

Ordnance Survey of Northern Ireland

Mapping the way to digital excellence

Ordnance Survey of Northern Ireland® (OSNI®) is the official producer of high quality, accurate and current geographic mapping data for Northern Ireland.

Public and private sector customers rely on our products and services to support their business needs and those of their end-users.

Ordnance Survey of Northern Ireland (OSNI) is part of Land & Property Services (LPS) within the Department of Finance.

LPS collects, processes and manages land and property information in support of economic and social development in Northern Ireland.

MURLOUGH

THE OSNI MAPPING PRODUCT RANGE

OSNI produces a range of raster and vector mapping including height data, aerial imagery, addressing and historical mapping at various scales.

Digital mapping can be used in GIS and CAD applications to provide accurate, attributed topography for a range of applications and add cartographic context to your data.

Vector mapping is a digital representation of topographic map features consisting of attributed points, lines and polygons. Raster mapping is a digital image created by a series of pixels that combine to form the map.



VECTOR DATA

OSNI FUSION CREATING LINKS

OSNI Fusion is the most recent largescale vector product and replaces OSNI Largescale. It consists of a more intuitive structure and contains 13 main themes, with the existing largescale feature types being held as attributes. Each feature will have a unique identifier and life cycle information. The full polygonisation of OSNI Fusion will facilitate the linkage of other products via unique identifiers. Consequently, a range of Fusion products will be developed through the amalgamation of Fusion layers with other key OSNI Products, such as Pointer and the Transport Network.





OSNI Fusion Transport Network is an enhanced road network vector product currently being developed to replace OSNI Road Centreline. It consists of lines, points and attributes, such as road name, number, classification, form of way, directionality and unique street reference number, which will provide a direct link to addresses in Pointer. Drive restriction data will be added to include restrictions on height, weight, use etc. Features, such as bridges, traffic calming and level crossings will also be included in the dataset. It will be fully integrated and updated in line with OSNI Fusion and will form part of the Fusion suite of products.

OSNI ROAD CENTRELINE

The OSNI Road Centreline is a vector dataset, created at 1:1,250 and 1:2,500 scale, comprising of line geometry for classified roads in Northern Ireland. The geometry is attributed with road name, classification and unique street reference number, which can be used as a direct link to addresses in Pointer. This product will be replaced by the OSNI Fusion Transport Network and withdrawn from supply.



OSNI 1:50,000 VECTOR A MID-SCALE VIEW OF NORTHERN IRELAND

The 1:50,000 scale vector data is made up of a number of distinct datasets including vegetation, relief and drainage as well as settlement outlines. The administrative boundary and road layers are now available under Open Government Licence. The datasets are available as full coverage of Northern Ireland.



ADDRESS DATA

POINTER®

With over 870,000 address records, Pointer® is the most comprehensive and authoritative address database for Northern Ireland. It is maintained by LPS with input from the local councils and Royal Mail. Each record has full address details, a unique property reference number (UPRN), address and building status information along with Irish Grid co-ordinates. Pointer data will link to OSNI Fusion through the land parcel, building and road identifiers. As it contains Royal Mail Intellectual Property, there may be implications regarding royalties for usage.

	_			- · · · · · · ·		
				interest and writing.		
- and a state of the state of t					And in case of the local diversion of the loc	
and an inclusion of the local division of the local division of the local division of the local division of the	-			· Annalise and Annalise	A second	
and the second s			1000	A stranged build.		
and shine and a				the state of the second	-	
	-	1.1.1.1		· Harrison and an	-	

LPS PROPERTY DATA

Property Data products contain all properties in the domestic and non-domestic valuation lists. The data includes a unique property ID as well as the Pointer UPRN, but does not include coordinates. Data is provided as a comma separated text file (csv) with full Northern Ireland coverage. Updatesonly files are not available. The data contains Royal Mail Intellectual Property and so there may be implications regarding royalties for usage.

141114	332349 379449 Central	BOLVING .
811.348	\$34500 X1000 Duniant	CASTLE
811.398	\$18812 37682 Central	BOTANEC
10111	2038/72 375366 Central	BOTANIC
211 10.	333776 334000 Ceveral	BOTANEC
PEE 201	333932 374334 Celleni	BOTANK
811 184	SIAMO AND DUNCH	CASTLE
011 1001	101070 334300 Central	BOTANK
WILLING	BURTO ENGINE CARDIN	BOTANK
BT1 104	101710 134368 Central	BOTANC
871 104	101745 STADU Central	BOTANIC
ETT 100	503545 \$74449 Central	BOTANC
871 155	ANETHO ATHEME Central	BOTANC
101.178	\$35546 \$74449 Cambral	BOTANIC
RT1 10-4	833738 874551 Central	BOTANIC
871 101	383702 374864 Central	BOTANIC
BT1 32L	223725 374656 New Lodge	OLDPARK

CENTRAL POSTCODE DIRECTORY (CPD)

CPD contains Irish Grid co-ordinates for the centroid point for each postcode in Northern Ireland. This dataset is maintained by NISRA and provides a direct look-up between postcodes and a range of administrative boundaries and NISRA geographies. The data is supplied in Access Database (.mdb) and csv formats.



AERIAL IMAGERY

OSNI ORTHOPHOTOGRAPHY ENHANCED AERIAL PHOTOGRAPHY

Orthophotography (ortho) is high quality georeferenced digital 3 Band aerial photography. Orthophotographs are scale-accurate raster images that offer a detailed bird's-eye view of the landscape. Any distortions caused by the earth's surface or aircraft movement have been removed by a process of ortho-rectification to ensure the images are accurate. Photographs are captured in optimal weather conditions to provide the best possible images.



OSNI 4 BAND NEAR INFRA-RED ORTHOPHOTOGRAPHY DETECTING CHANGE

OSNI 4 Band orthophotograpy is produced through the same process as the 3 Band product and both are updated in conjunction with each other on the same cycle. This 4 Band raster data can be used in a wide variety of applications such as vegetation classification, measuring vegetation health and feature change detection.



HEIGHT DATA

OSNI ENHANCED DIGITAL TERRAIN MODEL (DTM) THE LANDSCAPE IN 3D

A Digital Terrain Model (DTM) is a digital file providing a highly detailed representation of the topographical (i.e. relief) variations in the Earth's surface. Combined with other digital data, such as maps or orthophotographs, it can provide a 3D image of the land surface. The OSNI Enhanced DTM includes breaklines at major changes of slope and terrain elevations for ground positions at 60m spaced horizontal intervals. It is updated in line with the orthophotography. The added dimension and visualisation offered by a DTM can help in many decision-making processes.



OSNI DIGITAL SURFACE MODEL (DSM) HEIGHT MODELLING

The OSNI Digital Surface Model is produced from aerial imagery using a photogrammetric process and is updated in line with the orthophotography and DTM products. This high quality data is available as raster and point cloud, both at 40cm spatial resolution. It can be used for a wide variety of applications: line of sight, planning, aspect modelling (e.g. solar panels) and remote sensing applications such as change detection.



RASTER MAPPING

OSNI 1:10,000 RASTER BASE MAPPING

The 1:10,000 scale raster mapping is derived directly from the OSNI large-scale database. This dataset provides clear, detailed information on features such as roads, fields, water and settlements, overlaid by contours at 10m intervals. The map styling has been completely revised to produce clear mapping suitable for use in Geographic Information applications.



OSNI 1:25,000 ACTIVITY RASTER IDEAL FOR OUTDOOR ENTHUSIASTS

An award winning series of six 1:25,000 scale raster maps tailored to outdoor leisure activities that are also available as a paper product. The series consists of the Mournes, Sperrins, Lough Erne, Strangford Lough, Glens of Antrim and Causeway Coast and Rathlin Island. They are individually designed for each specific area and show details of features such as tracks, walks, and cliffs; the Lough Erne map concentrates on water activities, showing navigation guides and hydrographic information.



OSNI 1:50,000 RASTER

MID-SCALE MAPPING OF NORTHERN IRELAND

The 1:50,000 scale raster mapping provides a digital equivalent to the popular paper Discoverer Series with each of the 54 raster tiles covering 20x20km. Each tile is provided with a full colour version with grid, a low colour version and a townlands map. Relief shading has been reduced on the low colour raster to make it more suitable for Gl use.



1:250,000 RASTER NORTHERN IRELAND IN ONE MAP

The 1:250,000 scale raster provides a clear map covering the whole of Northern Ireland and highlighting features such as roads, golf courses, settlements and sites of interest. A black and white outline version is provided along with a full colour image. The mapping is also available as the 'Ireland North' paper map which is part of the 'Holiday Ireland' series.



OSNI BELFAST STREET MAP RASTER

The OSNI Belfast Street Map is a high resolution raster map at 1:12,000 scale showing clear street level detail for use in any geographic information software. It covers the entire Greater Belfast area and is also available as a paper map. A street gazetteer is provided with both the digital and paper versions.



HISTORICAL MAPPING VIEWS OF THE LANDSCAPE THROUGH TIME

The OSNI Historical Archive provides over 20,000 scanned versions of historical mapping products dating from 1835 to the late 1950's. The archive is a unique educational resource which gives you digital access to maps of significant cultural and social value. You can view the maps online at https://mapshop.nidirect.gov.uk.

OTHER PRODUCTS

BESPOKE MAP EXTRACTS:

OSNI data is also available as bespoke customer defined extracts and also in a range of paper maps.

ADDRESS CENTRED EXTRACT MAPS (ACEMAPS) provide largescale map plots at 1:500, 1:1250, 1:2500 and 1:5000 in pdf or paper format, primarily for use in planning and conveyancing. These are created directly from the most detailed largescale mapping and are centred on a specified address or area of interest.

BESPOKE LARGE SCALE VECTOR extracts created directly from the largescale mapping provide a flexible way of licensing a specific area by drawing a rectangle or irregular polygon. Customers can select their area of interest and download the data in a variety of formats for CAD and GI uses.

BESPOKE 1:10,000 raster mapping provides a pdf or paper plot of our popular midscale mapping, based on a selected address or area of interest.

PAPER MAPS:

OSNI Activity maps – an award winning series tailored to outdoor leisure use covering six areas; Mournes, Sperrins, Lough Erne, Strangford Lough, Glens of Antrim and Causeway Coast and Rathlin Island. This is the paper equivalent of the OSNI 1:25,000 raster data and provides high quality mapping on waterproof paper.

OSNI Discoverer Series – this popular series is available in 18 sheets covering Northern Ireland and parts of the Republic of Ireland. It is an equivalent presentation to the 1:50,000 Raster data. It complements the Discovery Series published by Ordnance Survey Ireland.

OSNI Ireland North – an overview map covering all of Northern Ireland on one sheet. It is the equivalent of the 1:250,000 Raster data and is part of an all-island Holiday Series.

OSNI Belfast Street Map – a clear street map showing the entire greater Belfast area at 1:12,000 scale. A street gazetteer is included with the paper map and this product is equivalent to the OSNI Greater Belfast Raster map.

WANT TO KNOW MORE?

If you would like more information about any of these products or would like to license some of the data please visit our online map shop.

URLOUGH

www.OSNI.gov.uk or email mapping.helpdesk@finance-ni.gov.uk

LICENSING OSNI DATA

For more information about licensing OSNI data please see www.nidirect.gov.uk/campaigns/ordnance-survey-of-northern-ireland

COMMERCIAL PRODUCTS

If you are interested in utilising any of the products for commercial purposes or if you would like to find out about becoming a Value Added Reseller, Distributor or Innovator please contact our Commercial Development team at commercial@finance-ni.gov.uk.

The material in this booklet is © Crown Copyright and is created and licensed by Ordnance Survey of Northern Ireland, part of Land & Property Services whose Chief Executive has delegated authority from the Keeper of Public Records, © Crown Copyright and database right 2018.



Land & Property Services Seirbhísí Talún & Maoine

Airgeadais

Ordnance Survey of Northern Ireland

Land & Property Services Lanyon Plaza 7 Lanyon Place Town Parks BELFAST, BT1 3LP

Email: mapping.helpdesk@finance-ni.gov.uk