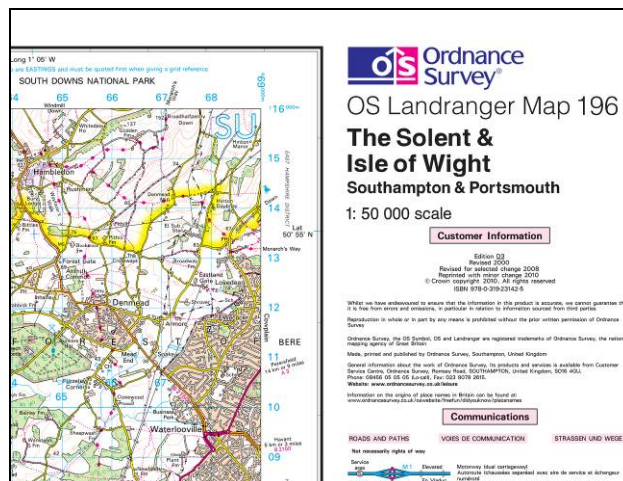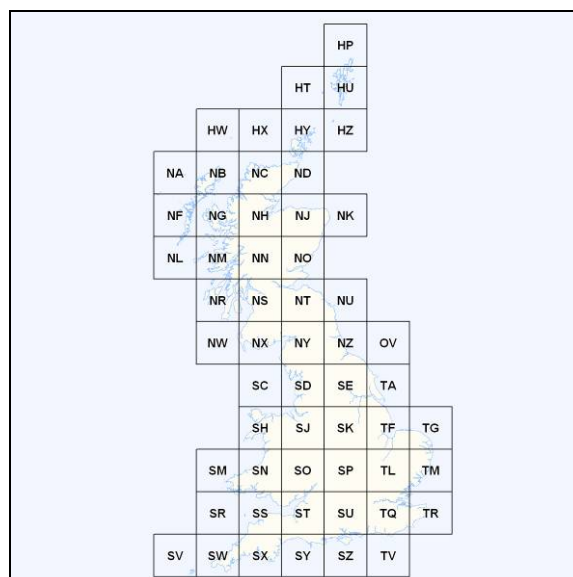# National Grid script

If you have ever used an Ordnance Survey paper map and been given a grid reference and located it using the numbers along the edges of the map, then you'll have used the National Grid. If you are not familiar with reading grid references, please look at the education section of our website. However if you look at one of our paper maps you will notice that apart from the grid numbers, there are also letter pairs around the edge, these point to the wider scale of the National Grid. Here we will use the example of our head office in Southampton to illustrate this.
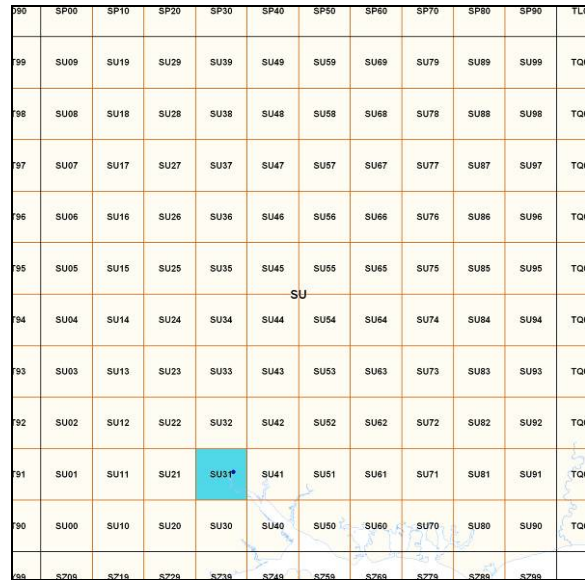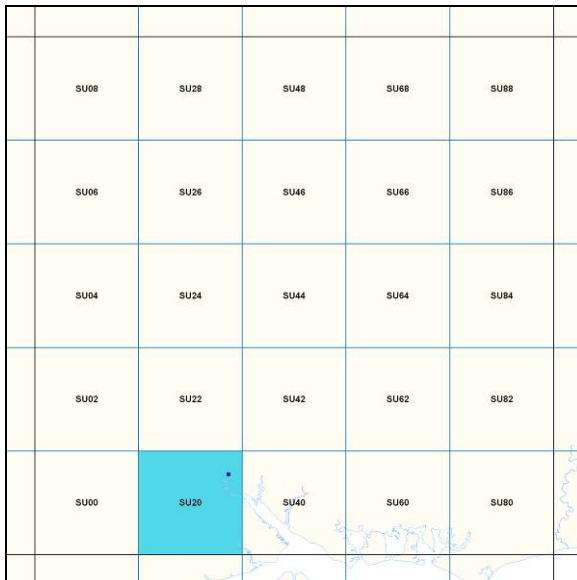

The National Grid starts out as a series of 25, 500 km by 500 km squares, each given a letter of the alphabet from A-Z (missing out I). Each of these 500 km squares is then subdivided into a series of 25, 100 km by 100 km squares, again each with a letter of the alphabet A-Z (excluding I). This then results in a series of 100 km squares with references such as SX, SY and SZ. In terms of products, this is how 1:250 000 Scale Colour Raster tiles are referenced.
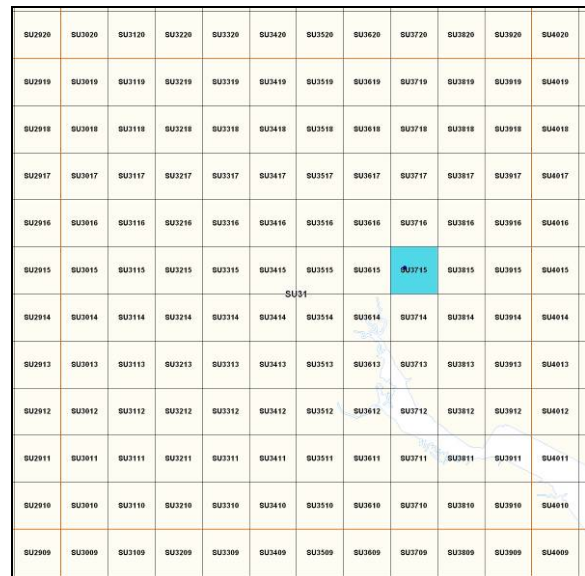

These 100 km squares can then be divided again into 100, 10 km by 10 km squares. These are each given a number from 00 to 99. So using our office as an example, it falls within SU31. This is how products such as 1:25 000 Scale Colour Raster and OS VectorMap® District tiles are referenced.

These 10 km squares can also be merged in sets of four to form 25, 20 km squares. In our example, our office falls in square SU20. This is how 1:50 000 Scale Colour Raster tiles are referenced.

These 10 km squares can be divided into one of two ways: either into 5 km by 5 km squares or into 1 km by 1 km squares.

With the 5 km squares, the 10 km square is split into four and is referenced as NW, NE, SE, SW, so for example, with SU31, the 5 km square where our office is would be SU31NE. This 5 km grid is how products such as OS Street View® and 1:10 000 Scale Raster tiles are referenced.

Alternatively, the 10 km squares can be split into 1 km squares. So with our office, the 1 km grid reference would be SU3715. This 1 km grid is how OS MasterMap® Imagery tiles are referenced.

To find out more, please visit our website.

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