

# OSNI ENHANCED DIGITAL TERRAIN MODEL

## What is an Enhanced Digital Terrain Model (DTM)?

A topographical model of the bare earth consisting of breaklines and spot heights providing a highly detailed representation of the topographical variations in the Earth's surface. Breaklines represent linear features such as banks, ditches and rock faces.

### PRODUCT INFORMATION

- The Enhanced DTM consists of a point file of heights, along with breaklines showing definite changes in height, giving a highly detailed representation of the Earth's surface

#### Key Features:

- Derived from aerial imagery using 3D software
- Major change across Northern Ireland is updated every 3 years in line with the orthophotography flying program. Essentially one-third or just under 100 tiles across Northern Ireland are updated on an annually
- 65% of the data is within +/-1.0 m accuracy
- 95% of the data is within +/-2.0 m accuracy
- 99% of the data is within +/-3.0 m accuracy

### TECHNICAL SPECIFICATION

**Format** – DXF

**Supply** – Digital

**Availability** – 291 full sheets

**Tile Size** – 9.6 x 6.4 kms

**Coverage** – Full Northern Ireland

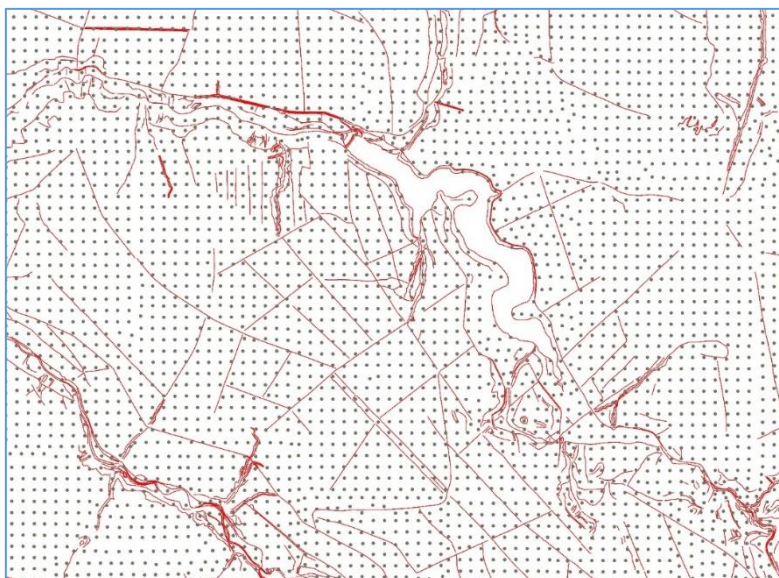
**Update Frequency** – Every 3 years

**Resolution** – 60m Spot Heights with Breaklines

**Maximum file size** – 81GB

**Coordinate Reference System** – TM75 Irish National Grid

**Limitation** – Within forests, accuracy will be reduced as ground height can only be estimated



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ORDNANCE SURVEY  
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## APPLICATIONS

The height information held within these points and lines can be interrogated in most Software packages and, when draped with orthophotography or other raster datasets, can create three dimensional models.



- Environmental applications, e.g., land fill sites to determine if illegal dumping has taken place and over what time periods
- Soil erosion modelling
- Flow direction and accumulation
- Watershed delineation

## Product Enquires and Feedback

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