



User guide

Including ADMIRALTY Information Overlay (AIO)

April 2025 – V6.2

Contents

Including ADMIRALTY Information Overlay (AIO) 1 Contents 2 AVCS 3 Overview 3 Quality 3 Carriage compliance 3 Licensing 3 SENC Services 3 Pay as you Sail (PAYS) 3 Further information 3 Getting started with AVCS 4 Before you start 4 Installing permits and data 4 Exchange set 5 Readme file 5 Other important information 5 Continual delivery of updates 5 Working with AVCS 6 Maintaining your holdings 6
AVCS 3 Overview 3 Quality 3 Carriage compliance 3 Licensing 3 SENC Services 3 Pay as you Sail (PAYS) 3 Further information 3 Getting started with AVCS 4 Installing permits and data 4 Exchange set 5 Readme file 5 Other important information 5 Continual delivery of updates 5 Working with AVCS 6
Overview 3 Quality 3 Carriage compliance 3 Licensing 3 SENC Services 3 Pay as you Sail (PAYS) 3 Further information 3 Getting started with AVCS 4 Before you start 4 Installing permits and data 4 Exchange set 5 Readme file 5 Other important information 5 Continual delivery of updates 5 Working with AVCS 6
Quality 3 Carriage compliance 3 Licensing 3 SENC Services 3 Pay as you Sail (PAYS) 3 Further information 3 Getting started with AVCS 4 Before you start 4 Installing permits and data 4 Exchange set 5 Readme file 5 Other important information 5 Continual delivery of updates 5 Working with AVCS 6
Carriage compliance 3 Licensing 3 SENC Services 3 Pay as you Sail (PAYS) 3 Further information 3 Getting started with AVCS 4 Before you start. 4 Installing permits and data 4 Exchange set 5 Readme file 5 Other important information 5 Continual delivery of updates 5 Working with AVCS 6
Licensing
SENC Services
Pay as you Sail (PAYS) 3 Further information 3 Getting started with AVCS 4 Before you start 4 Installing permits and data 4 Exchange set 5 Readme file 5 AVCS permits 5 Other important information 5 Working with AVCS 6
Further information 3 Getting started with AVCS 4 Before you start. 4 Installing permits and data 4 Exchange set 5 Readme file 5 AVCS permits 5 Other important information 5 Continual delivery of updates 5 Working with AVCS 6
Getting started with AVCS
Before you start
Installing permits and data
Exchange set
Readme file
AVCS permits
Other important information5 Continual delivery of updates5 Working with AVCS6
Continual delivery of updates
Working with AVCS
•
Maintaining your holdings6
Downloaded data6
Downloading data from ADMIRALTY6
Exchange Set Service6
Cancelled ENCs7
Withheld ENCs7
Adding ENC coverage7
Holdings Report7
ADMIRALTY Information Overlay (AIO)
Overview
Updating AIO
Content
Compatibility
Managing temporary information with AIO
T&P NMs

EP NMs	10
'No Overlay' feature	10
Passage Planning	11
Policy of ENC producers	11
ECDIS symbology	11
Using AIO	11
Compliance	11
Further guidance	12
Frequently asked questions	12
Troubleshooting	13
ENC Validation	13
Incorrect chart information	13
Security Scheme Errors (SSE)	13
Conversion errors	14
Technical support	14
Emergency chart permits	14

AVCS

Overview

ADMIRALTY Vector Chart Service (AVCS) is produced and distributed according to well-defined international standards.

This guide provides generic information to assist in managing and maintaining your AVCS holdings.

This guide should be used in conjunction with the User Manual supplied by your ECDIS manufacturer.

AVCS brings together official Electronic Navigational Charts (ENC) from national Hydrographic offices around the world. It includes ENC coverage produced by UKHO in co-operation with Foreign Governments to provide comprehensive worldwide coverage.

Quality

AVCS meets customer requirements for a comprehensive, world-wide, fully carriagecompliant electronic chart service. AVCS continues to develop in response to customer feedback.

UKHO has a programme of assessment by its professional cartographers, where the content of the ENC is compared to relevant paper charts and other information held at UKHO. Any navigationally significant differences are communicated to users of AVCS through ADMIRALTY Information Overlay (AIO).

Every ENC released in AVCS conforms to the International Hydrographic Organisation (IHO) standards S-57 and S-63.

Carriage compliance

AVCS contains Official ENC data that meets Safety of Life at Sea (SOLAS) Carriage Requirements for use within Electronic Chart Display and Information Systems (ECDIS).

Licensing

The ENCs in AVCS are provided under a licence agreement that allows their use for defined periods of time. ENC permits may be purchased for periods of 3, 6, 9 or 12 months (where data supply agreements allow). This offers maximum choice and the flexibility to match your chart holdings to your operational patterns.

SENC Services

When they are loaded into the ECDIS, ENCs are converted to the system's own proprietary format, known as System ENC (SENC). To allow them to load more efficiently, some service providers convert AVCS ENCs to SENC ashore, then send them to the vessel, usually by download.

AVCS SENC services carry full ADMIRALTY assurance and accreditation.

Pay as you Sail (PAYS)

PAYS subscriptions provide your vessel with permits for the majority of the AVCS portfolio, so they are available for voyage planning. Where the Producer allows their ENCs to be included in the PAYS Service, you avoid having to purchase them individually. You are only charged for their use when your vessel tracks across the data coverage of each ENC.

The ENC data must still be loaded onto your ECDIS either manually or automatically.

Further information

NP231 ADMIRALTY Guide to the Practical Use of ENCs is a comprehensive guide to the ENC portrayal, standards and regulations.

The UKHO website, <u>admiralty.co.uk</u>, has more information and links to resources for use with AVCS.



Getting started with AVCS

This start-up guide is designed to help you to load and maintain your AVCS data easily and quickly. It describes the basic steps necessary to use AVCS in any ECDIS. The functionality for loading and maintaining AVCS will differ from one ECDIS to another, so this guide should be used in conjunction with the User Manual supplied by your ECDIS manufacturer.

AVCS contains official ENCs issued by, or on behalf of, Government Hydrographic Offices. It is designed to be used in conjunction with a typeapproved ECDIS to meet the requirements of SOLAS Chapter V.

Before you start

- 1. Your ADMIRALTY Distributor will have provided the following materials:
 - A set of ENC Permit files (PERMIT.TXT and ENC.PMT) for each ECDIS equipment
 - An optional 'Schedule A' Order Report (a document listing the units that you have added to your new licence).
 - Access to AVCS ENC base and update data. This may be by download or physical media.
 - AVCS Certificate (a document showing your vessel and licence details).
 - ADMIRALTY Information Overlay (AIO) data (recommended).
- 2. Referring to the User Guide for your ECDIS, remove any existing ENCs and if possible, any installed permits.

You are now ready to load AVCS onto your ECDIS.

Installing permits and data

Specific instructions for some common models of ECDIS are available at <u>admiralty.co.uk/AVCS</u>. Videos are also available at <u>youtube.com/user/AdmiraltyTV</u>

 Before loading AVCS ENCs, the ENC Permits must be installed on the system. The permits consist of two files for each ECDIS: ENC.PMT and PERMITS.TXT.

Install your permits, referring to your ECDIS User Guide.

AVCS customers with multiple ECDIS on board should be careful to load the correct permits into the corresponding system.

Permit sets are labelled MASTER, BACKUP, RESERVE 1, 2 and 3 etc.

2. Load ENCs from exchange sets delivered by download or physical media. Note that some producers (such as the United Kingdom) produce data worldwide so folders in data exchange sets do not directly correspond to a geographical area.

It is only necessary to load the exchange sets that contain licensed ENCs, as listed in the permit file. The ECDIS will manage the loading of all ENC cells based on the installed ENC Permits.

 Load the ADMIRALTY Information Overlay, which provides additional information for passage planning. The Overlay contains some of the Temporary & Preliminary Notices to Mariners (T&P NMs) for issued for ADMIRALTY paper charts and ENC Preliminary Notices to Mariners (EP NMs), which highlight navigationally significant differences between ENCs and ADMIRALTY paper charts.

A permit for AIO is provided free of charge with AVCS. If it does not display, please ask your ADMIRALTY Distributor to check that it has been added to your licence and that your ECDIS has been enabled.



Exchange set

ENC data, catalogues and metadata files are organised in an internationally recognised standard format that is recognised by the ECDIS. A complete collection is known as an 'exchange set' and will normally be named "V01X01".

AVCS DVDs are supplied in a different Large Media Format. DVD1 is named "M01X02" and DVD2 is named "M02X02".

Readme file

AVCS exchange sets contain a 'README.TXT' file which includes important safety information that should be read before using the service and checked regularly.

The latest README.TXT file can also be viewed on the Support page at <u>admiralty.co.uk/avcs</u>.

AVCS permits

Each permit is unique and is the method which gives the user access to the required ENCs.

The ENC Permits are supplied in a zipped file and the contents of this file will depend on the user's bridge configuration, as each AVCS licence allows for use on more than one ECDIS. When extracted, one or more set of permit files (*PERMIT.TXT* and *ENC.PMT*) will be copied automatically into folder(s) named MASTER, BACKUP, RESERVE1, RESERVE2 and RESERVE3 etc depending on the number of ECDIS configured on the bridge.

Most ENC Producers grant permission for their data to be displayed many times on a single vessel licence. However, where permission is restricted to a smaller number of ECDIS displays, those permits will only be included in the appropriate number of permit files, in the order given above. It is therefore important that priority displays are identified correctly on your licence otherwise some data may not be available when needed.

The permits may be supplied on physical media, separately by email, downloaded over the internet, or directly from bridge software applications. The contents should be extracted to a file location that is capable of being read by the ECDIS system.

Other important information

Information about general cautions when using ENCs within ECDIS is contained in the document "Important information for AVCS users" which can be found on the Support page at <u>admiralty.co.uk/avcs</u> and the INFO folder on AVCS DVD exchange sets.

Updates applied to the ECDIS may have a navigational impact on an area covered by a stored route. It is important to check the effect of any updates on these routes prior to their use.

Continual delivery of updates

Most ENC updates are now available from UKHO as soon as they are ready and therefore can be displayed on ECDIS many days earlier than the AVCS weekly batch release. Please ask your ADMIRALTY Distributor about connecting to this faster service.

Working with AVCS

Maintaining your holdings

 A new set of ENC Permits will be supplied by your ADMIRALTY Distributor whenever an ENC has been added or removed from your licence. These should be installed on the ECDIS when they are received, before loading any new exchange sets.

If your Distributor provides you with a Holdings Report (a list of ENCs on your licence), this will be updated.

2. Your ADMIRALTY Distributor will supply you with AVCS update data.

Alternatively, you may use your ECDIS or other software to request and download ENC updates.

If you are using the AVCS DVD and AIO CD exchange sets on physical media or download, the data is cumulative. To update the ECDIS, just load the ENCs from the latest version of these exchange sets that you hold. Alternatively, you may only receive the updated data for the AIO and ENCs that you hold whenever the updates are released.

Downloaded data

Your ADMIRALTY Distributor may provide you with the capability to deliver the ENCs and updates that you need over the internet or by email. This has the advantage of allowing you to keep the ENCs on your ECDIS up to date and avoid the delay when physical media is delivered by post.

Downloading data from ADMIRALTY

As well as receiving datasets from your Distributor, you may download AVCS data over the internet direct from the ADMIRALTY File Share Service at https://fss.admiralty.co.uk.

DMIRALTY File Share Service	Exchange Search
This service is in beta phase - please provide lead took to help us improve t	
Search files	
Complete the patimeters to create a scoren quory.	Exchange sets
Search	Not can make a small { \$00 FMC} contains not barge set here and closed out a
Advanced Search	Make an ascharge set

	9	Ethnace, policy.	Accessibility
0	UK Hydrographic Office	6 Cownerpyrgin 2013 UK Hyr	diographic Otto

On the File Share Service, you can search for and download recent batch datasets such as the cumulative AVCS DVDs and weekly AIO. The File Share Service also provides smaller datasets that only contain the updates issued during the past week. However, these must be loaded in the correct sequence since S-57 updates will not install if previous updates are missing.

Exchange Set Service

The File Share Service has a facility to allow you to request the latest data for specific ENCs which can significantly reduce the size of any download.

Note: it is strongly recommended that you update and check your ENC holdings catalogue before requesting data updates. This is because your data request may contain cancellation updates that have been recently issued for your existing ENCs. If that is the case, to maintain full coverage on your ECDIS, you will need to request the data for any extra replacement ENCs that have been added to your licence.

To access this feature, click the link on the File Share Service home page: "Make an exchange set". On the next page you can enter the name of a specific ENC or upload a list of ENCs as text or csv.



Public Proceed File Share Service Image: Service is in beta phase - please provide feedback to help us improve k Etth This service is in beta phase - please provide feedback to help us improve k Etch Exchange sets Update your ENCs for a vessel by making an exchange set Your AVCS workings set will contain the tarset willions and all the updates available for your requested ENCs. Some may be may to date than those available in the AVCS Weekly service. You can add a single ENC or upload a list: Upload a list in a file Add ENC: Add single ENC Upstream Marging ENC Proceed

3
UK Hydrograph

Follow the on-screen instructions to download your data through your internet browser. The dataset can then be loaded onto your ECDIS.

Cancelled ENCs

Periodically, ENCs are cancelled as part of the continuous maintenance of ENC coverage worldwide. If possible, cancelled ENCs are replaced with alternative or new coverage so there is no loss of coverage in your ECDIS.

It is strongly recommended that you choose to delete any cancelled ENCs from the SENC as failure to do so may result in the ECDIS displaying out of date ENCs in preference to more up to date data.

Withheld ENCs

If an ENC in service is found to have a serious safety or operational issue, it may be withdrawn from AVCS until the issue is fixed. This is extremely uncommon but if this happens, you would be advised by your ADMIRALTY Distributor to remove the ENC from your ECDIS immediately. Since the withdrawal does not remove the permit from your permit files, you should also take steps on board to prevent the data from being re-loaded at any later date until the problem is fixed.

A list of withdrawn ENCs is available at admiralty.co.uk/avcs.

Adding ENC coverage

Permits for additional AVCS Units may be purchased from your ADMIRALTY Distributor.

Once your order has been approved, you will receive new ENC Permits to 'unlock' the newly added data. These permit files are cumulative so as well as unlocking the new coverage they will also hold the permits necessary to unlock all your existing coverage.

You can use software applications and some ECDIS to order new permits and data, then have them delivered direct to your vessel.

Holdings Report

Your ADMIRALTY Distributor may supply you with a 'Holdings Report', generated by UKHO systems, which shows which ENC permits are held on your licence at the time that the report is run. The report also states the latest Edition and Update number for each ENC.

ADMIRALTY Information Overlay (AIO)

ADMIRALTY

Vector Chart Service

Overview

AVCS

The AIO is a worldwide digital dataset that is designed to be displayed over ENCs in ECDIS and other chart display systems to provide additional information during passage planning.

The Overlay displays ADMIRALTY paper chart Temporary & Preliminary Notices to Mariners (T&P NMs) where temporary information has not been encoded by the producer into the underlying ENC.

The AIO includes ENC Preliminary Notices to Mariners – EPNMs, which draw attention to areas where there are differences between ENCs and ADMIRALTY paper charts which may affect the passage plan. No other electronic chart service offers this level of reassurance.

Updating AIO

The AIO is refreshed every week, as part of the AVCS Weekly Update and is available as a weekly cumulative disc, ISO and zip files, as well as a week-only zip file for download. Cumulative files contain the base edition and all the updates to date, so you only need to load the most recent version. The week-only file is much smaller since it only contains the latest changes but in common with all ENCs, the Week-only exchange set files can only be applied to the most recent base edition issued and must be applied in sequence.

A New Edition is issued approximately every two years, after 90 weekly updates.

The Week-only zip file, Weekly ISO and Weekly zip files are available to download from the ADMIRALTY File Share Service (FSS) at <u>https://fss.admiralty.co.uk</u>.

The full ISO and zip file exchange sets are around 20-30MB in size. The 'Update-only' exchange set is less than 1MB. Note that every two years the 'Week-only' will be the full New Edition of around 20MB.

Content

Except for areas where there is no ADMIRALTY chart at equivalent scale to the ENC (indicated by 'No Overlay' polygons), AIO covers the whole world. Temporary information is assessed for inclusion as follows:

- Considered if it affects an ADMIRALTY paper chart and has been issued as a T&P NM but:
- excluded if the information only relates to paper charts and is therefore not relevant to the ECDIS user or,
- excluded if the producer nation confirms that they include temporary information in their ENCs.
- Included as EPNM if the information is about a navigationally significant difference between the ENC and the equivalent paper chart.

Compatibility

The Overlay can be displayed on AIO-compatible ECDIS equipment as well as some software applications. Please see the AVCS Support page at <u>admiralty.co.uk/avcs</u> for a list of AIO-compatible ECDIS or consult your supplier.

The Overlay data is a single S-57 exchange set which is installed and updated in the same way as ENCs. The AIO permit GB800001 is free of charge for AVCS users and is added to your licence by default. Please contact your ADMIRALTY Distributor if you wish to use the Overlay or cannot view it on your ECDIS.

Managing temporary information with AIO

ADMIRALTY

Vector Chart Service

T&P NMs

AVCS

The UKHO issues Temporary and Preliminary Notices to Mariners (T&P NMs) which contains temporary information of navigational interest to mariners using ADMIRALTY paper charts. Mariners are only required to hold Notices to Mariners for paper charts that are on board.

Like UKHO, Hydrographic Offices around the world issue Notices to Mariners to update their paper charts. Some countries do not issue T&P NMs and some do not update their ENCs with temporary information.

If the ENC producer does not include temporary information in their ENCs but the UKHO has issued it as a T&P NM for an equivalent scale paper chart, it is added to the ADMIRALTY Information Overlay (AIO). This allows you to receive extra temporary information which has not been included in your subscribed ENCs.

The T&P NMs are displayed as polygons over the ENCs on the ECDIS, labelled with the number of the ADMIRALTY Notice to Mariners (NM).



The full text of the NM is included as an associated text file which can be displayed by selecting the 'Temporary Notice to Mariners' or 'Preliminary Notice to Mariners' feature in the ECDIS Pick Report. Any associated diagrams can also be viewed through the Pick Report. Square polygons are generally used to display Temporary Notices. The size of the polygon is designed to make it visible on the ECVDIS display and may not denote the extent of the issue that it is described. Navigation and routeing decisions should therefore follow the textual description provided.

AIO does not contain paper T&P NMs issued by the ENC producer, unless it has been re-issued as an ADMIRALTY T&P NM.

There may be a time delay between the publication or cancellation of national T&P NMs and the publication or removal of the equivalent ADMIRALTY T&P NMs that are included in AIO.

Although UKHO tries to avoid duplication, it is possible that the AIO will occasionally contain T&P information similar to that displayed in the ENC.

AIO does not include T&P NMs that only relate to paper charts. For instance, a non-temporary update to a local ENC may result in a T&P NM for the ADMIRALTY paper chart. Because the information is contained in the ENC, the ADMIRALTY T&P NM would be excluded from AIO.

Some ADMIRALTY T&P NMs solely refer to nonnavigational charts, e.g. Thematic or Maritime Security Charts. As the T&P NM often relates to text boxes on the paper chart and cannot be geodisplayed, they are not included in AIO.

A list of ENC producers whose policy is to include T&P NM information in their ENCs can be found at admiralty.co.uk/AVCS and in the INFO folder on AVCS DVD and AIO CD Exchange Sets.

Some T&P NMs may display in AIO before they are published in the ADMIRALTY Weekly Bulletin.

Official ENCs remain the primary source of information for navigation at all times.



EP NMs

ENC Preliminary (EP) NMs highlight navigationally significant differences between ENCs and ADMIRALTY paper charts.

These NMs are displayed in the same way as T&P NMs, as a polygon with a hatched fill which indicates the area affected by the NM. Each NM is allocated a unique EP NM number and is exclusive to AIO.



The full text of the NM can be viewed in the ECDIS Pick Report. Where additional information is needed to explain the NM an associated picture file displays the ENC superimposed over the current paper chart information.

'No Overlay' feature

Where there is no ADMIRALTY paper chart at equivalent scale to the ENC, UKHO is not able to compare coverage and add additional information. In these areas, the AIO shows a grey hatched polygon labelled 'No Overlay'.



ADMIRALTY paper T&P NMs may occasionally display within a 'No Overlay' polygon if the information has been published for smaller scale paper charts and is also relevant at a larger scale.

Additional information, such as local T&P NMs, may be available in these areas from other sources. When navigating in these areas, users should ensure that other sources of information such as local web sites, Navtex, port notices etc. have been consulted.



Passage Planning

AVCS

ADMIRALTY

Vector Chart Service

SOLAS Chapter V states that all information relevant to the passage should be considered during planning. Appropriate scale, accurate and up-to-date charts are to be used for the intended passage, as well as any relevant temporary Notices to Mariners.

Policy of ENC producers

Most producers now include temporary information in their ENCs and it is received on your vessel as a normal ENC update or new edition. This means that you can see the change on the ECDIS and use the pick report to obtain more information in the normal way. The ECDIS Route Assessment tools will automatically assess the temporary information because it appears as standard ENC objects. Your passage plan should be compiled as normal using what you see displayed on your ECDIS along with the pick reports.

Some producers do not describe the information as 'temporary' or 'preliminary' in their ENCs; they simply issue updates as required.

ECDIS symbology

A 'd' symbol is displayed on ECDIS when the ENC producer codes a feature with time-based attributes such as start or end date. It can be used for seasonal buoys, traffic separation schemes etc.



Date dependent features display according to the date set on your ECDIS. Therefore, it is advisable to plan your route with the ECDIS set to the dates of the intended passage.

Using AIO

You should have AIO active on your ECDIS screen during passage planning.

Use the ENCs and route checking in the normal way, noting any features that are described in the pick report as being temporary.

Check your route with the ECDIS date set to the planned passage time.

You may see coloured polygons that are associated with ADMIRALTY paper T&P NMs issued by the UKHO. The T&P NMs will be giving you additional information that is not already included in your ENCs. You should then open the text of the notice using the ECDIS Pick report to assess and include the information in your passage plan as necessary. You may wish to annotate your ECDIS display with key information from the T&P NM, so it is available as a prompt for watchkeepers if you prefer to hide the AIO during passage monitoring.

If you use the mariner's notes function on your ECDIS to mark the temporary items of interest, your notes should be checked against each AIO update.

Compliance

ADMIRALTY paper T&P NMs are not issued as corrections to electronic charts. Audit and compliance inspections require you to demonstrate that you are working with the latest ENC updates for your passage plan.

You are also required to demonstrate that you have a system in place to reasonably obtain and assess temporary information. Temporary information for digital navigation can be obtained from:

- The information encoded in the ENC.
- Extra information in AIO that may not be included in ENCs, where there is equivalent coverage by ADMIRALTY paper charts.
- Other sources on board such as Navtex.



Local authorities, such as agents or port authorities.

Where the information is included in the ENC, you do not need to assess paper chart notices as part of the passage plan, unless you are navigating with paper charts.

Further guidance

The ADMIRALTY Guide to the Practical Use of ENCs (NP231) gives guidelines for using AIO and ENCs during passage planning and monitoring, including the use of T&P NMs.

Frequently asked questions

Why does AIO not have all T&Ps?

To avoid duplication and reduce screen clutter. Many countries now issue temporary information as an update to their ENCs. If you are navigating digitally you don't need to receive and manage the information more than once.

How do I get T&Ps?

Digital vessels without paper charts receive temporary information as updates and new editions of ENCs. AIO also provides additional information. If you need all the ADMIRALTY T&Ps, they can be obtained from the Weekly Notices to Mariners Bulletin or from digital services available from your Distributor.

Can I use AIO to receive T&Ps for my paper charts?

AIO is for digital chart users. Paper chart users must use the T&P NMs published in the weekly bulletin, as paper or download versions.

Will I get a deficiency when the inspector checks my T&Ps?

You will need to show that you have the latest ENC updates, and that your procedures extract all relevant information from them, including any

temporary information. AIO will continue to provide ADMIRALTY T&P information where it has not been included in the ENC.

Should I mark up the ECDIS with T&Ps?

If you wish, you can use Mariner's Notes to highlight temporary information in ENC or AIO on your ECDIS. Temporary information only has a T&P Notice number when it applies to an ADMIRALTY paper chart and is in AIO.

Why is the list of ADMIRALTY T&Ps in the Weekly Bulletin different to AIO?

ADMIRALTY T&P NMs are issued for paper charts, and therefore may not be added to AIO. Some of the T&P NMs in the Weekly Bulletin will have been issued in earlier AIO updates.

How do I know which ENCs contain temporary information?

A list of countries that publish temporary information in their ENCs is available at <u>admiralty.co.uk/avcs</u> and in the INFO folder of AVCS DVD and AIO CD exchange sets.

Which countries are not covered by AIO?

AIO serves the whole world, but temporary information is included in the overlay according to the rules given in the first section above.

Troubleshooting

ADMIRALTY

Vector Chart Service

ENC Validation

AVCS

The majority of the ENC validation checks defined in the IHO Standard S-58 are intended for use in the ENC validation software that is used by Hydrographic Offices and Regional ENC Coordinating Centres. These were not intended to be used in ECDIS. However, some system manufacturers have incorporated and interpreted some, or all the ENC validation checks in their ECDIS software. As a result, you may see misleading messages indicating that officially produced and released ENC data contains errors, when it does not. In some cases, official ENC data may even being reported as not suitable for navigational use.

You should only report these errors where an ENC has failed to load. These are normally identified by the ECDIS as a fatal error or ENC failed import. UKHO will seek to resolve these cases with the ENC producer.

Incorrect chart information

According to IHO rules, each producer is responsible for producing the ENCs in their own waters. As a result, UKHO is unable correct any errors that are reported by users, except for GB ENCs. However, we will pass on any user feedback to the Producer Nation with the aim of resolving any issues.

Security Scheme Errors (SSE)

As part of the IHO Standard S-63 Data Protection Scheme, ECDIS have to include standard error and warning messages called Security Scheme Errors (SSE). The table below shows a list of the SSE codes:

Error messages likely to be displayed in an ECDIS		
SSE 03	Certificate is invalid (Authentication failure)	
SSE 04	Format of Certificate is incorrect (Authentication failure)	
SSE 05	SA Digital Certificate file is not available (Authentication failure)	
SSE 06	SA Digital Certificate is invalid (Authentication failure)	
SSE 07	Certificate file is not available (Authentication failure)	
SSE 08	Format of Private Key is incorrect (Authentication failure)	
SSE 09	Signature is invalid (Authentication failure)	
SSE 10	Files are different (check after decryption)	
SSE 11	Cell Permit file not found (Decryption failure)	
SSE 12	Cell Permit format is incorrect (Decryption failure)	
SSE 13	Cell Permit is invalid (checksum [CRC] is incorrect / decryption failure)	
SSE 14	Incorrect system date	
SSE 15	Subscription licence has expired	
SSE 16	ENC CRC value is incorrect	

- Codes 03 to 09 relate to the ECDIS check of the authenticity of the exchange sets being loaded
- Codes 11 to 13 relate to the permits supplied
- Codes 14 and 15 relate to checks on licence validity
- Codes 10 and 16 relate to checks carried out on the consistency of the ENC data





Conversion errors

When ENCs are loaded into an ECDIS they are converted from the standard S-57 format they are supplied into the system specific format of the ECDIS being used (the System ENC – SENC).

Data being supplied within AVCS has been validated to very high standards but when loading ENCs the ECDIS could report that it is unable to load the ENC data or loads and reports an error. This is not common. If the problem persists, please contact your ADMIRALTY Distributor.

Technical support

You will receive the most effective support if you address your initial query to the correct organisation.

Problem	Contact
Hardware problems:	
difficulties with the keyboard, mouse, display or main system console, CD or DVD drive.	ECDIS
Software problems:	Manufacturer
difficulties with configuring or using the ECDIS system software, interfacing problems.	
Chart installation problems:	
problems with installing certificates, permits and AVCS ENCs, standard error codes displayed.	ADMIRALTY
Chart content problems:	Distributor
display anomalies or mismatched data displays.	

When reporting a chart related problem, it is useful if you can provide the following details:

- Licence Number
- Vessel Name
- ECDIS/Software Manufacturer
- Details of error message Including 'SSE' error code
- Screen shot(s) of error
- Details of DVD used (date) if applicable
- Details of permits used (date)
- Details of Cell number(s) errors apply to latest update loaded
- Details of User Permit(s)

Emergency chart permits

In certain circumstances it may be necessary for a vessel to get access to extra ENCs at very short notice. Your ADMIRALTY Distributor has access to the UKHO 24-hour online ordering system and can very quickly deliver new permits to you by email or internet. Also, some ECDIS or bridge software systems allow you to order and download new permits yourself.

If these options are not available to you and you need new permits **due to a medical or safety emergency only,** individual AVCS ENC Permits can be obtained from the UKHO at any time. Please quote Vessel Name, ECDIS User Permit Number, required ENC(s) and reason for request.

These permits can be transmitted direct to the vessel by email, or simply by reading the characters out over the telephone.



About us

The UK Hydrographic Office is a global centre for hydrographic understanding, delivering data and expertise to support safe, secure and thriving oceans.

Trusted by customers and partners worldwide

We deliver quality innovative maritime navigation solutions through our ADMIRALTY products and services, which are relied upon by over 90% of large ships trading internationally to support safety, efficiency and compliance.

For more information, contact our global network of ADMIRALTY Distributors. Alternatively, contact our customer service team.



Admiralty Way, Taunton, Somerset TAI 2DN, United Kingdom Telephone +44 (0)1823 484444 customerservices@ukho.gov.uk gov.uk/ukho

Discover more about our market-leading ADMIRALTY products and services:

admiralty.co.uk 🛅 🖸 🕤 🚳

