Using the ADMIRALTY Vector Chart Service with TOTEM ECDIS

This guide is based on the TOTEM ECDIS 00035 Version 5.0.83.546 ECDIS
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1 Introduction

> 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 TOTEM 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 ‘S63 Manager (AVCS/Primar)’ and ‘CMAP Chart Manager’ functions in the ‘Charts and Navigation’ option, accessed by rolling the ball/mouse to the top menu bar of the TOTEM ECDIS:

1. Select the ‘Charts and Navigation’ function

2. Then select either the ‘S63 Manager (AVCS/Primar) ’ or the ‘CMAP Chart Manager’ function
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.

To check the ‘User Permit Number’:

Top Menu Bar: Charts and Navigation → S63 Manager (AVCS/Primar) → User Permit in ‘Totem S-63 Manager’ window

1. In Top Menu Bar, select ‘Charts and Navigation’

2. In ‘Charts and Navigation’, select ‘S-63 Manager (AVCS/Primar)’
3. The User Permit Number then appears at the top of the ‘Totem S63 Manager’ window.
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.

To delete ENC data from the system:

Top Menu Bar: Charts and Navigation → CMAP Chart Manager → Databases Tab → Select Database → Unregister Database → Yes → OK

1. In Top Menu Bar, select ‘Charts and Navigation’

2. In ‘Charts and Navigation’, select ‘CMAP Chart Manager’
3. In the ‘CMAP Chart Manager’ window, select the ‘Databases’ Tab

4. Select the Database (i.e. AVCS) to be deleted

5. Then click on ‘Unregister Database’ in the ‘Selected Database’ box on the left hand side

6. A ‘Confirmation’ window will then appear asking you to confirm the unregistration of the AVCS Database. Click ‘Yes’

7. A final ‘Information’ window will then appear to confirm the successful unregistration of the AVCS Database. Click ‘OK’
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.

**Delete ALL ENC permits**

Top Menu Bar: Charts and Navigation → S63 Manager (AVCS/Primar) → Delete All Cell Permits → OK

1. In Top Menu Bar, select ‘Charts and Navigation’, then select ‘S63 Manager (AVCS/Primar)’ and in the ‘Totem S-63 Manager’ window, click on ‘Delete all Cell Permits’

2. A ‘Confirm’ window will then appear asking the user to confirm the deletion of all Permits, click on ‘Yes’
3. A new window then appears confirming the deletion of all Cell Permits

![Image of confirmation message]

**Delete ONLY 1 Cell Permit**

**Top Menu Bar:** Charts and Navigation → S63 Manager (AVCS/Primar) → Remove one cell permit → OK

1. In Top Menu Bar, select ‘Charts and Navigation’, then select ‘S63 Manager (AVCS/Primar)’ and in the ‘Totem S-63 Manager’ window, click on ‘Remove one Cell Permit’

![Image of menu selection]

2. A ‘Delete Cell Permit’ window then appears. Select the ‘Provider ID’ (i.e. GB)

3. Select the ‘Cell Name’ for the Cell that needs to be deleted

4. When selected, click ‘Delete’

![Image of delete cell permit window]
5. A Confirm window will then appear asking the user to confirm the deletion of this Permit, click on ‘Yes’

![Confirm window](image)

6. A new window then appears showing a list of active Cell Permits. If the recently deleted Cell Permit does not appear in this list, the Cell Permit has been successfully deleted.

![Cell Permit list](image)
6 The Public Key

To install S-63 1.1 data, the latest IHO certificate will need to be installed in your ECDIS. The IHO.CRT is located on any AVCS S-63 1.1 Media. To install it, please insert the S-63 1.1 Media into your ECDIS and follow the steps below:

Top Menu Bar: Charts and Navigation → S63 Manager (AVCS/Primar) → Install SA (IHO) Certificate → IHO.CRT → Open → Certificate successfully installed

1. In ‘Charts and Navigation’, select ‘S63 Manager (AVCS/Primar)’ and then in the ‘Totem S-63 Manager’ window, click on ‘Install SA (IHO) Certificate’

2. Browse to the inserted CD/DVD or location (i.e. USB) that contains the file ‘IHO.CRT’ and select it

3. Click ‘Open’
4. The IHO.CRT has now been installed and S-63 1.1 data can be loaded into the ECDIS
7 Installing ENC Permits

To install AVCS ENC Permits:

Top Menu Bar: Charts and Navigation → S63 Manager (AVCS/Primar) → Load PERMIT.TXT → PERMIT.TXT → Open → Database to Synchronise Permits → OK

1. In ‘Charts and Navigation’, select ‘S63 Manager (AVCS/Primar)’ and then in the ‘Totem S-63 Manager’ window, click on ‘Load PERMIT.TXT’

2. Browse to the location (i.e. USB) that contains the file ‘PERMIT.TXT’ and select it

3. Click ‘Open’
4. The Permits are being loaded. You now need to select the Database (i.e. AVCS) to synchronise the Permits to this Database and click ‘OK’

![Image](image1.png)

**Note:** If there is no AVCS Database yet created in the TotemPlus ECDIS, instead of asking you at this stage to synchronise the Permits to the recognised AVCS Database as above, the system will automatically synchronise the Permits to another already existing Database as below:

![Image](image2.png)

Then when installing the Cells from the AVCS Media, you will be asked to create an AVCS Database. Thereafter, each time you install new Permits or data, the system will ask you to synchronise the Permits or data to the existing AVCS Database.

5. A ‘Totem S63 Manager’ window then appears confirming the successful synchronisation of all Permits

![Image](image3.png)
You can check the installed Permits by clicking on the 'List Cell Permits'. The list of Permits installed in your ECDIS will then be displayed.
8 Installing AVCS Base CDs

There are currently 9 AVCS Base CDs but this number will grow as more ENCs 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 ENCs. 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

Top Menu Bar: Charts and Navigation → S63 Manager (AVCS/Primar) → Totem S-63 Manager window → Load Cells Tab → Select CD/DVD Drive → ENC ROOT Folder → Next → Sync Permits

1. After having inserted the first AVCS Base CD identified in the Schedule A into the appropriate drive (i.e. D/Q), in ‘Charts and Navigation’, select ‘S63 Manager (AVCS/Primar)’ and in the ‘Totem S-63 Manager’ window, click on the ‘Load Cells’ Tab
2. Select the D: Drive from the Drive drop down list

3. Navigate to the ENC_ROOT folder and select the required country folder to install

4. The ‘CATALOG.031’ file will be shown on the right side

5. Click on ‘Next’
6. Select the ‘AVCS’ Database if already created.

**Note:** If the Database does not already exist, click on ‘Create New Database’ on the left hand side to create the ‘AVCS’ Database

7. Click ‘Next’

The installation of the Base CD will then start.

8. When the installation is complete (i.e. bottom bar showing 100%), you now need to synchronise the installation of the Permits with the Database. On the ‘Select Database to sync Permits’ window appearing, click ‘OK’
9. When the synchronisation of the Permits is complete, an installation summary report appears confirming that the Base Cells have been successfully installed. If the installation of the Base Cells has not been successful, error messages (i.e. SSE error messages) will be displayed in this installation summary report.

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.

Top Menu Bar: Charts and Navigation → S63 Manager (AVCS/Primar) → Totem S-63 Manager window → Load Cells Tab → Select CD/DVD Drive → ENC ROOT Folder → Next → Sync Permits

1. After having inserted the AVCS Update CD into the appropriate drive (i.e. D/Q), in the ‘Charts and Navigation’, select ‘S63 Manager (AVCS/Primar)’ and in the ‘Totem S-63 Manager’ window, click on the ‘Load Cells’ Tab
2. Select the D: Drive from the Drive drop down list

3. Navigate to the ENC_ROOT folder and select the required country folder to install

4. The ‘CATALOG.031’ file will be shown on the right side

5. Click on ‘Next’
6. Select the ‘AVCS’ Database

**Note:** If the Database does not already exist, click on ‘Create New Database’ on the left hand side to create the ‘AVCS’ Database

7. Click ‘Next’

8. When the installation is complete (i.e. bottom bar showing 100%), you now need to synchronise the installation of the Permits with the Database. Click ‘OK’.
9. When the installation is complete, an installation summary report appears confirming that the Updates have been successfully installed.
10 Installing AVCS DVD

When using the AVCS DVD Service, only one disc needs to be installed because it contains all the Base ENCs and Updates up to the date of its issue.

**DVD Service**

- Week 02/14: Base & Update
- Week 03/14: Base & Update
- Week 04/14: Base & Update
- Week 05/14: Base & Update
- Week 06/14: Base & Update
- Week 07/14: Base & Update
- Week 08/14: Base & Update

**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

**Top Menu Bar:** Charts and Navigation → S63 Manager (AVCS/Primar) → Totem S-63 Manager window → Load Cells Tab → Select CD/DVD Drive → ENC ROOT Folder → Next → Sync Permits

1. After having inserted the AVCS DVD into the appropriate drive (i.e. D/Q), in the ‘Charts and Navigation’, select ‘S63 Manager (AVCS/Primar)’ and in the ‘Totem S-63 Manager’ window, click on the ‘Load Cells’ Tab
2. Select the D: Drive from the Drive drop down list

3. The system will then automatically show the B1 to B9 Folders (equivalent to Base CDs 1 to 9 in the AVCS CD Service). Select the required Folder to install

4. The ‘MEDIA.TXT’ file will be shown on the right side

5. Click on ‘Show Media Information’
6. Select ‘Install Media’

![Image of Install Media]

7. Select the ‘AVCS’ Database

![Image of Select Database]

8. Click ‘Next’

**Note:** If the Database does not already exist, click on ‘Create New Database’ on the left hand side to create the ‘AVCS’ Database
The installation of the DVD will then start.

9. When the installation is complete (i.e. bottom bar showing 100%), you now need to synchronise the installation of the Permits with the ‘AVCS’ Database. Click ‘OK’

10. When the installation is complete, an installation summary report appears confirming that the Cells have been successfully installed.
11 Installing AIO Permits

The Admiralty Information Overlay (AIO) is installed in the TOTEM ECDIS by installing the Cell GB800001 included in the PERMIT.TXT file and then the AIO Data.

1. In ‘Charts and Navigation’, select ‘S63 Manager (AVCS/Primar)’ and then in the ‘Totem S-63 Manager’ window, click on ‘Load PERMIT.TXT’

2. Browse to the location (i.e. USB) that contains the file ‘PERMIT.TXT’ and select it

3. Click ‘Open’
4. The Permits are being loaded. You now need to select the Database (i.e. AVCS) to synchronise the Permits to this Database and click 'OK'.

![Image of selecting database](image1)

**Note:** If there is no AVCS Database yet created in the TotemPlus ECDIS, instead of asking you at this stage to synchronise the Permits to the recognised AVCS Database as above, the system will automatically synchronise the Permits to another already existing Database as below:

![Image of automatic synchronisation](image2)

Then when installing the Cells from the AVCS Media, you will be asked to create an AVCS Database. Thereafter, each time you install new Permits or data, the system will ask you to synchronise the Permits or data to the existing AVCS Database.

5. A message then appears confirming the successful synchronisation of all Permits.

![Image of successful synchronisation](image3)
6. You can check the installed AIO Permits by clicking on the ‘List Cell Permits’. The list of Permits installed in your ECDIS will then be displayed.

7. Check that the Cell GB800001 appears in that list.
12 Installing AIO Media

The AIO Media can only be installed when the usual AVCS S-63 1.1 Data has been previously installed. After having previously installed the Permit for the AIO Cell GB800001, the AIO Media now needs to be installed.

1. In ‘Charts and Navigation’, select ‘S63 Manager (AVCS/Primar)’ and then in the ‘Totem S-63 Manager’ window, click on the ‘Read AIO Update’ Tab

2. Browse to the CD/DVD Drive

3. Navigate to the ‘ENC ROOT’ Folder, double-click on it, select the ‘CATALOG.31’ file

4. Click ‘Open’
The installation of the AIO CD will then start

5. When the installation is complete (i.e. bottom bar showing 100%), a message will appear at the end of the installation confirming that the installation is ‘Done’ and showing the week number of the installed AIO CD.
13 Systems Checks

The user has the option to review the status of all installed ENCs on the TOTEM ECDIS. The display will very much depend on the filtering applied and the user’s installed ENC permits.

Top Menu Bar: Charts Tab → ‘Review Updates’ in Chart Catalog section → Double Click on each Chart in ‘Charts’ → Status displayed in ‘Dataset Properties’

1. Select ‘Charts’
2. Click on ‘Review Updates’
3. Double-click on a selected installed Cell displayed in the ‘Charts’ section to both view the Cell and its related installation and update status
4. The Update status of each Cell will be then displayed in the ‘Dataset Properties’ section on the right hand side
14 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.

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

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:

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

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.