

Guide to NZ ENC Permits

ENCs are controlled by permits that determine how long they can be used for and by whom.

The majority of ENC publishers encrypt their ENCs using the International Hydrographic Organization (IHO) S-63 data protection standard. All ENCs covering New Zealand waters published by the New Zealand Hydrographic Authority (NZHA) are protected using the S-63 standard.

How does the IHO S-63 encryption work?

In accordance with the IHO S-63 standard, the NZHA provides encrypted NZ ENCs to the mariner with a unique encrypted key for each ENC cell they have subscribed to. These keys are known as a 'cell permit' and are unique to each S-63 compliant navigation system. Cell permits also contain information about the duration of each subscription. The mariner loads the cell permits into the navigation system and the system then uses the cell permits to unlock subscribed ENC data to permit access and viewing.

Before the cell permits are created, the mariner must supply NZHA with another encrypted key called a 'S-63 user permit'. The user permit is allocated by the system manufacturer and is an encrypted key which is unique to each navigation system sold. This is usually supplied with documentation accompanying the navigation system when purchased. On receipt of a valid S-63 user permit, the user permit can be decrypted, identify the manufacturer of the system and generate encrypted cell permits that will only work on the mariner's navigation system.

When will I receive ENC cell permits?

On first subscribing to an NZ ENC data pack the NZHA will make the NZ ENC cell permits available for download within two to five working days of receipt of your system information and contact details.

The NZ ENC Service includes a fortnightly update service for the duration of the 12-month subscription.

What do I load first, the cell permits or the ENC data?

To determine whether cell permits or ENC data should be loaded first, you should consult your navigation system manual. Once this has been ascertained, you should remember that NZ ENC cell permits are specific to a particular fortnightly update. It is important to not load new cell permits until you have received or downloaded the corresponding ENC update data. Failure to follow this advice may remove access to previously installed ENC cells.