

# **OS MasterMap Sites Layer**

# User guide

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## **Preface**

This user guide (hereafter referred to as the guide) is designed to provide an overview of OS MasterMap Sites Layer (hereafter referred to as the product) and it gives guidelines and advice on how a customer might derive the maximum benefit from the product. It assumes a general knowledge of geographic information. If you find an error or omission in this guide, or otherwise wish to make a comment or suggestion as to how we can improve the guide, please contact us at the address shown below under contact details or complete the product and service performance report form at annexe B and return it to us.

## **Contact details**

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You are advised to copy the supplied data to a backup medium.

# Using this guide

The documentation is supplied in portable document format (PDF) only. Free Adobe® Reader® software, which displays the guide, incorporates search and zoom facilities and allows you to navigate within. Hyperlinks are used to navigate between associated parts of the guide and to relevant Internet resources by clicking on the blue hyperlinks and the table of contents.

If you are unfamiliar with any words or terms used and require clarification please refer to the glossary at the end of the document.

# **Chapter 1** OS MasterMap Sites Layer

OS MasterMap® Sites Layer provides a nationally maintained view of the detailed extents of important locations such as airports, schools, hospitals, utility and infrastructure sites and more. The points of access and routing points, to navigate in and out of the sites, are also provided. The access and routing points, reference OS MasterMap Integrated Transport Network™ (ITN) Layer features.

All the source data that is used in the creation of OS MasterMap Topography Layer has information about its function or purpose, and the Sites Layer is intended to enhance analytical use of this information. OS MasterMap Sites Layer features are a representation of what people see in the real world, where the common view of something (such as a school) is not the address, the main building or the playing fields, but is the site as a whole.

The features are derived from Ordnance Survey's detailed data content; therefore, the classification and grouping of features is dependent upon the source data capture specification.

The product contains three spatial object types:

- Functional site polygons (FunctionalSite);
- Functional site access points (AccessPoint);
- Functional site routing points (RoutingPoint)

Although this dataset has been derived from detailed content also used in the creation of topographic area polygons in OS MasterMap Topography Layer, these topographic area polygons are not supplied as part of the product.

These types are discussed in the technical specification in INSPIRE-compatible terms with reference to the INSPIRE data specification for facilities. The attribute naming convention also takes into consideration consistency with attribute names in the other OS MasterMap layers.

The components that make up these features and the relationships between them are shown in the product's logical model diagram below.

Please note that some of the attributes are currently not populated within OS MasterMap Sites Layer.

To find out more please refer to Chapter 3 OS MasterMap Sites Layer feature types and attribution.

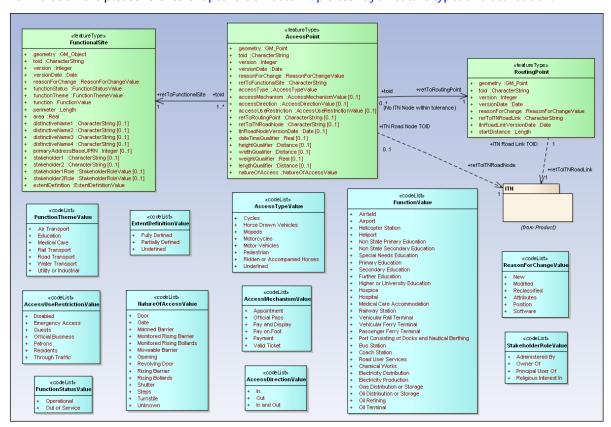


Figure 1: Unified Modelling Language (UML) diagram – OS MasterMap Sites Layer

# Integration with other OS MasterMap layers

OS MasterMap is a continuously-updated database containing a variety of information in different product layers – Address Layer 2, Imagery Layer, ITN Layer and Topography Layer – and new for 2013, Water Layer (alpha launch). The new OS MasterMap Sites Layer is integrated with the Topography and ITN Layers.

Layers are integrated by the sharing of common coordinate systems and context. With the exception of the Imagery Layer, the TOID\* feature identifier attribute provides a unique feature level link for referencing between related features in different OS MasterMap layers and users' features. For example, in OS MasterMap Sites Layer, there is an explicit link between an access point feature and the OS MasterMap ITN Layer road node that is closest to it.

## **Purpose**

Many customers want to be able to answer a simple question, for example – 'How close is this school to something?', 'What would be affected in the event of an emergency?' or 'How much of this hospital would flood?'

OS MasterMap Sites Layer creates a way for customers to easily answer these questions. It helps customers start using Ordnance Survey's large-scale data in a more analytical manner.

The provision of 'form and function' information in OS MasterMap Sites Layer for risk modelling, business analysis and informed decision-making enables the use of intelligence sourced from OS MasterMap Topography Layer for applications such as data analytics. The product will help customers start the journey to a more analytical use of OS MasterMap Topography Layer and would provide closer integration with ITN Layer and AddressBase.

It is important to note that the OS MasterMap Sites Layer product does not indicate the definitive or legal extent, but rather the extent of usage or function.

## **Applications**

The table below outlines the potential benefits of OS MasterMap Sites Layer for different customer groups.

Customer sector	Benefit of using OS MasterMap Sites Layer	Outcome for customer
Energy and Infrastructure	Improved risk management of key assets and better risk planning. Intelligence on which access point is impacted whilst dealing with a callout.	More accurate risk analysis. Reduction in costs of maintenance planning and responding to call-outs.  A better understanding of the wider geographic perspective; for example, how assets are interacting with specific types of sites (for example, schools).
Insurance	More intelligent risk models.  Better identification of areas where an insurer is exposed to accumulated risk or risk to their client's assets.	More effective identification and modelling, using the extents of real-world features in understanding their vulnerability to natural hazards.  Accurate premiums reflecting true risk.
Central and local government	Ability to identify and manage public assets holistically, breaking down the administrative or ownership barriers to achieve more efficient use of publically-owned assets and to provide better services to citizens.	Reduced costs of capture and maintenance, improved efficiency in decision-making and the ability to effectively implement and monitor government policy.  Nationally-consistent view of sites, providing core reference geographies, thus enabling data sharing between government departments.

	Improved understanding of the extent and function of a site and the contribution it may make to social, economic or environmental health of the area.	
Emergency services	Ability to respond more efficiently or deploy resources more effectively to emergencies.  Identification of the more appropriate access point into that site, and the best route to navigate to them.	Better information to feed into risk assessments, contingency planning, incident prevention and first response.
	Provision of a common operational picture, thus improving inter-agency communication.	

## **Data creation**

#### **Geometry**

The initial process for creating functional site extents resulted from several processes carried out after Ordnance Survey's initiation of the Geospatial Data Management System (GDMS), which introduced a new internal data specification – 'Geobase-04'. Geobase-04 refers to a database schema that provides intelligence to features; that is, it separates form and function and explicitly models relationships.

Using a rule-based procedure, cartographic text in OS MasterMap Topography Layer that was linked to a topographic area was used as a trigger to create functional site locations. The process resulted in the appropriate primary function and proper name being assigned to functional sites.

This list of functional sites for initial release was extracted and utilised by data editors to relate features that make up the extents of the functional sites that were included in the capture specification. The editors validated the candidates for the functional sites to ensure that only the correct features were linked together using OS MasterMap Topography Layer and OS MasterMap Imagery Layer.

Most functional site extents could be defined by whole existing features from Topography Layer but in some instances, area features in Topography Layer were split (this does not apply to building features) by closing links (change of function limit) to better represent the functional extent in the real world.

Access points are initially captured from a visual inspection of OS MasterMap Topography Layer and Imagery Layer. Access points will also be captured and maintained through field survey. Access point features are positioned on the boundary of the functional site feature to which they relate. There are possible circumstances where access points do not lie on the site boundary; for example, underground access into a site, and these would be captured in their true position or within a metre of the functional site extent boundary.

Routing points are currently being created by an automated process that performs a spatial query to identify the nearest position on the closest ITN RoadLink. The process also ensures that there is no viable RoadNode on the selected RoadLink using a 5 metre tolerance before generating a routing point.

The initial release of the OS MasterMap Sites Layer product was generated from a desk-based process, which is now maintained and updated by field processes.

#### **Attributes**

In the extraction and creation of the OS MasterMap Sites Layer features, attribution is generated from the detailed source data (OS MasterMap).

# **Data currency and completeness**

This release of OS MasterMap Sites Layer is focused on the content of the initial seven themes; these are described in more detail in the following chapter and in the technical specification.

It is intended that any sites in the relevant themes that were not included in the initial release will be captured following a reanalysis of the underlying Geobase-04 content. These will be made available to customers in subsequent releases of the product.

Some of the access points to the sites in the real world are not easily accessible and have various restrictions. There is no information about them in OS MasterMap Sites Layer at the moment as the restriction attributes are currently not populated.

#### **Data maintenance**

After initial capture, content of the current themes of OS MasterMap Sites Layer product will be maintained alongside other Ordnance Survey large scale-content in an integrated edit environment. This will ensure that any relevant real-world change is updated in all relevant OS MasterMap Layers at the same time.

Product updates will be supplied six-monthly as a full supply or change-only update.

## **Styling**

A sample style for the graphical depiction of the functional site extents, access and routing points has been designed to aid customers with illustrating this product. Ordnance Survey has created Style Layer Descriptors (SLD); these can be found on the product website.

# **Reference systems**

The dataset uses the British National Grid (BNG) spatial reference system. BNG uses the OSGB36\* geodetic datum and a single Transverse Mercator projection for the whole of Great Britain. Positions on this projection are described using easting and northing coordinates in units of metres.

A guide to coordinate systems in Great Britain is available at:

http://www.ordnancesurvey.co.uk/oswebsite/gps/docs/A\_Guide\_to\_Coordinate\_Systems\_in\_Great\_Britain.pdf

A general introductory guide to BNG is provided at:

http://www.ordnancesurvey.co.uk/oswebsite/gi/nationalgrid/nghelp1.html

# **Chapter 2** Theme descriptions

A theme is a set of features that have been grouped together for the convenience of customers and to provide a high-level means of dividing the data in the layer logically. All features belong to at least one theme. It is important to note that themes are not part of the classification system of OS MasterMap features.

Below are descriptions of the themes that are currently included in OS MasterMap Sites Layer and examples of functional sites that are represented within these themes. Also provided is an explanation of the features included or excluded during the capture process of an extent.

The initial release of OS MasterMap Sites Layer provides seven themes:

- Air transport
- Education
- Medical care
- Rail transport
- Road transport
- Water transport
- Utility or industrial

# Air transport

This theme includes sites associated with movement of passengers and goods by air, or where aircraft take off and land.

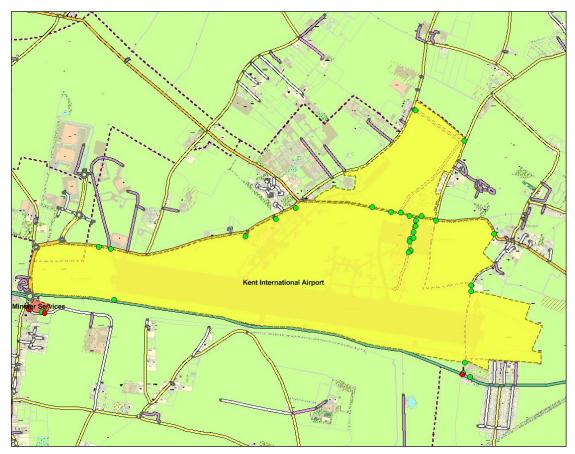


Figure 2: OS MasterMap Sites Layer (yellow polygon) – air transport theme – airport.

Functional sites	Description
Airfield	An area of ground where aircraft take off and land. It may have some permanent buildings but it is smaller than an airport and may be for private use only.
Airport	A feature where aircraft land and take off and which provides facilities for handling passengers, air freight and servicing aircraft.
Helicopter station*	A feature from where bodies such as the police or ambulance service operate helicopter operations.
Heliport*	An airport specifically designed for use by helicopters.

<sup>\*</sup> NOTE: only clearly defined helicopter stations and heliports outside of airfields and airports are to be captured.

All active air transport features (including military sites) will be captured as indicated below unless they fall out of scope (for example, a private property) or are described as disused sites.

#### The following features are included in the captured extent:

- buildings for the handling of air passengers and goods;
- buildings for the storage and maintenance of aircraft;
- aircraft landing and taxiing surfaces (man-made or natural);
- site access roads and paths;
- structures associated with the operation of the site;
- car parks for air passengers;
- areas of man-made and natural surface totally surrounded by included areas; and
- areas of manmade and natural surface abutting included areas along a non-obstructing edge.

#### The following features are not included in the captured extent:

- aircraft-related services outside of perimeter fence (for example, Warehouses or catering);
- public through-roads and pavements; and
- hotels adjacent to site and their car parks.

# **Education**

This theme includes a very broad group of sites with a common high-level primary function of providing education (either state-funded or are fee-paying).



Figure 3: OS MasterMap Sites Layer (purple polygon) – education theme – primary school.

Main function	Functional site attribution	Description
Further education	Further education	An educational site for academic and vocational qualifications below degree level.
Higher education	Higher or university education	A feature where students study at National Qualifications Framework level 4 and above.
University	Higher or university education	An institution of higher education.
Non state primary or preparatory school	Non state primary education	An educational establishment for children from the ages of seven to eleven that is not funded by the state.
Non state secondary school	Non state secondary education	An educational establishment for children of eleven years and over that is not funded by the state.
First school	Primary education	An educational establishment for children from the ages of four to eight.
Infant school	Primary education	An educational establishment for children from the ages of five to seven.
Junior school	Primary education	An educational establishment for children from the ages of seven to eleven.

Middle school	Primary education	An educational establishment for children from the ages of eight to twelve or nine to thirteen.
Primary school	Primary education	An educational establishment for children from the ages of seven to eleven that is funded principally by the state.
Secondary school	Secondary education	Educational establishment for children over 11 years old.
Special needs education	Special needs education	A specialist school for the teaching of those with disabilities.

Table 1, above, shows how the base function of a site has been mapped across to the equivalent functional site attribution, for example, a first school will be attributed as 'primary education'.

Where a school is described with one or more functions and it is not possible to ascertain which buildings relate to which function, the entire site will be captured once for each function present. There will also be instances where there are several functions associated to a single site.

In some cases it may be possible to determine which buildings are related to the different functional sites, but not possible to divide the playing fields; as a result the playing fields will be captured for each function and will overlap.

#### The following features are included in the captured extent:

- all teaching and assembly buildings supporting education functions;
- ancillary buildings and structures directly enabling the site to operate (for example, boiler house, kitchens and waste disposal areas);
- site access roads and paths;
- recreational areas associated with the site (for example, playgrounds and playing fields);
- areas of man-made and natural surface totally surrounded by included areas; and
- for schools: areas of man-made and natural surface abutting included areas along a non-obstructing edge.

#### The following features are not included in the captured extent:

- public roads and pavements;
- pedestrian through-routes; and
- separately-addressed properties as indicated by house numbers.

For the initial product release, only those universities with a nucleated campus have been captured (see the frequently asked questions for a list of these sites). Ordnance Survey will capture the remaining universities and provide them in subsequent releases of the product.

Universities or higher education sites that have extensive and regionally-disparate sites will be associated together using the stakeholder attribute, to specify a relationship between such sites that come under the control of a single stakeholder. This attribute is currently not populated but will be implemented in subsequent releases of the product.

Sites associated with professional bodies or work places will not be captured; for example, 'Dance School' or 'Performing Arts School'.

## **Medical care**

This theme includes sites that focus on the provision of secondary medical care services.



Figure 4: OS MasterMap Sites Layer (green polygon) – medical care theme – hospital.

Functional site	Description
Hospice	Hospice
Hospital	A medical facility that provides secondary level care.
Medical care accommodation	A feature that provides both long-term medical accommodation and medical care.

All medical care sites will be captured as indicated below unless they fall out of scope; for example, a private property labelled as 'The Blue Hospital'.

#### The following features are included in the captured extent:

- main buildings;
- site-specific service buildings and structures;
- access roads and paths;
- site-specific car parks; and
- areas of man-made and natural surface surrounded by included areas.

#### The following features are not included in the captured extent:

- buildings not specifically related to the operation of the site (for example, children's nursery);
- public through-roads and their pavements; and public pedestrian through-routes.

# **Rail transport**

This theme includes sites associated with movement of passengers and goods by rail.

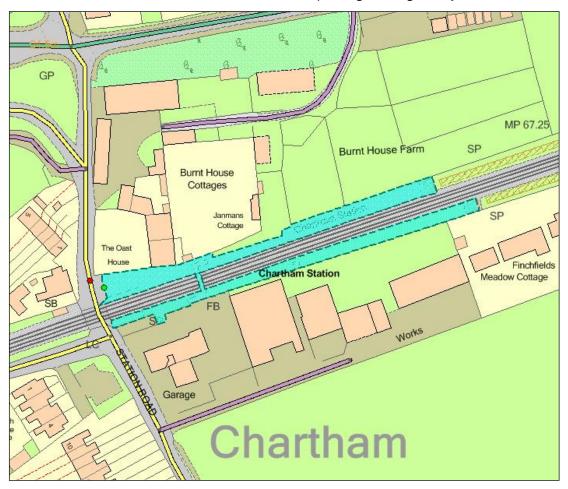


Figure 5: OS MasterMap Sites Layer (blue polygon) – rail transport theme – railway station.

Functional site	Description
Railway station	A feature by a light railway network or railway network where a light rail vehicle or train may stop to pick up goods or passengers.
Vehicular rail terminal	A facility where freight vehicles may be transferred to or from the rail network.
Tram station	A stop/station for trams. Tram systems are defined as light rail systems with some shared running over roads.

All rail transport sites will be captured as indicated below unless they fall out of scope; for example, a private property labelled as 'Railway Station Bungalow'.

#### The following features are included in the captured extent:

- station buildings;
- station shelters;
- platform areas;
- access roads and paths;
- station footbridges and associated structures;
- station car parks;

- areas of man-made and natural surface surrounded by included areas; and
- areas of man-made and natural surface abutting included areas along a non-obstructing edge.

## The following features are not included in the captured extent:

- railway buildings (for example, signal boxes and maintenance huts);
- railway track areas (made-way);
- man-made and natural areas alongside tracks; and
- public roads and footpaths.

It is important to note that functional sites in the rail transport theme are often not contiguous and may be constrained of the structure of polygons in the Topography Layer.

The underground extent of London Underground stations has not been captured in the initial release of the Sites Layer; they will, however, be supplied in subsequent product releases.

# **Road transport**

This theme includes sites associated with the movement of passengers and goods by road.



Figure 6: OS MasterMap Sites Layer (red polygon) – road transport theme – bus station.

Functional site	Description
Coach station	A place where coaches begin, break or end a journey and at which passengers may embark or disembark. A coach station may consist of buildings or may simply be an area specifically set aside with shelters and signage.

Bus station	A place where buses begin, break or end their journey and at which passengers may embark or disembark. A bus station may consist of buildings or may simply be an area specifically set aside with shelters and signage.	
Road user services	An area for the supply of fuel, refreshments and so on near a road or motorway.	

All road transport sites will be captured as indicated below unless they fall out of scope (for example, a private property).

#### The following features are included in the captured extent:

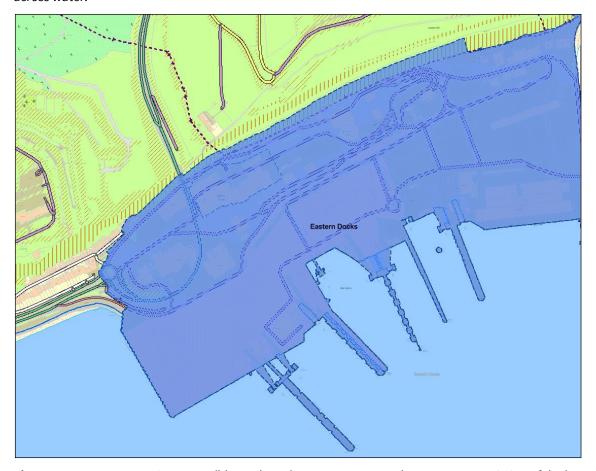
- bus/coach station buildings (for example, ticket office, waiting room)
- bus/coach station shelters;
- car/bus/coach parking areas;
- buildings for bus/coach storage, maintenance and cleaning;
- access roads and paths; and
- areas of man-made and natural surface surrounded by included areas.

#### The following features are not included in the captured extent:

- public roads and pavements; and
- pedestrian through-routes.

## **Water transport**

**Description**: this theme includes sites involved in the transfer of passengers or goods onto vessels for transport across water.



**Figure 7**: OS MasterMap Sites Layer (blue polygon) – water transport theme – port consisting of docks and nautical berthing.

Functional site	Description
Vehicular ferry terminal	A site facilitating the embarkation and disembarkation of ferry passengers and their vehicles.
Passenger Ferry Terminal	A site facilitating the embarkation and disembarkation of pedestrian ferry passengers
Port Consisting of Docks and Nautical Berthing	A site on a waterway with facilities for loading and unloading ships.

#### The following features are included in the captured extent:

- port buildings (for example, customs office, ticket office, waiting room);
- vehicle parking/waiting areas;
- structures for loading people, vehicles or goods onto vessels;
- access roads and paths; and
- areas of man-made and natural surface surrounded by included areas.

#### The following features are not included in the captured extent:

- public roads and pavements; and
- public slipways.

For the initial product release, only those ports with the highest freight tonnage have been captured (see the frequently asked questions for a list of these sites). Ordnance Survey will capture the remaining ports and provide them in subsequent releases of the product.

# **Utility or industrial**

This theme includes sites where the following activities take place:

- The principles of chemistry are applied to materials to create different materials on a large scale.
- Energy (that is, electricity, gas or oil) is produced, refined, distributed or stored.



Figure 8: OS MasterMap Sites Layer (orange polygon) – utility or industrial theme – electricity production

Functional site	Description
Chemical works	A site where the principles of chemistry are applied to materials to create different materials.
Electricity distribution	A site used to handle electricity as part of the process of distributing electricity nationally. If the site is for domestic electricity supply then it is considered to be an electricity sub-station site and not captured as part of the initial release.
Electricity production	A site where electricity is generated on a large scale.
Gas distribution or storage	A site associated with the storing or supply of gas to users.
Oil distribution or storage	A depot where oil is stored.
Oil refining	A site where crude oil is refined.
Oil terminal	A storage point and distribution centre at the head of an oil pipeline

#### The following features are included in the captured extent:

- internal site access roads and paths;
- buildings and structures associated with the operation of the site;
- areas of man-made and natural surface totally surrounded by included areas;
- areas of man-made and natural surface abutting included areas along a non-obstructing edge; and
- for marine oil terminals, include related berthing structures physically connected to the site.

#### The following features are not included in the captured extent:

- site-related areas outside of perimeter fence (for example, car parking); and
- isolated mooring structures.

In the initial product release, the primary oil Refineries and terminals have been captured. Ordnance Survey will capture the remaining oil refineries and terminals and provide them in subsequent releases of the product.

## Renewable energy

#### **Solar Farms:**

Solar farms are currently undergoing capture and the number of these sites will increase with subsequent product refreshes. They are represented by single- and multi-part polygons that cover the sections of land the solar panels are located on.

#### **Hydroelectric Power Stations:**

Hydroelectric power stations are represented in OS MasterMap Sites Layer where the above ground elements of these features appear in OS MasterMap Topography Layer. The underground sections of these sites are not currently represented in OS MasterMap Sites Layer. These features are currently undergoing capture and the number of these sites is expected to increase with subsequent product refreshes.

#### **Wind Farms:**

Wind farms are not currently included within OS MasterMap Sites Layer. Ordnance Survey are investigating how best to represent wind farms.

# Chapter 3 OS MasterMap Sites Layer feature types and attribution

OS MasterMap Sites Layer has three feature types:

- 1 functional site;
- 2 access point; and
- 3 routing point.

The features and their attributes are listed below. Please note that there are some attributes within Sites Layer which are currently not populated. These have been greyed out in the table below. The *Nature of access* attribute is currently populated as 'Unknown' and *Access Type* as 'Motor Vehicles' and/or 'Pedestrian'.

For a more detailed explanation, please refer to the technical specification.

Functional Site	Routing Point	Access Point
gml:id	gml:id	gml:id
TOID	TOID	TOID
Primary AddressBase UPRN	Version	Version
Version	Version date	Version date
Version date	Reason for change	Reason for change
Reason for change	Reference to ITN Road Link	Reference to Functional Site
Function status	ITN Road Link version date	Reference to Routing Point
Function theme	Start distance	Reference to ITN Road Node
Function		Reference to ITN Road Node version
Perimeter		ITN Road Node version date
Area		Access type
Distinctive name1		Access mechanism
Distinctive name 2		Access direction
Distinctive name 3		Access use restriction
Distinctive name 4		Nature of access
Stakeholder 1		Date/time qualifier
Stakeholder 2		Height qualifier
Stakeholder 1 role		Width qualifier
Stakeholder 2 role		Weight qualifier
Extent definition		Length qualifier

#### **Unique identifiers**

OS MasterMap Sites Layer contains two unique identifiers; both are populated with the TOID. The TOID is a unique identifier that is associated with every feature in many of Ordnance Survey's large scale products. It is a unique reference consisting of the prefix 'osgb' and either 13 or 16 digits which will stay the same during a features lifecycle. GML also requires a gml:id attribute which must be unique. It was decided to populate this attribute with the TOID to ensure only one set of unique identifiers must be managed.

In order for the TOID to remain consistent throughout OS products that use them, you should not alter them in any way, either manually or through translation within software.

#### **Stakeholder attribute**

In instances where multiple stakeholders exist for a given Site they will be listed in the Stakeholder 1 attribute, in alphabetical order, and separated with '+'. A simple selection query is therefore suggested where a user wishes to interrogate Stakeholder 1 in GIS.

Stakeholder 2 attribute will not be populated.

Stakeholder 1 role attribute will continue to hold only one role. Stakeholder 2 role attribute will not be populated.

# **Chapter 4** Data measures

Ordnance Survey measures the data in its products in one or more of the ways set out in the table below.

Data measure	Definition	Sub-measure	Definition and value
absen agains specif	Presence and absence of features against the specified data content*	Omission	Features representing objects that conform to the specified data content and are not present in the data
			(as a percentage of the total).
			90% (target value).
		Commission	Features representing objects that conform to the specified data content and are present in the data (as a percentage of the total).
			90% (target value).
Logical consistency	Degree of adherence to logical rules of data structure, attribution and relationships	Conceptual consistency	How closely the data follows the conceptual rules (or model).
			99% (target value).
		Domain consistency	How closely the data values in the dataset match the range of values in the dataset specification.
			99% (target value).
		Format consistency	The physical structure (syntax): how closely the data delivered fits the agreed supply formats.
			99% (target value).
		Topological consistency	The explicit topological references between features (connectivity) – according to specification.
			99% (target value).
_	Accuracy of the position of features	Absolute accuracy	How closely the coordinates of a point in the dataset agree with the coordinates of the same point on the ground (in the British National Grid reference system).
			The positional accuracy of the functional site extent features against the British National Grid are projected to be in line with the Topography Layer values; that is, RMSE in urban +/- 0.5 m, rural +/- 1.1 m, and mountain and moorland +/- 4.1 m.
		Relative accuracy	Positional consistency of a data point or feature in relation to other local data points or features within the same or another reference dataset.
			The relative accuracy of the functional site extent features against adjacent features are projected to be in line with the Topography Layer values; that is, RMSE in urban +/- 0.5 m (up to 60 m), rural +/- 1.0 (up to 100 m) and mountain and moorland +/- 4.0 m (up to 500 m).
		Geometric fidelity	The 'trueness' of features to the shapes and alignments of the objects they represent*.
			Not measured.
Temporal accuracy	Accuracy of temporal attributes and temporal relationships of features	Temporal consistency	How well-ordered events are recorded in the dataset (life cycles).
a r			Not measured currently, this will be set at first product update.
		Temporal validity (currency)	Validity of data with respect to time: the amount of real-world change that has been incorporated in the dataset that is scheduled for capture under current specifications.*
			Not measured currently, this will be set at first product update.
Thematic accuracy (attribute accuracy)	Classification of features and their attributes	Classification correctness	How accurately the attributes within the dataset record the information about objects*.
			95% (target value).

<sup>\*</sup> When testing the data according to the data specification against a reference dataset; that is, OS MasterMap Topography Layer.

# Annexe A Glossary

#### address, addressed premises

A permanent or non-permanent location with an address being a potential delivery point for Royal Mail<sup>®</sup>. Examples of addressed premises are a house, a flat within a block of flats, a caravan site, a bollard to which several houseboats may be moored or an organisation occupying the whole or part of a building.

#### attribute

Any item of information packaged in an OS MasterMap feature. The TOID and the geometry of the feature are both attributes of the feature. In GML and XML documents and specifications, this term is used in a different way. This usage is noted in the OS MasterMap specification as appropriate.

#### customer

An organisation or individual that makes use of Ordnance Survey's data supply facilities. This includes both direct sales customers of Ordnance Survey and Ordnance Survey Mapping and Data Centres, as well as customers of Licensed Partners. It does not include anyone, or any organisation, that has access to Ordnance Survey material without charge.

#### dataset

An identifiable set of data that share common characteristics and that are managed as a subset of the data within a database.

#### **Digital National Framework (DNF)**

A nationally-consistent geographic referencing framework for Great Britain, comprising the National Grid and the National Geographic Database, that defines each geographic feature as it exists in the real world with a maintained, unique reference allocated to each feature. The DNF is not a product; it is the framework on which our future products will be based.

#### feature

An abstraction of a real-world object. It is not the real-world object itself. The OS MasterMap product is composed of discrete vector features, each of which has a feature type, geometry, and various feature attributes.

#### **GML**

Geography Markup Language. An XML encoding for the transport and storage of geographic information, including both the geometry and attributes of geographic features.

#### INSPIRE

The INSPIRE directive aims to create a European Union (EU) spatial data infrastructure. This will enable the sharing of environmental spatial information among public sector organisations and better facilitate public access to spatial information across Europe.

#### layer

A layer is a group of related OS MasterMap themes. A layer may consist of one or more themes. For example, the Sites Layer is currently composed of seven themes, whereas the Topography Layer contains seven themes.

#### life cycle

The series of events that occur in the life of a real-world object or the OS MasterMap feature(s) that represents it. This will always include those events that result in creation and deletion and may also include events that result in amendments or change.

#### **National Grid**

A unique referencing system that can be applied to all Ordnance Survey maps of Great Britain at all scales. It provides an unambiguous spatial reference for any place or entity in Great Britain.

#### obscured level

Where more than one level of detail exists, all detail that meets the specification for capture positioned below

cartographic surface level and either at or above ground surface level is captured as obscured detail. For example, detail under bridges is obscured whilst the bridge itself is at normal cartographic level.

#### order

A request from a customer for the supply of data. The scope of an order may be constrained by an agreement for a period licence service.

#### point

A pair of coordinates.

#### point feature

A feature representing a real-world object. The geometry of a point feature is a single point (a pair of coordinates) with optional size and orientation.

#### polygon

Polygons are representations of areas. A polygon is defined as a closed line or perimeter that completely encloses a contiguous space and is made up of one or more lines.

#### polygon feature

A polygonised representation of a real-world object. A polygon feature may be used to represent a building, field, lake, functional site extent and so on.

#### positional accuracy

The accuracy of the feature geometry relative to the coordinate spatial reference system.

#### real-world object

The real thing represented by a feature; for instance, a building, a section of fence, the boundary of a wood or a sharp change of gradient. For comparison, an example of a non-real-world object would be the line of an administrative boundary.

#### spatial reference system

The term used in GML (and hence in OS MasterMap specifications) for the definition that allows each spatial position to be stated as a tuple. The only spatial reference system currently used in OS MasterMap is the British National Grid.

#### **Supply format**

The file format in which the data is supplied to the customer.

#### Theme

A collection of features that form some logical set, for example, buildings, water, land. In the OS MasterMap context, themes are a collection of features that are either similar in nature or are related to specific usage. A single feature may be in one or more themes. They are designed to allow the easy selection of features. They do not form part of the classification of the feature. The theme exists purely to facilitate customer data selection.

#### TOID

An identifier that uniquely identifies every feature.

#### version date

The date the version of the feature was created by Ordnance Survey within its master database of OS MasterMap.

#### **Version number**

A version number will identify that a feature has been altered. Version numbers will be allocated sequentially, with version 1 representing the creation of the feature.

#### **XML**

eXtensible Markup Language. A flexible way to create common information formats and share both the format and the data on the Internet, Intranets and elsewhere. XML is extensible because, unlike HTML, the

markup tags are unlimited and self-defining. XML is a simpler and easier to use subset of the Standard Generalised Markup Language (SGML), the standard for how to create a document structure.				

# Annexe B Product and service performance report form

Ordnance Survey welcomes feedback from its customers about OS MasterMap Sites Layer.

If you would like to share your thoughts with us, please print a copy of this form and when completed post or fax it to the address below. Organisation: Postcode: Email: ..... Ouotation or order reference: Please record your comments or feedback in the space below. We will acknowledge receipt of your form within three (3) working days and provide you with a full reply or a status report within 21 working days.

If you are posting this form, please send it to:

OS MasterMap Sites Layer Product Manager, Ordnance Survey, Adanac Drive, SOUTHAMPTON, SO16 0AS.

If you wish to return it by fax, please dial 023 8005 6159.

Any personal information that you supply with this report form will be used by Ordnance Survey only in the improvement of its products and services. It will not be made available to third parties.