information and can be used for both data download and supply via the Internet.
7. The inclusion of the ITN (Integrated Transport Network) as a downloadable layer benefits a significant number of users who wish to carry out analysis that requires an accurate and fully attributed road network for applications such as routing and drive-time analysis.
8. A further benefit of using OS MasterMap is that it is the data format of the future for Great Britain. The Ordnance Survey intends to gradually replace current products with additional layers of OS MasterMap. A student's knowledge of OS MasterMap could significantly enhance their future prospects.