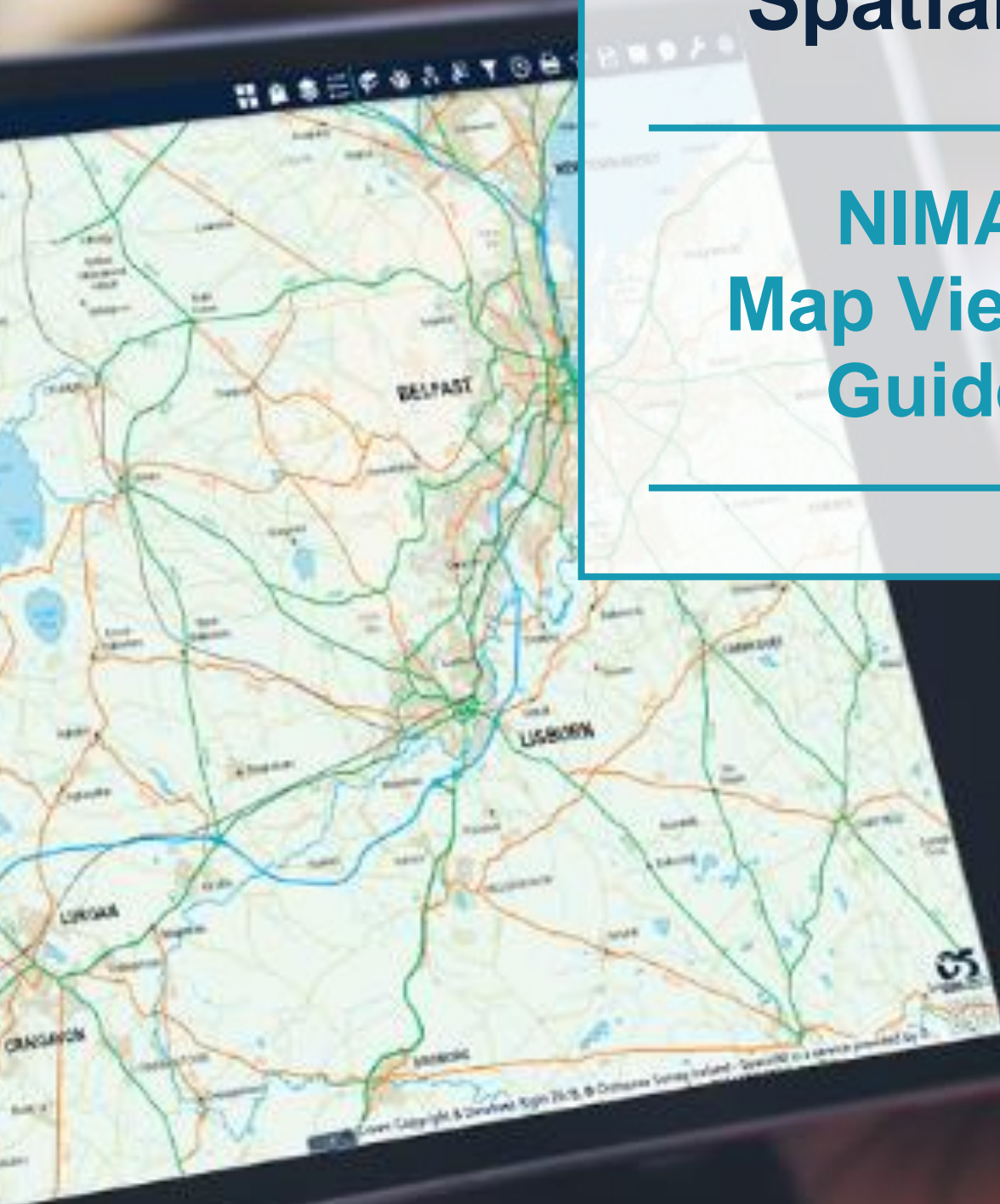




ORDNANCE SURVEY
OF NORTHERN IRELAND®

Spatial NI

NIMA Map Viewer Guide



Document Version

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1.0	Completed	1 April 2019



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About this guide

This guide has been written to assist you when using the Spatial NI NIMA Map Viewer.

Text highlighted in **bold** are actions that you will need to complete.

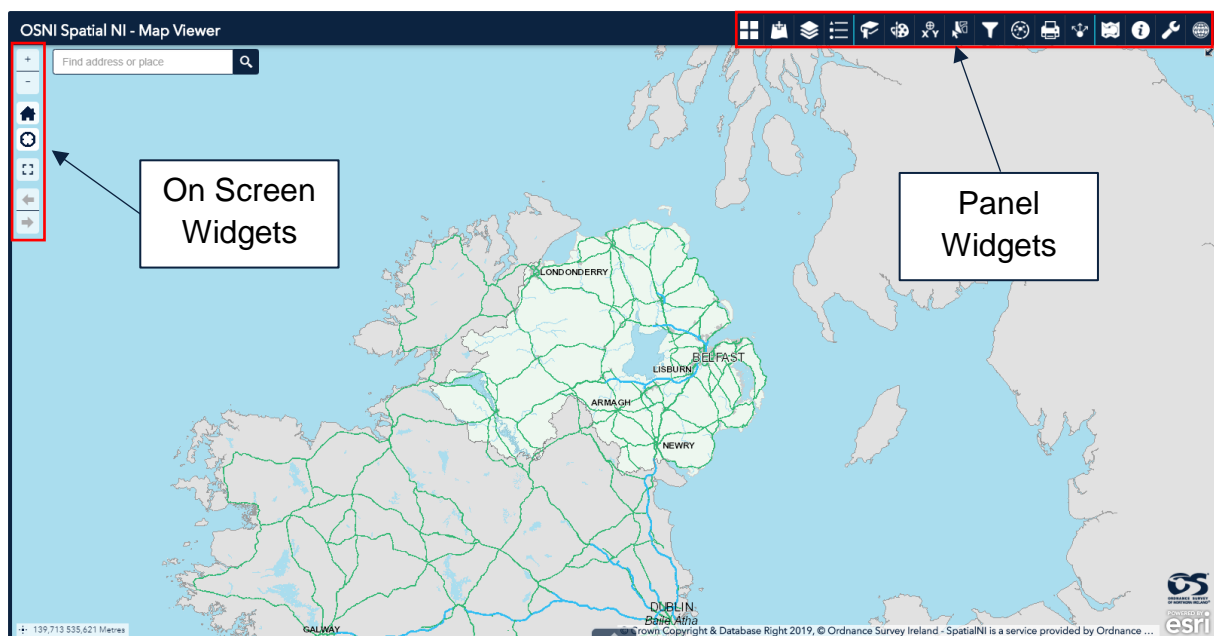
Map Viewer Tip: Discover a handy tip for how to do something in the Spatial NI map viewer.



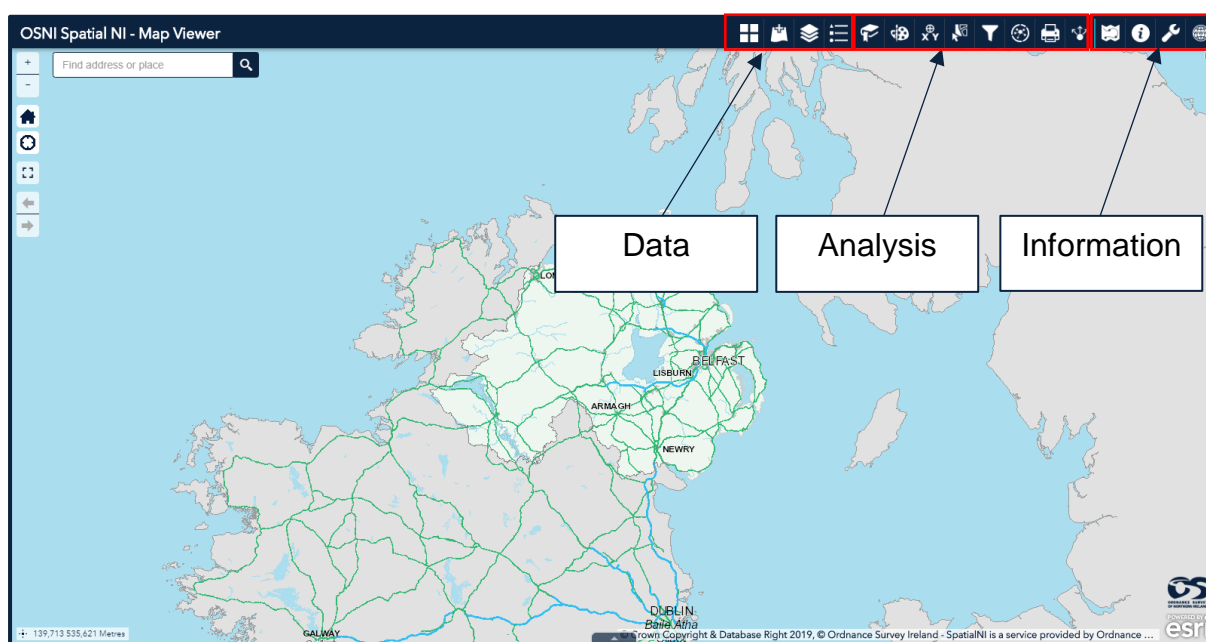
Overview

The Spatial NI NIMA map viewer is a free to use application for all NIMA participants allowing you to interrogate OSNI mapping and other geospatial information from multiple sources to provide a deeper understanding of the issues that impact our lives.

The functions you can use in the map viewer have been divided into 2 types:

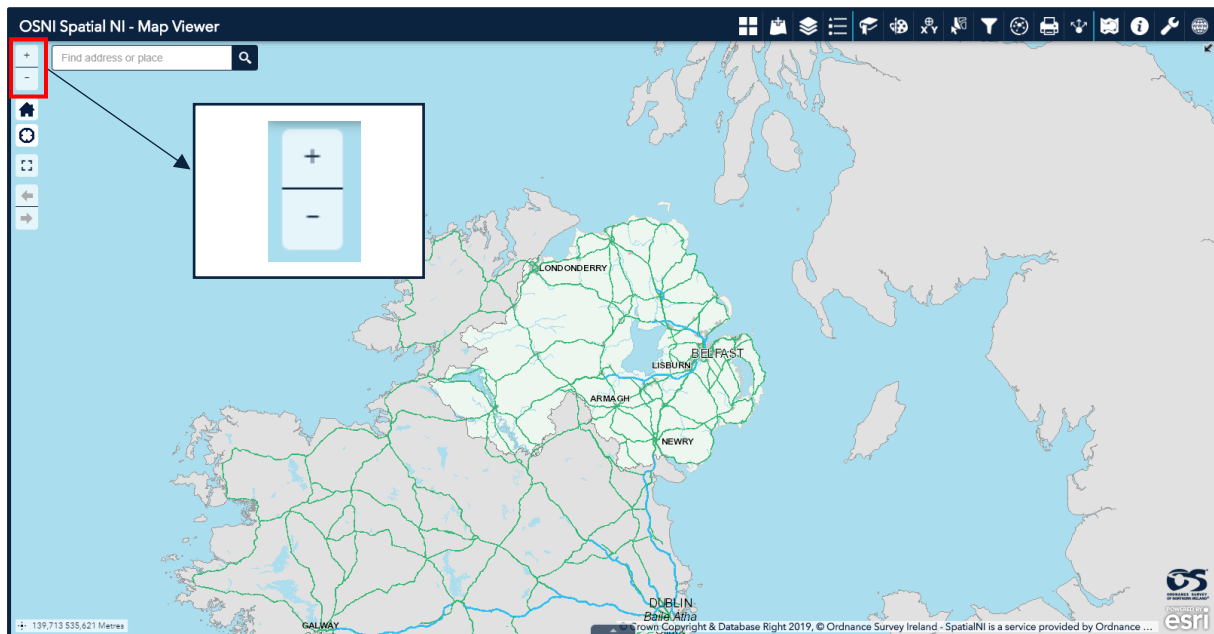


The panel widgets have been divided into 3 categories:



On Screen Widgets

Zoom Slider



Use the (+) and (-) buttons to either zoom in or out of an area shown on the map.

The more zoomed in you are, the more detail will be shown on the map. This is good for showing detail down to individual locations such as houses, farms or specific sites.

Advanced Map Navigation: use the + and – keys on your keyboard to zoom in and out on the map.

Double left click with your mouse to zoom in to that specific area.

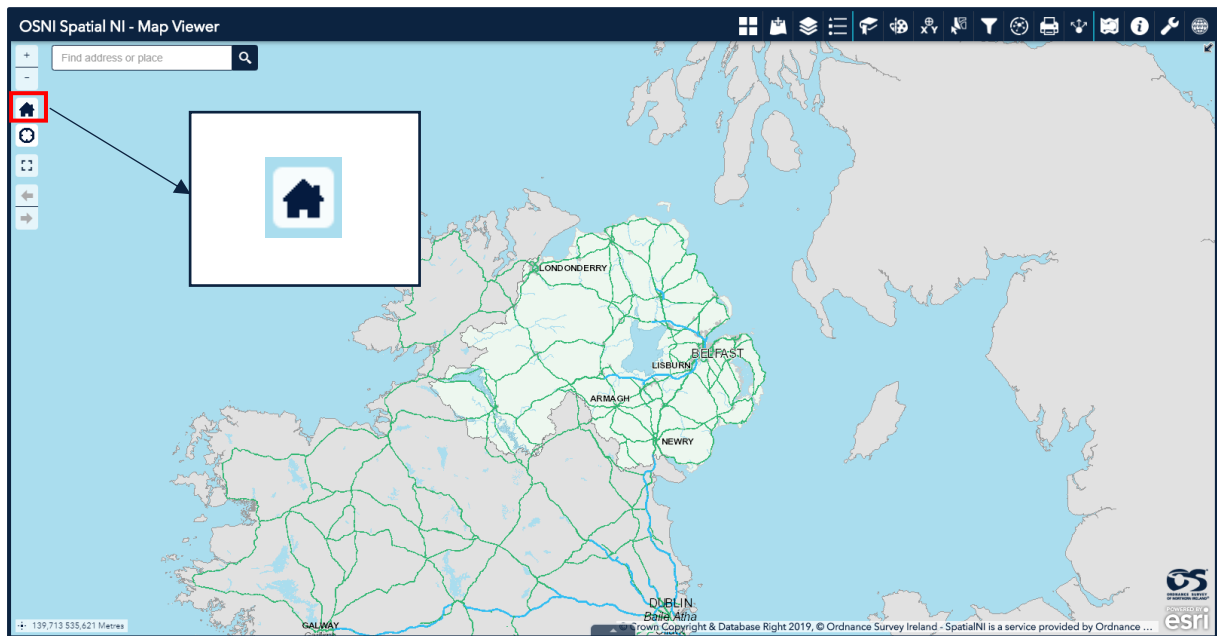
Hold the shift key on your keyboard and use your left mouse button to draw an area to zoom to on the map.

Use the scroll wheel on your mouse to zoom in or out on the map.

Left click and hold using your mouse to pan the map.

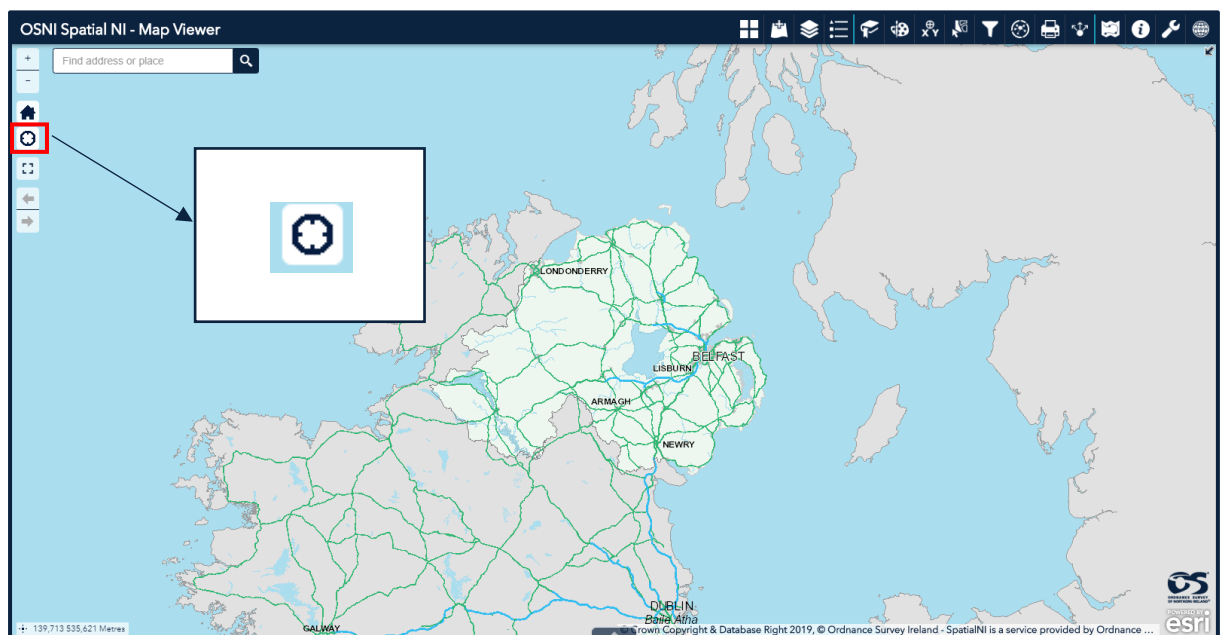


Home



Use this button to reset the map to its original extent.

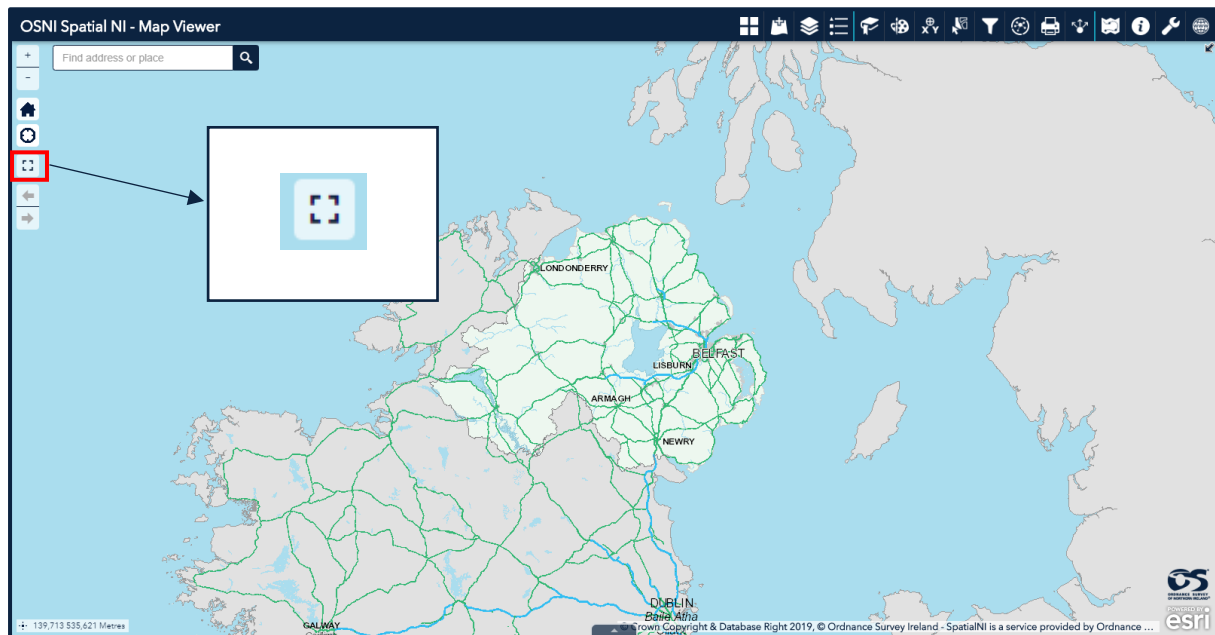
My Location



Select this function to navigate the map to your current location. Doing this changes the scale of the map to the most appropriate for the location.

Spatial NI recommend that you only use this function when on a mobile device and location services have been enabled.

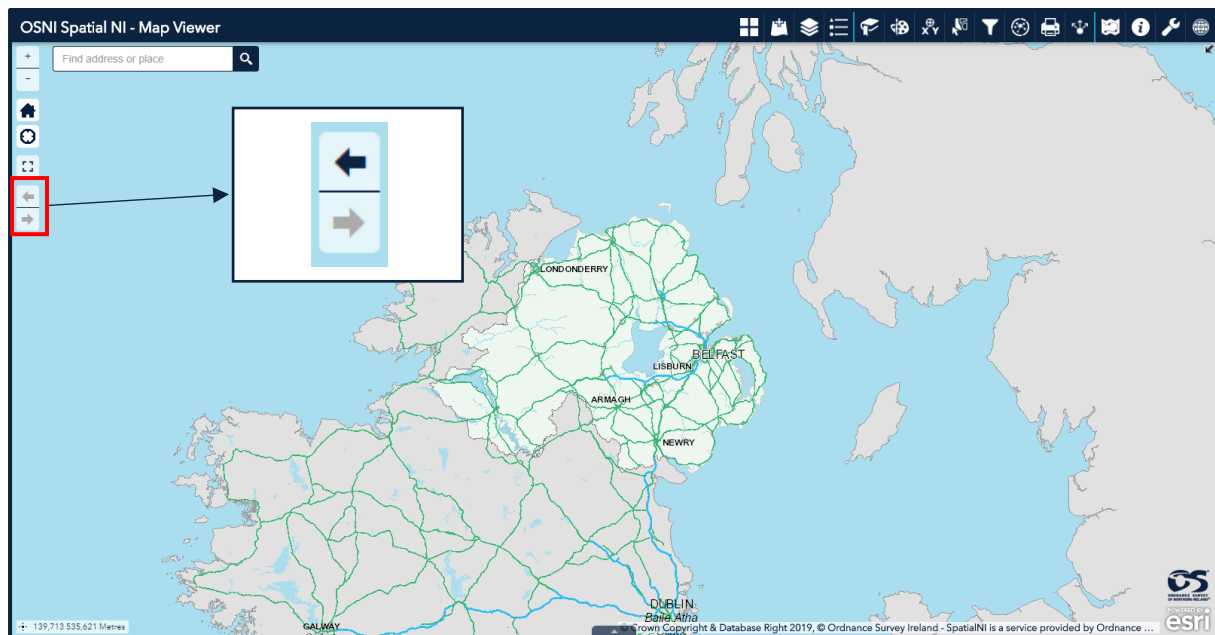
Full Screen



Use the full screen mode to expand the map viewer to the full extent of your monitor screen. This is particularly useful when using the map viewer for a presentation.

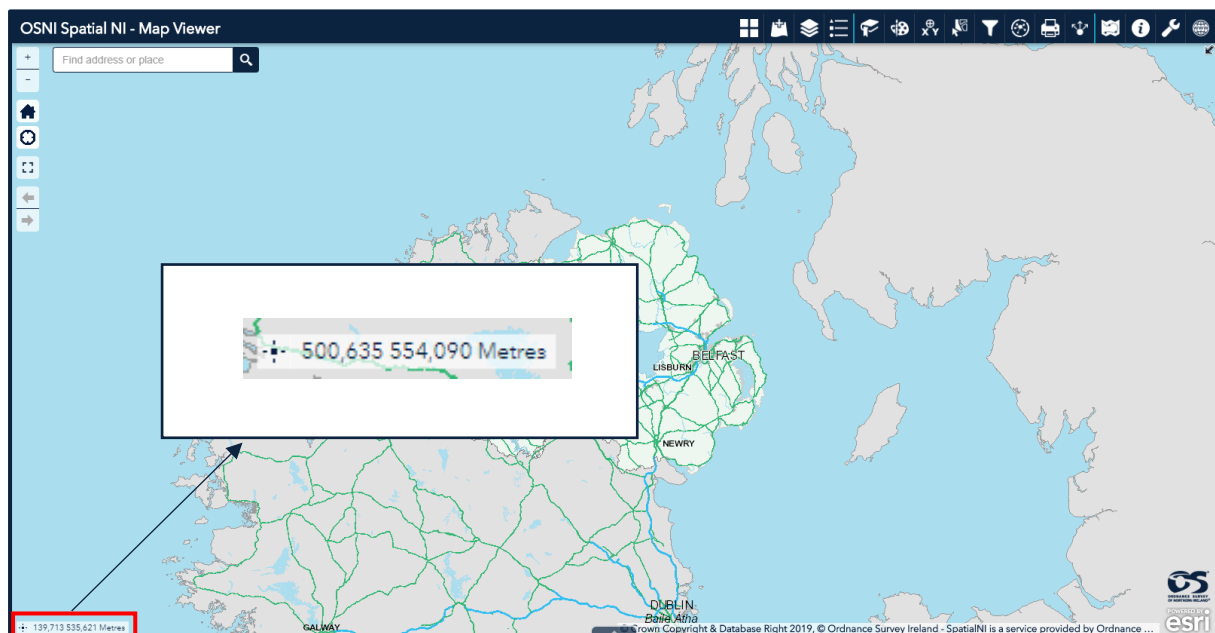
The full screen function is not supported on mobile devices.

Extent Navigate

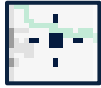


Click the arrows to navigate the map to its previous or next extent.

Coordinates

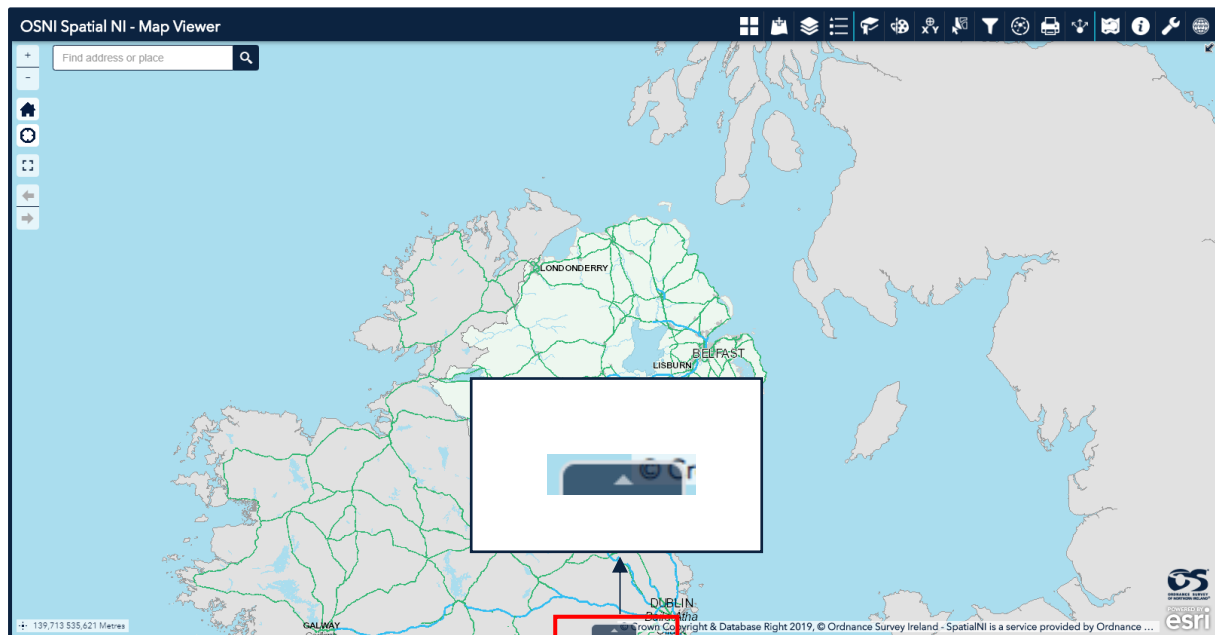


The coordinates are displayed at the bottom left of the map in Irish Grid Eastings and Northings. The coordinates will change depending on your cursor location.



Selecting the '**Get Map Coordinates**' button allows you to find the exact location on the map. When you click on a location, a marker symbol will appear and the coordinates are fixed to this location. To remove the marker symbol, deselect the '**Get Map Coordinates**' button.

Attribute Table



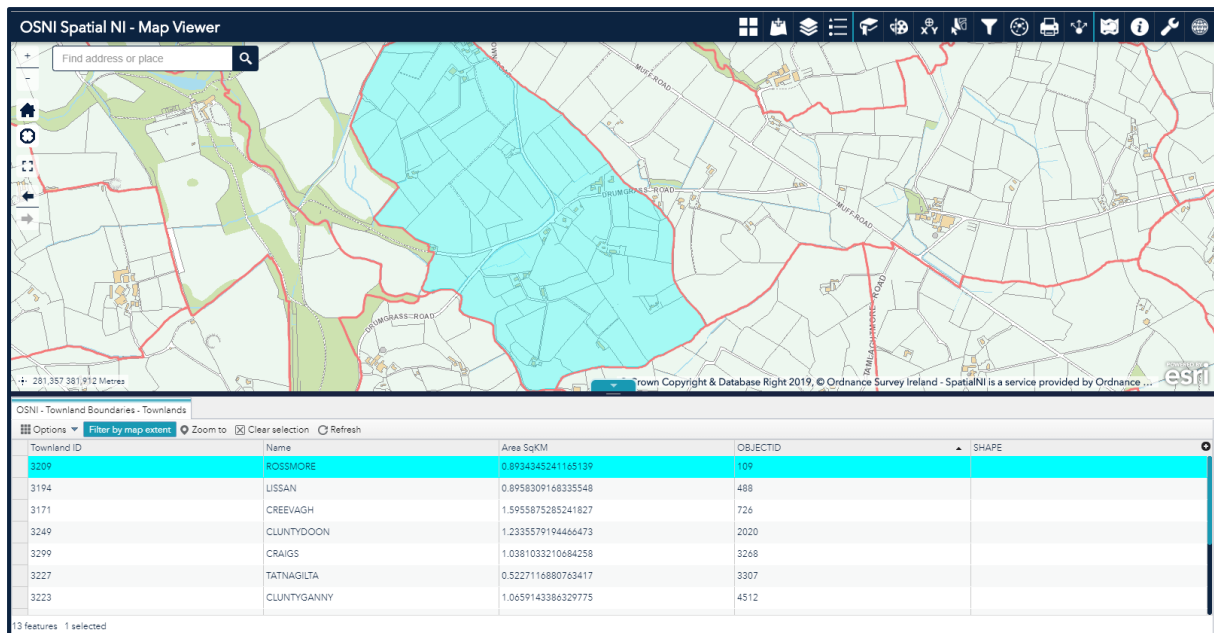
Open and close the attribute table by clicking on the tab at the bottom of the map.

A range of functions are available for you to explore the data on your map.

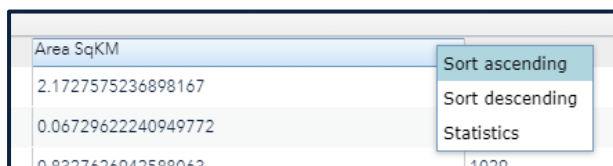
Select a record – Click a record in the table to select it and highlight the corresponding feature on the map. Press the Shift or Ctrl key on your keyboard and click using your left mouse button to select multiple records.

Clear selections – Click the Clear selection button to clear all selections.

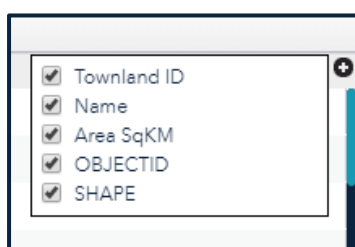
Refresh – Click refresh to refresh the table.



Sort a field – Click a field heading to sort the records by this field.



Show or hide columns – Click the + button on the right side of the attribute table panel to open the field visibility window. Check or uncheck the fields to set their visibility in the table.



Number of selected records – shown at the lower left of the table.



Options -

Show Selected Records – displays the selected records in the table

Show Related Records – displays related records if a selected record has a related table.

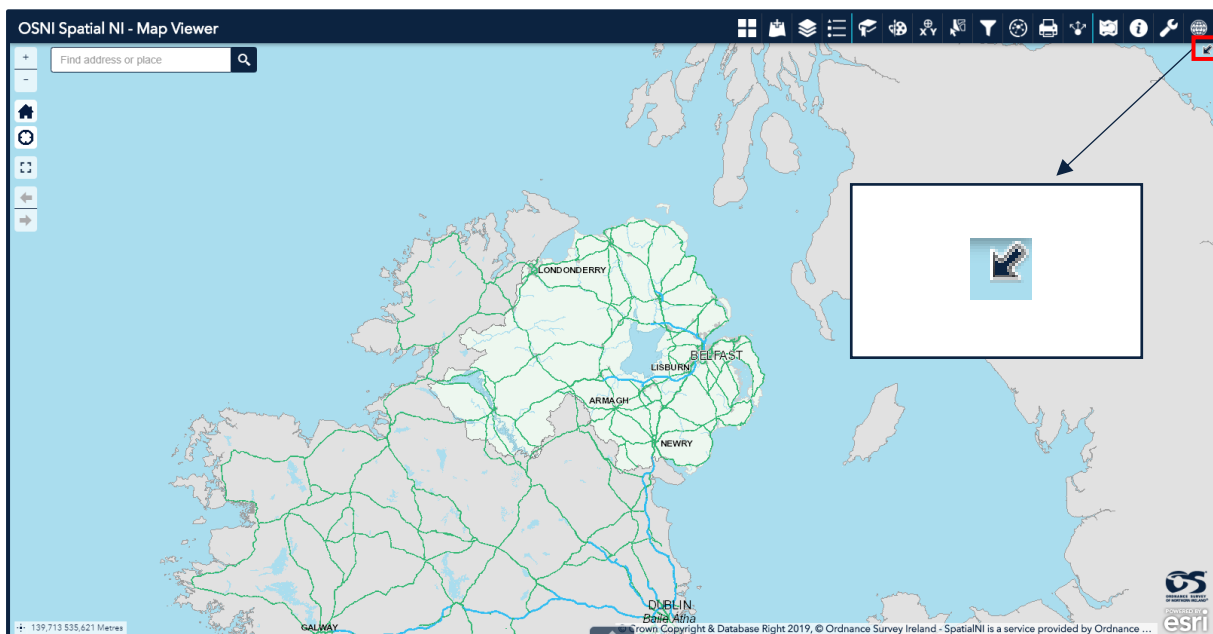
Filter – ability to filter records in the table by using a query.

Filter by Map Extent – Displays attributes for features within the current map extent.

Expand the attribute table: expand the attribute table by clicking on and dragging the navy bar at the top of the table just below the tab to open and close the table.

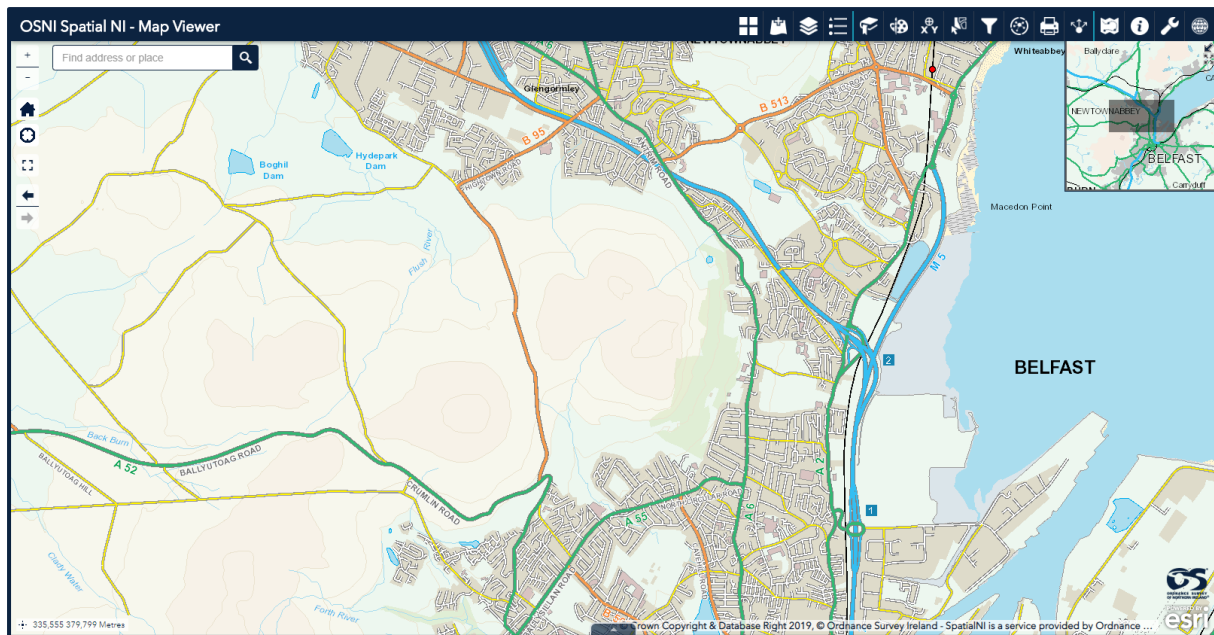


Overview Map

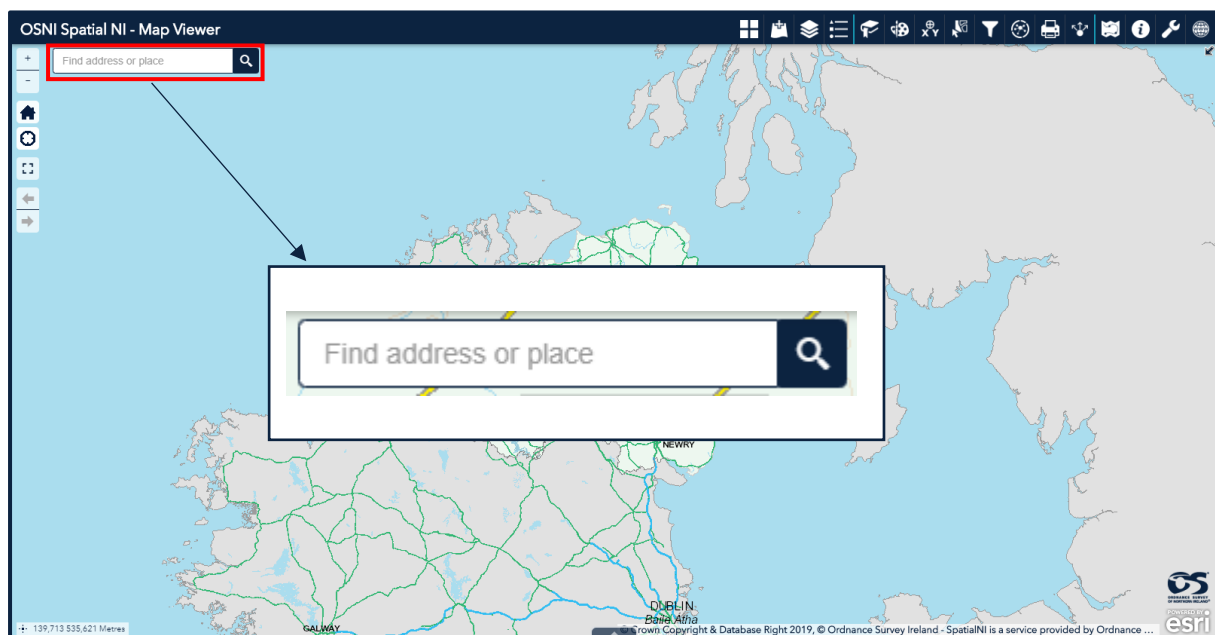


The overview map can be launched by clicking on the arrow on the top right of the map. This displays the current extent of the map within the content of a larger area and updates whenever the map changes.

The current map extent is represented by a grey rectangle on the overview map and can be dragged to modify the extent of the current view.



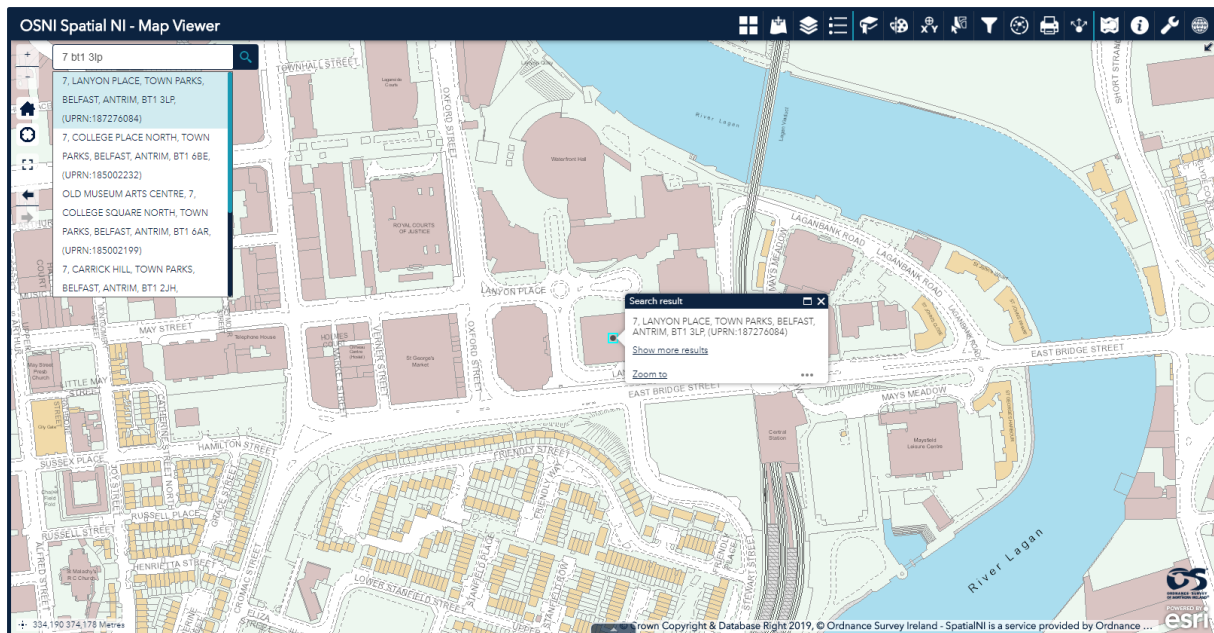
Search



Search for an address or place using the search bar located on the top left of the map.

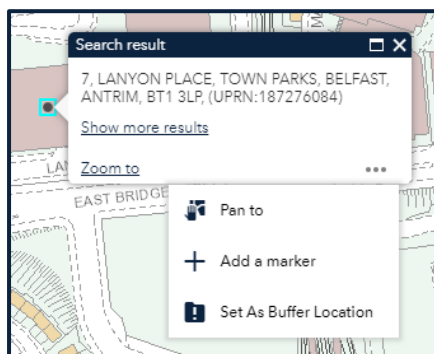
Type an address or postcode in the bar and click the search icon. The search is not case sensitive.

Depending on your search criteria, a list of suggestions will appear in a dropdown menu. Click on your desired address to locate the location on the map.



A popup will appear on the map showing the full address including the Unique Property Reference Number (UPRN).

From the popup: click on the 3 ellipses to get an additional menu. From here you can add a marker or set the location to be used in the buffer analysis tool.



The marker contains the Irish Grid coordinates for the location and a URL reference for the location.

Panel Widgets

Data

Basemap Gallery



Selecting the basemap gallery widget displays all the OSNI basemaps available for you to use in the map viewer. Clicking a basemap thumbnail sets it as the active basemap for your map.

A summary of the basemaps available is provided below:

Basemap Name	Description	Scale
(1:250,000) Colour	A coloured raster map of NI highlighting features such as: roads golf courses, settlements, and sites of interest.	1:550,000 - 1:120,000
(1:250,000) Outline	A black and white outline raster map of NI highlighting features such as: roads golf courses, settlements, and sites of interest.	1:550,000 - 1:120,000
1:10,000	A largescale derived raster map showing detailed information on features such as roads, fields, water and settlements.	1:20,000 - 1:5,000
Activity (1:25,000)	A series of raster maps tailored to outdoor leisure activities centred on six regions of NI (e.g. The Mourne).	1:30,000 - 1:10,000
Discoverer (1:50,000)	A mid-scale raster map giving full coverage of NI showing all roads, tourist information and relief.	1:60,000 - 1:20,000
Discoverer (1:50,000)(Grid)	A mid-scale raster map giving full coverage of NI showing all roads, tourist information and	1:60,000 - 1:20,000

	relief. This includes the Irish grid reference lines.	
Fusion	A scalable basemap depicting detail from a NI scale to the most detailed (derived from OSNI Fusion). This includes data from Ordnance Survey Ireland.	1: 2,000,000 - 1:500
Fusion Light	A grayscale styling of the Fusion basemap.	1: 2,000,000 - 1:500
Orthophotography	High quality 3-band Ariel photography offering a detailed birds-eye view of the landscape.	1: 2,000,000 - 1:500
Streetmap	A detailed raster map showing clear street level information for towns and cities in NI.	1:20,000 - 1:5,000

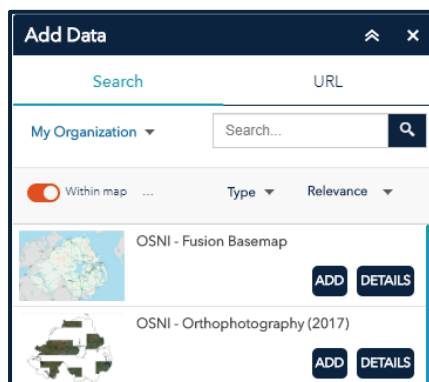
Add Data



The add data widget enables you to search Spatial NI and add other content to your map.

Search Tab

The search tab lists all the data available for you to add to your map. You can either scroll through the list or search based on keywords.




Use the pagination controls located at the bottom of the window to move between pages.

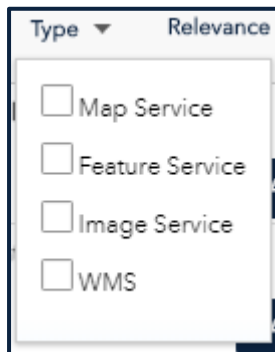


Click the **add** button to add the data to your map. To remove the data, select **remove**. Click **details** to open the portal item description page.

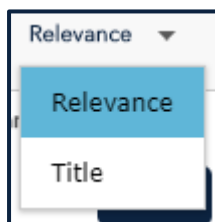
There are a number of options available to help you refine your search.

To search only layers within the map area, toggle the  button until it turns green. To search all layers, leave the toggle button red.

Click the **Type** dropdown list to search layers based on a specific type of web service:



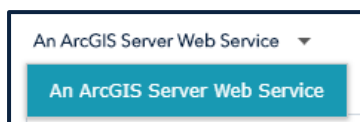
Click the **Relevance** dropdown list to sort the items based on relevance or title:




URL Tab

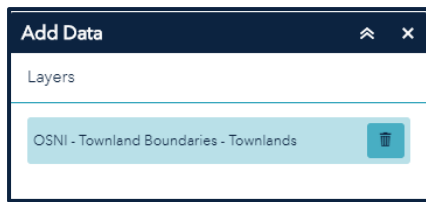
The URL tab gives you the option of adding data to your map from other sources. If you know the URL, paste it into the box and click **add**.

The following service options are accepted:



Click **sample URL(s)** to see the URL format for each type.

To see a list of all the services you have added, click the  option on the bar at the bottom:



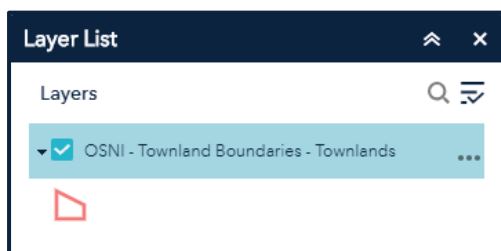
To remove a layer, hover over the item in the list and click the bin icon.

Layer List

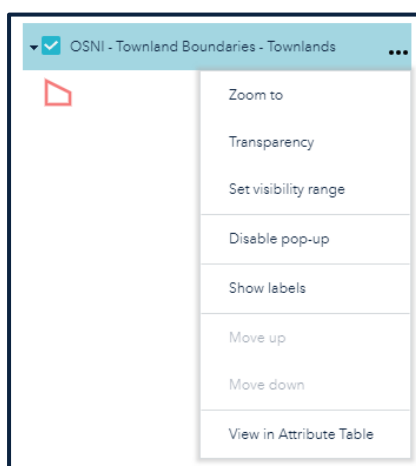


The layer list widget provides a list of operational layers and their symbols. It allows you to turn individual layers on and off.

Use the check box to toggle the layer on and off:



Click the three ellipses to the right of the layer name to display the layer menu. This provides you with the following additional options:



Zoom To – sets the map extent to the extent of the layer

Transparency – sets the transparency for the layer

Set visibility range – sets the range at which the layer will draw on the map

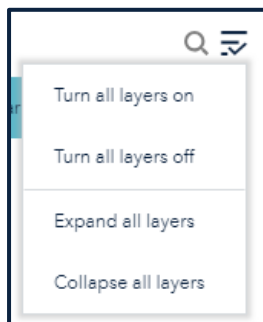
Enable/Disable Pop-Up – enables or disables the popup for the feature layer

Show/Hide Labels – turns on or off the labels for the feature layer

Move Up/Down – moves the selected layer up or down one level in the list

View in Attribute Table – opens the attribute table for the feature layer

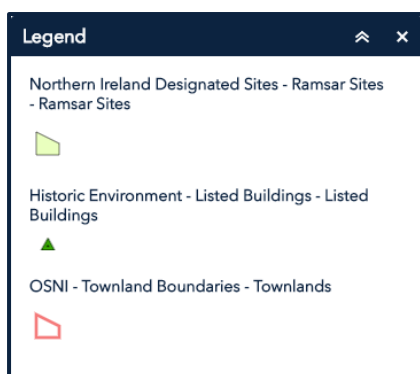
Use the control all layers button to control the behaviour of the layers in the list.



Legend



The legend widget displays labels and symbols for layers on the map. The order in which layers appear in the legend corresponds to the layer order in the map.



If you turn a layer off in the layer list widget, it will be removed from the legend.

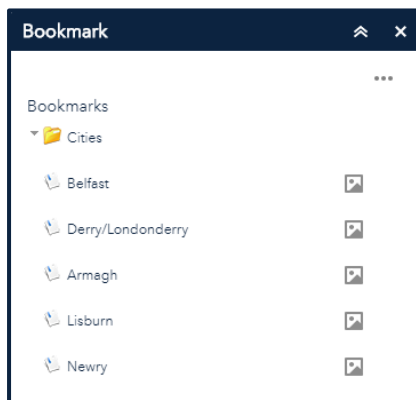
Analysis

Bookmark



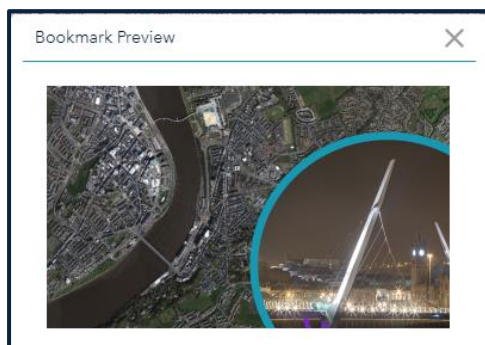
The bookmark widget stores a collection of map view extents (spatial bookmarks) displayed in the map viewer.

Open the widget to see a pre-defined list of bookmarks for the cities in Northern Ireland.

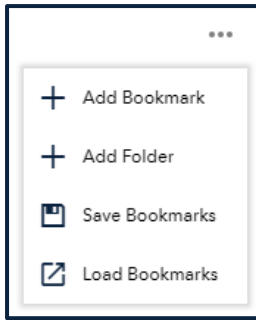


Click on a bookmark name to activate that bookmark. The map will zoom you to that location.

Click on the preview thumbnail to view an image of the bookmark location.



Click the three ellipses on the top right to open an additional action menu.



From this menu, you can:

Add a bookmark – locate your area of interest on the map, click **add bookmark** and give your bookmark a name.

Add a folder – create a new folder in which to store your bookmarks.

Save bookmarks – save your bookmarks as a json file on your own device.

Load bookmarks – load saved bookmarks back into the map viewer.

Select the X to remove any folders or bookmarks you have created.

Your bookmarks will not persist once you close the map viewer unless you save them.

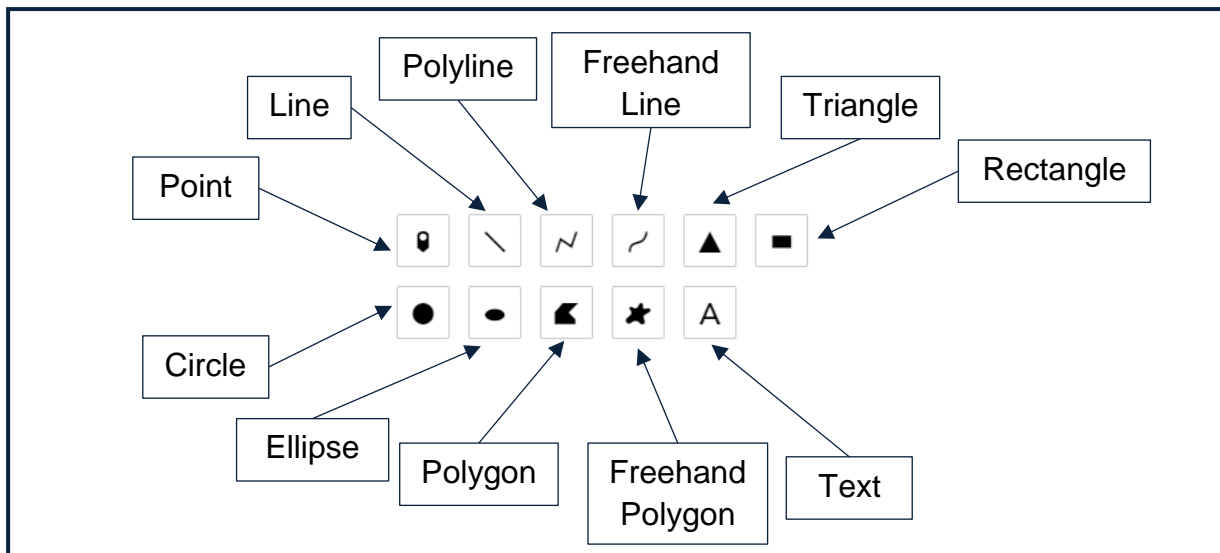
Draw & Measure



The draw and measure widget allows you to create simple graphics and text that display on the map. You can also use it to add line distance or polygon area to the feature as text.

The widget allows you to save these locally as a json file and then reload these at a future date. You could also share the json file with a colleague for them to add to the map viewer.

When you open the widget, a dialog box appears that contains 11 feature draw tools:



Click the symbol type to select the drawing mode. This opens a symbol specific menu from which you can change the symbol attributes.


For point symbols:

The screenshot shows the configuration menu for point symbols. The menu includes a preview, a selection of symbols, and various attribute controls. The annotations point to the following elements:

- Preview:** This is a preview of your chosen symbol (pointing to the selected blue circle).
- Selection of different symbols:** Selection of different symbols available for you to choose from (pointing to the grid of symbol icons).
- Symbol size:** Change the symbol size (pointing to the size input field set to 24).
- Color:** Change the symbol colour (pointing to the color selection bar).
- Transparency:** Change the symbol transparency (pointing to the transparency slider).
- Outline color:** Change the symbol outline colour (pointing to the outline color selection bar).
- Outline width:** Change the symbol outline width (pointing to the outline width input field set to 1).

Show location measurement gives you the option to get coordinates in Degree or Degrees-Minute-Second format.

For line symbols:



This is a preview of your chosen symbol

Selection of different symbols available for you to choose from

Change the symbol colour

Change the symbol style

Change the symbol transparency

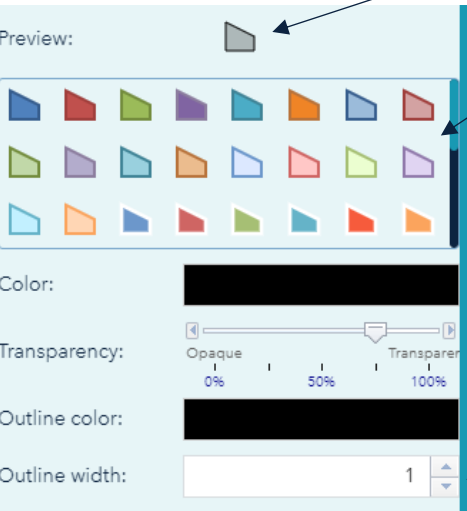
Change the symbol width

Toggle on to show length

The screenshot shows a configuration panel for line symbols. At the top is a 'Preview' section showing a horizontal line. Below it is a grid of 24 different line styles and colors. Further down are controls for 'Color' (a black color bar), 'Style' (a dropdown menu currently set to 'Solid'), 'Transparency' (a slider from 0% to 100%), 'Width' (a numeric input field set to 1), and 'Arrow' (a dropdown menu currently set to 'No').

The **show length measurement** gives you the option to show lengths in kilometres, miles, metres, feet, yards or nautical miles.

For polygon symbols:



This is a preview of your chosen symbol

Selection of different symbols available for you to choose from

Change the symbol colour

Change the symbol transparency

Change the symbol outline width

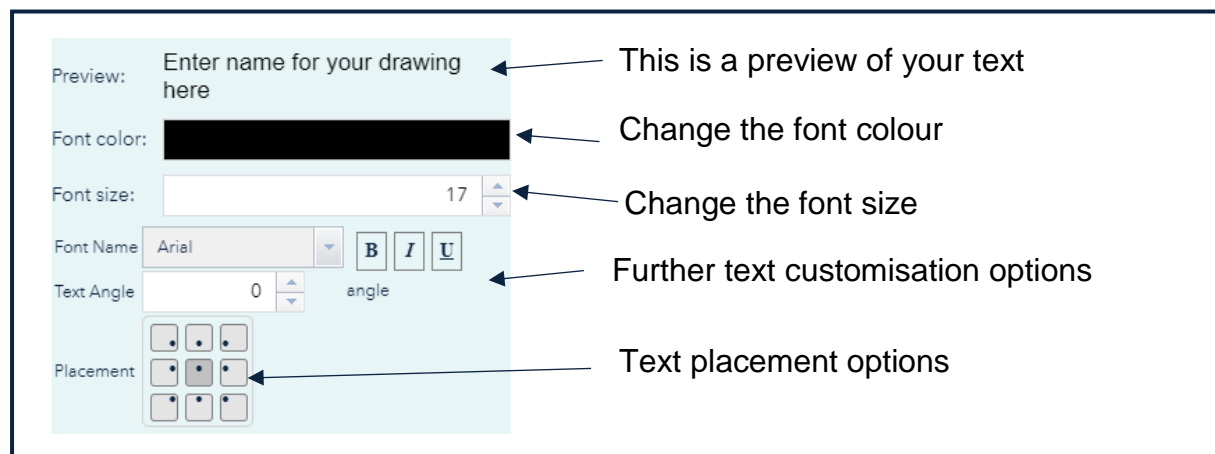
Change the symbol outline width

The screenshot shows a configuration panel for polygon symbols. At the top is a 'Preview' section showing a gray triangle. Below it is a grid of 24 different polygon symbols with various colors and styles. Further down are controls for 'Color' (a black color bar), 'Transparency' (a slider from 0% to 100%), 'Outline color' (a black color bar), and 'Outline width' (a numeric input field set to 1).

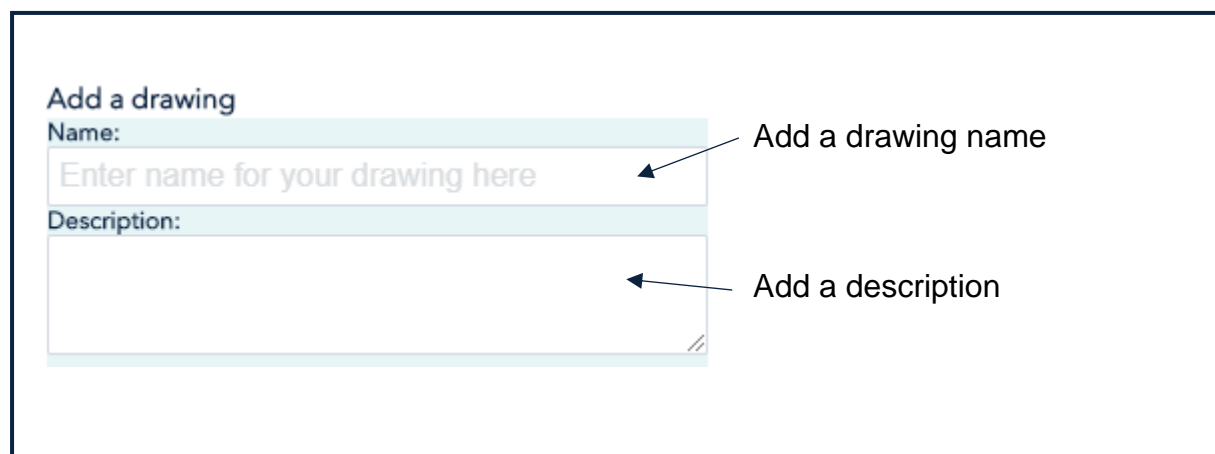
The **show area measurement** gives you the option to show area in square kilometres, square miles, acres, hectares, square metres, square feet or square yards.

The **show perimeter measurement** gives you the option to show lengths in kilometres, miles, metres, feet, yards or nautical miles.

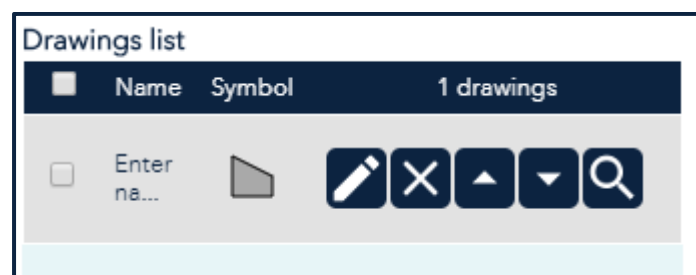
For text:



Under each option you have the ability to give the drawing a name and a description:



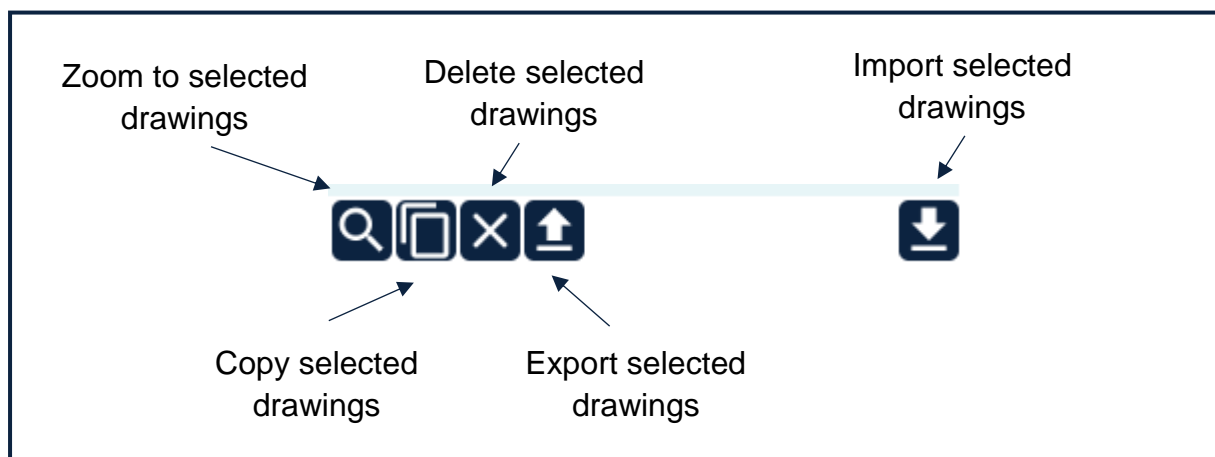
Once you have created your drawings, the drawing list tab will open.



This dialog box will allow you to:

- Update the drawing
- Delete the drawing
- Move the drawing up or down the list
- Zoom to the drawing

At the bottom of the drawing list tab, a number of further options are available.



Go to XY

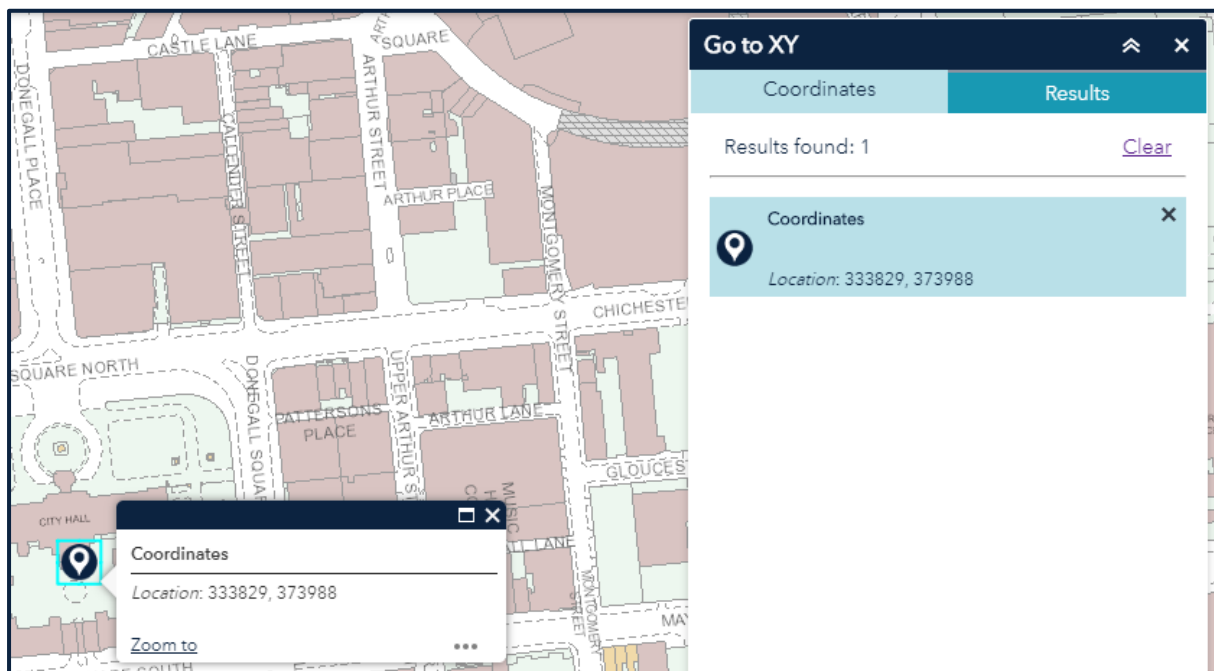


The Go to XY widget gives you the ability to enter Irish Grid Eastings and Northings and to zoom to that location on the map.

Enter your easting and northing and click **Locate**.

The 'Go to XY' dialog box has a title bar with a maximize icon and a close icon. It contains two tabs: 'Coordinates' (active) and 'Results'. Under the 'Coordinates' tab, there is a label 'Enter the coordinates:' followed by a 'Clear' link. Below this are two input fields: 'Easting (X):' with the value '333829' and 'Northing (Y):' with the value '373988'. An example text 'Example: (X) 333829, (Y) 373988' is shown below the input fields. A 'Locate' button is at the bottom right.

This will open the results tab where your coordinates are displayed in a list. A marker symbol is also added to the map.



Click the X to remove your search from the results.

You can navigate back to the coordinates tab and continue to search for more locations.

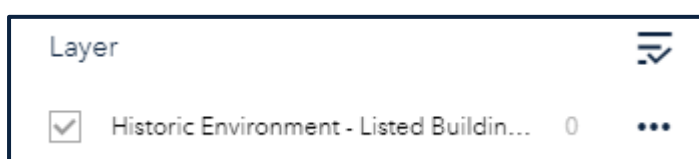
Select



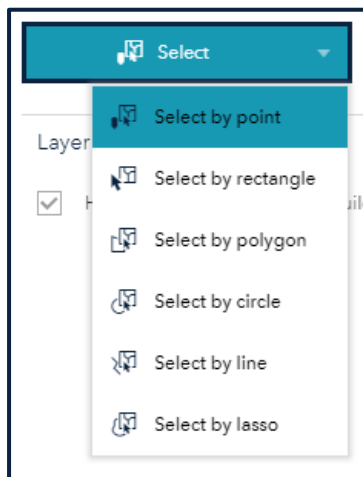
The select widget enables you to interactively select features on the map and take actions on the selected features.

Add data to your map using the add data widget.

In the select layer list, ensure your chosen layer is selected:

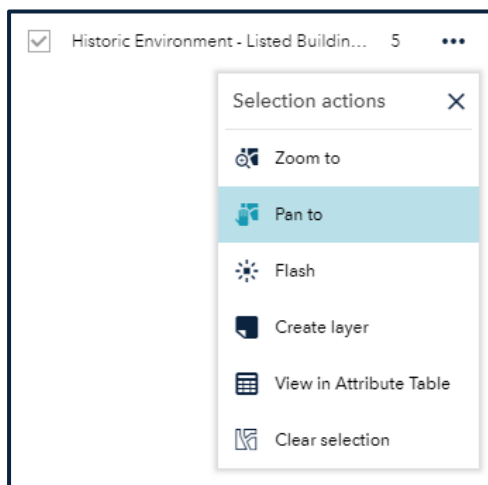


Click on **select** and chose an option from the list.



Draw around your chosen features on the map to select features. The number of selected features display next to the layer and are highlighted on the map.

Click the three ellipses beside the service name to open the Selection Actions dropdown menu.



The options are:

Zoom to – zoom to the features on the map

Pan to – pan to the features on the map

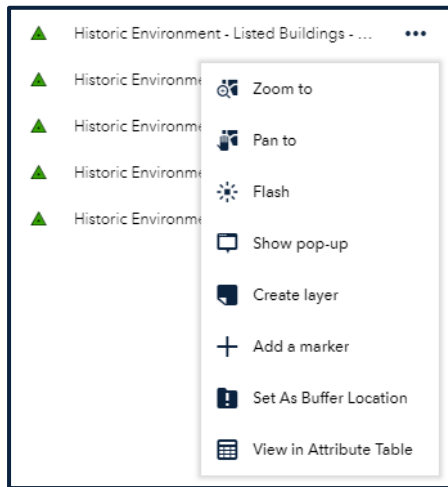
Flash – flash the features to make them visible

Create layer – create a layer from your selection and add it to your layer list

View in Attribute Table – view the selected records in the attribute table

Clear selection – clears the selection

Alternatively, click the **layer name** to display the list of features. Click the three ellipses to open the selection Actions dropdown menu.



The options are:

Zoom to – zoom to the features on the map

Pan to – pan to the features on the map

Flash – flash the features to make them visible

Show pop-up – show the features popup on the map

Create layer – create a layer from your selection and add it to your layer list

Add a marker – add a marker symbol at the location

Set as Buffer Location – use the location as the input for the buffer widget

View in Attribute Table – view the selected records in the attribute table

Filter




The filter widget allows you to limit the visibility of features in a layer. Only the features that meet the expression criteria will be visible on the map.

Add data to your map using the add data widget.

Click the **create custom filter** icon on the bottom right:



Select the layer you would like to filter and create your expression using the builder:

Move the toggle  located at the top right to green to enable your filter.

You can add multiple filters to further refine your search by clicking the **Add expression** button located at the bottom of the panel.

Get unique values: Click the cog icon to reveal the set input type menu.

Change the option to **unique** to get a list of all the unique values in your selected layer.



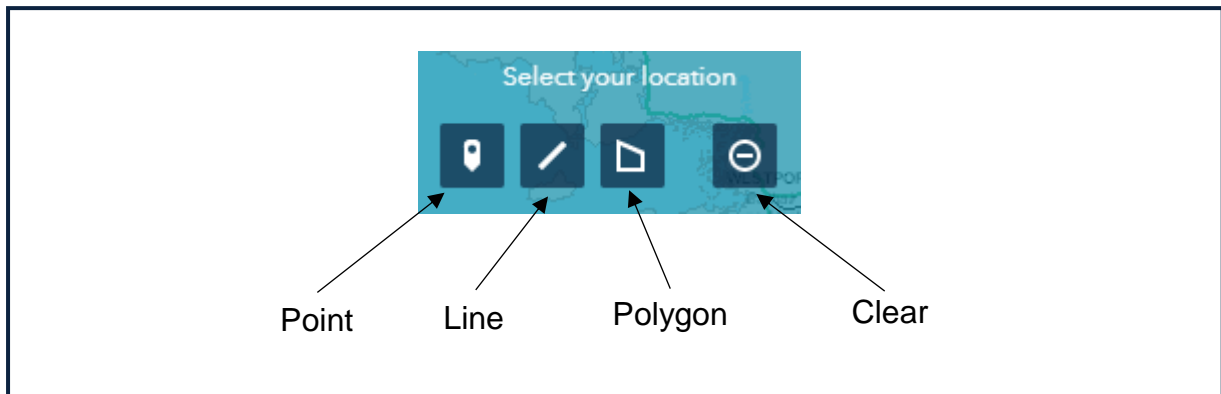
Buffer



The buffer widget gives you the ability to create a buffer around a feature.

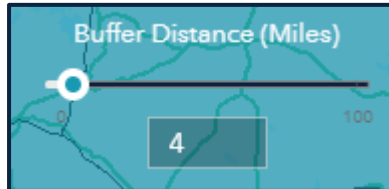
You can either:

Manually select a location to buffer using the icons on the bottom left:



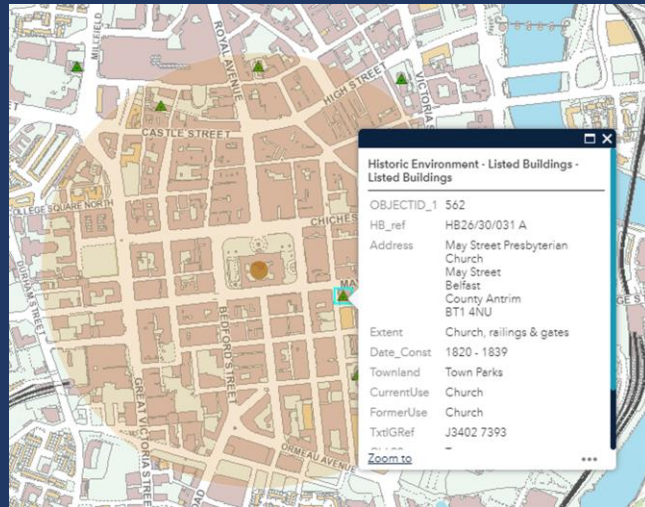
Or input a location as a result from another widget.

Set the buffer distance by either dragging the slider bar or entering a distance and pressing enter on your keyboard.



This will create a shaded buffer area on your map to meet the criteria you entered.

Advanced buffer use: By using operational data you have added to your map, you can click on the points that fall within your buffer area to obtain information on each location.

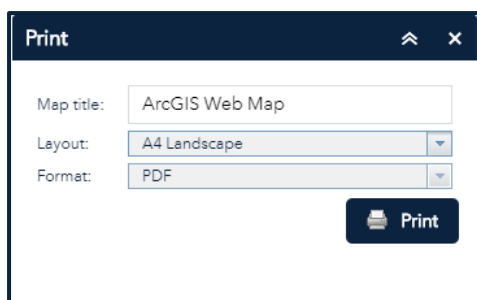


Print



The print widget provides the ability for you to create a print of your current map using one of our pre-defined Spatial NI templates.

Once the widget opens, you will be able to give you map a title and select a layout option.



Layout options to choose from are:

- A4 Portrait
- A4 Landscape
- A3 Portrait
- A3 Landscape

Click **Print**.


Spatial NI only provides the ability to print to a PDF document.


Your print will appear as a listing within the widget:


Map title:

Layout:

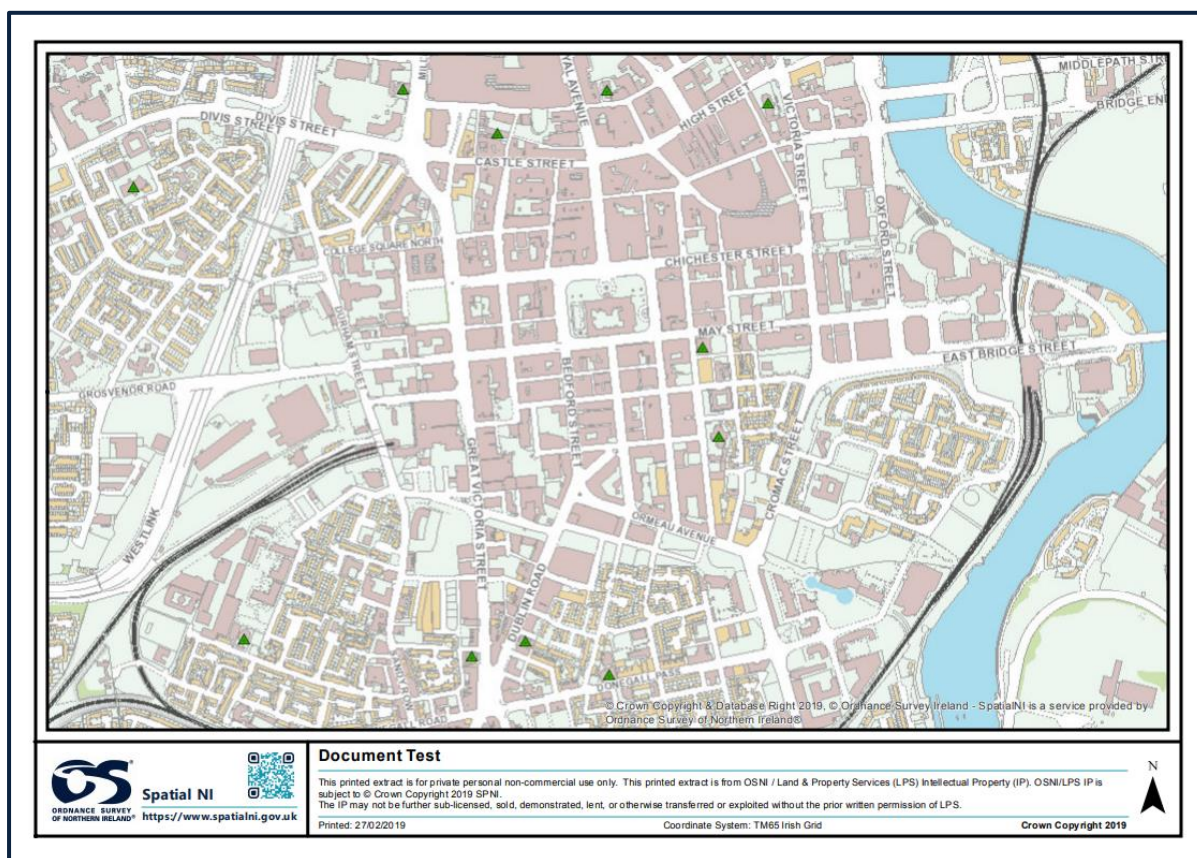
Format:

 **Print**

1.  Document Test

 **Clear prints**

Click on the map title to open the PDF.



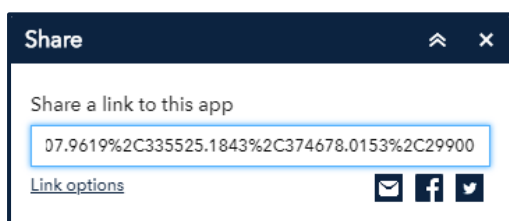
You can then save this file to your device or print your map.

Share



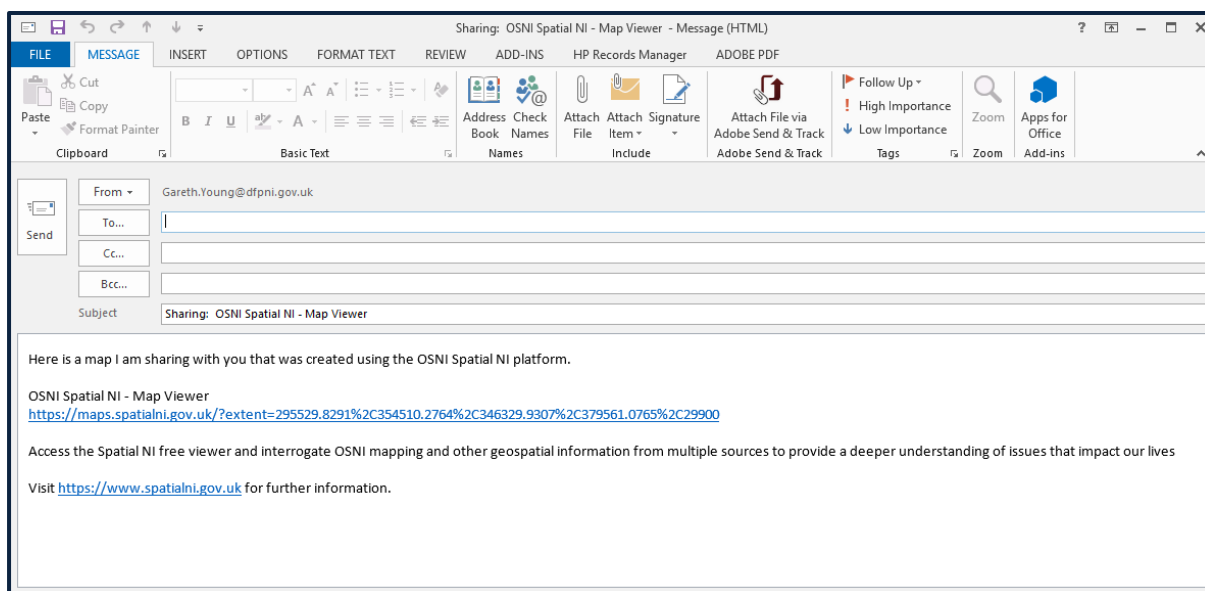
The share widget allows you to share your map by posting it to your social media account or by sending an email with a link.

Once the widget opens, you are given a URL for your map. Copy this URL and use it to share your map via instant message etc.



Click on the **facebook** or **twitter** icons to log into your social media account and share a link to your map.

Selecting the **email** icon generates an email template with a URL to your map which you can then share with others.



Optionally, click **Link Options** to easily define URL parameters included in the link. You can choose from the following options:

Current map extent – this is used by default

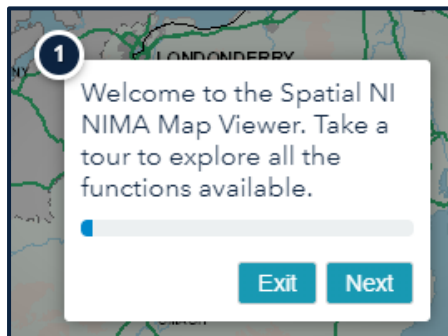
Add a marker on the map – click the point icon and click where you would like to add the marker on the map. Add a popup title and label.

Information

Map Tour



Take a tour of our map viewer and explore all the functions available by clicking on this widget.



Once launched, you will have the ability to step between each of the icons in the map viewer and discover what it can be used for.

About



Open the about widget to get some background information on the map viewer and to review our terms of use.

Help



Use the help widget to access this help document or to find out how to contact us should you need further advice or assistance.

Spatial NI



Click on this widget to get redirected to the Spatial NI website where you can easily get background information, browse our map gallery or get guidance on using our platform. (The website will open in a new browser tab).

Further help and support

Should you encounter an issue or need any further advice when using our map viewer, [contact](#) our support team.