Ordnance Survey®

1:50 000 Scale Colour Raster and 1:50 000 Scale Gazetteer

User guide and technical specification

1:50 000 Scale Colour Raster and 1:50 000 Scale Gazetteer

User guide

Contents

v2.2 – 12/2008

D05300_19

Preface

This user guide (hereafter referred to as the guide) is designed to provide an overview of 1:50 000 Scale Colour Raster and 1:50 000 Scale Gazetteer (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 A and return it to us.

Contact details

Our Customer Service Centre will be pleased to deal with your enquiries:

Customer Service Centre
Ordnance Survey
Romsey Road
SOUTHAMPTON
SO16 4GU

General enquiries (calls charged at local rate): +44 (0)8456 05 05 05

Dedicated Welsh Language HelpLine: 08456 05 05 04

Textphone (deaf and hard of hearing users only please): +44 (0)23 8079 2906

Email: customerservices@ordnancesurvey.co.uk

or visit the Ordnance Survey website at: www.ordnancesurvey.co.uk

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Use of the product

The terms and conditions upon which the product, including this guide, is made available to you and your organisation are contained in the customer contract made between you and Ordnance Survey. If there is an inconsistency between the terms of your customer contract and this guide, then the terms of your customer contract prevail. If you or your organisation has not signed a valid current customer contract then you are not entitled to use the product.

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Copyright in this guide

Data copyright and other intellectual property rights

Trademarks

Back-up provision of the product

You are advised to copy the supplied data to a back-up medium.

Using this guide

The documentation is supplied in portable document format (PDF) only. Free Adobe® Acrobat 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 Introduction

1:50 000 Scale Colour Raster

1:50 000 Scale Colour Raster is a mid-scale product in Ordnance Survey's raster portfolio, providing a raster image of the popular OS Landranger Map series. 1:50 000 Scale Colour Raster is available in colour and in a number of file formats. An example of the data is shown in figure 1 below.

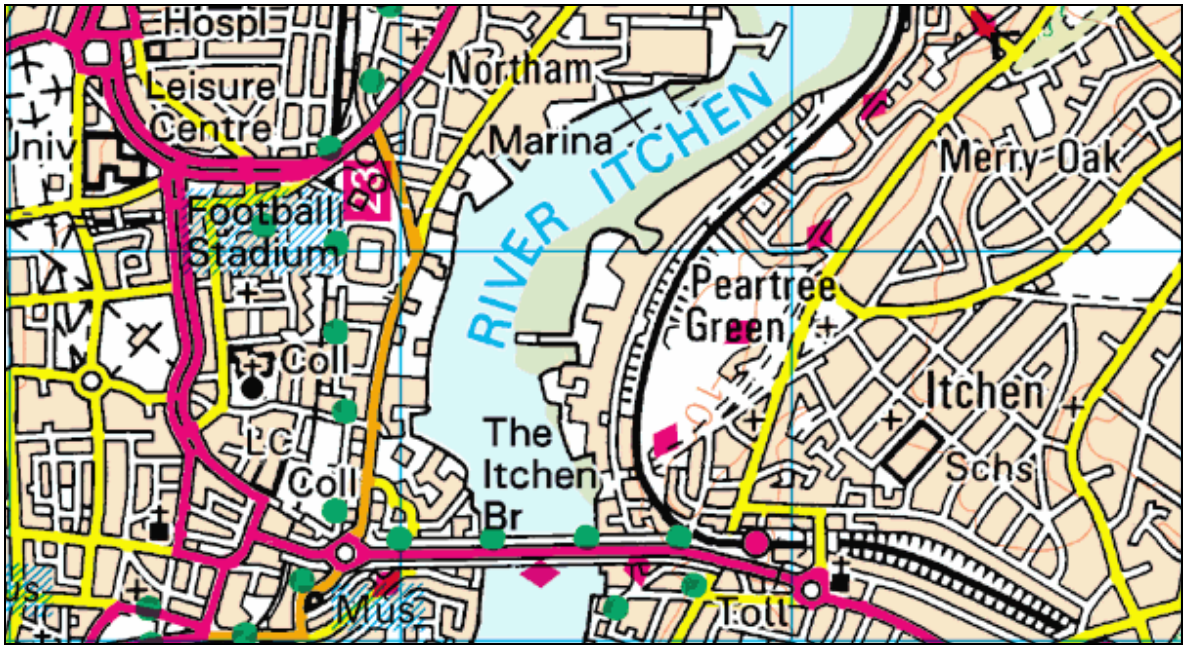

Figure 1: an extract of 1:50 000 Scale Colour Raster

1:50 000 Scale Colour Raster provides an image where the detail has been converted to a grid of pixels, which can then be displayed on computer screens. The product covers all of Great Britain and is supplied as tiles aligned to the National Grid. Data is converted into a raster format at a resolution of 254 dots per inch (dpi) and a pixel is equivalent to 5 metres on the ground. This resolution has been chosen as it maintains the necessary clarity for text shown on the map.

The product can be overlaid with other Ordnance Survey products or a customer's own geographic/business data, besides providing a detailed geographic context in its own right.

1:50 000 Scale Colour Raster is produced to provide customers with a detailed product that could be made available in a number of different formats to provide either a map of an area when used on its own or as a means of providing geographic context to help a customer visualise their own data.

1:50 000 Scale Colour Raster is supplied as graphic image files that can easily be read by many image software packages. To view tiles in geographic relation to each other and to create the best context for its use with other Ordnance Survey or third-party data, it is recommended that it is used in a geographical information system (GIS).

As can be seen from the illustration above, the product provides an excellent overview of the main features and communication routes of an area, and this makes 1:50 000 Scale Colour Raster particularly useful for development and land-use planning, environmental impact analysis, vehicle routing, asset management, marketing analysis, and display and promotion purposes.

1:50 000 Scale Gazetteer

1:50 000 Scale Gazetteer is a list of distinctive place or feature names from 1:50 000 Scale Colour Raster, with location information. This enables you to easily locate places on the map, geocode your data and build search functionality into applications.

1:50 000 Scale Gazetteer contains entries for airports, farms, hills, woodlands, commons and other places, including over 42 000 cities, towns and settlements with coordinates to 1-km resolution.

1:50 000 Scale Gazetteer has the following features:

- National coverage is held in one seamless file, enabling you to find locations quickly with minimal data management.
- It contains every distinctive name featured on the 1:50 000 Scale Colour Raster product.
- It is updated in conjunction with the 1:50 000 Scale Colour Raster revision cycles, giving product consistency.
- Highly detailed, containing over 250 000 names, from farms to cities.

Chapter 2 Content

1:50 000 Scale Colour Raster

1:50 000 Scale Colour Raster shows the following features:

- building blocks and important buildings;
- roads, public rights of way, cycle networks, paths, tracks;
- vegetation type, Forestry Commission access land, National Trust land;
- water features and associated detail;
- railways and associated detail;
- height information;
- archaeological and antiquity information;
- administrative boundary information;
- text;
- tourist information – including camping/caravan sites, gardens, golf courses, information centres, nature reserves, car parks, picnic sites, viewpoints and youth hostels; and
- rock features.

1:50 000 Scale Gazetteer

1:50 000 Scale Gazetteer includes records for the following feature types:

- cities;
- towns;
- water features;
- forests or woods;
- farms*;
- antiquities;
- hills or mountains; and
- other features, including those distinctive names not covered by the above classifications, for example, private houses, isolated buildings, airports, commons, greens and marshes.

* Farms that do not contain the word ‘farm’ as part of the name will not be identified under this feature type; they will be listed as other.

The geographical location referenced by the gazetteer entry depends on the nature of the feature itself. For features with a definable extent, such as towns, cities and forests, the entry references the central geographic kilometre of the feature within the 1:50 000 scale mapping. For example, for an urban area the most central point within its extents is used. This is likely to differ from the location of the urban area name on the mapping as this is usually placed outside of the town to avoid obscuring detail.

Other areas are applied based on the most logical location, for example, for a village crossing more than one kilometre square on 1:50 000 scale mapping, the kilometre with the most development is used.

For less easily definable features the position of the name itself on the 1:50 000 scale mapping may be referenced. This also applies to extensive geographical features such as mountain ranges and moorland.

Each record contains the information shown in table 1 below:

Table 1: record attributes

Field number	Field name	Full name	Description	Example
1	SEQ	Sequence number	Unique sequence number of the record.	86124
2	KM_REF	Kilometre reference	The National Grid 1 km by 1 km square the feature or centre of the feature falls within on the 1:50 000 scale mapping.	ST5265
3	DEF_NAM	Definitive name	Distinctive name of the feature the record describes.	Felton
4	TILE_REF	Tile reference	The 1:50 000 Scale Colour Raster tile the feature or centre of the feature falls within.	ST46
5	LAT_DEG	Latitude degrees	The latitude and longitude degrees and minutes of the 1 km National Grid square the feature or centre of the feature falls within.	51
6	LAT_MIN	Latitude minutes		23.1
7	LONG_DEG	Longitude degrees		2
8	LONG_MIN	Longitude minutes		41
9	NORTH	Northings	National Grid position of the centre point of the 1 km square the feature or centre of the feature falls within.	165500
10	EAST	Eastings		352500
11	GMT	Greenwich Mean Time	Position in relation to the Greenwich Meridian.	W
12	CO_CODE	County code	Code representing the county or unitary authority boundary the definitive name falls within. See annexe B for a list.	NS
13	COUNTY	County name	Abbreviated county or unitary authority name.	N Som
14	FULL_COUNTY	Full county name	Full county or unitary authority name.	North Somerset
15	F_CODE	Feature code	Describes what the feature is. See annexe C for complete list of definitions. 'T' represents town.	T
16	E_DATE	Edit date	The date the record was last amended.	01-MAR-2007
17	UPDATE_CO	Update code	'I' represents insert. 'A' represents amendment. 'D' represents deletion.	I A D
18	SHEET_1	Primary sheet no	The OS Landranger Map sheet the feature name falls within.	172
19	SHEET_2	Second sheet no		182
20	SHEET_3	Third sheet no		0

Chapter 3 Scale

1:50 000 Scale Colour Raster is derived from the source data used to create its graphic counterpart, the OS Landranger Map series.

Generalisation is used to emphasise, simplify, select and sometimes omit features to produce a cartographic representation of the landscape at a scale of 1:50 000.

The nominal scale of the product is 1:50 000, but recommended minimum-to-maximum scale range is 1:15 000 to 1:60 000 scale.

It is best viewed between 1:20 000 and 1:50 000 scale.

Coordinates

1:50 000 Scale Colour Raster is available in National Grid coordinates, which are expressed in metres relative to an origin set to a point west of the Isles of Scilly. These coordinates can easily be spatially related to other surveys, drawings, datasets or Ordnance Survey products. Customers can visit the British National Grid pages of Ordnance Survey's website for more information.

Coverage

1:50 000 Scale Raster is supplied in standard 20 km by 20 km tiles aligned to the National Grid.

Chapter 4 Formats

1:50 000 Scale Colour Raster comes in a number of file formats. These are:

- TIFF Palette 8-bit (256 colours) uncompressed
- TIFF Palette 8-bit (256 colours) with LZW compression
- Windows® BMP 8-bit colour (256 colours) uncompressed
- Windows BMP 8-bit colour (256 colours) with RLE compression
- PCX 8-bit (256 colours)

TIFF

TIFF is a file-based format for storing and interchanging raster images, with the most recent version (6.0) published in 1992.

There are two types of architecture for a TIFF. Many mainframe computers use what is known as a big-endian (Motorola®) architecture. Most modern computers, including personal computers (PCs), use the little-endian (Intel®) system. 1:50 000 Scale Colour Raster TIFFs are supplied with Motorola architecture. Converting between these two systems is possible but, as a general rule, modern software should be expected to handle both of these outputs without operator intervention.

The 1:50 000 Scale Colour Raster conforms to the TIFF 6.0 standard. Customers are recommended to contact their system suppliers to ensure that it can read the Motorola/big-endian TIFF architecture.

TIFF compressions explained

TIFF LZW is a lossless compression scheme that is supported by virtually all applications that can import TIFF graphics.

BMP

BMP files are a historic file format for Windows operating system. A compressed BMP format is available using Run Length Encoding (RLE). RLE means that the file can be read from start to finish in one pass.

BMP structure

A BMP file consists of either three or four parts. The first part is a header, which includes the position of the image and the number of colours to be displayed. This is followed by an information section, which contains the image width (part 2), height (part 3), and the type of compression (part 4).

PCX

The PCX format is a relatively simple format that provides a minimum of compression using RLE.

PCX structure

The PCX file itself contains two parts: the first part is called the header, which contains information about the image; the second part is the image data, which contains actual image data and colour information.

1:50 000 Scale Gazetteer is supplied as an ASCII colon separated value file.

Chapter 5 Data compression

The data volumes for each file format are influenced by the level of data compression.

Image compression

When an image is compressed, duplicated data that has no value is removed or saved in a shorter form, reducing a file's size. For example, if large areas of water are the same tone, only the value for one pixel needs to be saved, together with the locations of the other pixels with the same colour. When the image is edited or displayed, the compression process is reversed. When raster is compressed, not only are the data volumes reduced but the user can download, display, edit and transfer images more quickly.

There are two forms of compression: *lossless* and *lossy*:

Lossless compression

As its name suggests, lossless compression does not lose information within an image. A lossless compression retains the original quality of an image when it is uncompressed. This process doesn't provide much compression, so file sizes remain large. Lossless compression is used mainly where detail is important, such as when planning to make large prints.

Lossy compression

This process degrades images to some degree, meaning that the decompressed image isn't quite the same as the original. The more an image is compressed, the more degraded it becomes. In many situations, such as posting images on the Internet or printing small- to medium-sized prints, the image degradation isn't so obvious. If a lossy compressed image is over-enlarged, the degradation will become apparent and, therefore, 1:50 000 Scale Colour Raster is not supplied using this compression.

TIFF

TIFF is one of the most commonly used *lossless* image formats. TIFF is primarily designed for raster data interchange and is supported by numerous image-processing applications. This permits much more efficient access to very large files that have been compressed.

Chapter 6 Georeferencing

To be able to view each tile in the correct geographic relation to the National Grid and to each other, the tiles must be georeferenced. GIS typically provide georeferencing as part of their functionality, but for each set of tiles it is necessary to provide the information on how the tiles should be ordered.

Ordnance Survey provides this information in a set of georeferencing files, also known as World files. A complete set for 1:50 000 Scale Colour Raster is available to download free of charge from the 1:50 000 Scale Colour Raster product page on the Ordnance Survey website.

There are several different types of World file. Prior to downloading one of the sets, customers are advised to check with their system suppliers to find out which type their system supports.

The conventions behind the files' creation can be found in chapter 4 of the technical specification. By using the conventions outlined there, this means that other datasets using the same conventions can be imported into the same GIS to add value to the raster map; for example, overlaying a routing or logistics network over the map or displaying a customer's demographic information.

The georeferencing files should be saved in the same directory as the files of the map tiles themselves.

Chapter 7 Revision

Both 1:50 000 Scale Colour Raster and 1:50 000 Scale Gazetteer are updated via a revision programme. The revision programme for both products mirrors that of the OS Landranger Map series and is determined by assessing the following factors:

- known surveyed change;
- change intelligence gathered from a range of sources; and
- consideration is given to how long since an area was last revised.

Priority is given to prestige sites categorised as significant items of change, such as major road construction projects. Significant items of survey change relevant to the scale are captured during the revision programme.

Where a line feature ends by intersecting the tile edge, it is matched with its corresponding feature on the adjacent tile so that both features end on the same unique coordinate. The representation of detail across the tile edge will be of a cartographically acceptable standard when plotted or displayed at scale.

Changes are applied to the data and supplied to customers in June each year. For 1:50 000 Scale Colour Raster only tiles that have changed since the previous supply are provided to help with customers' data management. The full national set of 1:50 000 Scale Gazetteer is supplied each year; changes are indicated by the update code (see chapter 2).

Annexe A Product and service performance report form

Ordnance Survey welcomes feedback from its customers about 1:50 000 Scale Colour Raster and 1:50 000 Scale Gazetteer.

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.

Your name: .....

Organisation: .....

Address: .....

.....

.....

Postcode: .....

Phone: .....

Fax: .....

Email: .....

Quotation or order reference: .....

Please record your comments or feedback in the space below. We will acknowledge receipt of your form within 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:

1:50 000 Scale Colour Raster and 1:50 000 Scale Gazetteer Product Manager, Ordnance Survey, Romsey Road, SOUTHAMPTON, SO16 4GU.

If you wish to return it by fax, please dial 023 8079 2615.

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.

1:50 000 Scale Colour Raster and 1:50 000 Scale Gazetteer

Technical specification

Contents

v2.2 – 12/2008

Introduction

Purpose of this specification and disclaimer

This is the technical specification (hereafter referred to as the specification) applicable to the 1:50 000 Scale Colour Raster and 1:50 000 Scale Gazetteer (hereafter referred to as the product), which is referred to in the Framework Direct Licence, Specific Use Framework Partner Licence or your other customer contract for the product.

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Chapter 1 Specification

The following chapters include information about 1:50 000 Scale Colour Raster and (where applicable) 1:50 000 Scale Gazetteer data, file compression, symbology, georeferencing and formats.

1:50 000 Scale Colour Raster

Specification	1:50 000 Scale Colour Raster
Number of tiles in Great Britain	815 (edgematched) • England 421 • Scotland 338 • Wales 86
Tile size	20 km by 20 km
Availability	National coverage
Resolution	254 dots per inch
Data structure	Raster
Transfer format	TIFF Palette 8-bit (256 colours) uncompressed TIFF Palette 8-bit (256 colours) with LZW* compression Windows BMP 8-bit colour (256 colours) uncompressed Windows BMP 8-bit colour (256 colours) with RLE compression PCX 8-bit (256 colours)
Storage volumes per tile	10–18 Mb
Update frequency	Annual update (see chapter 7 in the user guide)

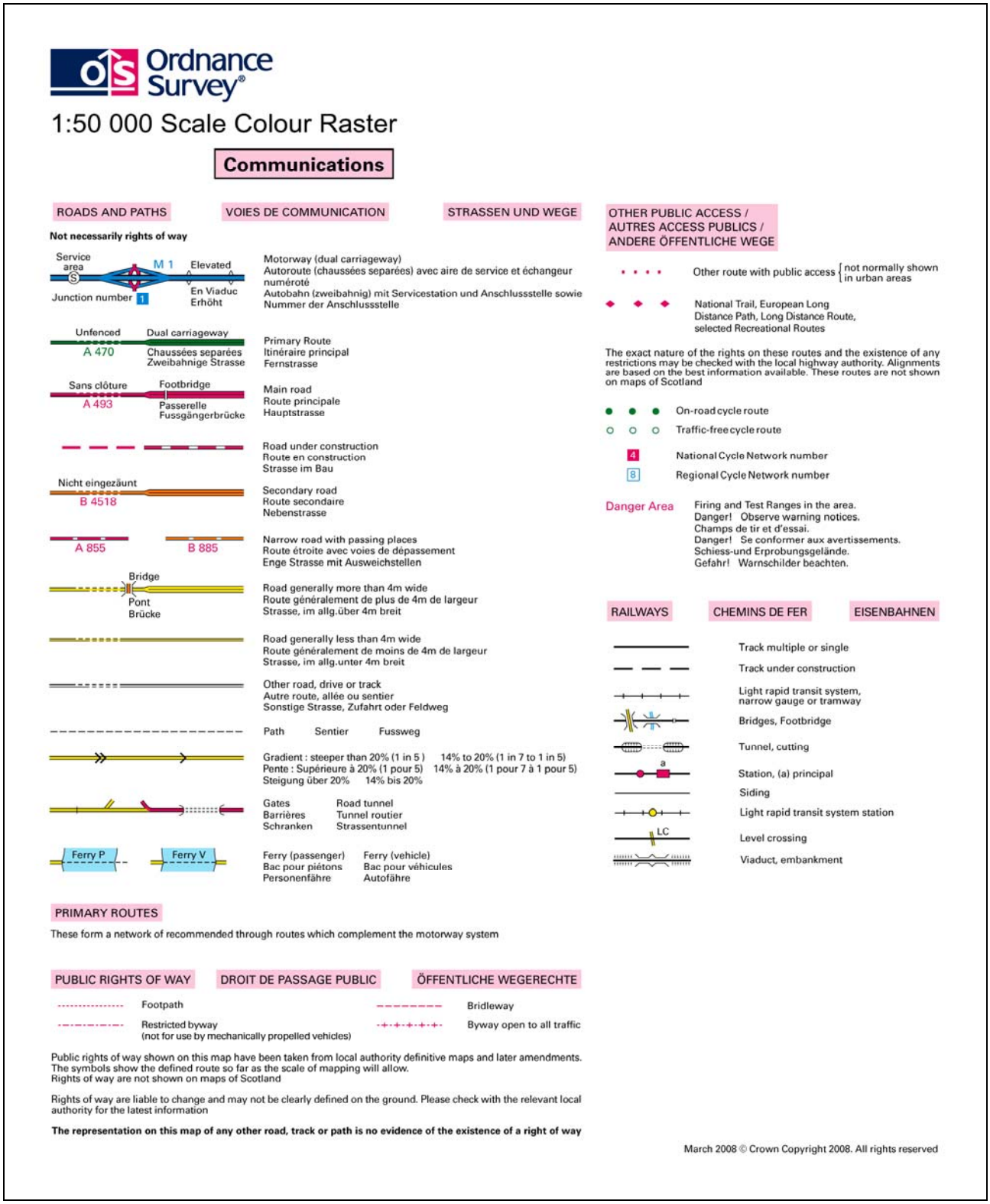
* If LZW compressed formats are used then registration may be required. Guidance is available on the Unisys® website at www.unisys.com/about__unisys/lzw/.

1:50 000 Scale Gazetteer

Specification	1:50 000 Scale Gazetteer
Number of files covering Great Britain	1
Availability	National coverage
Transfer format	ASCII colon separated value
Storage volume	112 Mb
Update frequency	Annual update (see chapter 7 in the user guide)

Chapter 2 Legend

English



Ordnance Survey

1:50 000 Scale Colour Raster

Communications

ROADS AND PATHS | VOIES DE COMMUNICATION | STRASSEN UND WEGE

Not necessarily rights of way

Service area (S) — M 1 — Elevated / En Viaduc / Erhöht — Junction number 1
Motorway (dual carriageway)
Autoroute (chaussées separées) avec aire de service et échangeur numéroté
Autobahn (zweibahnig) mit Servicestation und Anschlussstelle sowie Nummer der Anschlussstelle

Unfenced — A 470 — Dual carriageway
Chaussées separées
Zweibahnige Strasse
Primary Route
Itinéraire principal
Fernstrasse

Sans clôture — A 493 — Footbridge
Passerelle
Fussgängerbrücke
Main road
Route principale
Hauptstrasse

Road under construction
Route en construction
Strasse im Bau

Nicht eingezäunt — B 4518
Secondary road
Route secondaire
Nebenstrasse

A 855 — B 885
Narrow road with passing places
Route étroite avec voies de dépassement
Enge Strasse mit Ausweichstellen

Bridge / Pont / Brücke
Road generally more than 4m wide
Route généralement de plus de 4m de largeur
Strasse, im allg.über 4m breit

Road generally less than 4m wide
Route généralement de moins de 4m de largeur
Strasse, im allg.unter 4m breit

Other road, drive or track
Autre route, allée ou sentier
Sonstige Strasse, Zufahrt oder Feldweg

Path Sentier Fussweg

Gradient : steeper than 20% (1 in 5) 14% to 20% (1 in 7 to 1 in 5)
Pente : Supérieure à 20% (1 pour 5) 14% à 20% (1 pour 7 à 1 pour 5)
Steigung über 20% 14% bis 20%

Gates Barrières Schranken
Road tunnel Tunnel routier Strassentunnel

Ferry P — Ferry V
Ferry (passenger) Bac pour piétons Personenfähre
Ferry (vehicle) Bac pour véhicules Autofähre

PRIMARY ROUTES

These form a network of recommended through routes which complement the motorway system

PUBLIC RIGHTS OF WAY | DROIT DE PASSAGE PUBLIC | ÖFFENTLICHE WEGERECHTE

Footpath
Bridleway
Restricted byway (not for use by mechanically propelled vehicles)
Byway open to all traffic

Public rights of way shown on this map have been taken from local authority definitive maps and later amendments. The symbols show the defined route so far as the scale of mapping will allow. Rights of way are not shown on maps of Scotland

Rights of way are liable to change and may not be clearly defined on the ground. Please check with the relevant local authority for the latest information

The representation on this map of any other road, track or path is no evidence of the existence of a right of way

OTHER PUBLIC ACCESS / AUTRES ACCESS PUBLICS / ANDERE ÖFFENTLICHE WEGE

Other route with public access { not normally shown / in urban areas
National Trail, European Long Distance Path, Long Distance Route, selected Recreational Routes

The exact nature of the rights on these routes and the existence of any restrictions may be checked with the local highway authority. Alignments are based on the best information available. These routes are not shown on maps of Scotland

On-road cycle route
Traffic-free cycle route
4 National Cycle Network number
8 Regional Cycle Network number

Danger Area
Firing and Test Ranges in the area.
Danger! Observe warning notices.
Champs de tir et d'essai.
Danger! Se conformer aux avertissements.
Schiess-und Erprobungsgelände.
Gefahr! Warnschilder beachten.

RAILWAYS | CHEMINS DE FER | EISENBAHNEN

Track multiple or single
Track under construction
Light rapid transit system, narrow gauge or tramway
Bridges, Footbridge
Tunnel, cutting
Station, (a) principal
Siding
Light rapid transit system station
LC Level crossing
Viaduct, embankment

Ordnance Survey®

General Information

BOUNDARIES

- National
- District
- County, Unitary Authority, Metropolitan District or London Borough
- National Park

HEIGHTS

- 50 — Contours are at 10 metres vertical interval
- ·144 — Heights are to the nearest metre above mean sea level

Where two heights are shown, the first height is to the base of the triangulation pillar and the second (in brackets) to the highest natural point of the hill

ARCHAEOLOGICAL AND HISTORICAL INFORMATION

- Site of antiquity
- Visible earthwork
- Battlefield (with date)
- VILLA — Roman
- Castle — Non-Roman

Information provided by English Heritage for England and the Royal Commissions on the Ancient and Historical Monuments for Scotland and Wales

ABBREVIATIONS

More information on abbreviations and symbols can be found on our website.

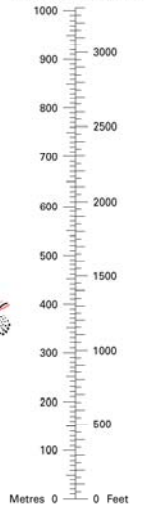
CH	Clubhouse
PH	Public house
PC	Public convenience (in rural area)
TH	Town Hall, Guildhall or equivalent
CG	Cattle Grid
P	Post office
MP	Milepost
MS	Milestone

ROCK FEATURES

CONVERSION

METRES – FEET

1 metre = 3.2808 feet

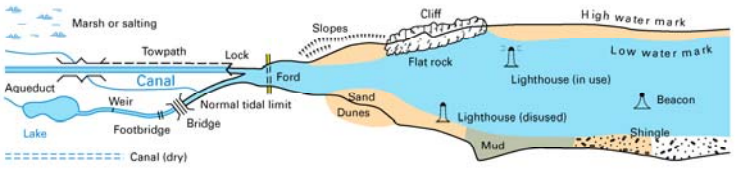


15.24 metres = 50 feet

LAND FEATURES

- Electricity transmission line (pylons shown at standard spacing)
- Pipe line (arrow indicates direction of flow)
- ruin — Buildings
- Important building (selected)
- Bus or coach station
- Glass Structure
- Heliport
- Current or former place of worship with tower
- Current or former place of worship with spire, minaret or dome
- Place of worship
- Triangulation pillar
- Mast
- Wind pump/wind turbine
- Windmill with or without sails
- Graticule intersection at 5' intervals
- Cutting, embankment
- Landfill site or slag/spoil heap
- Coniferous wood
- Non-coniferous wood
- Mixed wood
- Orchard
- Park or ornamental ground
- Forestry Commission land
- National Trust-always open
- National Trust-limited access, observe local signs
- National Trust for Scotland - always open
- National Trust for Scotland - limited access, observe local signs

WATER FEATURES



Contour values in lakes are in metres

Tourist Information

TOURIST INFORMATION RENSEIGNEMENTS TOURISTIQUES TOURISTENINFORMATION

- Camp site/caravan site
  Terrain de camping/Terrain pour caravanes
  Campingplatz/Wohnwagenplatz
- Garden
  Jardin
  Garten
- Golf course or links
  Terrain de golf
  Golfplatz
- Information centre, all year / seasonal
  Office de tourisme, ouvert toute l'année / en saison
  Informationsbüro, ganzjährig / saisonal
- Nature reserve
  Réserve naturelle
  Naturschutzgebiet
- P&R — Parking / Park and ride, all year / seasonal
  Parking / Parking et navette, ouvert toute l'année / en saison
  Parkplatz / Park & Ride, ganzjährig / saisonal
- Picnic site
  Emplacement de pique-nique
  Picknickplatz
- Selected places of tourist interest
  Endroits d'un intérêt touristique particulier
  Ausgewählter Platz von touristischem Interesse
- Telephone, public / roadside assistance
  Téléphone, public / borne d'appel d'urgence
  Telefon, öffentlich / Notrufsäule
- Viewpoint
  Point de vue
  Aussichtspunkt
- V — Visitor centre
  Centre pour visiteurs
  Besucherzentrum
- Walks / Trails
  Promenades
  Wanderwege
- Youth hostel
  Auberge de jeunesse
  Jugendherberge
- World Heritage site/area
  Site du Patrimoine Mondial
  Welterbestätte
- Recreation / leisure / sports centre
  Centre de détente / loisirs / sports
  Erholungs- /Freizeit- / Sportzentrum

Welsh

Ordnance Survey® Arolwg Ordnans®

1:50 000 Scale Colour Raster / Graddfa 1:50 000 Raster Lliw

Cysylltiadau

FFYRDD A LLWYBRAU

Nid â hawliau tramwy o anghenraid

Trafforddd (ffordd ddeuol)

Prif dramwyfeydd

Prifforddd

Ffordd yn cael ei hadeiladu

Ffordd eilaidd

Ffordd gul gyda lleoedd pasio

Ffordd sy'n lletach na 4m yn gyffredinol

Ffordd sy'n gulach na 4m yn gyffredinol

Ffordd arall, dreif neu drac

Llwybr

Graddiant: Yn fwy serth nag 20% (1 mewn 5) 14% i 20% (1 mewn 7 i 1 mewn 5)


Gatiau neu glwydi Twnnel ffordd

Fferi (teithwyr) Fferi (cerbydau)

PRIF DRAMWYFEYDD

Ffurfia'r rhain rwydwaith o dramwyfeydd trwodd a gymeradwywyd ac sy'n cyfochri'r gyfundrefn draffyrdd

HAWLIAU TRAMWY CYHOEDDUS

Llwybr troed

Llwybr march

Cilffyrdd cyfyngedig (nid at ddefnydd cerbydau beiriannol)

Cilffordd yn agored i bob trafnidiaeth

Daw'r hawliau tramwy cyhoeddus a ddangosir ar y map hwn o fapiau swyddogol awdurdodau lleol a newidiadau diweddarach. Mae'r symbolau yn diffinio llwybr y ffyrdd i'r graddau y mae graddfa'r map yn caniatáu.
Ni ddangosir hawliau tramwy ar fapiau Yr Alban

Mae hawliau tramwy yn gallu newid ac mae'n bosibl nad ydynt wedi'u diffinio'n eglur ar y tir. Holwch yr awdurdod lleol perthnasol am yr wybodaeth ddiweddaraf

Nid yw ymddangosiad unrhyw ffordd neu drac neu lwybr arall ar y map hwn yn profi bod hawl i dramwyo ar hyd-ddynt

MYNEDIAD CYHOEDDUS ARALL

Llwybrau eraill gyda mynediad i'r cyhoedd (nis dangosir fel rheol mewn ardaloedd ddinesig)

Llwybrau Cenedlaethol, Llwybrau Pell Ewropeaidd, Tramwyfeydd Pell, Llwybrau Hamdden dethol

Gellir holi'r awdurdod ffyrdd lleol am union natur yr hawliau ar y llwybrau hyn ac unrhyw gyfyngiadau sy'n bodoli. Mae'r aliniadau yn seiliedig ar yr wybodaeth orau sydd ar gael. Ni ddangosir y llwybrau hyn ar fapiau Yr Alban

Trywydd beicio ar ffordd

Trywydd beicio yn rhydd o draffig

4 Rhif Rhwydwaith Beicio Cenedlaethol

8 Rhif Rhwydwaith Beicio Rhanbarthol

Danger Area Meysydd Tanio a Phrofi yn yr ardal.
Perygl! Rhaid ufuddhau i arwyddion rhybudd

RHEILFFYRDD

Amldrac neu untrac

Trac yn cael ei hadeiladu

System gludo ysgafn gyflym, Rheilffordd gul neu tramffordd

Pontydd, Pompren

Twnnel, trychfa

a Gorsaf, (a) prif orsaf

Cliffordd

Gorsaf system gludo ysgafn gyflym

LC Croesfan wastad

Traphont, arglawdd

Ordnance Survey® Arolwg Ordnans®

Gwybodaeth Gyffredinol

FFINIAU

Cenedlaethol

Dosbarth

Sir, Awdurdod Unedol, Dosbarth Prifddinesig neu Fwrdeistref Llundain

Parc Cenedlaethol

UCHDERAU

50 Mae cyfwng fertigol o 10 metr rhwng cyfuchliniau

·144 Uchderau i'r metr agosaf uwchlaw lefel môr cymedrig

Ble mae dau uchder yn ymddangos, mae'r uchder cyntaf wrth sail y piler triongli ac mae'r ail (mewn cromfachau) ar gyfer pwynt uchaf naturiol y bryn

GWYBODAETH ARCHEOLEGOL A HANESYDDOL

Safle heneb

Cloddwaith i'w weld

Maes brwydr (gyda dyddiad)

VILLA Rhufeinig

Castle Anrhufeinig

Darparwyd gwybodaeth gan English Heritage a Chomisiwnau Brenhinol Henebion a Chofebau Hanesyddol yr Alban a Chymru

BYRFODDAU

Ceir rhagor o wybodaeth am fyrfoddau a symbolau ar ein gwefan

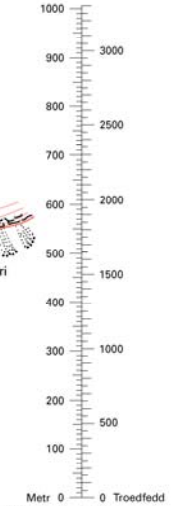
CH	Tŷ clwb
MS	Carreg filltir
MP	Postyn milltir
PH	Tŷ tafarn
CG	Grid gwartheg
P	Swyddfa'r post
TH	Neuadd y dref neu'r cyfryw
PC	Cyfleusterau cyhoeddus (mewn ardaloedd gwledig)

ARWEDDION CRAIG

TROSIAD

METRAU - TROEDFEDDI

1 metr = 3.2808 troedfedd



15.24 metr = 50 troedfedd

ARWEDDION TIR

Lein trawsyrru trydan (peilonau wedi eu dangos gyda chyfyngau cyfartal)

Lein bibau (saeth yn dangos cyfeiriad y llif)

adfail Adeiladau

Adeilad pwysig (dethol)

Gorsaf fysiau

Lle addoliad presennol neu blaenorol gyda thŵr

Lle addoliad presennol neu blaenorol gyda meindwr, minarét neu gromen

Lle addoliad

Adeilad gwydr

Maes hofrenyddion

Piler triongli

Mast

Pwmp gwynt/tyrbin gwynt

Melin wynt gyda hwyliau neu hebddynt

Llinellau rhwyllog yn croesi bob 5'

Trychfa, arglawdd

Safle claddfa rwbel neu tomen sorod/sbwriel

Coed conwydd

Coed di-gôn

Coed cymysg

Perllan

Parc neu gerddi addurnol

Tir y Comisiwn Coedwigaeth

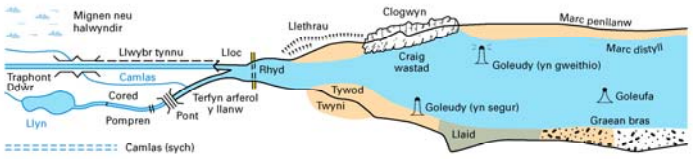
Ymddiriedolaeth Genedlaethol- ar agor bob amser

Ymddiriedolaeth Genedlaethol- mynediad cyfyngedig, rhaid ufuddhau yr arwyddion lleol

Ymddiriedolaeth Genedlaethol yr Alban - ar agor bob amser

Ymddiriedolaeth Genedlaethol yr Alban - mynediad cyfyngedig, rhaid ufuddau yr arwyddion

ARWEDDION DWR



Mae gwerthoedd cyfuchliniau mewn llynnoedd mewn metrau

Gwybodaeth i Dwristiaid

GWYBODAETH I DWRISTIAID

Safle gwersyll

Safle carafanau

Safle carafanau a gwersyll

Gardd

Cwrs neu lain golff

Canolfan wybodaeth, drwy'r flwyddyn/tymhorol

Gwarchodfa Natur

Parcio

P&R Parcio a Chludo, drwy'r flwyddyn / tymhorol

Mannau dethol o ddiddordeb i dwristiaid

Ffôn, cyhoeddus / cymorth minffordd

Gwylfa

Canolfan ymwelwyr

Llwybrau

Hostel ieuenctid

Safle picnic

Safle Treftadaeth y Byd

Canolfan adloniant / hamdden / chwaraeon

Chapter 3 Georeferencing

A definition for registering raster images within a geographic framework is the process of assigning map coordinates to the raster image data and resampling the pixels of the image to conform to the map projection grid. This allows tiles of map data to be located in their correct geographic position relative to the map projection and also to themselves.

Great Britain is surveyed and mapped using the Transverse Mercator (or Gauss-Kruger) projection, so all raster tiles will be mapped to this projection as it applies to Ordnance Survey National Grid if using World or TAB files supplied by Ordnance Survey.

Within the MIF record header the following information will be found under COORDSYS:

CoordSys Earth Projection 8, 79, "m", -2, 49, 0.9996012717, 400000, -100000 Bounds (4.17232513428e-011, 7.7486038208e-011) (700000, 1300000)

This information relates to the Transverse Mercator projection, its position relative to the rest of the world and also an individual tile's position relative to the projection. The record header is constructed as (not all fields have to be used):

CoordSys Earth Projection 8	The 8 relates to a MapInfo® identifier, in this case the Transverse Mercator projection.
79	A MapInfo identifier, in this case this relates to Ordnance Survey of Great Britain 1936, Airy ellipsoid.
"m"	Relates to the unit of measurement, in this case metres.
-2	This is the origin of the projection in respect of longitude.
49	This is the origin of the projection in respect of latitude.
0.9996012717	Indicates the distortion of the tile at the central meridian. A value of 1.0 would indicate no distortion at all. However, distortion within this projection is minimal, even at the far western or eastern limits.
400000, -100000	These figures indicate the false origin of the British National Grid. They represent the south-west corner of the Transverse Mercator projection, which overlays Great Britain, so all coordinates for any tile, no matter what scale, will always be positive.
Bounds: (4.17232513428e-011, 7.7486038208e-011)	These values represent the minimum bounding X and Y coordinates for the tile.
(700000, 1300000)	These values represent the maximum bounding X and Y coordinates for the tile.

Chapter 4 Image file directory (TIFF)

The image file directory for TIFF will contain a selection of the following entries:

Tag 254 (NewSubfileType)

An indication of the kind of data contained in this sub-file, for example, value = 0

Tag 256 (ImageWidth)

The number of columns in the image, the number of pixels per row, for example, value = 4000

Tag 257 (ImageLength)

The number of rows of pixels in the image, for example, value = 4000

Tag 258 (BitsPerSample)

Number of bits per component, for example, value = 8

Tag 259 (Compression)

Compression scheme used on the image data, for example, value = 5 (LZW)

Tag 262 (Photo.Interpretation)

The colour space of the image data, for example, value = 3 (RGB Palette).

Tag 270 (ImageDescription)

A string that describes the subject of the image, for example, value = 1:50 000 SU40

Tag 273 (StripOffsets)

For each strip, the byte offset of that strip, for example, 1st 4 values = 17833 20210 23238 26061

Tag 278 (RowsPerStrip)

The number of rows in each strip, for example, value = 2

Tag 279 (StripByteCounts)

For each strip, the number of bytes in that strip after compression, for example, 1st 4 values = 2377 3028 3823 2922

Tag 282 (XResolution)

The number of pixels per Resolution Unit in the Image Width, for example, value = 254/1

Tag 283 (YResolution)

The number of pixels per Resolution Unit in the Image Length, for example, value = 254/1

Tag 296 (ResolutionUnit)

Units used for Resolution, for example, value = 2 (Inch)

Tag 306 (DateTime)

Date and time of image creation, for example, value = 2006:06:30 12:38:41

Tag 320 (ColourMap)

Look-up table, for example, value = 1st 4 values = 55512 11308 51657 47288

Tag 33432 (Copyright)

Copyright notice, for example, value = ORDNANCE SURVEY CROWN COPYRIGHT 2007

NOTE: The values given above are relevant to 1:50 000 scale TIFF data using LZW compression.

TIFF

Colour image directory (TIFF)

	Tag number	TIFF 8-bit uncompressed	TIFF 8-bit LZW compressed
File Byte Order :		MM (Big-endian)	MM (Big-endian)
Magic Number :		42	42
Number of fields in IFD :		16	16
NewSubfileType	254	0	0
Image Width	256	4000	4000
ImageLength	257	4000	4000
BitsPerSample	258	8	8
Compression	259	1 (Uncompressed)	5 (LZW)
Photo.Interpretation	262	3 (RGB Palette)	3 (RGB Palette)
ImageDescription	270	1:50000 TILE SU40	1:50000 TILE SU40
XResolution	282	254/1	254/1
YResolution	283	254/1	254/1
ResolutionUnit	296	2 (Inch)	2 (Inch)
DateTime	306	2006:09:20 11:20:04	2006:09:20 11:20:04
ColorMap	320	1st 4 values = 55512 11308 51657 47288	1st 4 values = 55512 11308 51657 47288
Copyright	33432	ORDNANCE SURVEY CROWN COPYRIGHT 2007	ORDNANCE SURVEY CROWN COPYRIGHT 2007

The tag values listed in the above table are relevant to 1:50 000 scale Motorola TIFF raster data.

It should be noted that customers can access tag information from a raster file image by right clicking on a TIFF data image and looking at properties, and then left clicking on summary.

Annexe A Glossary

The purpose of this chapter is to provide a glossary of terms used in the definition of products, services, licensing and other terms and conditions for 1:50 000 Scale Colour Raster and 1:50 000 Scale Gazetteer.

American Standard Code for Information Interchange (ASCII)
A standard binary coding system used to represent characters within a computer.

binary digit (BIT)
The smallest possible unit of data, resulting from a choice between 0 and 1.

boundary
A boundary forms the division between two similar real-world objects, for example, property boundary or administrative boundary, and is defined by one or more lines.

byte
A unit of computer storage of binary data, usually comprising 8 bits, equivalent to a character.

character
A distinctive mark; an inscribed letter; one of a set of writing symbols.

character code
The binary representation of a single element of a character set, for example, EBCDIC, ASCII.

coordinate pair
A coordinate pair is an easting and a northing.

coordinate transformation
A computational process of converting an image or map from one coordinate system to another.

compact disc
Read-only memory (CD-ROM). A data storage medium. A 12-cm disc similar to the audio CD. It is an alloy disc pitted with tiny holes and then coated in plastic. A laser head reads the pattern of the holes and translates them into binary data.

copyright
The sole legal right to print or publish a work. Crown Copyright subsists in all Ordnance Survey publications for a 50-year period, from the end of the year in which they were first published, by virtue of the *Copyright Designs and Patents Act 1988*.

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

data
A representation of facts, concepts or instructions in a formalised manner suitable for communication, interpretation or processing.

database
An organised, integrated collection of geographic data, which may or may not be spatial data. It is stored so those specific applications can access the data by different logical paths. A database is accessed and managed by a database management system (software for managing database information).

data format
A specification that defines the order in which data is stored or a description of the way data is held in a file or record.

data quality
Attributes of a dataset that define its suitability for a particular purpose, such as completeness, positional accuracy, currency and so on.

data structure
The defined logical arrangement of data as used by a system for data management; a representation of a data model in computer form.

data transfer medium
This is the means by which computer files are transferred from one computer to another. Transfer media may be subdivided into communications media and physical media.

dataset
Data as supplied in a particular format to customers, whether internal or external to Ordnance Survey.

density
A measure of the number of units of data held on a stated length of storage surface. For example, some magnetic tapes may be recorded at a density of 1 600 bits per inch (bpi). Often referred to as packing density.

delivery mechanism
The method of supply of data to a customer (such as offline and online).

descriptive name
A name describing a real-world object or feature (for example, School) as shown on the 1:50 000 Scale Colour Raster map.

definitive name
The name as shown on the 1:50 000 Scale Colour Raster map.

digital
Data that is expressed as numbers (digits) in computer-readable form.

digital update
The supply of revised digital data to a customer at a predetermined interval of time.

direct sale
A direct transaction between Ordnance Survey and a customer.

distinctive name
A text feature that forms a name that distinguishes it from other text features of the same type, for example, Millbrook School.

dots per inch (dpi)
The resolution, or fineness, of a raster image.

eastings
See rectangular coordinates.

JPEG
An image named after the Joint Photographic Experts Group, it uses a lossy compression format. It is designed for compressing full colour or greyscale images of natural, real-world scenes and works well on photographs. It is the de facto standard for photographs on the web.

encoding
The process of converting information to a computer-readable form, for example, digitising maps.

feature
A geographic entity such as a building or stream, either taken from a map or surveyed directly from the real world. Can be a point/symbol, text or line.

format
The specified arrangement of data, for example, the layout of a printed document, the arrangement of the parts of a computer instruction, the arrangement of data in a record.

generalisation
The cartographic process of simplifying the depiction of features to fit the output scale. For example, road widening is necessary at smaller scales to enhance their visibility.

geocode
Assigning a geographic location to data, for example, adding coordinates to an address.

geographic coordinates
Coordinates, usually expressed as latitudes and longitudes, which define position on the Earth's surface.

georeference
A definition for registering raster images within a geographic framework is the process of assigning map coordinates to the raster image data and resampling the pixels of the image to conform to the map projection grid.

gigabyte (Gb)
1 073 741 824 bytes, a measure of data storage capacity (see megabyte).

kilobyte (Kb)
1 024 bytes, a measure of data storage capacity.

Licensed Partner
Any organisation that has entered into a formal licence agreement with Ordnance Survey to market map information or to incorporate map data with their application or service.

linear feature
Map feature in the form of a line (for example, river, and boundary) that may or may not represent a real-world (existent) feature.

local origin
The local origin of rectangular coordinates is the south-west corner of the 1 km by 1 km National Grid square they identify.

Map scale
The ratio between the extent of a feature on the map and its extent on the ground, normally expressed as a representative fraction, for example, 1:1250, 1:50 000 and so on.

megabyte (Mb)
1 048 576 bytes, a measure of data storage capacity (see gigabyte).

National Grid
The metric grid on the Transverse Mercator projection used by Ordnance Survey on all post-Second World War mapping to provide an unambiguous spatial reference in Great Britain for any place or entity, whatever the map scale.

northings
See rectangular coordinates.

Oracle®
The relational database management system used for the 1:50 000 Scale Gazetteer.

origin
The zero point in a system of rectangular coordinates.

pixel
In the 1:50 000 scale product a pixel is a single point represented by a square.

points
A pair of coordinates.

raster data
Attribute data expressed as an array of pixels, with spatial position implicit in the ordering of the pixels.

real-world object
The real-world feature represented by a feature, for example, a building, a fence, a wood.

rectangular coordinates
Also known as x-y coordinates and as eastings and northings. These are two-dimensional coordinates that measure the position of any point relative to an arbitrary origin on a plane surface (for example, a map projection, a digitising table or a VDU screen).

stipple
Used to produce light or dark shading (for example, building/water fill); this is dependent on spacing of the dots – the denser the dots, the darker the effect.

string
A set of items that can be arranged into a sequence according to a rule.

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

tag
Tags are unique numbers that are used for identifying specific information in TIFF files, for example, image width, image length, bits per sample, photo interpretation and resolution.

terminator
Character, or character string, or field, or record used to signal the end of a record, or section, or volume or database.

tile
A unit of map used to divide large areas into regular and more manageable sizes.

TIFF
TIFF is a tagged image file format-based file format for storing and interchanging raster images, with the most recent version (6.0) published in 1992.

transfer format
The format used to transfer data between computer systems. In general usage this can refer not only to the organisation of data but also to the associated information, such as attribute codes, which are required in order to successfully complete the transfer.

transfer medium
The physical medium on which digital data is transferred from one computer system to another. For example, compact disc.

UNIX®
An operating system that supports multitasking and is used by many workstations and mini computers.

update
The process of adding to and revising existing digital map data to take account of change.

volume
A physical unit of the transfer medium such as a single disk or a single DVD.

Annexe B 1:50 000 Scale Gazetteer county code list

A full list of all the county codes in fields 12 (CO_CODE), 13 (COUNTY) and 14 (FULL_COUNTY) is below:

CO_CODE	COUNTY	FULL_COUNTY
AB	Aberd	Aberdeenshire
AG	Angus	Angus
AN	C of Aber	Aberdeen City
AR	Arg & Bt	Argyll and Bute
BA	Brad	Bradford
BB	Black w Dar	Blackburn with Darwen
BC	Brackn	Bracknell Forest
BD	Bark & Dag	Barking & Dagenham
BE	Brig	Bridgend
BF	Beds	Bedfordshire
BG	Blae Gw	Blaenau Gwent
BH	C of Bri & Hov	City of Brighton and Hove
BI	Birm	Birmingham
BL	Barns	Barnsley
BM	Bucks	Buckinghamshire
BN	Barnet	Barnet
BO	Bolton	Bolton
BP	Blackp	Blackpool
BR	Brom	Bromley
BS	Bath & NE Somer	Bath and North East Somerset
BT	Brent	Brent
BU	Bourne	Bournemouth
BX	Bexley	Bexley
BY	Bury	Bury
BZ	C of Bris	City of Bristol
CA	Cald	Calderdale
CB	Cambs	Cambridgeshire
CD	Card	Cardiff
CE	Cered	Ceredigion
CF	Caer	Caerphilly
CH	Ches	Cheshire
CL	Clackm	Clackmannanshire
CM	Camden	Camden
CN	Corn	Cornwall
CT	Carm	Carmarthenshire
CU	Cumbr	Cumbria
CV	Cov	Coventry
CW	Conwy	Conwy
CY	Croy	Croydon
DB	C of Derb	City of Derby
DD	C of Dun	Dundee City
DE	Denb	Denbighshire
DG	D & G	Dumfries and Galloway
DL	Darl	Darlington
DN	Devon	Devon
DR	Donc	Doncaster
DT	Dorset	Dorset
DU	Durham	Durham
DY	Derby	Derbyshire

CO_CODE	COUNTY	FULL_COUNTY
DZ	Dudley	Dudley
EA	E Ayr	East Ayrshire
EB	C of Edin	City of Edinburgh
ED	E Dunb	East Dunbartonshire
EG	Ealing	Ealing
EL	E Loth	East Lothian
EN	Enf	Enfield
ER	E Renf	East Renfrewshire
ES	E Susx	East Sussex
EX	Essex	Essex
EY	E Yorks	East Riding of Yorkshire
FA	Falk	Falkirk
FF	Fife	Fife
FL	Flint	Flintshire
GH	Ghead	Gateshead
GL	C of Glas	Glasgow City
GR	Glos	Gloucestershire
GW	Gren	Greenwich
GY	Gwyn	Gwynedd
HA	Halton	Halton
HD	Herts	Hertfordshire
HE	Heref	Herefordshire
HF	Ham & Ful	Hammersmith & Fulham
HG	Hargy	Haringey
HI	Hill	Hillingdon
HL	Highld	Highland
HN	Hack	Hackney
HP	Hants	Hampshire
HR	Harrow	Harrow
HS	Houns	Hounslow
HT	Hartpl	Hartlepool
HV	Hav	Havering
IA	I of Angl	Isle of Anglesey
IL	Isling	Islington
IM	I of M	Isle of Man
IN	Inverc	Inverclyde
IS	I Scilly	Isles of Scilly
IV	C of Inv	City of Inverness
IW	I of W	Isle of Wight
KC	Ken & Ch	Royal Borough of Kensington & Chelsea
KG	King	Kingston upon Thames
KH	C of K upon H	City of Kingston upon Hull
KL	Kirk	Kirklees
KN	Know	Knowsley
KT	Kent	Kent
LA	Lancs	Lancashire
LB	Lam	Lambeth
LC	C of Leic	City of Leicester
LD	Leeds	Leeds
LL	Lincs	Lincolnshire
LN	Luton	Luton
LO	C of Lon	City of London
LP	Liv	Liverpool

CO_CODE	COUNTY	FULL_COUNTY
LS	Lew	Lewisham
LT	Leic	Leicestershire
MA	Man	Manchester
MB	Midd	Middlesbrough
ME	Medway	Medway
MI	Midlo	Midlothian
MK	Mil Key	Milton Keynes
MM	Monm	Monmouthshire
MO	Moray	Moray
MR	Merton	Merton
MT	Merth Tyd	Merthyr Tydfil
NA	N Ayr	North Ayrshire
NC	NE Lincs	North East Lincolnshire
ND	Northum	Northumberland
NE	Newp	Newport
NG	C of Nott	City of Nottingham
NH	Newham	Newham
NI	N Lincs	North Lincolnshire
NK	Norf	Norfolk
NL	N Lanak	North Lanarkshire
NN	Northnts	Northamptonshire
NP	Nth Pt Talb	Neath Port Talbot
NR	N Tyne	North Tyneside
NS	N Som	North Somerset
NT	Notts	Nottinghamshire
NW	N upon Ty	Newcastle upon Tyne
NY	N Yks	North Yorkshire
OH	Oldham	Oldham
OK	Orkney	Orkney Islands
ON	Oxon	Oxfordshire
PB	Pemb	Pembrokeshire
PE	C of Peterb	City of Peterborough
PK	Pth & Kin	Perth and Kinross
PL	Poole	Poole
PO	C of Port	City of Portsmouth
PW	Powys	Powys
PY	C of Plym	City of Plymouth
RB	Redbr	Redbridge
RC	Red & Cl	Redcar & Cleveland
RD	Roch	Rochdale
RE	Renf	Renfrewshire
RG	Read	Reading
RH	Rho Cyn Taf	Rhondda, Cynon, Taff
RL	Rut	Rutland
RO	Roth	Rotherham
RT	Rich	Richmond upon Thames
SA	Sand	Sandwell
SB	Scot Bord	Scottish Borders
SC	Salf	Salford
SD	Swin	Swindon
SE	Sefton	Sefton
SF	Staffs	Staffordshire
SG	S Glos	South Gloucestershire

CO_CODE	COUNTY	FULL_COUNTY
SH	Shrops	Shropshire
SI	Shetld	Shetland Islands
SJ	C of Stoke	City of Stoke-on-Trent
SK	Suff	Suffolk
SL	S Lanak	South Lanarkshire
SM	Stock on T	Stockton-on-Tees
SN	St Hel	St Helens
SO	C of Soton	City of Southampton
SP	Sheff	Sheffield
SQ	Sol	Solihull
SR	Stir	Stirling
SS	Swan	Swansea
ST	Somer	Somerset
SU	Surrey	Surrey
SV	Sund	Sunderland
SW	Sthwk	Southwark
SX	S Ayr	South Ayrshire
SY	S Tyne	South Tyneside
SZ	Sutton	Sutton
TB	Torbay	Torbay
TF	Torf	Torfaen
TH	T Ham	Tower Hamlets
TR	Traf	Trafford
TS	Tames	Tameside
TU	Thurr	Thurrock
VG	V of Glam	The Vale of Glamorgan
WA	Wals	Walsall
WB	W Berks	West Berkshire
WC	Win & Maid	Windsor and Maidenhead
WD	W Dunb	West Dunbartonshire
WE	Wakf	Wakefield
WF	Wal F	Waltham Forest
WG	Warr	Warrington
WH	C of Wolv	City of Wolverhampton
WI	N Eil	Na h-Eileanan an Iar
WJ	Wok	Wokingham
WK	Warw	Warwickshire
WL	W Loth	West Lothian
WM	C of West	City of Westminster
WN	Wigan	Wigan
WO	Worcs	Worcestershire
WP	Wrekin	Telford and Wrekin
WR	Wirral	Wirral
WS	W Susx	West Sussex
WT	Wilts	Wiltshire
WW	Wan	Wandsworth
WX	Wrex	Wrexham
YK	York	York
YS	Sou-on-Sea	Southend-on-Sea
YT	Slough	Slough
YY	Stock	Stockport

Annexe C 1:50 000 Scale Gazetteer feature code list

Feature code	Description
A	Non-Roman antiquity: shown on the OS Landranger Map in Lutheran type.
F	Forest or wood: named areas on the OS Landranger Map identified by a green colour fill.
FM	Farm: all buildings named on the OS Landranger Map with the text string 'Farm' or 'Fm' as part of their name. These features can include private houses that include 'Farm' as part of their name. *NOTE: Not all farms shown on OS Landranger Maps are covered under this classification as their names, especially in Wales, do not contain the word 'Farm'.*
H	Large hill features or mountains with a minimum height difference of 30 m (three ring contours): hills are only named where their name has been selected for depiction on the OS Landranger Map and the feature contains three contour lines. If less than three contour lines are present classification 'X' is used. Spurs, saddles and slopes are not classified.
R	Roman antiquity: shown on the OS Landranger Map in Spartan antiquity type.
C	City
T	Town
O	Other settlements (urban area, village: Place names relating to built-up areas as shown on the OS Landranger Map).
W	Water features: rivers, lakes, lochs, reservoirs and other water features, including coastal waters shown in blue type on OS Landranger Maps, except marsh, which is recorded under classification 'X'.
X	Other feature: all distinctive names not covered by the above classifications, for example, private houses, isolated buildings, airports, commons, greens, marshes.