



**AVCS**

**ADMIRALTY**  
Vector Chart Service

# Using the ADMIRALTY Vector Chart Service with Danelec ECDIS

This guide is based on the Danelec 1.20 – 1.50 Series ECDIS Version 5.0.83.546



United Kingdom  
Hydrographic Office

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# 1 Introduction

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- > The purpose of this guide is to provide equipment-specific information to assist users in managing their AVCS ENC holdings.
- > This guide should be used in conjunction with the AVCS User Guide, as well as the ECDIS Operators Manual or other documentation as supplied by the equipment manufacturer.
- > The actual instructions and screenshots in this guide are based on the version of the Danelec ECDIS installed in the UKHO as detailed on the front cover. There may be minor differences between certain models (i.e. screen layouts may vary).

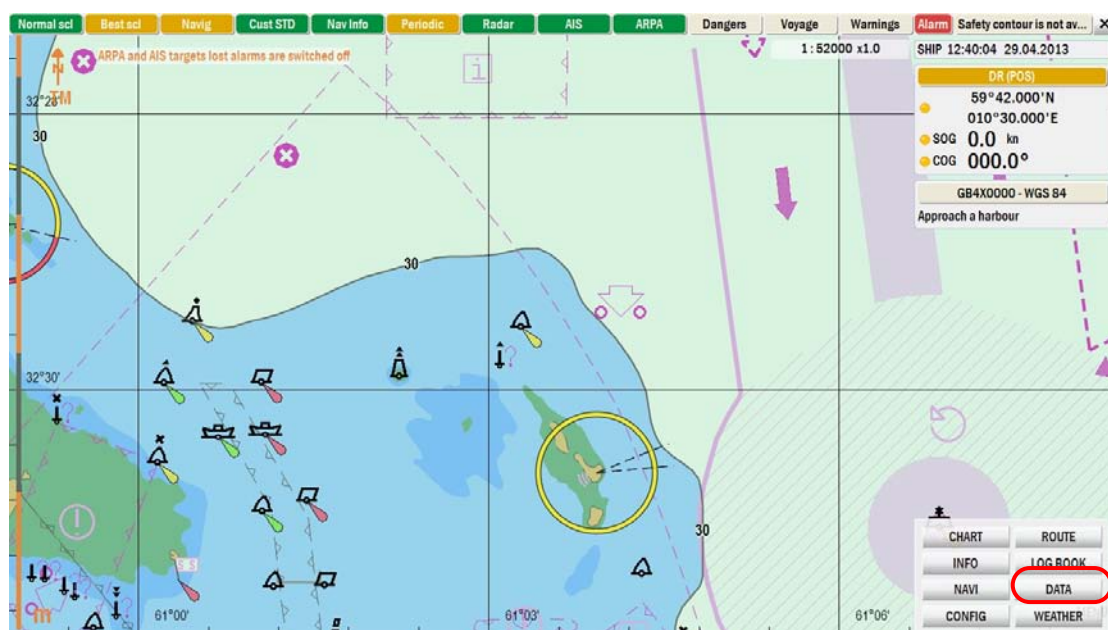
## 2 Data Management

All electronic chart licensing and data management operations are carried out through the 'DATA' menu option.

Within the ECDIS move the cursor over the 'Menu' icon in the bottom right hand corner of the screen.



This provides the user with a further eight menu options. To manage the ENC Data select the 'DATA' option.



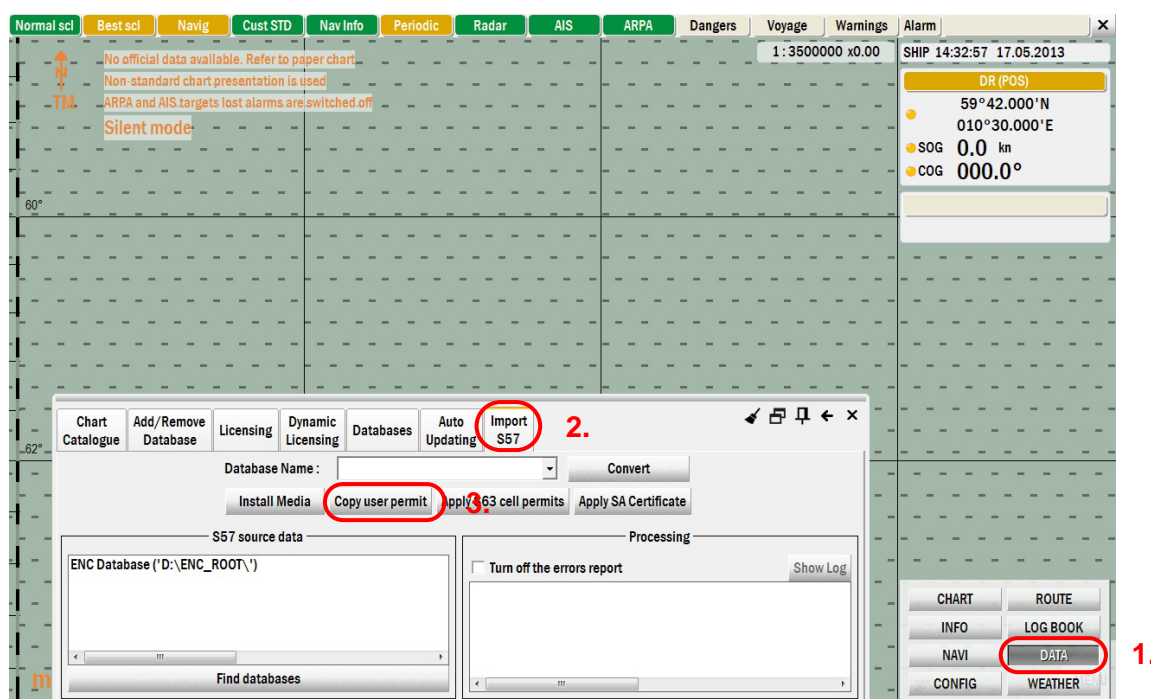
### 3 The User Permit Number (UPN)

The User Permit Number is a 28 character alphanumeric string that is unique to each ECDIS installation or group of ECDIS, e.g. multiple bridge installations. The User Permit Number should have been supplied at the time of delivery and must be used when ordering an AVCS licence.

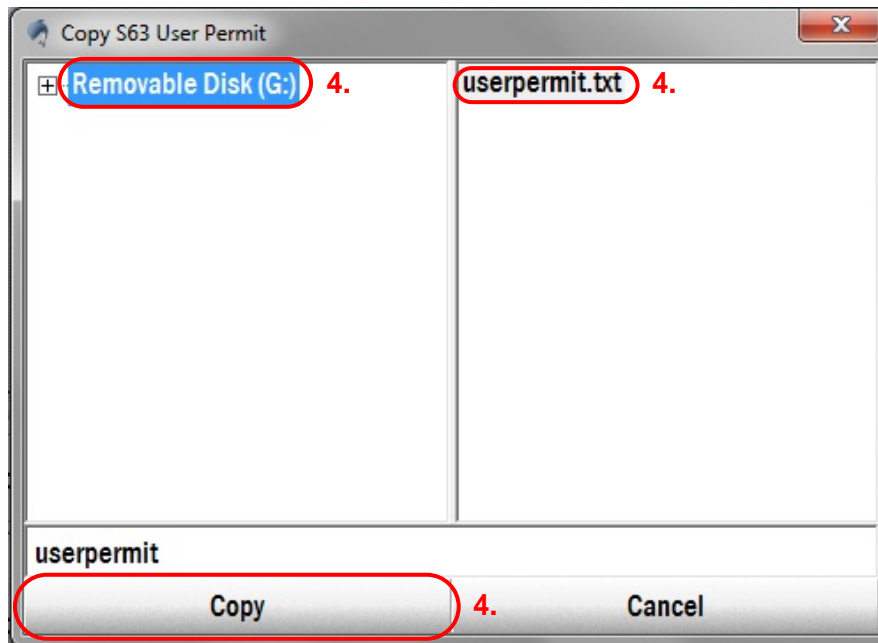
The *User Permit* can be retrieved from within the Danelec ECDIS in the form of a text file as it is not possible to display the User Permit on the screen.

Main MENU: 'DATA' → 'Import S57' tab

1. From main 'Menu' select the 'DATA' option
2. Select the 'Import S57' tab.
3. Select the 'Copy user permit'



4. Browse to an appropriate location to save the file and select 'Copy'. This will save the file to the given location.



This will save a text file to the selected location.



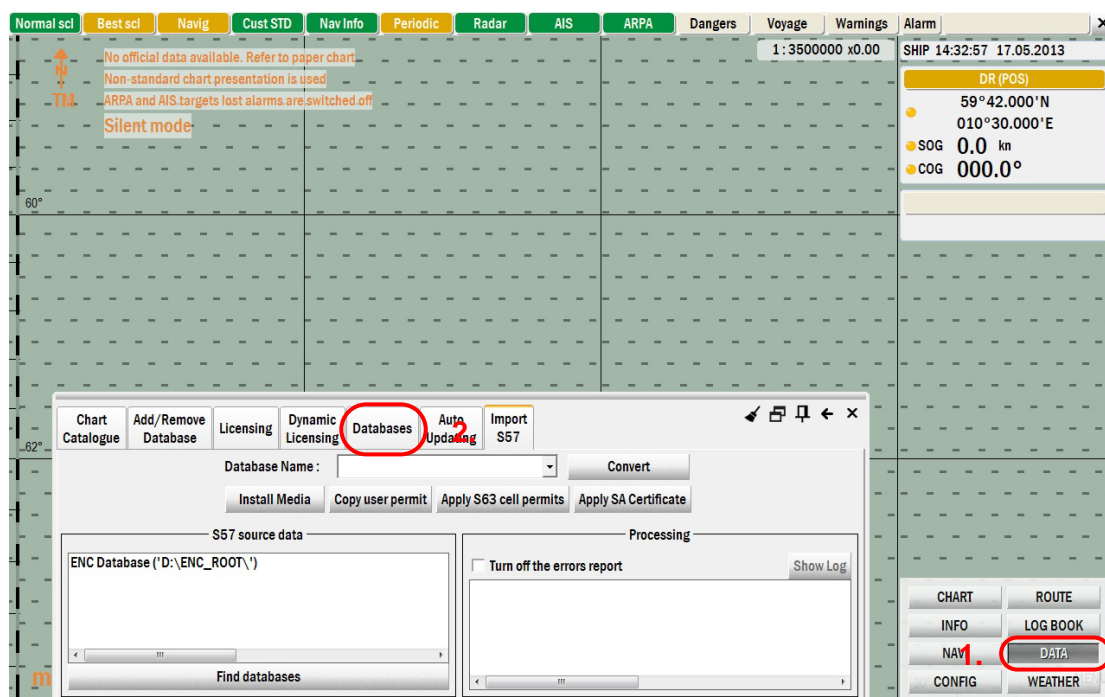
## 4 Deleting ENC Data

New AVCS customers who had previously subscribed to other ENC services are **strongly** recommended to remove (purge) all ENC Permits and ENCs from the system before installing AVCS. For more information please refer to the 'Data Cleansing' section in the AVCS User Guide.

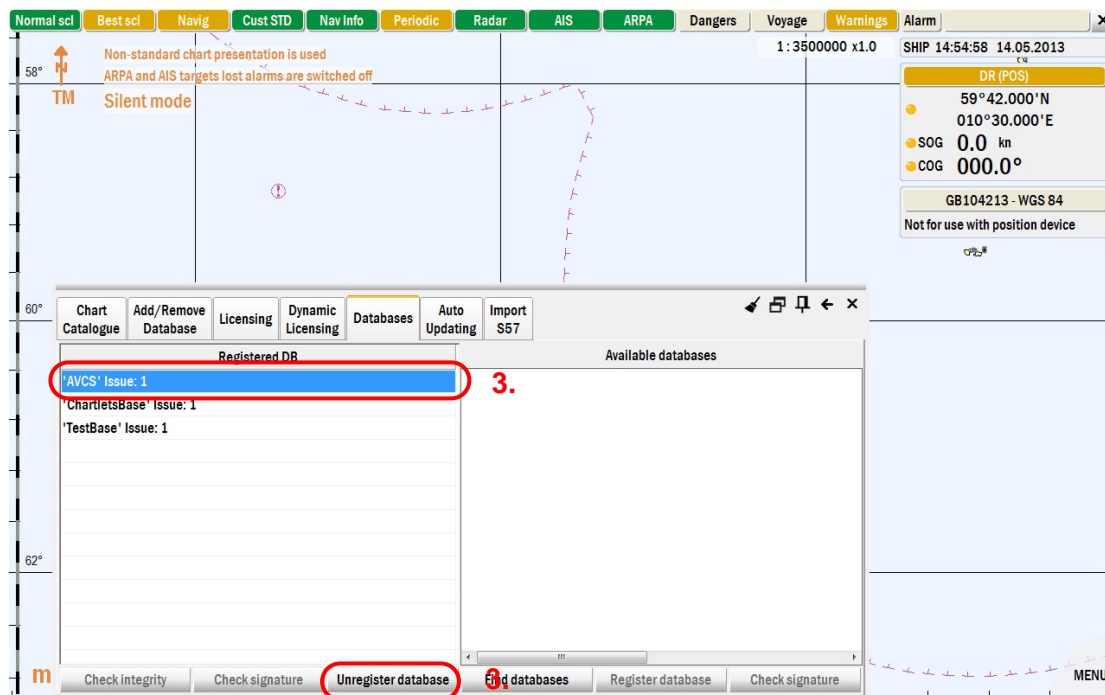
When there are installed charts in the ECDIS the user can choose to remove (delete) all of the installed ENCs from the system database (SENC). This is achieved by removing the required Database.

Main MENU: 'DATA' → 'Databases' → 'Unregister database'

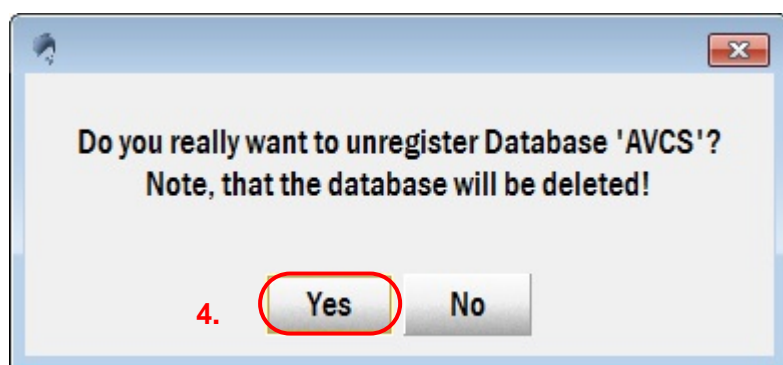
1. From main 'Menu' select the 'DATA' option.
2. Select the 'Databases' tab.



- Highlight the required database in the 'Registered DB' section of the screen and select 'Unregister database'.



- Select 'Yes' to confirm deletion of the database.



This process will remove all of the ENC data relating to that particular database.

**Note:** The Danelec ECDIS does not allow the deletion of individual ENCs



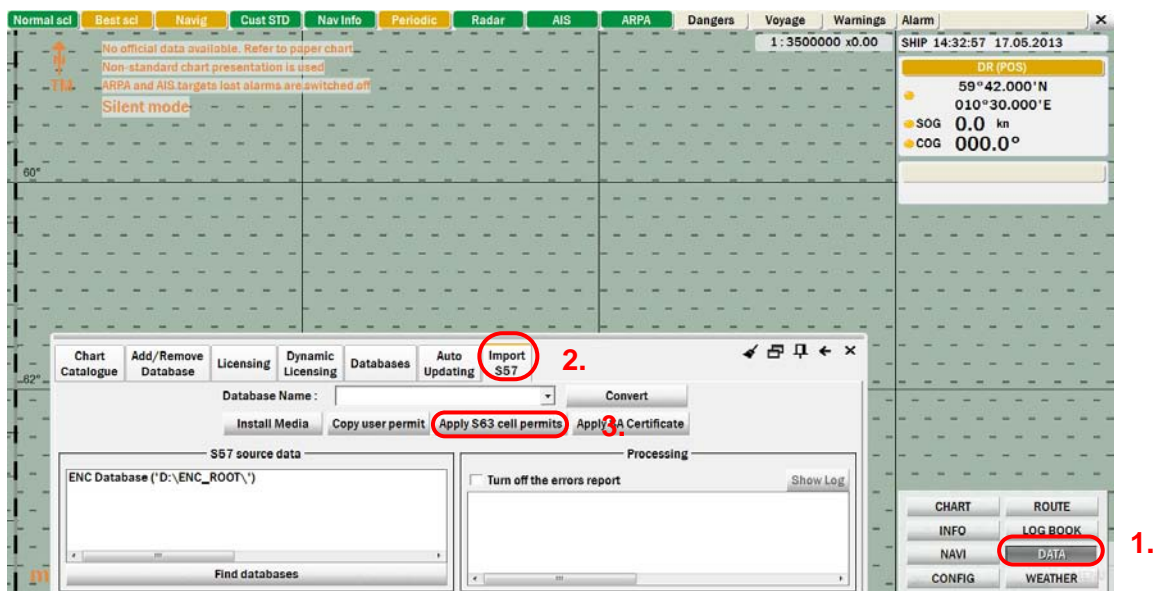
## 5 Deleting ENC Permits

If the user has previously subscribed to another ENC service it is advised to remove these ENC permits from the ECDIS system before use. The user must select the cells for which permits are to be deleted. In most instances this will simply involve selecting all cells. In certain circumstances it may be required to remove permits for individual cells, in this case simply select the cells for which permits need to be deleted.

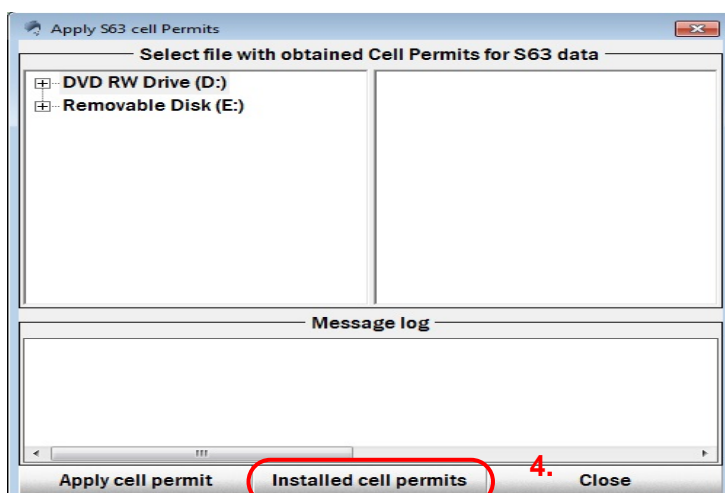
To delete ENC permits:

*Main MENU: DATA → Import S57 tab → Apply S63 cell permit → Installed cell permits*

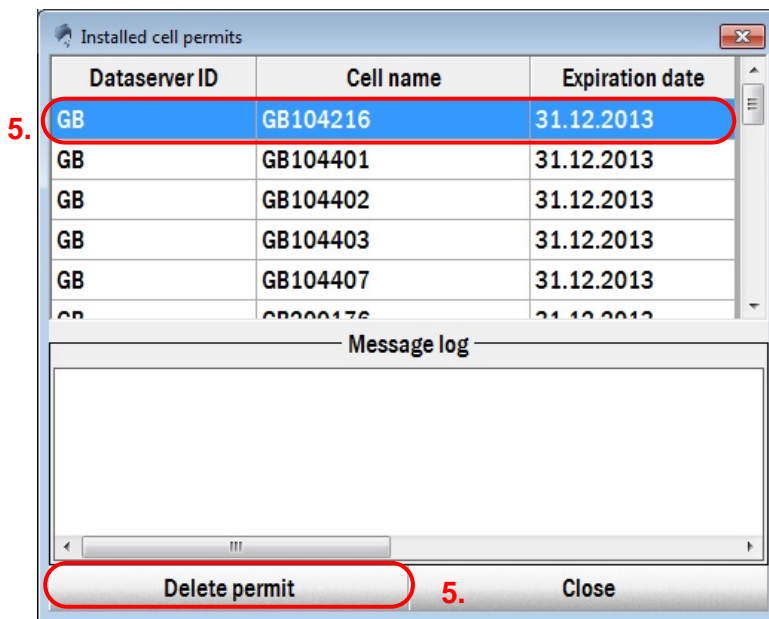
1. From main 'Menu' select the 'DATA' option.
2. Select the 'Import S57' tab.
3. Select 'Apply S63 cell permits'.



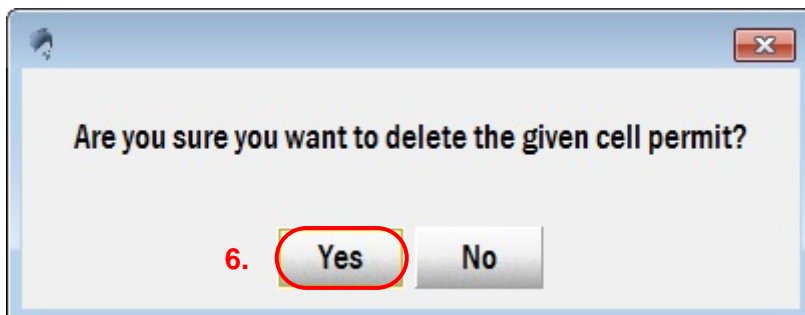
4. In the 'Apply S63 cell permits' window select 'Installed cell permits'.



5. Highlight the cell permit to be deleted and select *'Delete permit'*.



6. Select *'Yes'* to confirm deletion.



Repeat the above process as required.

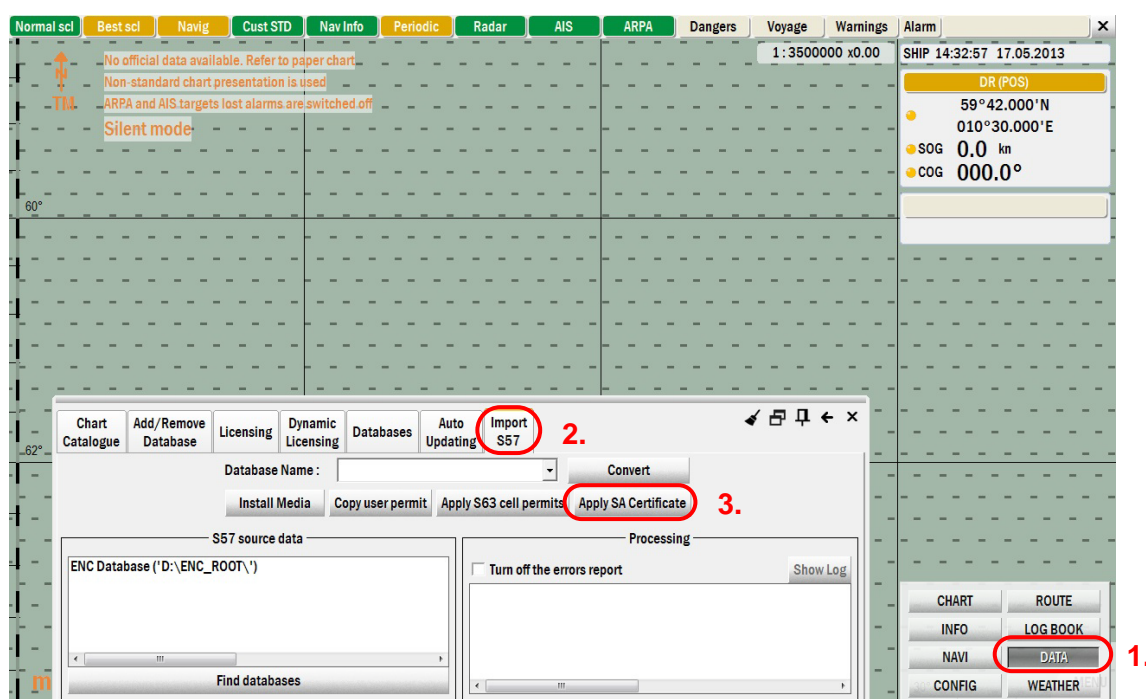
## 6 The Public Key

The Admiralty Vector Chart Service currently uses the IHO.CRT, issued by the International Hydrographic Organisation, to authenticate its AVCS ENC's. The IHO Public Key is included in all AVCS media.

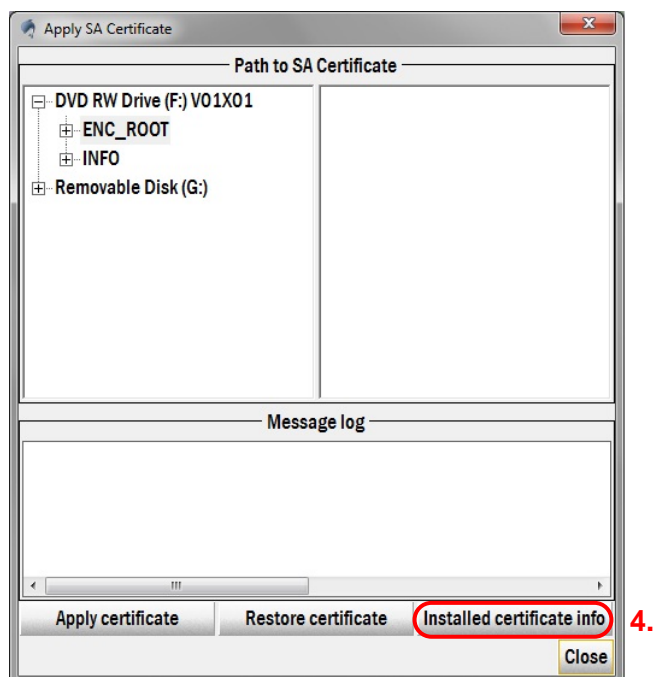
To view the installed Public Key follow the below steps:

*Main MENU : DATA → Import S57 → Apply SA Certificate*

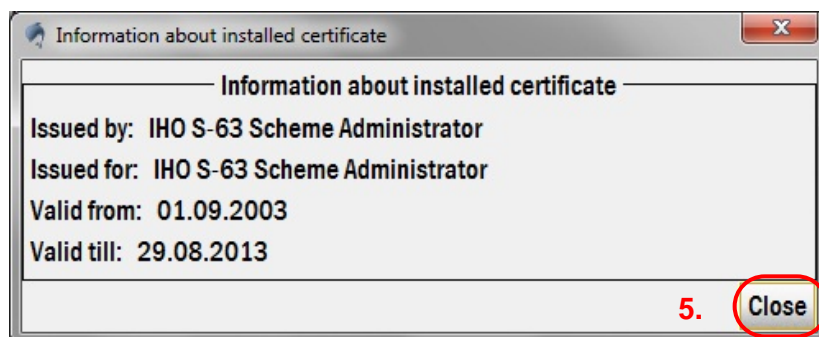
1. Select 'DATA' from the main 'Menu'.
2. Select the 'Import S57' tab.
3. Select 'Apply SA Certificate'.



4. On the 'Apply SA Certificate' screen select the 'Installed certificate info'.



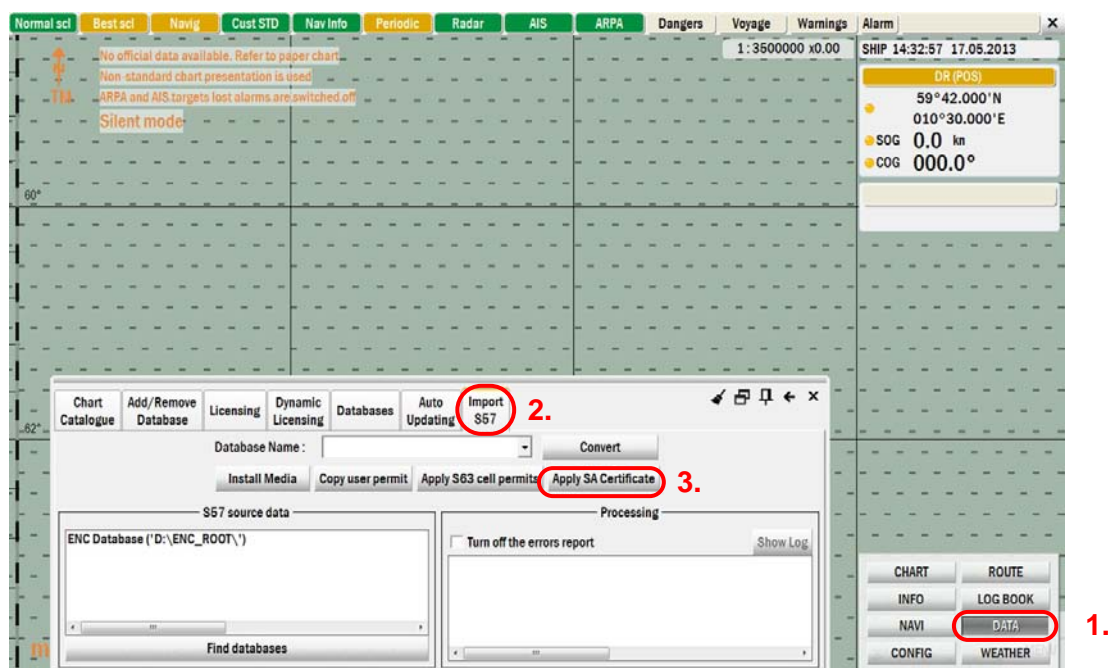
5. This will display information about the currently installed Public Key. Select 'Close' to complete the process.



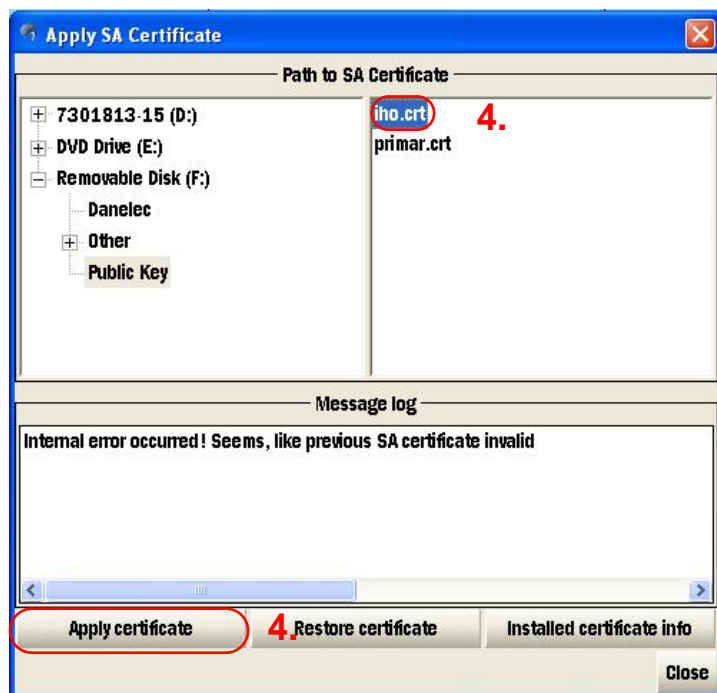
If the Public Key currently installed is not the IHP.CRT it will need to be installed prior to AVCS being installed. To do this insert any AVCS Media into your ECDIS and follow the below steps.

Main MENU : DATA → Import S57 → Apply SA Certificate

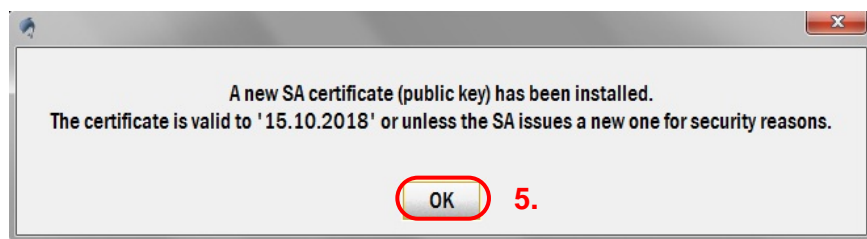
1. Select 'DATA' from the main 'MENU'.
2. Select the 'Import S57' tab.
3. Select 'Apply SA Certificate'.



4. On the 'Apply SA Certificate' screen browse to the location of the IHO.CRT. Select the IHO.CRT and select 'Apply certificate'.



5. This will then install the IHO.CRT. Select 'OK' to complete the process.



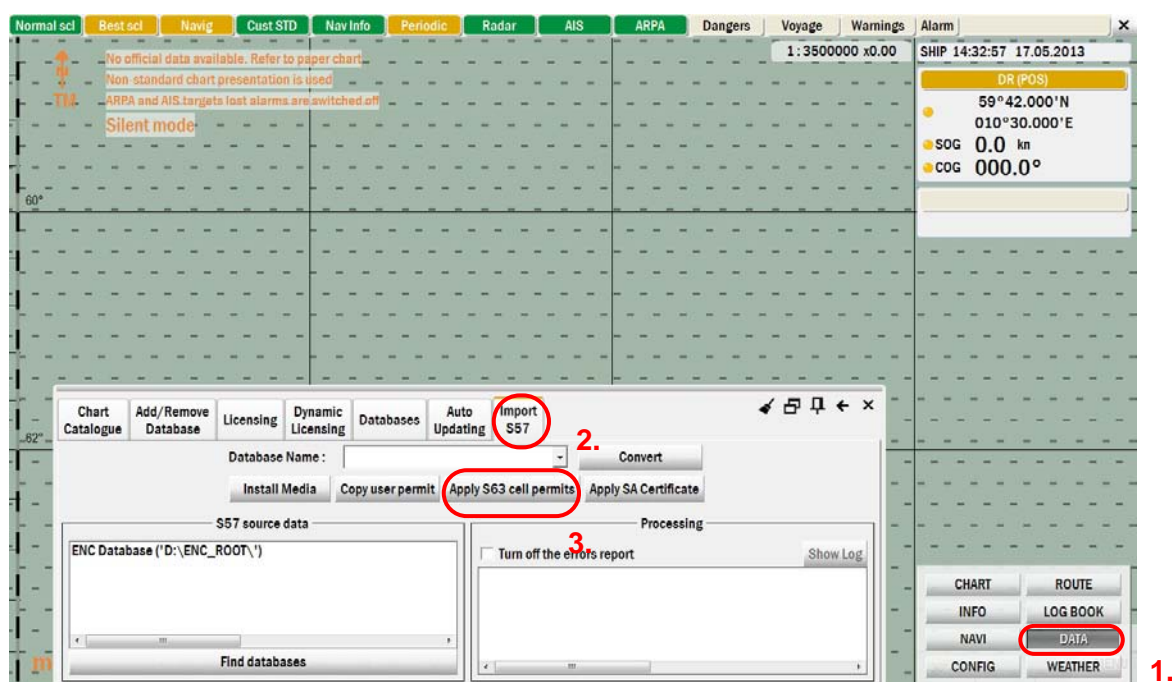


## 7 Installing ENC Permits

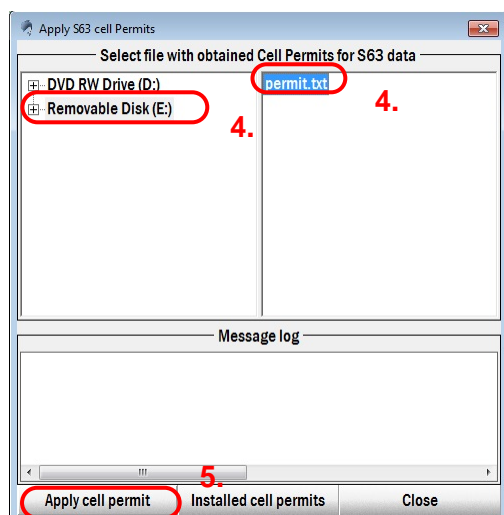
To install AVCS ENC Permits into the Danelec ECDIS please follow the directions below:

*Main MENU: DATA → Import S57 tab → Apply S63 cell permits*

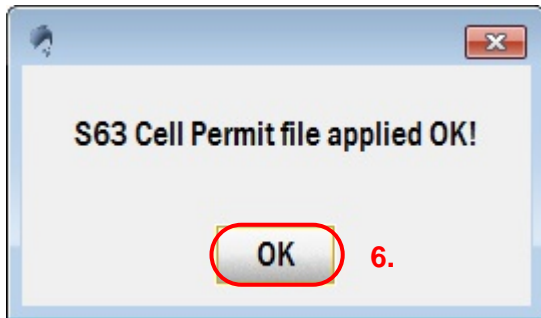
1. From main “Menu” select the “DATA” option.
2. Select the “Import S57” tab.
3. Select “Apply S63 cell permits’.



4. Browse to the location of the “permit.txt” and select the file.
5. Select “Apply cell permit”.



6. Confirmation that the permits have been loaded will be displayed. Select “OK” to complete the process.



## 8 Installing AVCS Base CDs

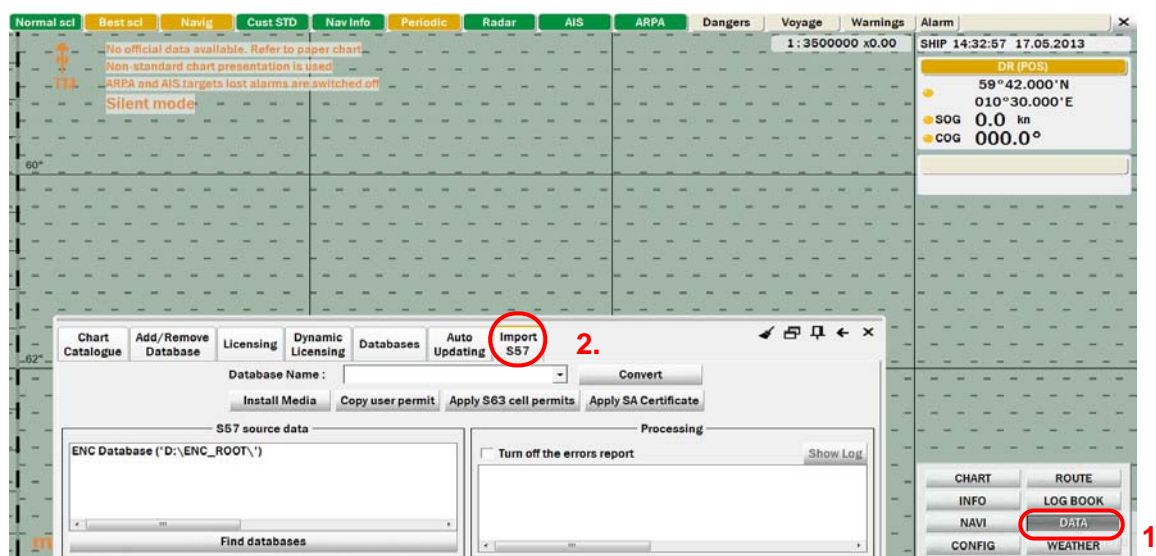
There are currently 9 AVCS Base CDs but this number will grow as more ENC's become available for distribution within AVCS. It is unlikely that users will need to install all of the CDs in order to load all licensed ENC's. Reference to the **Schedule A** can avoid the unnecessary loading of some CDs and save the user time.

The process described here should be used in almost all circumstances as it will automatically select data to be loaded according to the permit file installed by the user.

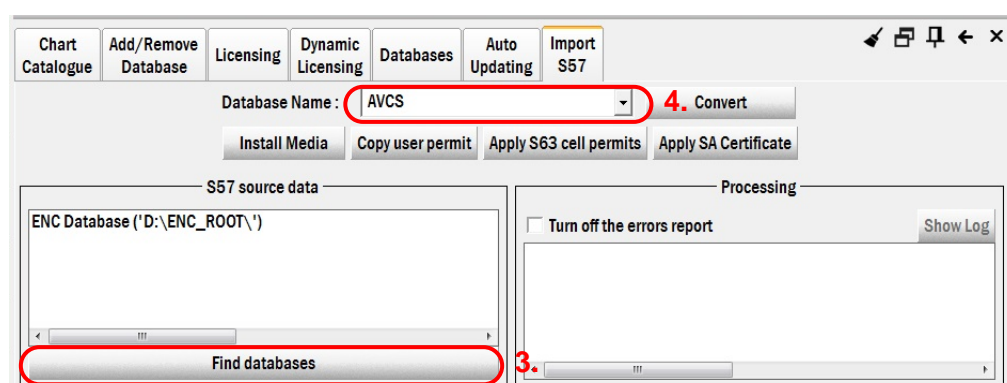
**Note:** Ensure the latest permits have been installed before attempting to install any data

Main MENU: DATA → Import S57

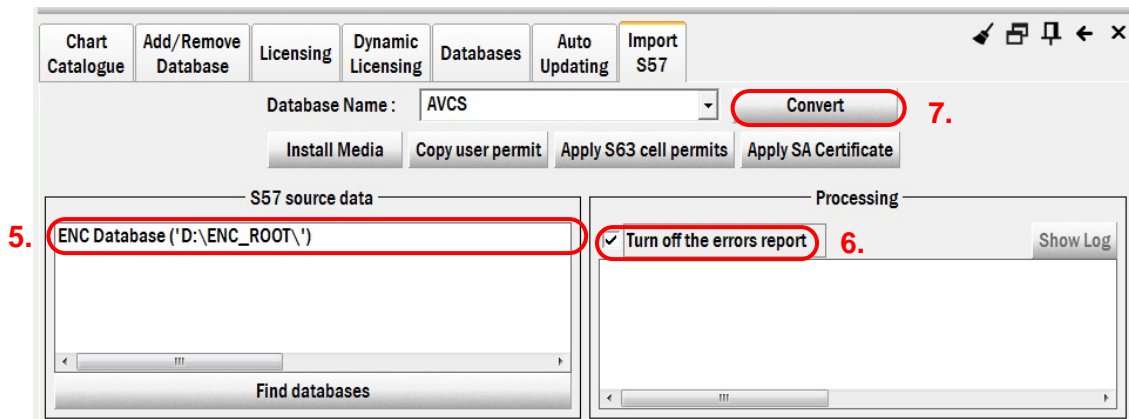
1. From main "Menu" select the "DATA" option.
2. Select the "Import S57" tab.



3. Insert AVCS Base CD and select "Find databases".
4. Enter a name in the "Database Name" section.

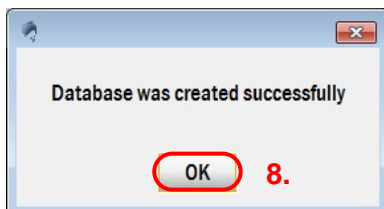


5. Select the CD in the “S57 source data” section.
6. Make sure the “Turn off the errors report” is ticked.
7. Select “Convert”.

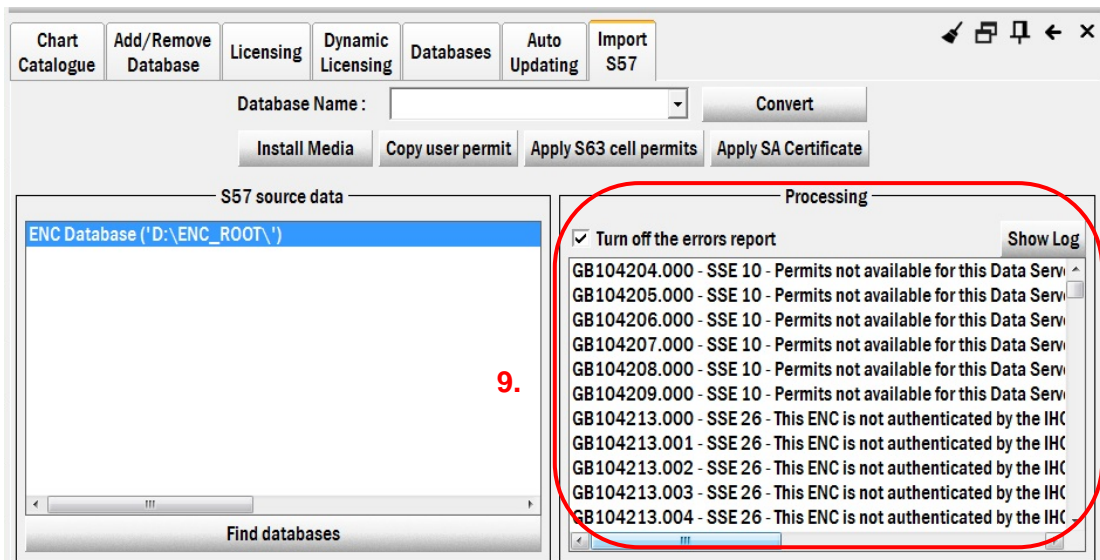


**Note:** It is advised that “Turn off the errors report” is ticked to reduce the manual intervention. “SSE 10 – Permits not available for this data server” will be encountered for charts that they user is not licensed to view.

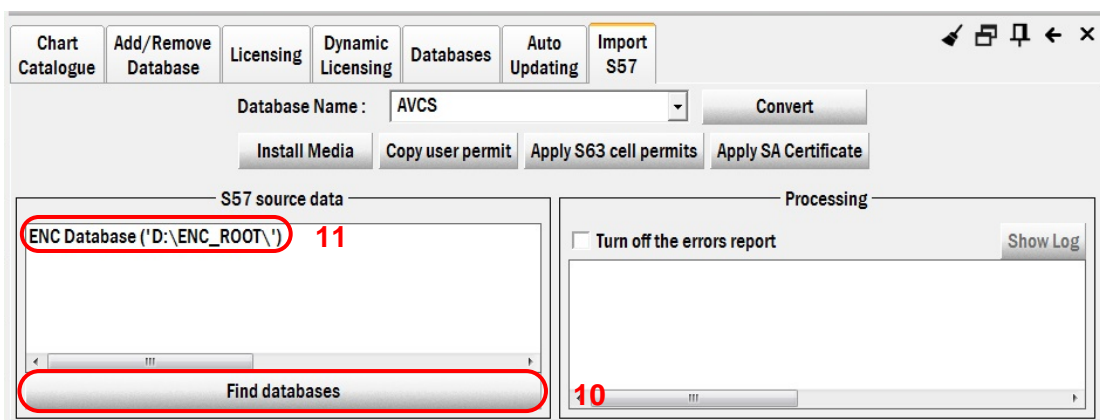
8. Select “OK” to complete the process.



9. Any errors encountered during installation will be reported in the “Processing” section and can aid in resolving loading issues.



10. During Base installation it maybe required to install more than one Base CD, if this is the case insert the next AVCS Base CD into the ECDIS and select “Find Databases”.
11. The ECDIS will then scan the CD populating the “S57 source data” panel.

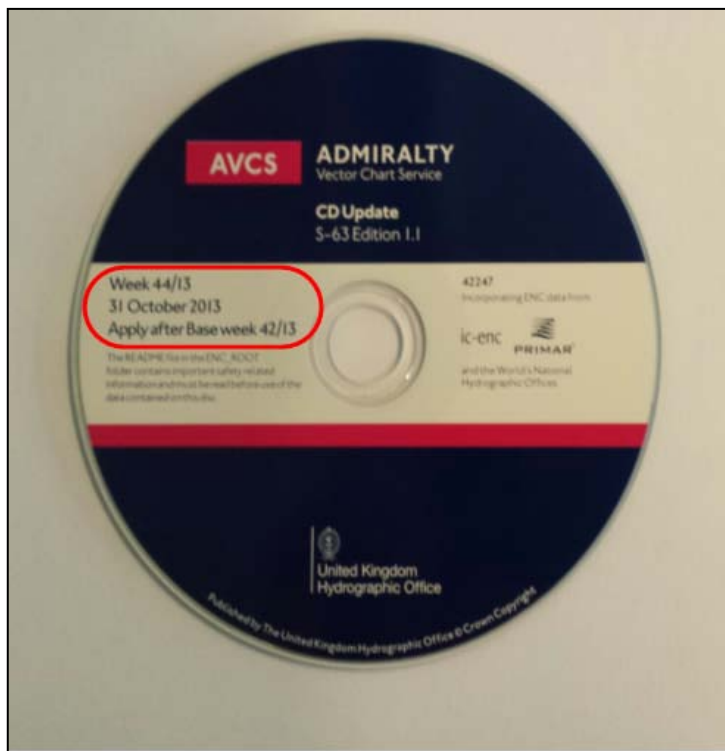


Repeat the above steps for all required AVCS Base CDs.

**Note:** Make sure that all the required AVCS Base CDs have been inserted and the import operations completed before installing the latest Update CD. Updates cannot be applied unless the ENC base file is present in the system database.

## 9 Installing AVCS Update CD

The Weekly AVCS Update CD must only be inserted into the CD Drive after having installed the latest required Base CD(s).

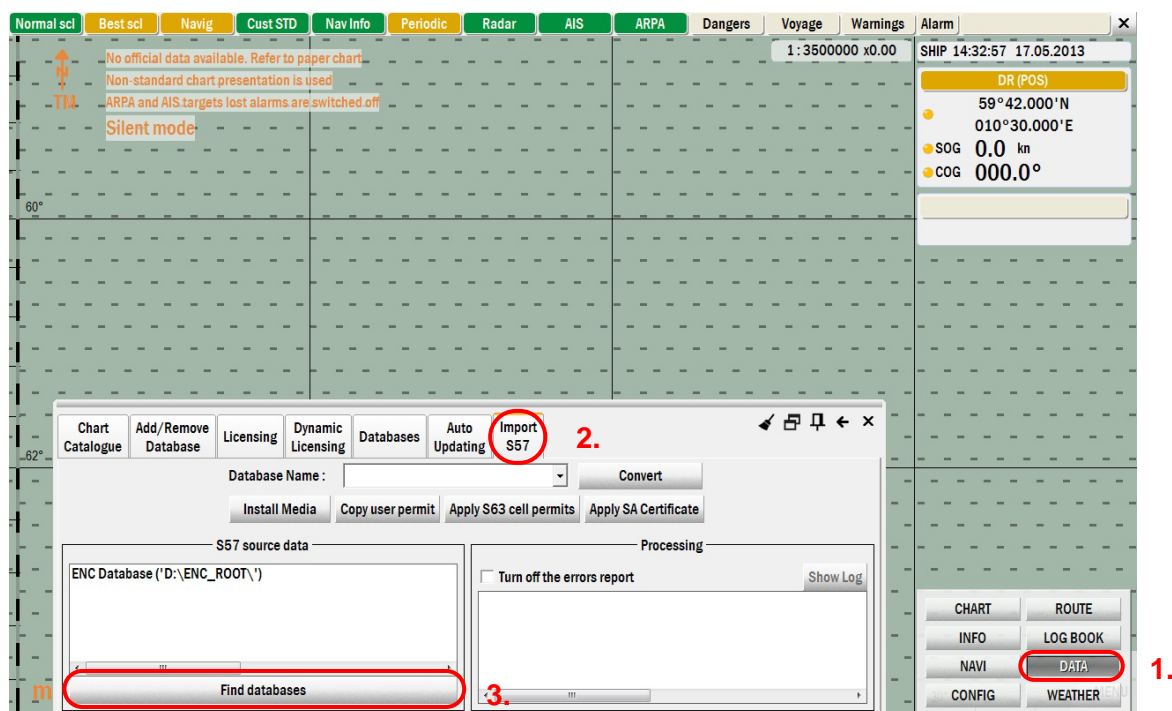


**Note:** Base CDs are re-issued about every 6 to 8 weeks. The AVCS update disc will indicate which Base disc week must have been installed. It is important that users do not attempt to load an Update CD that is not consistent with the Base CDs.

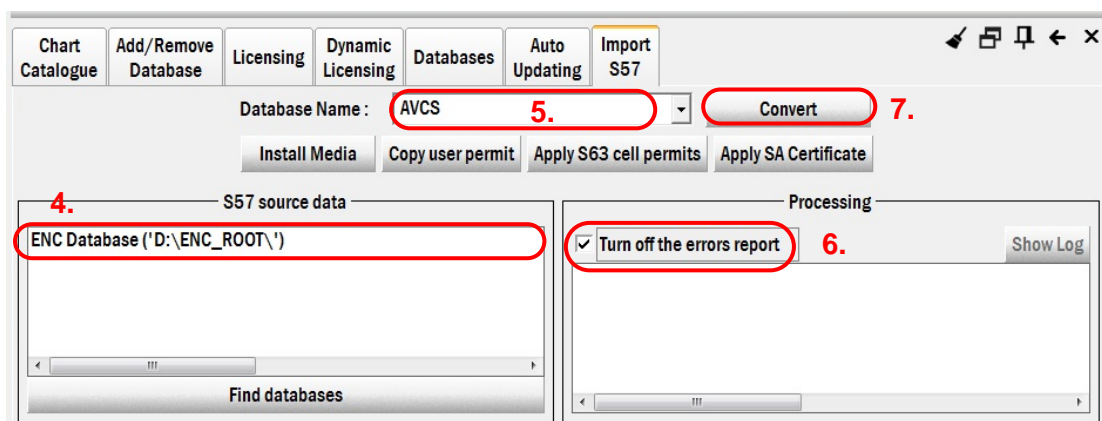
Main MENU: DATA → Import S57

1. From main “Menu” select the “DATA” option.
2. Select the “Import S57” tab.
3. The Select “Find databases” to allow the Danelec ECDIS to scan the AVCS Update CD.





4. Select the CD in the “S57 source data” section.
5. Select the required Database from the drop down menu of the “Database Name” section. This must be the same as the Base Database.
6. Make sure the “Turn off the errors report” is ticked.
7. Select “Convert”.

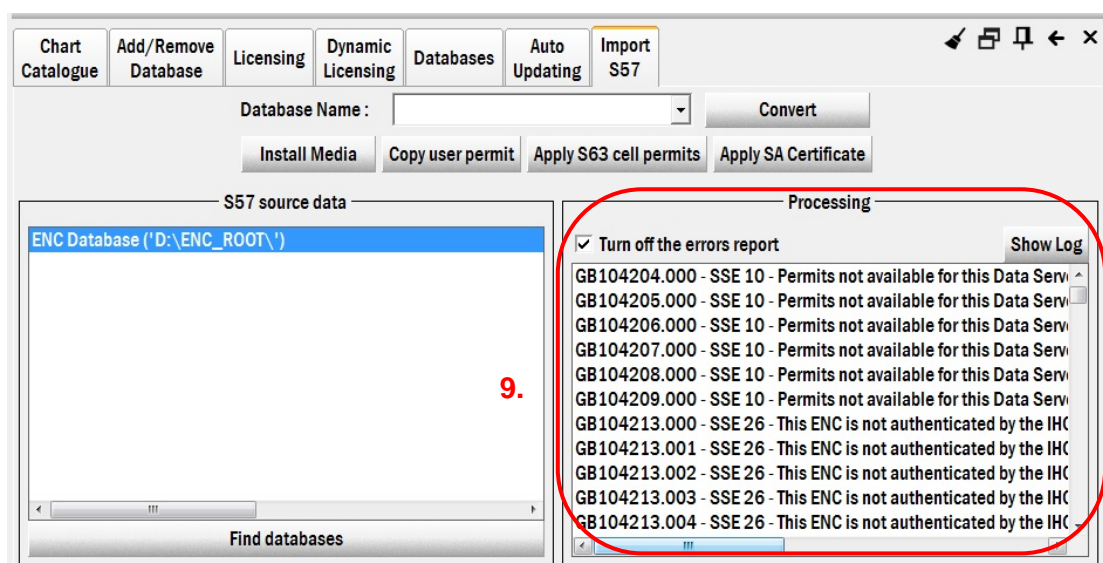


**Note:** It is advised that “Turn off the errors report” is ticked to reduce the manual intervention. “SSE 10 – Permits not available for this data server” will be encountered for charts that they user is not licensed to view.

8. Select "OK" to complete the process.



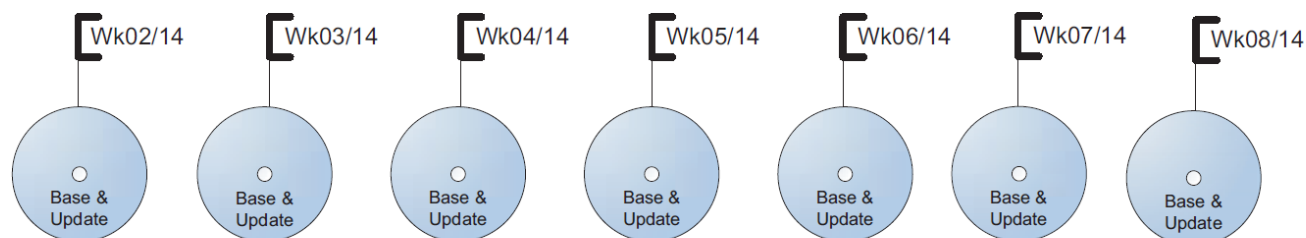
9. Any errors encountered during installation will be reported in the "Processing" section and can aid in resolving loading issues.



## 10 Installing AVCS DVD

When using the AVCS DVD Service only one disc needs to be installed because it contains all the base ENC's and updates up to the date of its issue.

### DVD Service



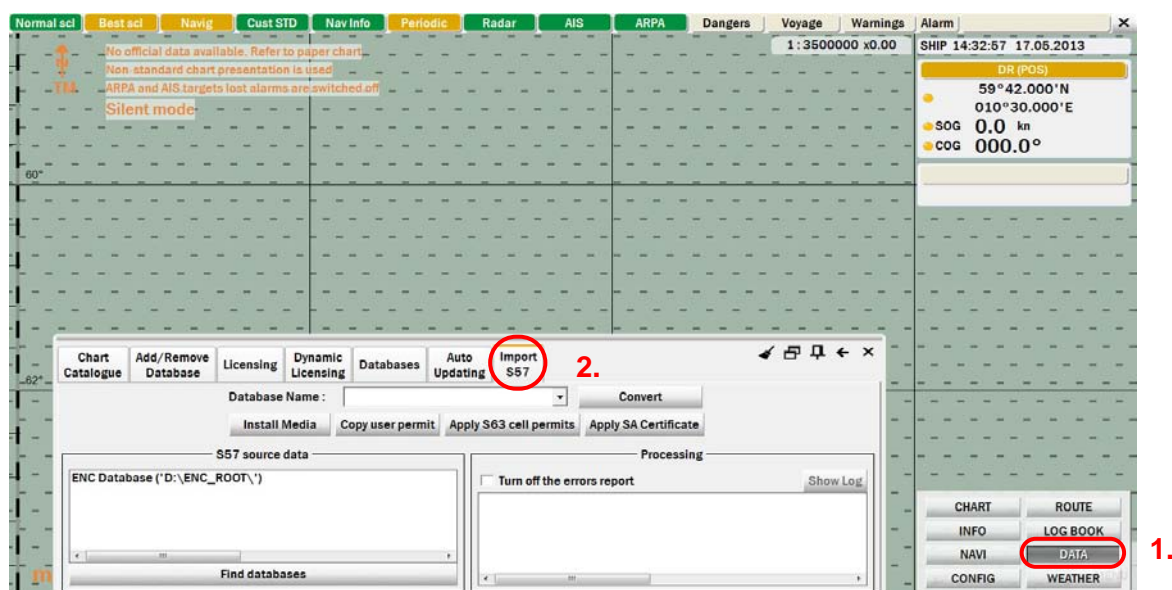
DVD contains Base and Update data for complete AVCS service each week

Week numbers are given as examples only and do not represent the data issued by the UKHO

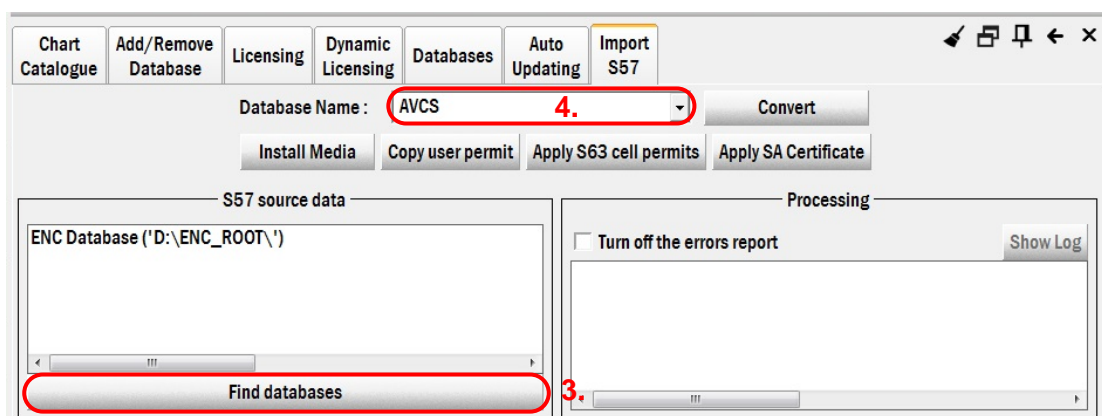
**Note:** The loading process within the ECDIS will be very similar to that required for the AVCS CD Service however there are some minor differences which are detailed below.

Main MENU: DATA → Import S57 → Find database → Install Media

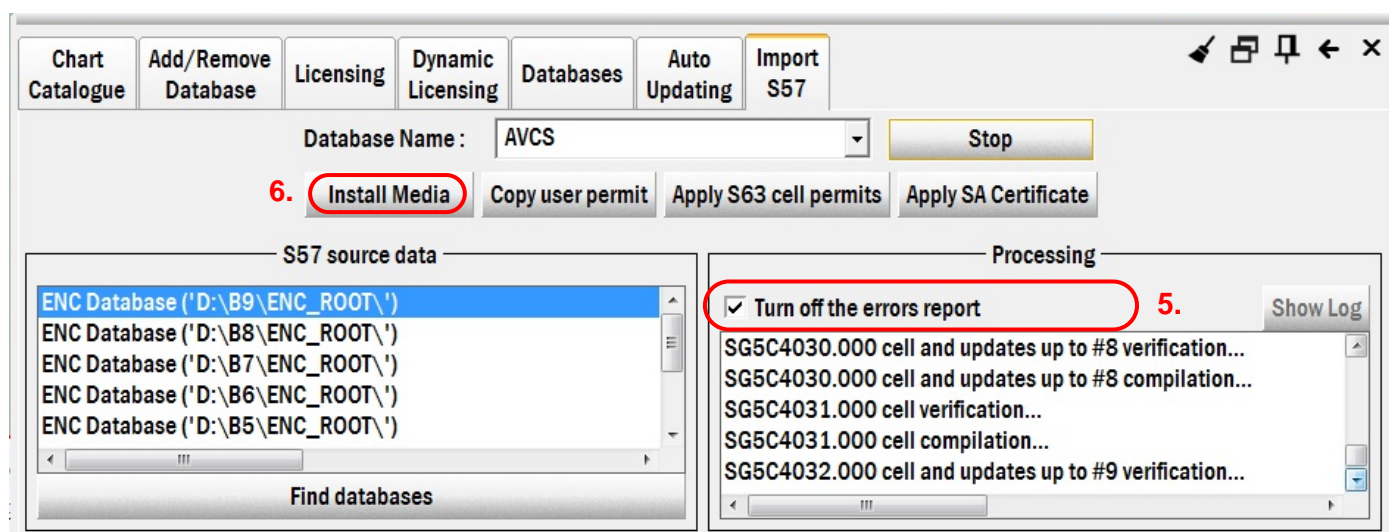
1. From main "Menu" select the "DATA" option.
2. Select the "Import S57" tab.



3. Insert AVCS DVD and select “Find database”.
4. Enter a name in the “Database Name” section.



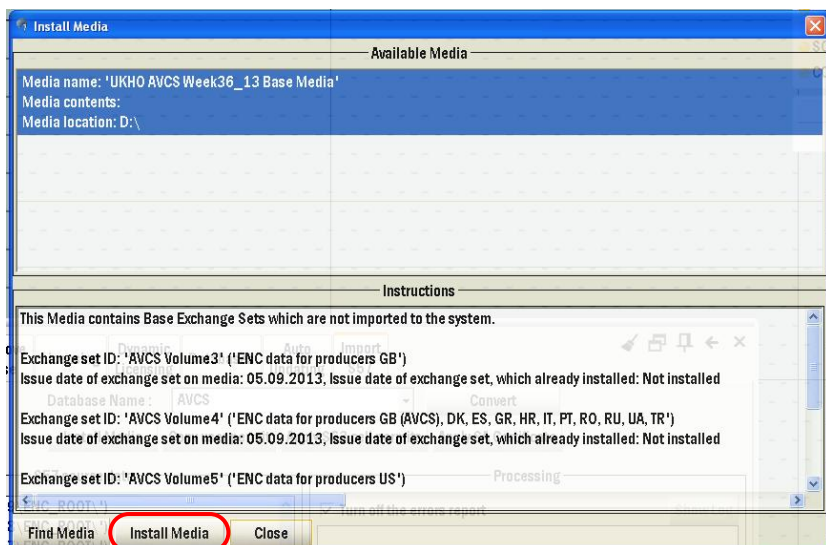
5. Make sure the “Turn off the errors report” is ticked.
6. Select “Install Media”.



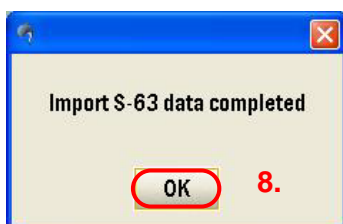
**Note:** It is advised that “Turn off the errors report” is ticked to reduce the manual intervention.

“SSE 10 – Permits not available for this data server” will be encountered for charts that they user is not licensed to view.

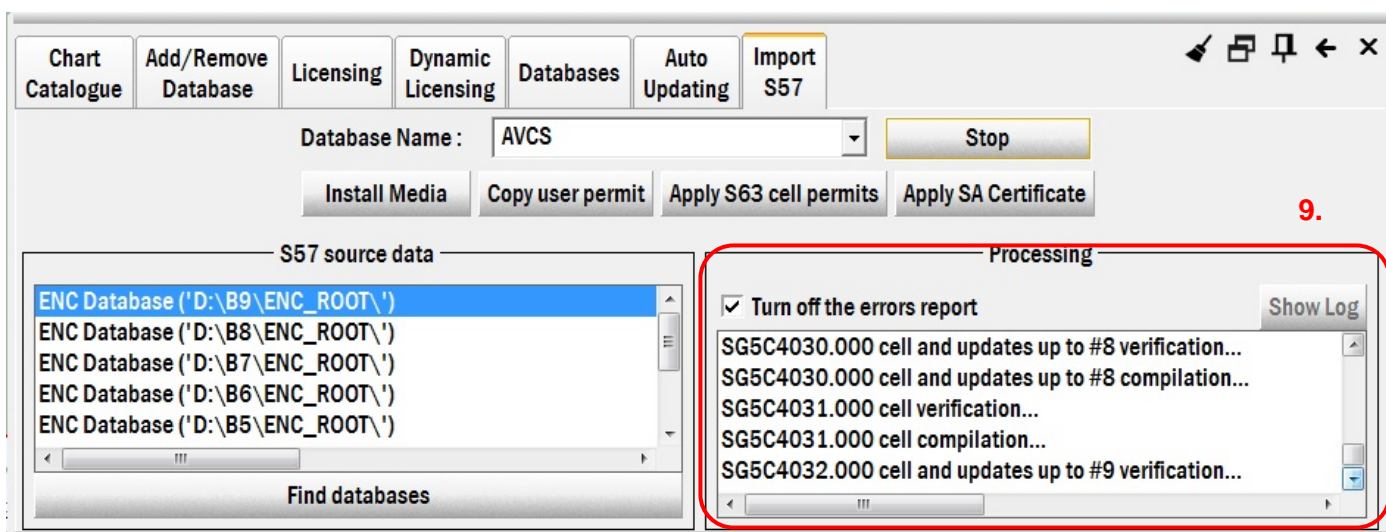
7. From the “Install Media” window select “Install Media”. The AVCS data will then start to install.



8. Select “OK” to complete the process.



9. Any errors encountered during installation will be reported in the “Processing” section and can aid in resolving loading issues.



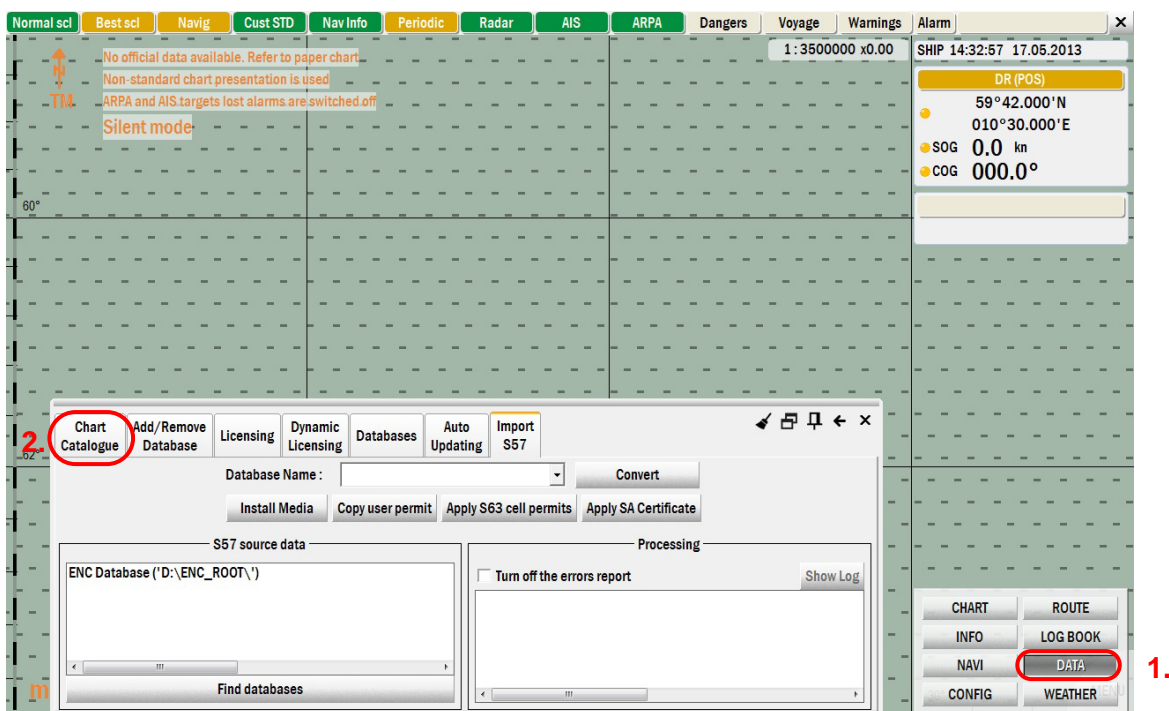


## 11 Systems Checks

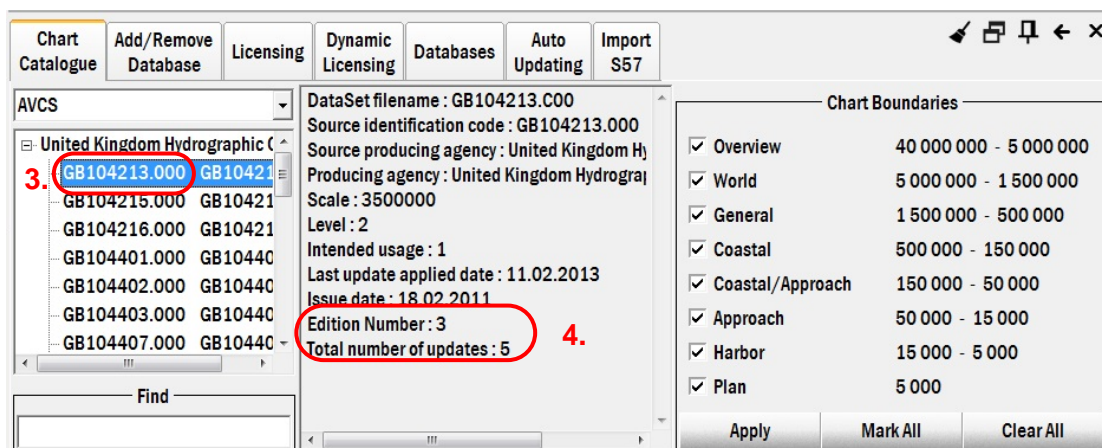
The user has the option to review the status of all installed ENC's from within the Danelec ECDIS as follows:

*Main MENU: DATA → Chart Catalogue*

1. From main "Menu" select the "DATA" option.
2. Select the "Chart Catalogue" tab.



3. Select an AVCS ENC.
4. This will provide details of the status of that particular ENC including the Edition and Update Number.





## 12 Troubleshooting

Many of the difficulties that could be experienced when using the Admiralty Vector Chart Service with this system can be avoided by carefully following the instructions in this guide. However, issues that are known to have caused confusion in the past are detailed in the Frequently Asked Questions (FAQ) section which can be found at:

<http://www.ukho.gov.uk/Support>

If you encounter problems that are not solved by referring to the FAQs, you may wish to seek Technical Support. Please see the section below for contact details.

### Who should you contact?

You will receive the most effective support if you address your initial query to either your ECDIS Manufacturer or ADMIRALTY Chart Agent, but in certain circumstances you may need to contact the UKHO Customer Services.

Problem	Contact
<b>Hardware problems:</b> difficulties with the keyboard, mouse, display or main system console, failure of a floppy disk or CD drive or USB port.	ECDIS Manufacturer
<b>Software problems:</b> difficulties with configuring or using the ECDIS system software, interfacing problems.	
<b>Chart installation problems:</b> problems with installing certificates, permits and AVCS ENC's, standard error codes displayed (see AVCS User Guide).	Admiralty Chart Agent
<b>Chart content problems:</b> display anomalies or mismatched data displays.	
Problems that have not been resolved by your Admiralty Chart Agent.	UKHO Customer Services

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 Base Discs used (date)
- > Details of Update CD used (date)
- > Details of Permits used (date)
- > Details of Cell number(s) errors apply to
- > Have there been any configuration changes to system(s)
- > Details of User Permit(s) and PIN Number(s)

## Emergency Chart Permit Generation

In certain circumstances it may be necessary for a vessel to get access to an AVCS chart at very short notice, for instance if a route needs to be **diverted due to a medical or safety emergency**.

In these emergency circumstances only, individual AVCS ENC Permits can be obtained from the UKHO **24 hours a day, 365 days a year**.

To obtain the AVCS emergency permit, please quote:

- > Vessel Name
- > ECDIS User Permit Number
- > Required ENCs

The permits can be sent directly to the vessel by email wherever possible, by fax, or simply by reading the characters out over the telephone or radio.

Please contact UKHO Customer Services using the contact details below:

Support Hours: 24/7	Telephone:	+44 (0)1823 723366
	Facsimile:	+44 (0)1823 330561
	Email:	<a href="mailto:customerservices@ukho.gov.uk">customerservices@ukho.gov.uk</a>
	Contact:	UKHO Customer Services
	Web:	<a href="http://www.ukho.gov.uk/Support">http://www.ukho.gov.uk/Support</a>

## Feedback

We hope this User Guide assists you in using the Admiralty Vector Chart Service with this system. If you have any feedback on the content of this particular guide, or the online FAQs, please forward your comments to your Admiralty Chart Agent or directly to UKHO Customer Services.



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