Important Information for AVCS Users.

20 March 2025

This document contains important information for users of AVCS, including general cautions about the use of ENCs and should be read by all mariners who use ENCs in an ECDIS.

Short term information and information of immediate navigational significance is given in the README.TXT file contained in AVCS exchange sets. The README.TXT file should be checked for the latest information each time the ECDIS is updated. Significant changes to this document will be announced in this file.

Content of the ECDIS chart display

Mariners should be aware that the appearance and content of the data displayed in electronic charts may differ substantially from the same or similar data on paper charts. The ECDIS chart display is generated according to display rules defined by the IHO Presentation Library and the amount of detail that is displayed will depend on several factors, including:

– The cells loaded on the ECDIS and available for display.

– The feature content of those cells (including any objects with date, time, or scale dependent attributes).

– The display scale set by the ECDIS user.

– The display mode set by the ECDIS user (i.e. "Base", "Standard" or "All").

– The Safety Contour, Safety Depth and Safety Height set by the ECDIS user.

– Other user display options provided by the ECDIS (e.g. options to show isolated dangers in shallow waters, full length light sectors, etc.).

– The ECDIS manufacturer's implementation of the IHO Presentation Library.

Date symbol

Coastal States usually implement or change Routeing measures such as Traffic Separation Schemes (TSS) at specific dates and times.

Notice of such changes can be given to mariners in ENCs (using Updates or New Editions) in advance of the implementation date by using the attributes Date Start (DATSTA) on new features that are being introduced and Date End (DATEND) on existing features that are being discontinued. The purpose of these attributes is to allow mariners to preview forthcoming changes and ECDIS to apply the changes automatically at the appropriate time.

The way in which ECDIS equipment will display the features encoded using DATSTA and DATEND varies, although most ECDIS will use one of the following methods:

– The ECDIS will use the attributes to display only those features that are valid on a user-selected date.

– The ECDIS will display, according to the selection of the user, either the features that are valid on the current date or all features (regardless of their validity).

– The ECDIS will display all features (regardless of their validity) with no user-selectable options. In this case, it may still be possible to obtain information on the date and time window for which particular features are valid by using the cursor-pick report to view the date-dependent attributes.

It is important for users to understand the user settings available in their ECDIS to ensure the best possible display of these features. It is also important that the ECDIS is up to date for the latest IHO standards.

National language attributes

IHO Standard S-57 defines four national language attributes for use in ENCs. Some national languages, especially those that use additional character sets, e.g. Turkish, Korean, etc. cannot be viewed in some ECDIS equipment. In these instances, users should refer to the English language versions of these attributes.

The national language attributes that may be displayed on the ECDIS with an unreadable text string are as follows:

- NINFOM [Information in national language]

- NOBJNM [Object name in national language]

- NPLDST [Pilot district in national language]

- NTXTDS [Textual description in national language]

In the case of NTXTDS [Textual description in national language], it may be the content of the linked text file that is unreadable.

Non-Official ENC data

When the ECDIS displays non-official ENC data, the boundary between official and non-official data is defined by the symbology illustrated below. See also ENC 1 - Chart of Symbols - on the ECDIS and NP231 – Guide to the Practical Use of ENCs.
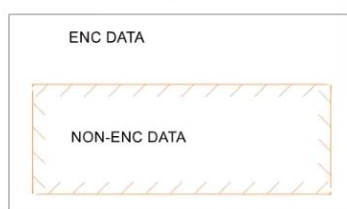
To identify data as non-official, the ECDIS refers to a software file that contains a list of the official Producer Codes issued in IHO Standard S-62. IHO updates the list from time to time with new Members and Producer Agencies, so it is important that the ECDIS is loaded with the latest file, provided by the ECDIS manufacturer.

If the S-62 file is out of date, the ECDIS may not recognise the Producer Code as being official and consequently display the orange 'non-official' symbol described above.

AVCS only contains data that has been issued by authorised government hydrographic offices. Any exceptional cases that affect the display are described in the AVCS README.TXT file.

Paper chart updates

The UKHO's updating service for ENCs includes the latest updates issued by all the contributing Hydrographic Offices. These updates may or may not be synchronised with Notices to Mariners and New Editions produced for their national paper chart series. Therefore, ENCs may be more up to date or less up to date than the corresponding paper chart of the same area.

Removal of ENCs from AVCS

UKHO may remove ENCs from AVCS from time to time as new data or information becomes available.

"**Cancellation**" is the term used when an ENC producer issues an update to cancel and delete an ENC. When it is loaded, the Cancellation Update sets the Edition number to ".000" and the ECDIS subsequently displays a warning if the ENC is loaded on the display. ENC Producers can only cancel their own ENCs and ENCs can only be cancelled by their own Producer.

The Producer may also provide one or more replacement ENCs free of charge to maintain ENC coverage. The permits for the replacement ENCs will be automatically added to the vessel's AVCS licence and the updated Permit Files and PRODUCTS.TXT catalogue must be loaded into the ECDIS. To retain coverage, it is advisable to load the replacement ENCs at the same time as the Cancellation Update since some ECDIS may automatically unload the Cancelled ENC.

"**Withdrawal**" is the term used when the UKHO decides to remove an ENC from AVCS without it being cancelled by the Producer. The key distinction is that, if an ENC is 'withdrawn', there is nothing to prevent end users continuing to use the cell until their permit expires.

ENCs may be withdrawn for the following reasons:

1. Safety concerns with the ENC data.

2. Loading or display issues on ECDIS.

   In these cases, UKHO recommends that these ENCs are unloaded from their ECDIS, and measures should be taken on board to make sure that it is not re-loaded with future data sets, unless instructed to do so. Further updates are not usually issued until the issue is fixed; therefore, their carriage may not satisfy SOLAS requirements.

3. The ENC Producer instructs AVCS to remove the ENC from sale without a cancellation update.

   In this case, the ENC Producer will continue to support the ENC with data and cancels it when all user licences have expired.

The withdrawal of ENCs is communicated in the AVCS README.TXT file. The Updates page at admiralty.co.uk/avcs contains the full list of currently withdrawn ENCs.

S-63 Edition 1.2

All AVCS exchange sets conform to the latest IHO Standard S-63 Edition 1.2.

SCAMIN

Each object in an ENC is coded with a Scale Minimum (SCAMIN) value. This determines the display scale below which the object must not be displayed by an ECDIS, with the aim of reducing excessive information clutter on the screen. Latest ECDIS standards provide a control on the ECDIS that can be used by the mariner to override this SCAMIN display criteria. Mariners should use this during passage planning to see all the information along the track.

Temporary information (T&P NMs) in ENCs

Temporary and preliminary information is considered an essential part of keeping navigational charts up to date. However, textual T&P NMs are produced for paper charts, not ENCs and not every ENC producer includes temporary information in their ENCs. If temporary information is included, it is likely to display with different content than that which appears in the NM for the paper chart and will not be a like-for-like comparison. The ENC producer may indicate the temporary nature of the information by:

1. Using the DATSTA and DATEND attributes described above.

2. Using the text description of the feature.

3. Simply issuing an update to the ENC with the new information, then another when the change expires.

The latest confirmed status of temporary information in the ENCs that are available in AVCS is shown in the ENC-TandP-NM-Status.pdf file available in the INFO folder on AVCS discs and at admiralty.co.uk/avcs.

To ensure that T&P NM information is as widely available to ENC users as possible, the ADMIRALTY Information Overlay includes worldwide ADMIRALTY T&P NMs for paper charts where the Producer does not code temporary information into their ENCs. AIO can be displayed on top of ENCs in most ECDIS equipment and some back-of-bridge software applications.

WGS 84 compatible datums

Positions obtained from Global Navigation Satellite Systems, such as GPS, are normally referred to WGS 84 Datum. In many parts of the world, however, charts were originally produced on a variety of local datums for which the shift to WGS 84 may be unknown or unreliable. ENCs derived from such charts may not be accurately referred to WGS 84 Datum. This can result in small but noticeable positional differences where adjoining ENCs have been shifted by slightly different amounts. Mariners are warned that these differences may be significant to navigation and are therefore advised to confirm GPS positions shown in the chart display using alternative navigational techniques, particularly when closing the shore or navigating in the vicinity of dangers.

The differences between satellite-derived positions and positions on these ENCs cannot be accurately determined, so the estimated values of the differences for these ENCs are detailed in the Information attribute of Caution Areas, for example: "Positions in this region lie within ± nn metres of WGS 84 Datum". Such ENCs may also contain a warning encoded as the name of a Sea Area feature covering the ENC, for example: "This chart cannot be accurately referenced to WGS 84 Datum; see caution message". They are intended for use with this warning continuously displayed and should not be used otherwise.