New National Map Series

Land Information New Zealand will launch a new 1:50,000 topographic map series in 2009: Topo50 maps.

From September 2009, the entire Topo50 map series will replace LINZ's existing 1:50,000 scale NZMS260 series.

ENTIRE SERIES ROLLED OUT IN SEPTEMBER 2009

The entire Topo50 map series will be available from map retailers from September 2009. The new series will provide the same detailed and accurate representation at 1:50,000 scale as LINZ's current NZMS260 series.

While the geographic features portrayed on the Topo50 map series are the same as those on the NZMS260 series, the coordinates of these features will change. Each individual new Topo50 map will cover a different area to the NZMS260 map due to the change to an A1 portrait format.

Some areas will have been updated as part of LINZ's regular maintenance cycle. Prior to launch in September 2009, LINZ will publish a map on our website, <u>www.linz.govt.nz</u>, showing the currency of the data on all maps.

In our development of the Topo50 maps, LINZ has introduced technology that will reduce the time required for future Topo50 map editions.

The NZMS260 series will only be available as reprints until September 2009. LINZ will not print any new editions of the NZMS260 maps.

New maps, new technology

Since the mid-1970s, LINZ's 1:50,000 scale maps have been produced on the New Zealand Map Grid projection, a 'best fit' for New Zealand.

The new Topo50 maps are an international 'best fit', making them more compatible with modern navigational products such as GPS.

They will use the New Zealand Geodetic Datum 2000 (NZGD2000) and New Zealand Transverse Mercator 2000 (NZTM2000) projection.

EMERGENCY SERVICES SHIFTING TO NZTM2000 AND TOP050 MAPS

Emergency services and defence agencies will switch their emergency and base mapping to NZTM2000 and the new Topo50 maps at the time of launch in September 2009.

To coincide with this shift, LINZ will encourage map users to purchase printed maps that use the NZTM2000 projection.



Example of a Topo50 map

- The new 1:50,000 topographic maps will be launched in September 2009.
- > The maps will be known as the Topo50 map series.
- For the first time the entire series 452 maps will be released simultaneously.
- The Topo50 maps are easily distinguishable from the current NZMS260 series maps. They feature green and orange covers, are printed in A1 portrait format and have new sheet numbering (see the example above).

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Information

Topographic

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Technical information

The Topo50 maps use the New Zealand Geodetic Datum (NZGD2000) and New Zealand Transverse Mercator 2000 projection (NZTM2000).

New Zealand Geodetic Datum 2000

See LINZ Standard LINZS25000

Reference ellipsoid	Geodetic Reference System 1980 (GRS80)
Semi-major axis	6378137.000
Flattening	1/298.257222101

New Zealand Transverse Mercator Projection 2000

See LINZ Standard LINZS25002

Projection type	Transverse Mercator
Reference ellipsoid	GRS80
Datum	NZGD2000
Origin latitude	0° 00' 00" South
Origin longitude	173º 00' 00" East
False Northing	10,000,000 metres North
False Easting	1,600,000 metres East
Central Meridian scale factor	0.9996

COORDINATE CONVERSIONS AND TRANSFORMATIONS

Information and resources to assist with coordinate conversions and transformations are available from:

- Online coordinate conversion tools at <u>www.linz.govt.nz/coordinateconversion</u>
- Conversion software available for download at <u>www.linz.govt.nz/downloadsoftware</u>
 - NZGD1949 to NZGD2000 conversion using GD2000it
 - 'C' language source code for NZTM2000 and NZMG
 - CONCORD allows conversion between all New Zealand datums and projections.

TOPO50 DIGITAL IMAGES

Digital images of the Topo50 maps will be publicly available from launch in September 2009. There will be digital images in tiff format (of the whole map including legend and index) and georeferenced tiff format (of the spatial data area only).

The image resolution, distribution details and exact timing for release are yet to be confirmed.

- > The series is made up of 446 full mainland map sheets, including approximately 40 sheets with little land cover.
- > These 40 sheets will be printed with one-third overlap from an adjacent sheet.
- > Topo50 maps will have no part sheets.
- LINZ will also produce six map sheets for the Chatham Islands. These are based on the Chatham Islands Transverse Mercator 2000 (CITM2000) projection. See <u>www.linz.govt.nz</u>.



Section of the new Topo50 map index sheet

MORE ON TOPOGRAPHIC MAPS

For more information, check out <u>www.linz.govt.nz/topo50</u>. Also, find out about the Topo250 map series at 1:250,000 scale to be launched in September 2009 at <u>www.linz.govt.nz/topo250</u>.

You can register for regular email updates on launch progress by emailing <u>newmapseries@linz.govt.nz</u>.

newzealand.govt.nz



