

This Week's Wisdom:

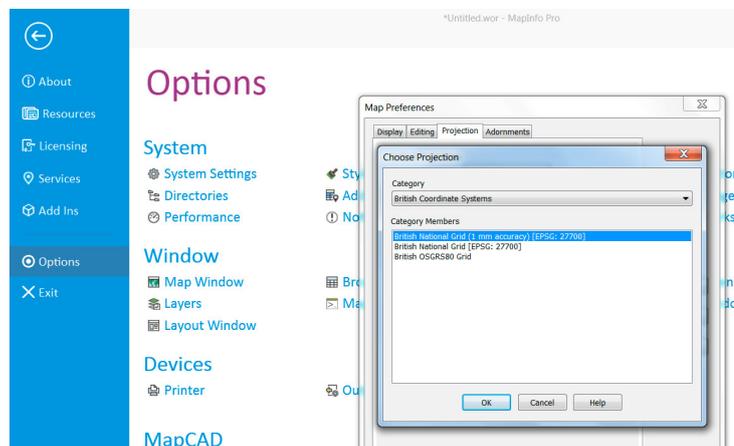
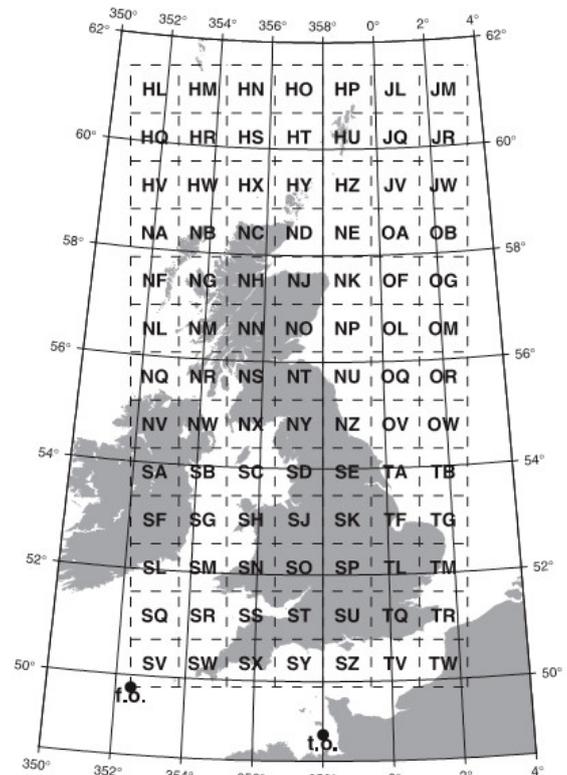
Projection Systems

The greatest challenge for any cartographer is taking a round object and putting it on a flat piece of paper. Projection systems take 3D spherical coordinates (Longitude and Latitude) and convert them into a 2D grid (X and Y). It's impossible to flatten out the surface of the earth without distortion and so various projection systems exist depending on the area you're mapping.

British National Grid

Great Britain uses the British National Grid projection system which is based on the Airy ellipsoid (The best fit for GB). The image to the right shows both the 'False Origin' and 'True Origin'. The TO is just below Jersey. The FO is set to the bottom left corner of the grid and is used because the TO gave negative coordinate values for any point further West (pretty much half of GB!).

The BNG is devised by the Ordnance Survey and used on all OS maps. If you work with any OS data, this is the projection you need to be using! (Make sure you use the 1mm accuracy option in MapInfo)



How do I change my projection in MapInfo?

Each table and map window has its own projection so you don't have to translate all of your data - MapInfo will handle that for you. You can overlay a table of Longitude and Latitude over a British National Grid map and MapInfo will match the two together.

To change the default **Map Window** projection, you need to go to Options > Map Window > Projection Tab

To change the **Table** projection make a copy of the table and define the new projection.

What about Ireland? And the rest of the World?

Ireland uses its own grid projection system called the Irish Grid reference system. It gets a bit trickier if you need to map the rest of the world. It is often easier to use longitude and latitude coordinate systems such as WGS84, particularly when working over large areas such as the US or Russia. There are thousands of projection and coordinate systems to choose from, some global and some for specific regions or countries.



If you're working on a project that doesn't use British National Grid we're happy to advise on alternatives!

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