



ELECTRONIC CHART CENTRE

VPN User Manual

Version 6.5

Table of Contents

1	OBJECTIVE OF VIRTUAL PRIMAR NETWORK.....	3
2	OVERVIEW OF VPN TECHNOLOGY	4
2.1	MINIMUM INFRASTRUCTURE REQUIREMENTS FOR A HO.....	4
2.2	JAVA RUN TIME ENVIRONMENT (JRE)	4
3	USER MANUAL FOR VPN PROCEDURES	6
3.1	LOGIN TO VIRTUAL PRIMAR NETWORK	6
3.2	DESCRIPTION OF USER INTERFACE	7
3.3	UPLOAD ENC TO PRE-RELEASED DATABASE.....	9
3.4	DELETE DATA FROM PRE-RELEASED DATABASE	12
3.4.1	Delete Procedure	12
3.5	RELEASE DATA FROM PRE-RELEASED DATABASE	13
3.5.1	Release Procedure	14
3.6	DOWNLOAD DATA FROM RELEASED DATABASE	15
3.6.1	PRIMAR Download Procedure.....	17
3.6.2	PRIMAR Directory Structure.....	18
3.7	DOWNLOAD DATA FROM PRE-RELEASED DATABASE.	19
3.8	REPORTS	19
3.9	ADDITIONAL TOOLS.....	19
3.10	LOGOUT FROM VPN	24
4	HOW TO RUN A CD SERVICE.....	25
4.1	RUN YOUR OWN CD SERVICE.....	25
4.1.1	Base CD	25
4.1.2	Update CD.....	26
5	SUPPORT	28
6	TERMS AND DEFINITIONS.....	28

1 Objective of Virtual PRIMAR Network

The Virtual PRIMAR Network (VPN) technology is a set of tools and functionality to give cooperating Hydrographic Offices (HO) a possibility to get a closer participation in PRIMARs operations. It also enables an HO to have a much better control and management of its own ENC information stored in the PRIMAR ENC database.

PRIMAR is using the GeoData Distribution Server (GDS) application to generate its products and deliver an official ENC service to its users. The VPN is an Internet based front-end to some of the functionality developed in GDS. The VPN has a range of functionality to transfer and manage the ENCs in the PRIMAR GDS database. The most important are shown in Figure 1 and described below:

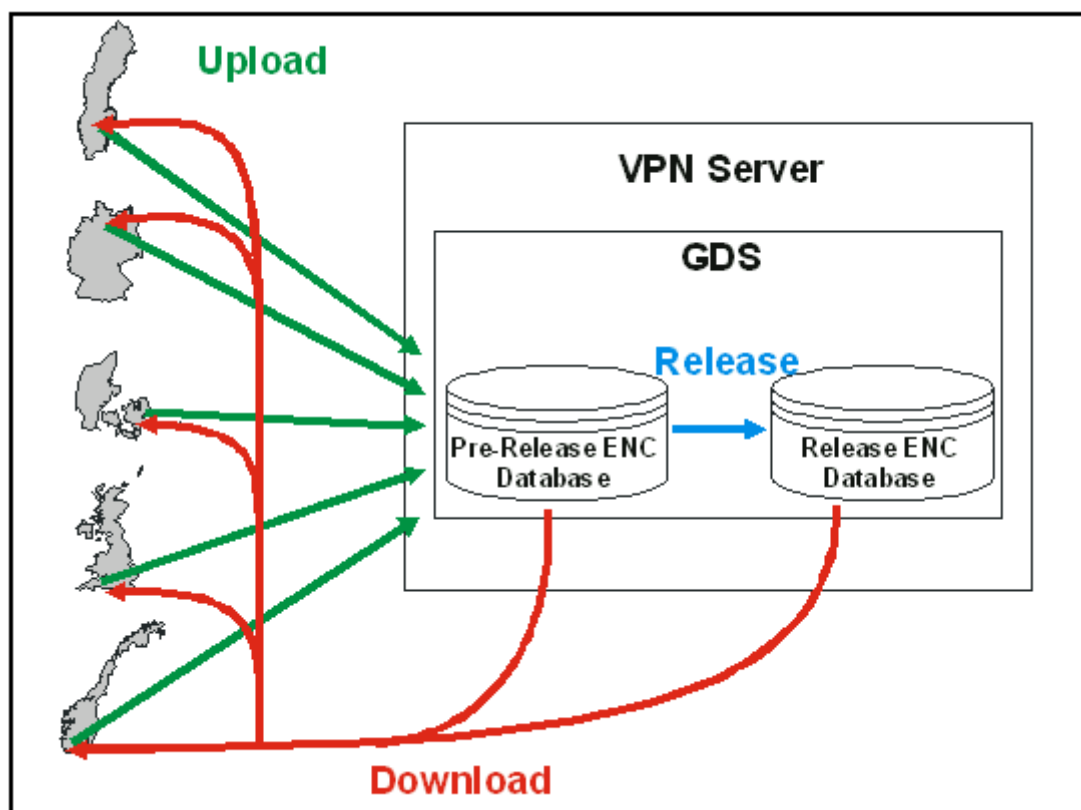


Figure 1: Overview of VPN data flow and functionality.

- Upload ENC: Transfers an ENC exchange set from the HO to PRIMAR. The ENCs will be stored in a pre-release database until the HO decides to release the ENCs commercially.
- Release ENC: All ENCs uploaded to PRIMAR will initially be stored in a *Pre-Release Database* for further checking and quality control. This functionality moves the ENC from the *Pre-Release Database* to the commercial *Released ENC Database* and makes the ENC available for on-line download and inclusion on the PRIMAR CD.
- Download ENC: This functionality enables an HO to download its own ENCs from the PRIMAR database. The operator has a choice of downloading either the ENCs stored in the *Pre-Release Database* or the ENCs stored in the commercially *Released ENC Database*.

Note that a user in an HO might not have access to all the above functionality due to the configuration of the individual user profile.

Note also that an HO can only operate on its own ENC information. If however an HO grants access to its ENC information to another HO, that HO will also be able to access the ENCs.

It is expected that more functionality might be added or amended if new requirements arise from the users of the VPN.

2 Overview of VPN Technology

The VPN is fully based on standard Internet technologies. The hardware infrastructure is built up around the virtual private network technology. It enables two remotely connected computers to use Internet to exchange information securely.

PRIMAR is managing communication and access security by using commercial applications such as VASCO to access our services. It guarantees that only authorised persons will get access, and that all communication will be uniquely encrypted between PRIMAR and the participating organisation. All security aspects will be transparent to the users and will only require login once during the session.

PRIMAR is responsible for operating all the security aspects and running the web server providing the VPN functionality.

Some of the VPN functionality is available as java applets. The java applet is stored on the PRIMAR server and is downloaded the first time it is used by an operator in an HO. The next time it is used it will not be downloaded unless there are software updates to the applet. This setup does not require any installation of software at the HO and does not require any resources for managing the VPN software. It also enables PRIMAR to upgrade and bug-fix the VPN software and to add more functionality without distributing the software applets with a new installation or upgrade in the HO.

2.1 Minimum Infrastructure Requirements for a HO

The requirements on a HO to use the VPN functionality are very limited. The HO must have Internet access to use the VPN functionality available from PRIMAR. A high communication bandwidth will of course increase the information throughput and reduce the connection time.

2.2 Java Run Time Environment (JRE)

JRE must be installed with your web-browser for making the VPN function. PRIMAR recommends that you install Java 1.5 or later. JRE can be downloaded from www.java.sun.com

Depending on its configuration, you might experience a Java Plug-in security warning as shown in Figure 2.



Figure 2: Java Plug-in Security Warning.

This is just to verify that you trust PRIMAR and its Java applets to run on your computer. If you select “Grants this session” you will enable your browser to execute the VPN applets only during the current connection and you will get the same warning the next time you log on to VPN. If you select “Grant always”, you can run the VPN services in the future without getting the security warning each time you connect.

After a successful installation of the JRE 1.5 you should do some minor settings in the Java consol. Open the Java consol from your control panel (usually available from the start menu – settings) Set the Java cache to unlimited. See Figure 3. Please note that the control panel may look different in later versions of JRE.

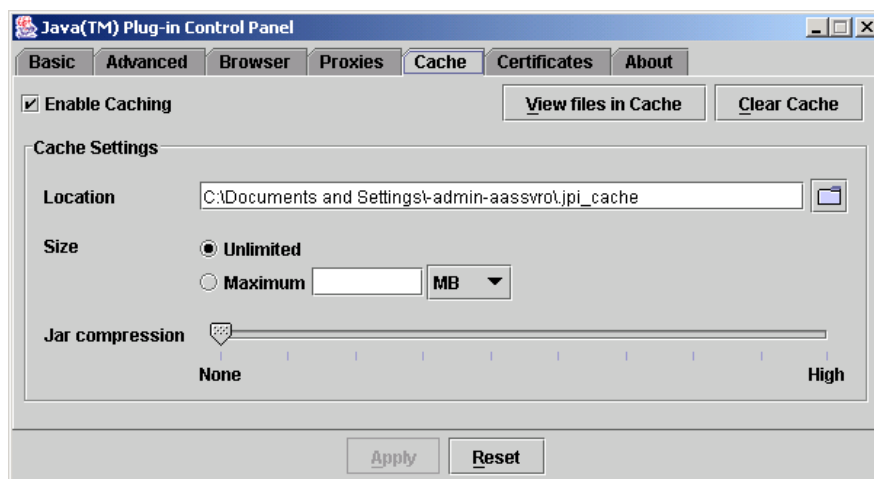


Figure 3: Java Consol. Set java cache to unlimited.

3 User Manual for VPN Procedures

Please note that the Java applets will be downloaded unless they already reside on your computer. You might in some cases experience a few seconds delay before the applet starts, which is especially noticeable if you have a slow connection.

3.1 Login to Virtual PRIMAR Network

The PRIMAR VPN web pages are accessible from: <http://www.primar.org/>. Direct address: <https://services.ecc.no/primar/portal/>

This address leads to the ENC Portal. In the upper left corner login is available.

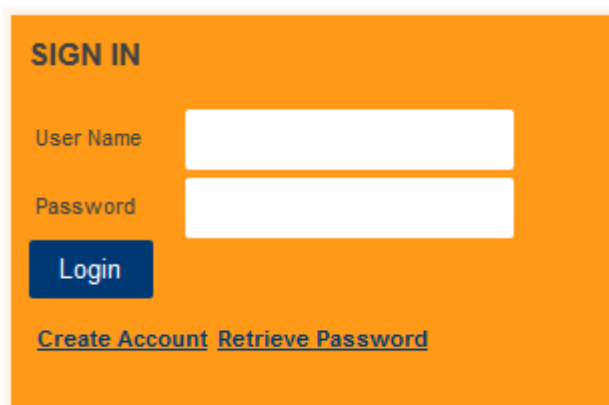


Figure 4: Login displayed in upper left corner.

PRIMAR will provide you with a Username, pin code and VASCO Digipass to access its services. To login to the PRIMAR services, you must provide a valid username and password. The password consists of a combination of your personal pin code, and the key currently displayed on your VASCO Digipass, ref Figure 5.



Figure 5: VASCO Go-3 Digipass.

Successful login will get you to Home page. You will see My Page, VPN, My Agreement, VRC and My Reports as tabs in the upper left corner of the screen. Click either one to access. Due to the configuration of your user you will have access to all or some of the functionality as shown in Figure 6. Only cooperating HO's or organisations that have signed a bilateral agreement with PRIMAR, will have access to the VPN services.

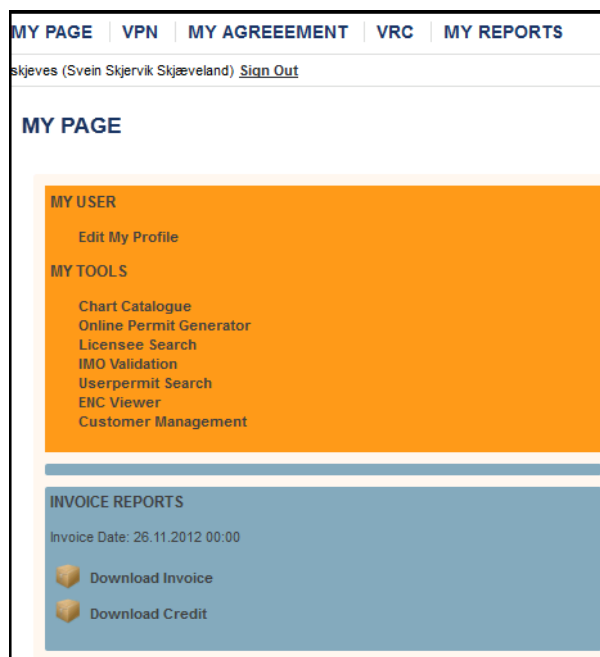


Figure 6: My Page functionality.

3.2 Description of VPN Data Management User Interface

The user interface is built up with several frames, ref. Figure 7. Moving a frame's borderlines can change the size of the frames.

ENC List Frame

The frame shows an overview of all the ENC's the HO has uploaded and has access to in the pre-release database. An empty list indicates no ENC's are stored in the database. Note that if another HO has granted you permission to operate on its data, you will also be able to view their ENC's.

The ENC's are sorted in an alphabetical ordered list. You can open or close the list by clicking the plus or minus signs in front of the listed entity.

- At the top level is the 2-character country code as specified in S57. If the user selects the country code and presses the "ADD" button, all ENC's and updates from the nation are added to the *ENC Transfer Frame*.
- At the next level is a list of the ENC cells stored in the database. To get more information about the cell, click the plus sign in front of the cellname. If the user selects one ENC in the list and presses the "ADD" button, all information about that particular cell are added to the *ENC Transfer Frame*.
- At the next level you can see the cell edition number. To get more information about e.g. any updates, click the plus sign in front of the cellname. If the user selects the edition, all information about the cell edition is added to the *ENC Transfer Frame*.
- The last level shows information about individual updates or the base cell. If the user selects one particular update in the list and presses the "ADD" button, the update can be added to the *ENC Transfer Frame*. Note that a "0" denotes the base cell file, and that any other number denotes the specific update file.

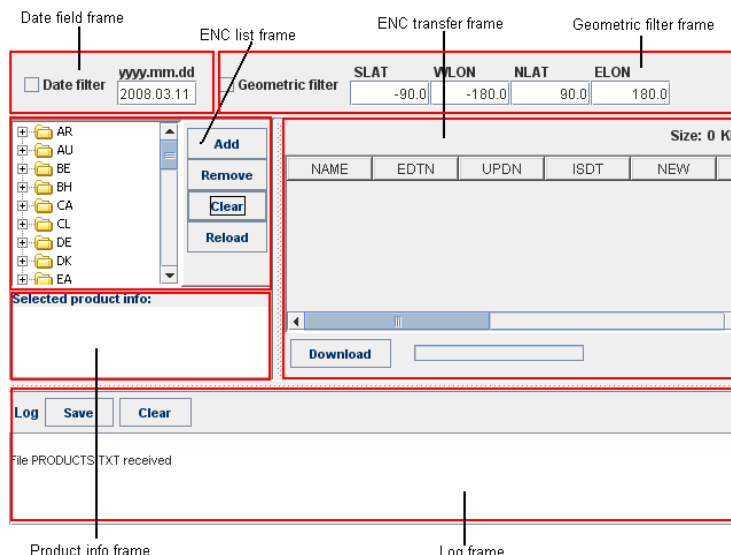


Figure 7: The different frames.

Selected Product Information Frame

The frame shows more detailed information about an ENC entity selected in the ENC List Frame.

Date Field Frame

The Date Filter can be used to limit the cells displayed in the ENC List Frame based on the Date selected. The Date Filter will display cells based on the date they have been released into the Release database. If enabled, the ENC List Frame will display the applicable ENC information issued on and after the selected Date. The Date format is YYYY.MM.DD.

The Date Filter can be used to set up and run your own CD service, ref. procedure defined in chapter 4.1. The Date filter is then used to filter out all ENC data released after the base CD was created.

The Date field is enabled by clicking the tick-box in front of the frame. By not using the Date Filter you will be able to display all the data available in the Database.

Geometric filter frame

The geometric filter can be used to limit the cells displayed in the ENC List Frame based on geometry. The geometric filter will display cells based on SLAT, WLON, NLAT and ELON values. If enabled, the ENC List Frame will display the ENCs available inside the limitations given with the geometric filter.

ENC Transfer Frame

The frame shows the ENC cells or updates which have been selected to be moved from the pre-release to the commercial release database. It will initially be empty since no ENCs have been selected. The frame displays information about ENC cell name, edition number, update number, issue date, corner coordinates, size, DB date, reissue and type.

The scroll bar at the bottom of the frame can be used to view the other columns in the frame. By clicking on a column heading, it can be moved left or right to reorder the columns.

The total file size for all of the selected ENC information is shown in the upper right hand corner. It is the uncompressed file size.

Log Frame

The frame shows a log of all completed transactions and their status. There is a possibility to save the log in a local file specified by the operator. The operator can print or save the log as a quality record compliant with internal procedures. The file PRODUCTS.TXT referenced in this frame is generated by the database server and contains information about all the ENCs displayed in the *ENC List Frame*.

Function Buttons

The window contains a few function buttons with specific features:

- **ADD:** Moves the selected information in the *ENC List Frame* to the *ENC Transfer Frame*.
- **REMOVE:** Removes the selected ENC information from the *ENC Transfer Frame*.
- **CLEAR:** Empties all ENC information in the *ENC Transfer Frame*.
- **RELOAD:** Connects to the pre-released and released database and updates the ENC information in the *ENC List Frame*. Used in cases where several people have access to upload information to the pre-release database.
- **DELETE:** Deletes all the ENC data in the *ENC Transfer Frame* from the pre-release database. **Note** that the button is only available in the *Delete pre-released cells* mode of operation.
- **RELEASE:** Transfers the ENC data in the *ENC Transfer Frame* from the pre-release to the release database. **Note** that the button is only available in the *Release Cells* mode of operation.
- **DOWNLOAD:** Downloads the ENC data in the *ENC Transfer Frame* to the local computer of the operator. **Note** that the button is only available in the *Download Released Cells* and *Download Pre-Released Cells* modes of operation.

3.3 Upload ENC to Pre-Released Database

Data Management/Upload cells

The Upload Procedure is used to transfer an ENC exchange set containing base cells or updates to the PRIMAR pre-release database. The exchange set can contain ENCs compliant with S57 edition 3.1, 3.1.1 and 3.1.2.

The operator starts the upload process by activating “*Data Management/Upload Cells*”. Left side menu disappear, and the upload interface window is activated. When pressing the “**UPLOAD**” button, the operator will be requested to select a CATALOG.030/031 file for the exchange set about to be uploaded to PRIMAR. The applet will zip (compress) all the files in the exchange set and transfer them securely to PRIMAR using SSL. The transfer time will be reduced by approximately 75-80% since the files are compressed. A progress bar at the bottom of the window shows the status of the file transfers together with log results.

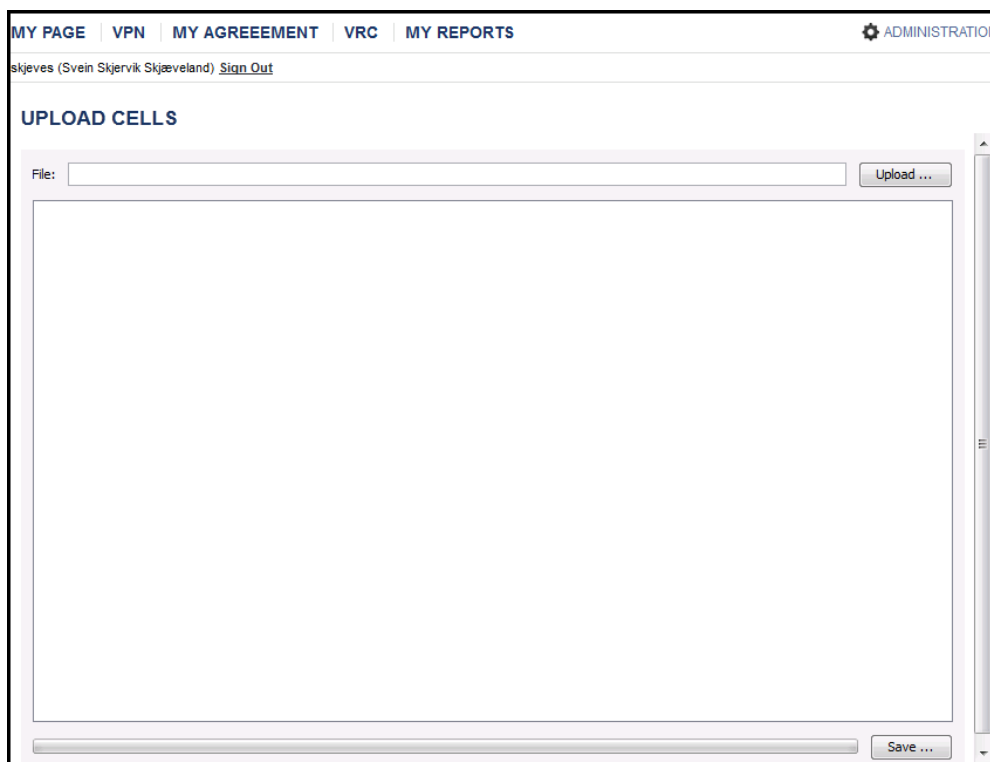


Figure 8: Upload web page.

Note that all files stored in the directory on your computer will be compressed and transferred to PRIMAR. Only the files referenced in an exchange set will be validated and imported into the VPN pre-release database, while all other files will be discarded.

After the exchange set has been transferred successfully, a status box will be displayed requesting permission to start the checking processes. PRIMAR will uncompress the files and check the ENC exchange set. It will do a range of tests before the files are stored in the pre-release database. The test performed and a short description is described below:

Reading catalog file

- Initial parsing of the CATALOG.031 file.

Looking for encrypted data

- Checking if data is encrypted.

Parsing the ENC files in the catalog file

- CATALOG.031 and dataset files are parsed according to ISO 8211.
- References to TXT and TIF are checked for base cell and re-issue.

Performing access control

- Checking if you have access to upload data for the country code of uploaded data.

Looking for reissue.

- Checking if exchange set contains a re-issue, and then that the extension of the cell name is 000 and that the DSID UPDN is in sequence with previous loaded data.

Checking for previous uploaded data

- Data already uploaded are removed from the exchange set.

Checking if the files exist

- Check that all the files referenced in the CATALOG.031 file exist in exchange set.

Checking for imported cell keys

- Checking if required cell keys are uploaded. If not, data will not be uploaded.

Checking filenames

- Checking if the filenames are according to S-57 ENC Product Specification 5.6.

Checking CATD IMPL value

- Checking that implementation value (CATD IMPL) is correct in the CATALOG.031 file. Example; ASC, BIN, TXT, TIF.

Checking crc values

- Checking that computed CRC values of the dataset files, txt and tiff files are identical to the CRC values listed in the CATALOG.031 file.

Checking if DSID DSNM match filename

- Checking that the filename of the data set file is identical to the data set file name in DSID DSNM .

Checking if DSID DSNM corresponds to DSID AGEN

- Checking that the two first characters in DSID DSNM corresponds to producing Agency, DSID AGEN.
- Checking if DSID.AGEN is known in S-62.

Checking file size

- Checking if file size is larger than 5MB.

Checking if DSID INTU match cellid

- Checking that the intended usage value in DSID INTU is identical to the 3rd character in the dataset filename.

Checking if the TXT/TIF files are referred

- Report TXT/TIF files in the CATALOG.031 that is not referenced by any dataset file.

Checking for missing TXT/TIF references in updates

- Check that references within an update are either included with the update or with an earlier dataset file for the same cell edition.

Checking dates

- Checking that the dates used are logical.

Checking order of updates

- Checking that current loaded update is in sequence with previous loaded update.

Checking S-57 data structure

- Checking that the S-57 data structure is correct.

Checking geolimit of updates

- Checking that the geo limit in the CATALOG.031 file is now wrapped. NLAT > SLAT and ELON > WLON.
- Checking that the geo limit in the CATALOG.031 file match the dataset coverage.

Checking for propagated errors

- This message is reported on updates that has an error in previous loaded EN or ER file.

If files that already are stored in the database are identified during the upload process they will not overwrite the previously stored data. The upload will skip these files and carry on uploading any new files within the exchange set.

When issuing a new edition of an ENC or a new ENC, it is expected that all files referenced by the dataset files are included in the upload. TXT and TIF files must be included even though they already exist in their present version within the PRIMAR database.

If errors are detected an appropriate error message will be displayed in the status window. The message “Errors have to be fixed before uploading.” will also be displayed at the bottom of

the status window. If you have more than one dataset in the exchange set uploaded, data that passes the quality checks will be uploaded but data containing errors will not be loaded into the pre-release database. Another attempt to load the erroneous dataset can be made when the errors are fixed.

The message “Load successful”/”Load completed with remarks” will be written at the bottom of the status window when the exchange set is loaded into the pre-release. In some cases you will see a message saying “Not loading <cell name> and See log at the end. If this happens the loading of one or more ENC’s have failed and you will need to check the log to see what is wrong.

The SAVE button can be used to save the log files on your computer. The scroll bar can be used to scroll through the log file on-line.

3.4 Delete Data from Pre-Released Database

Data Management/Delete prereleased Cells

The Delete Procedure is used to delete ENC information from the pre-release database in case errors are discovered during the validation process. There is no Delete function available for ENC’s in the commercial release database because an ENC can only be removed from the market by issuing a Cancel Cell update or by releasing a new edition of a cell.

3.4.1 Delete Procedure

The operator selects the ENC’s to be deleted in the *ENC List Frame* and presses the “ADD” button to move them to the *ENC Transfer Frame*, ref. Figure 9.

The operator has a choice to select all the data available from an HO to an individual update. When all ENC’s have been selected, the operator must press the “DELETE” button to delete the ENC’s from the pre-release database. You will then see a “Confirm Delete” window requesting you to confirm the Delete operation. Press “YES” to confirm or “NO” to cancel the operation.

A message box will be displayed showing successful operation and the number of ENC cell/updates, which have been deleted.

A log of the transactions can be saved by pressing the “SAVE” button in the *Log Frame*.

Figure 9: Delete web page.

3.5 Release Data from Pre-Released Database

Data Management/Release prereleased Cells

All ENC's uploaded successfully to GDS are stored in the pre-release database. This enables an HO to download its own data for further validation and quality control. PRIMAR validation will take place before the ENC's are released. This procedure will change the status of the ENC's to release for commercial use. None of the ENC information stored in the pre-release database will be included in the regular PRIMAR ENC distribution service.

The user interface is shown in Figure 10 and its operation is basically identical to the description in section 3.4. The only difference is the "RELEASE" button instead of "DELETE".

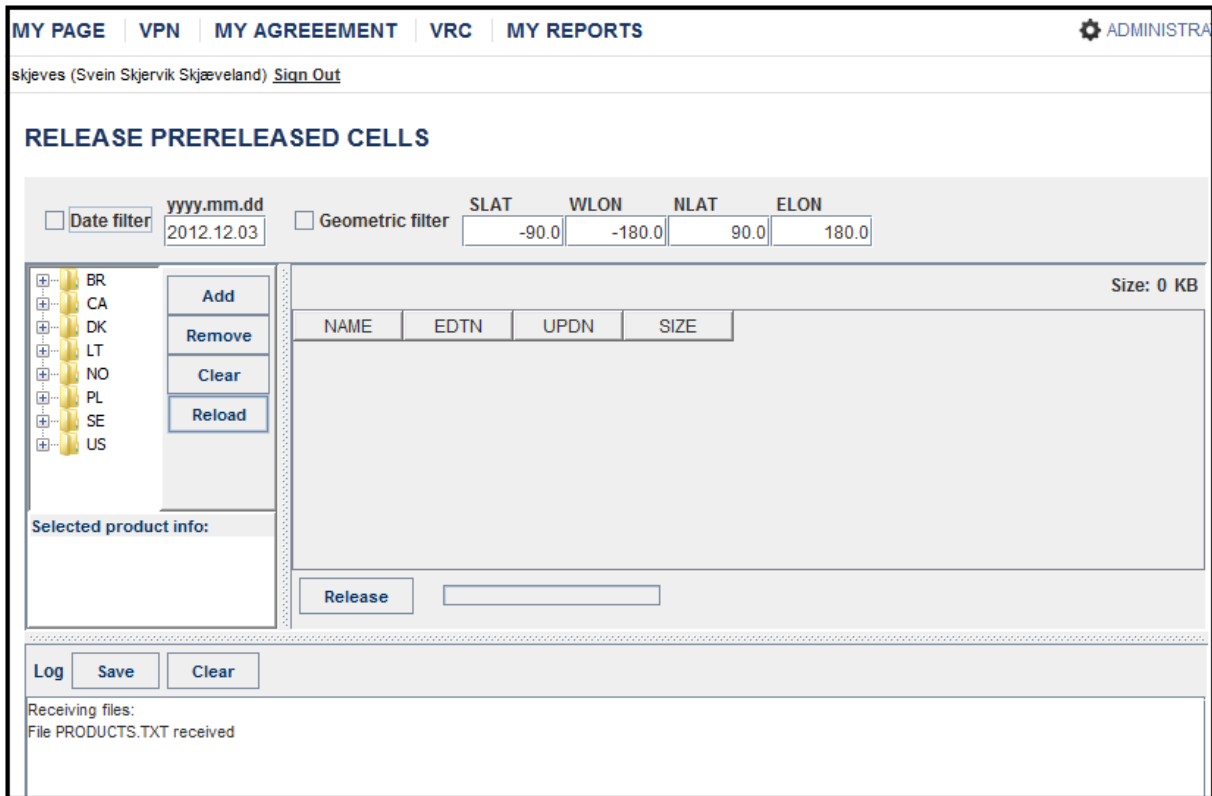


Figure 10: Release cells web page.

3.5.1 Release Procedure

The operator selects the ENC's to be released in the *ENC List Frame* and presses the “ADD” button to move them to the *ENC Transfer Frame*. When all ENC's have been selected, the operator must press the “RELEASE” button to transfer the ENC's from the pre-release to the commercial release database. You will then be requested to confirm the release operation.

You will then be requested in a pop-up window to provide further information about the individual cell editions to be released, ref. Figure 11. (This window will not be displayed when ENC updates or new editions are released.) The information will be used by PRIMAR to establish the cell price and provide more effective marketing information.

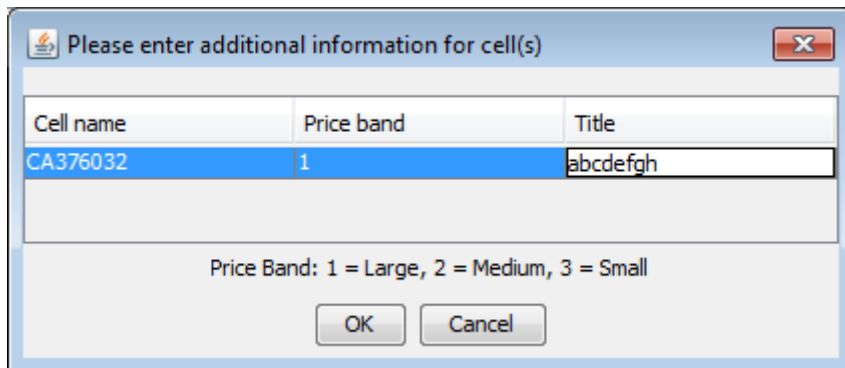


Figure11: Enter price band and chart title information.

You are requested to select price band for the cell and type in an ENC title used by the PRIMAR Chart Catalogue. Price band 1 should always be selected (If special arrangement

has been done, prices can be assigned to price band 2 or 3). When the cell title has been entered, remember to press “ENTER”. Further information about the Chart Catalogue is available at: <http://www.primar.org/>

Press “OK” when all information is provided, or “CANCEL” to cancel the release operation. An appropriate error message will be displayed below the window title in case of problems, e.g. price band or title information is not provided.

If the cell title is missing a warning will display, ref. Figure 12.

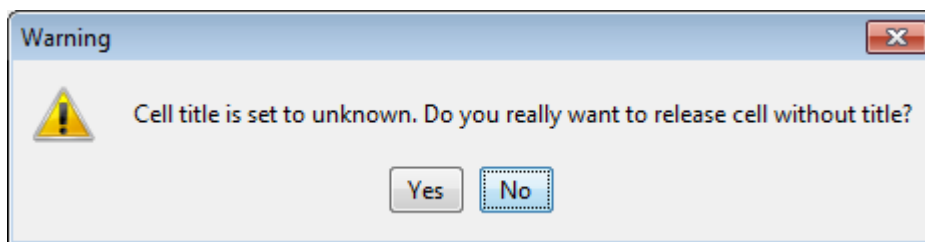


Figure 12: Warning when cell title is unknown.

A log of the transactions can be saved by pressing the “SAVE” button in the *Log Frame*.

3.6 Download Data from Released Database

Data Management/Download Released Cells

The Download Procedure is used to download an ENC exchange set from the PRIMAR commercial release database to a directory on your computer. The exchange set will be compliant with S57ed 3.1. The user will have a choice of downloading the ENCs in an encrypted or unencrypted form.

Whether the user will have access to download unencrypted data is based on the user’s access rights. By default a user will only have access to download encrypted data but can on request from the HO owning the data get access to download the data unencrypted as well.

The HOs can use the PRIMAR Chart Catalogue services to download Chart Permits (decryption keys) for the ENCs, ref. <http://www.primar.org/>

The user can create a CD containing the downloaded encrypted ENC information and provide a national ENC service.

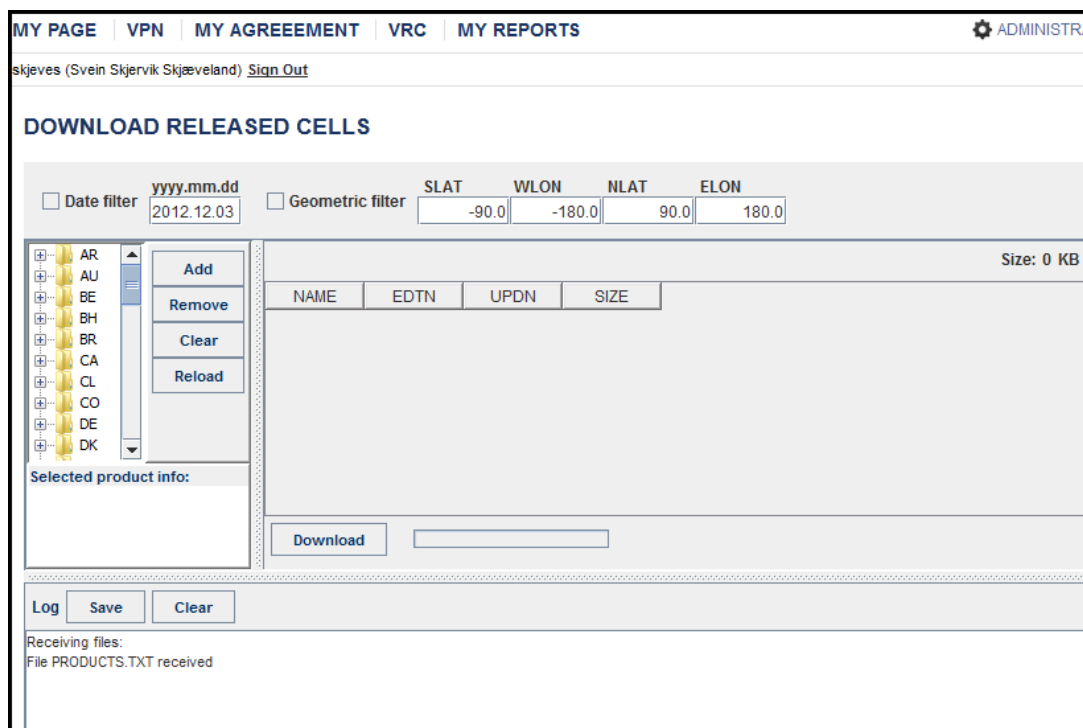


Figure 13: Download released cells web page.

The user interface is shown in Figure 13 and its operation is basically identical to the description in section 3.5. The only difference is the “DOWNLOAD” button instead of “RELEASE”.

The operator selects the ENC's to be downloaded in the *ENC List Frame* and presses the “ADD” button to move them to the *ENC Transfer Frame*. The operator has a choice to select all the data available from a HO to an individual update. When all ENC's have been selected, the operator must press the “DOWNLOAD” button to transfer the ENC's.

You will then see a “Confirm Download” window indicating the total file size to be downloaded, ref. Figure 14. Note that the downloaded ENC's will be unencrypted unless you mark the “Download cells encrypted” box.

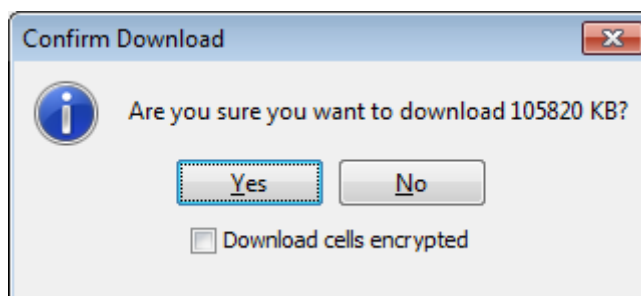


Figure 14: Confirm Download window for users with both download encrypted and unencrypted access.

Users without access to download data unencrypted will see the confirm download box shown in Figure 15.

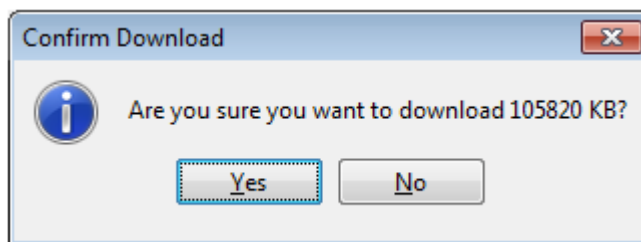


Figure15: Confirm Download window for users, with only download encrypted datasets access.

The user will then be requested to select a directory on his/hers computer in where to store the content of the ENC_ROOT directory of the exchange set. As shown in Figure 16, the downloaded ENC exchange set will be stored locally in C:\TEST\... The download applet will zip (compress) all the files in the exchange set and transfer them securely to your computer using SSL. The transfer time will be reduced by approximately 75-80% since the files are compressed. The files will be unzipped before they are stored on your computer. A progress bar at the bottom of the window shows the status of the file transfers together with log results.

The ENC exchange set will be stored in the same directory structure as PRIMAR uses in its service, ref. section 3.6.2. This directory structure will be established relative to the directory the user selected to store the exchange set.

A message box "Download is complete" will be displayed after successful completion of the operation.

A log of the transactions can be saved by pressing the "SAVE" button in the *Log Frame*.

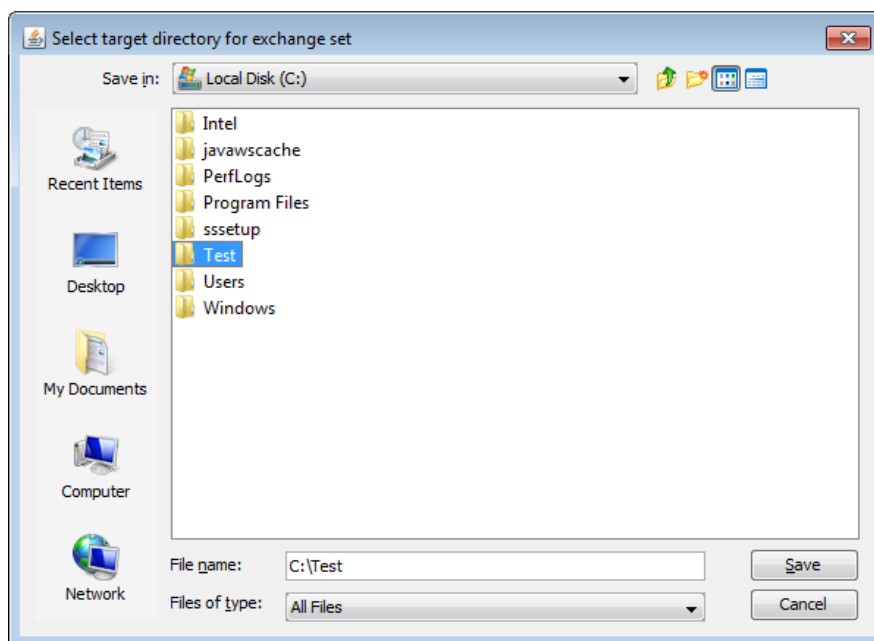


Figure16: Window to select target directory to store downloaded ENC exchange set.

3.6.1 PRIMAR Download Procedure

PRIMAR will apply the following procedure when ENCs are downloaded:

- PRIMAR will archive a transaction log with the Username, date/time and which ENC data was downloaded.

3.6.2 PRIMAR Directory Structure

PRIMAR has defined a directory structure, ref. Figure 17, used in its on-line and CD services. This directory structure is also used for all ENC's downloaded using VPN. The directory structure is defined as follows:

- All the files to be stored in /ENC_ROOT will be stored in the directory the user has selected. This will include the CATALOG.031 and README.TXT files.
- A number of sub-directories will be created in /ENC_ROOT based on the producers country code as defined in S57, i.e. DK for Denmark and NO for Norway, /ENC_ROOT/DK. All ENC data from a nation will be stored below its country code.
- A number of sub-directories will be created below the country code. There will be one directory for each available cell.
- Below the cell name directory is a subdirectory indicating the cell edition.
- Below the edition number are several sub-directories indicating the update number. The base cell is always stored in directory 0 and update 001 in directory 1

The directories at this level will contain:

- The data set file (1 file, mandatory)
- Optional ASCII Text file
- Optional TIFF picture file
- Signature file for data set file (included as part of the security scheme to trace the authentication of the data file). Not included in unencrypted datasets.

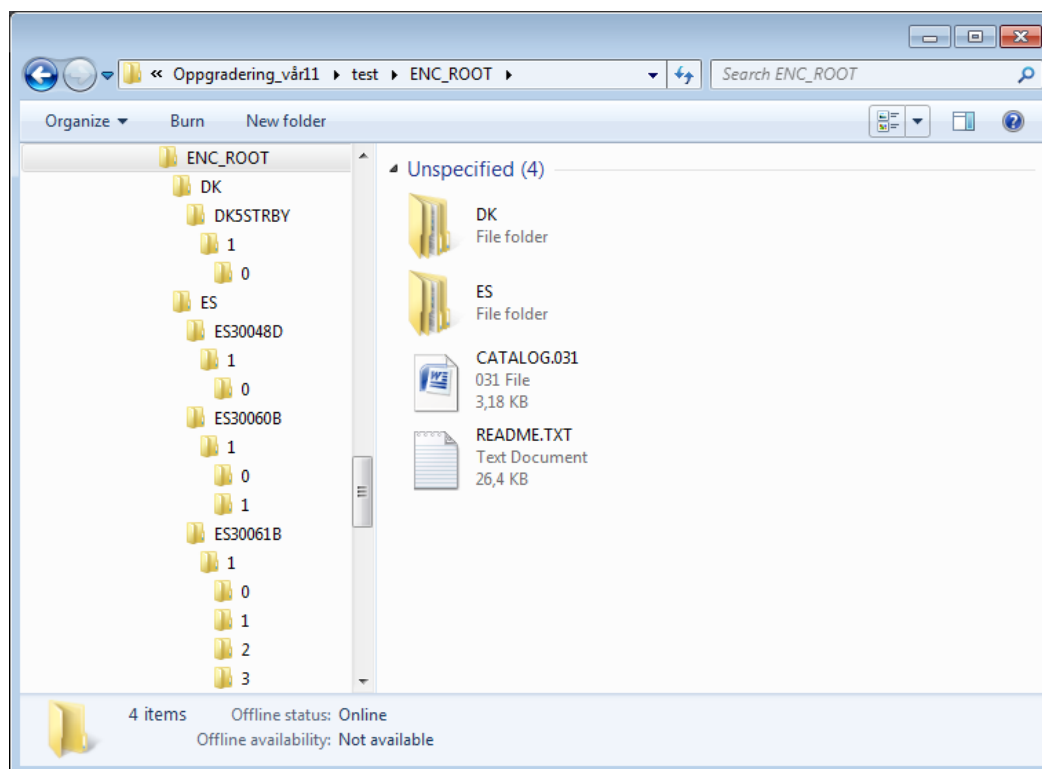


Figure17: Directory structure used in all PRIMAR services.

- A directory named /INFO/ will also be created. This will contain the PRODUCTS.TXT file.

Note:

- All the country codes are compliant with S62.
- The CATALOG.031 file will always include references to the signature files.
- The digital signature file will match the cell file name except that the navigational purpose codes, 1 – 6, will be replaced by the values I – N.
- The CATALOG.031 will include the correct path name in its file references if the complete exchange set is copied to the top directory on a CD.

3.7 Download Data from Pre-Released database.

Data Management/Download Prereleased Cells

The procedure is identical to download of released cells described in section 3.6, except that the operator is downloading information from the Pre-release database instead of the commercial release database.

3.8 Reports

Reports can be generated at any time. Reports are available in My Reports. Some of the reports require access rights, and are therefore not available for all users. Those who have access, will be able to view sales reports from his/hers origin country. I.e. The Polish Hydrographic office will only be able to view sales figures for Poland, the Swedish HO only Swedish sales figures and so on. This access can only be initiated by the contact person within each of the member countries participating in the PRIMAR RENC. The contact person within each country can send a request for access to sales reports to support@ecc.no

3.9 Additional Tools

In VPN menu *Data Validation* and *Data Management* sections, some additional tools are available:

Data Validation:

- S-57 Advisor Read
- ISO 8211 to Text

Data Management:

- Check Overlap Candidates
- Edit Title

S57 Advisor Read

The S-57 Advisor database contains errors/warnings discovered when data have been validated in validation tools dKart Inspector and ENC Analyzer. It also contains error messages from Furuno and Transas ECDIS systems discovered during quality review of ENC's. The errors/warnings are listed with a description and references to S-57, S-58 and a cross reference between dKart Inspector and ENC Analyzer when possible. All the errors/warnings are classified as either "HO to Check", "Failed", "Accepted" or "Erroneous".

Search field – write in the message number (code) and press search. The message number appears at top of page. It is also possible to search for S-57 and S-58 references.

Last modified – the date when the message was reported added to the database.

Software message – this field list the error/warning message as reported in the validation tool.

Description – an explanation of the message reported.

S-57 reference – reference to more detailed explanation in S-57 “IHO Transfer Standard for Digital Hydrographic Data edition 3.1”.

S-58 reference – reference to tests in the S-58 “Recommended ENC Validation Checks”.

Cross reference – reference to similar message reported in dKart Inspector/ENC Analyzer.

Validation tool – report the validation tool the message was reported in.

Classified – classification of the message, “HO to Check”, “Failed”, “Accepted” or “Erroneous”.

Example of use:

After entering S-57 Advisor Read, enter message number (code) in search field and press enter. The results are then being listed, ref. Figure 18.

Navigation: MY PAGE | VPN | MY AGREEMENT | VRC | MY REPORTS | ADMINISTRATION

skjeves (Svein Skjervik Skjæveland) [Sign Out](#)

S-57 ADVISOR READ

Database Information Number of rows: 1466

🔍 VS57_UOC_85

RESULTS

Code	S-57 Reference	S-58 Reference	
VS57_UOC_85	UOC 4.6.6.5	T1581	View ENCs

Figure 18: Results of a search displayed in S-57 Advisor Read.

Press *view* to get more information regarding the specific message, ref. Figure 19.

Navigation: MY PAGE | VPN | MY AGREEMENT | VRC | MY REPORTS | ADMINISTRATION

skjeves (Svein Skjervik Skjæveland) [Sign Out](#)

S-57 ADVISOR READ

Database Information Number of rows: 1466

🔍 VS57_UOC_85

VS57_UOC_85

Last modified: 07.07.2003

SOFTWARE MESSAGE
Error: VS57_UOC_85 If the feature is of object class LOKBSN, then it must not overlap a feature of object class SEAAARE

DESCRIPTION
LOKBSN overlapping a SEAAARE.

DETAILS

- S-57 Reference: UOC 4.6.6.5
- S-58 Reference: T1581
- Cross Reference: LG0148
- Validation Tool: ENC Analyzer
- Classified: FAIL

RESULTS

Code	S-57 Reference	S-58 Reference	
VS57_UOC_85	UOC 4.6.6.5	T1581	View ENCs

Figure 19: Further information of one specific message.

Press ENC's (ref Figure 20) to get a list of VRC reports for ENC's where this message is reported, i.e. only the latest editions released/pre-released together with the belonging updates are taken into consideration when the list is created. The VRC reports are listed alphabetically based on cell name. In order to get a list limited to your own country just type your county code into "Cell ID" field

Cell ID	Edition	Update	Reissue	Report
BR400720	2	2	0	Report
BR400720	2	3	0	Report
DK31310A	1	0	0	Report
DK51351A	1	0	0	Report
DK51353A	1	0	0	Report

Figure 20: List of ENC's with message reported.

ISO 8211 TO TEXT

ISO 8211 to Text is a tool for converting an EN/ER file (.000, .001, .002, .003...) to a readable format. This tool can also be used on S-101 data.

ISO 8211 TO TEXT

SELECT FILE TO PARSE

Use condensed format

PARSED RU5N8XP2.003

```

root:
RECORD 0:
RECORD 1:
  DSID: <10><1><2><5><RU5N8XP2.003><1><3><
    ><20121117><03.1><1><><2.0><2><420><-Formatted by SevenCs ENC Des
  DSSI: <2><1><2><1><0><17><0><0><0><3><0>
RECORD 2:
  VRID: <130><294><1><1>
  VRPT: <<120><137>><255><255><1><255>
    <<120><136>><255><255><2><255>
    
```

Figure 21: ISO 8211 to Text.

Browse to wanted destination and choose S-57/S-101 file for conversion, ref Figure 21. Press upload, and the file will be converted to readable format, ref Figures 22 and 23. This may take some time depending on the file size. The use of condensed format is optional.

Condensed format will be displayed like this:

```

root:
RECORD 0:
RECORD 1:
  DSID: <10><1><1><4><N14DPUNI.000><1><0><20090325><20090325><03.1><1><1><2.0><1><341><-Formatted by SevenCs ENC Designer-->
  DSSI: <2><1><1><3><0><3><0><6><7><0>
    
```

Figure 22: Display of condensed format.

Not Condensed format will be displayed like this:

```

root:
RECORD 0:
RECORD 1:
  DSID:
    RCNM: 10
    RCID: 1
    EXPP: 1
    INTU: 4
    DSNM: N14DPUNI.000
    EDTN: 1
    UFDN: 0
    UADT: 20090325
    ISDT: 20090325
    STED: 03.1
    PRSP: 1
    PSDN:
    PRED: 2.0
    PROF: 1
    AGEN: 341
    COM1: -Formatted by SevenCs ENC Designer-
  DSSI:
    DSTR: 2
    AALL: 1
    NALL: 1
    NOMR: 3
    NOCR: 0
    NOGR: 3
    NOLR: 0
    NOIN: 0
    NOCN: 6
    NOED: 7
    NOFA: 0
    
```

Figure 23: Display of uncondensed format.

Check Overlap Candidates

This tool displays a graphical overview of ENC's overlapping (data coverage) based on the selection criteria's chosen, ref. Figure 24. Select Country, and if required alter distance filter (default 5,0 meters)

Cell	Title	Overlapping cells
RU2OG0T9	Chukchi Sea. 180 W to Alaska.	US2AK92M
RU2O0KG9	BARENTS SEA VARANGERFJORD TO KANIN PENINSULA	NO2A2852 NO2A3252 NO2A3268 NO2A3668
RU2P9KE9	BARENTS SEA. NADEZHDA ISLAND TO 45 59 E.	NO2A3668 NO2A4068 NO2A4468
RU3NSKI9	Baltic Sea. Gulf of Finland. Vaindloo Lighthouse to Moshchnyy Island.	EE3A0403 EE3E0201
RU3NSKO9	Baltic Sea. Gulf of Finland. Seskar Island to Primorsk.	RU3NTKQ0
RU3NTKQ0	Baltic Sea. Gulf of Finland E Part. Stirsudden Lighthouse to Sankt-Peterburg.	RU3NSKO9
RU3OH0B0	Chukchi Sea. Chukotskiy Peninsula. Dzhennetfen Point to Dezhnyoy Point.	US3AK80M US3AK89M
RU3OKM90	White Sea. Mezenskiy Gulf. Mikhaylovskiy Point to Tolstik Point	RU3OKME0
RU3OKME0	Barents Sea. Chyoshskaya Inlet.	RU3OKM90
RU3OS020	Kara Sea. Yugorskiy Peninsula. Rifovaya Bay to Pul'sedayakha River.	RU3OSOC0 RU3P0NJ9

Figure 24: Check Overlap Candidates.

Functionality for distance measuring, pan and zoom in/out is available.

Distance measuring: Left click mouse button on start point, move cursor to end point and left click mouse button once more. The distance between the two points is being measured.

Pan function: click somewhere in the chart and drag to wanted position.

Zoom function: The +/- buttons can be used to zoom in/out. The mouse scroll button can be used to zoom in/out. A zoom box is also available to zoom in on required area.

In the list of cells overlapping they can be ticked on/off to display only required cell(s).
Show Overlap button automatically zoom in on overlap.

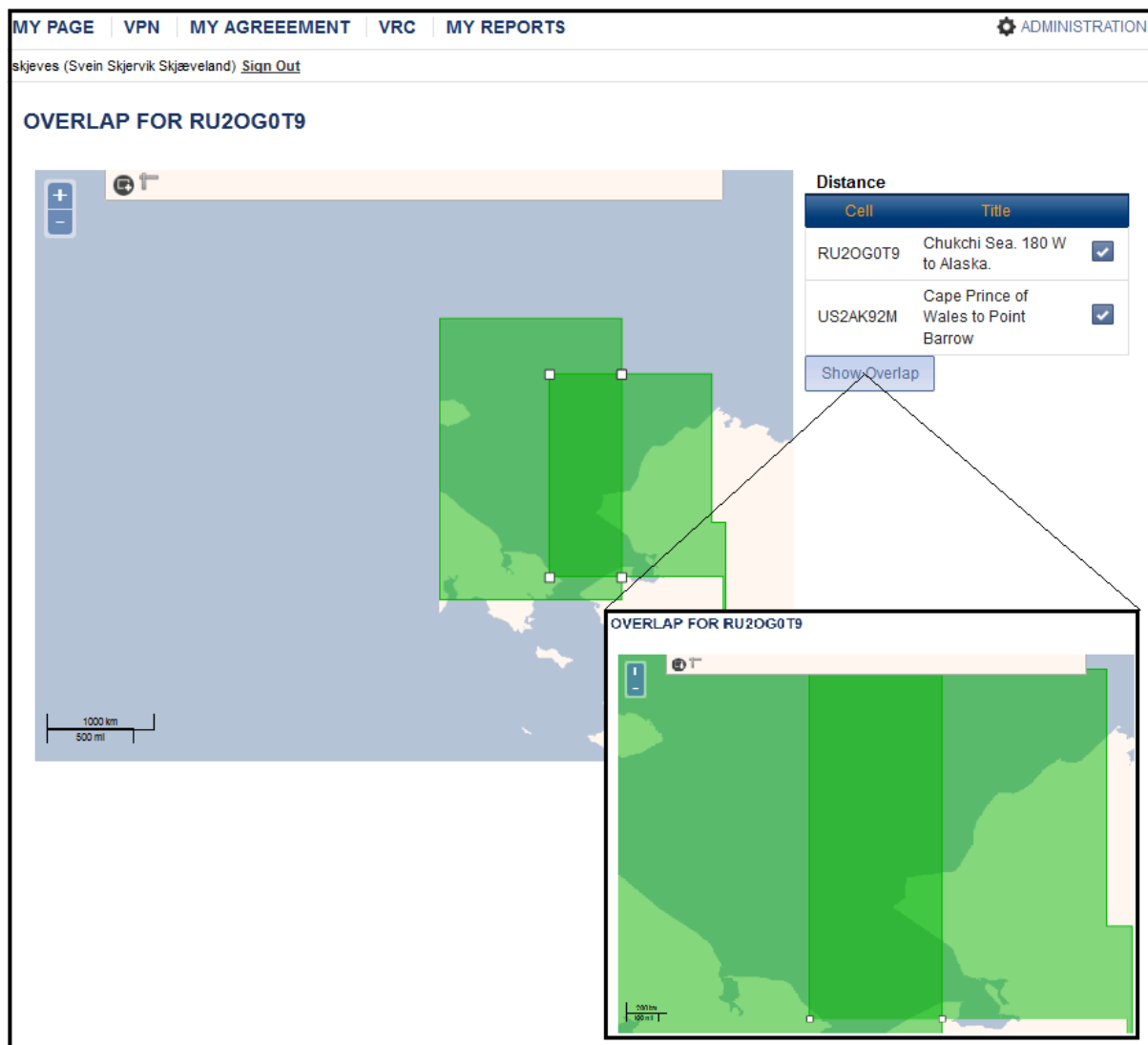


Figure 25:Overlap for selected ENC.

Edit Title

This tool offers an option to edit cell title and price band information. **Price band editing is only available for users with granted access.**

By typing in a cell name or part of a cell name, the system will return a list of ENC(s) where you will have the possibility to edit the cell title of the ENC, ref. Figure 26.

When pressing icon in right column, title and price band information can be changed and saved. A unit title can be edited the same way.

If you have done any changes, only cancel will abort the changes. Any other action might save the new values.

The screenshot shows a web application interface with a navigation bar at the top containing 'MY PAGE', 'VPN', 'MY AGREEMENT', 'VRC', and 'MY REPORTS'. On the right, there is a gear icon and the word 'ADMINISTRATION'. Below the navigation bar, the user's name 'Skjeves (Svein Skjervik Skjæveland)' and a 'Sign Out' link are visible. The main content area is titled 'EDIT TITLE' and features a search bar with 'EA2' entered. Below the search bar, a 'PRODUCTS' section displays a table with the following data:

Product ID	Title	
EA200001	The South China Sea	
EA200002	The South China Sea	
EA200003	The South China Sea	
EA200004	The South China Sea	

A modal window titled 'EDIT EA200003' is open, showing the following fields:

- Title:
- Price Band: (with a dropdown arrow)
- Price Band: Large
- Cells: (with a dropdown arrow)
-
- Buttons: Save, Cancel

Figure 26: Edit Title.

3.10 Logout from VPN

If you stay connected to VPN for a long time without any activity, the PRIMAR VPN server will automatically disconnect you and you will experience an error message the next time you try an operation. Login to the VPN server again and complete the operation.

A logout button is located in top left corner of the screen, behind active users name.

4 How to run a CD Service

4.1 Run your own CD service

4.1.1 Base CD

The functionality available in PRIMAR will enable an HO to deliver a national CD service. The VPN service supports the creation of encrypted/unencrypted base CDs and update CDs. The Chart Catalogue can be used to provide on-line chart permits (decryption keys) to the operator of the CD service. Additional services are available on request from ECC to assist in the on-line management of the financial transactions involved in delivering a CD service.

The following steps must be followed to create a base CD for Finland:

1. A Base CD can be created at any time based on the ENC's in the released database. Select *Download Released Cells* in the main window. To create the base CD, it is important you select all cells to be included in the service. In the example in Figure 27, the top directory FI (country code for Finland) is selected in the *ENC List Frame* to ensure all the base cells, updates, text and picture files stored underneath are included on the base CD.

The screenshot shows the 'DOWNLOAD RELEASED CELLS' interface. At the top, there are navigation tabs: MY PAGE, VPN, MY AGREEMENT, VRC, MY REPORTS, and ADMINISTRATION. Below the tabs, the user's name 'skjeves (Svein Skjervik Skjæveland)' and a 'Sign Out' link are visible. The main heading is 'DOWNLOAD RELEASED CELLS'. There are filter options for 'Date filter' (set to 2012.12.03) and 'Geometric filter' (with SLAT, WLON, NLAT, and ELON values). A tree view on the left shows a directory structure with 'FI' selected. A table of ENC records is displayed with columns: NAME, EDTN, UPDN, ISDT, NEW, SLAT, WLON, NLAT. The table contains 9 rows of data for FI29ARCE. Below the table is a 'Download' button and a 'Selected product info:' section. At the bottom, there are 'Log', 'Save', and 'Clear' buttons, and a status bar indicating 'Receiving files: File PRODUCTS.TXT received'.

NAME	EDTN	UPDN	ISDT	NEW	SLAT	WLON	NLAT
FI29ARCE	2	0	20100604	0	59.75	21.0	60.58333
FI29ARCE	2	1	20101018	0	59.75	21.0	60.58333
FI29ARCE	2	2	20101026	0	59.75	21.0	60.58333
FI29ARCE	2	3	20110104	0	59.75	21.0	60.58333
FI29ARCE	2	4	20110118	0	59.75	21.0	60.58333
FI29ARCE	2	5	20110216	0	59.75	21.0	60.58333
FI29ARCE	2	6	20110401	0	59.75	21.0	60.58333
FI29ARCE	2	7	20110415	0	59.75	21.0	60.58333
FI29ARCE	2	8	20110517	0	59.75	21.0	60.58333

Figure 27: Selecting FI to download all ENC information from Finland.

2. Press the "Download" button to initiate the transfer of ENC information as described chapter 3.6. The user must determine to deliver either an encrypted or unencrypted CD service, ref: Figure 14 and Figure 15.
3. Select a directory on your local computer to store the downloaded exchange set, ref: Figure 16. Note that the file references in the CATALOG.031 will always refer to the correct directory when the complete exchange set is copied to the top directory on a CD.

The following directory structure will then automatically be created (Figure 28) and the exchange set is ready to be burned to a CD.

4. The date the master CD was created must be recorded for future references when update CDs are created.
5. It is also recommended to add a file on the CD indicating the type of CD (base or update) and the week of issue to enable user systems to distinguish the CDs from each other.

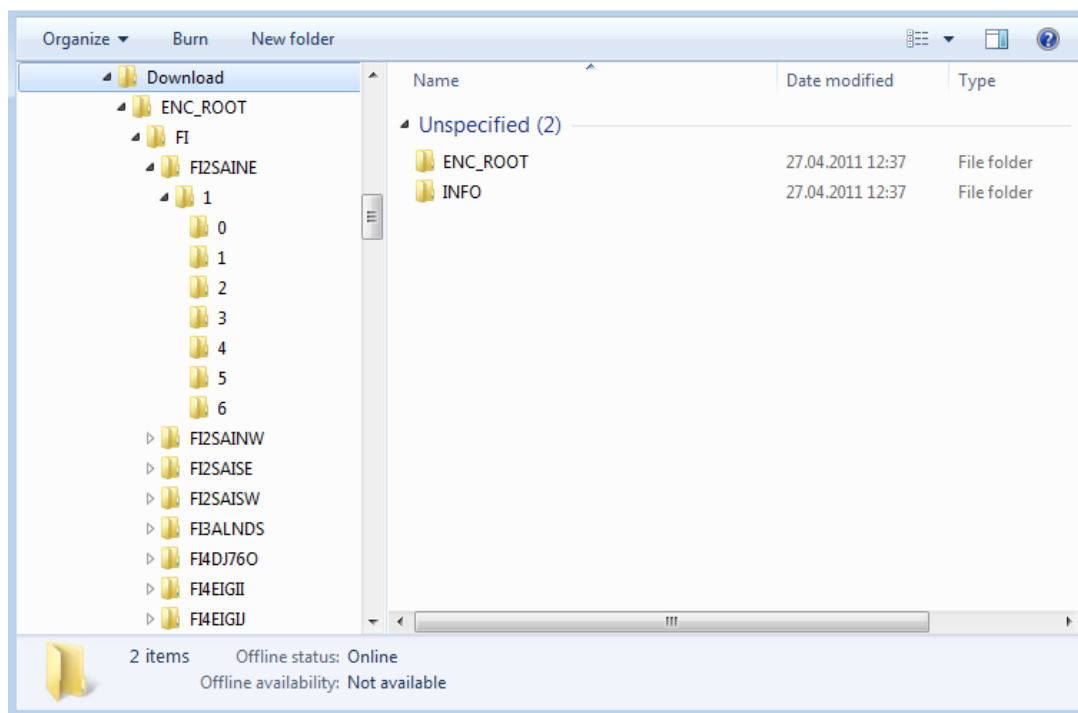


Figure 28: ENC_ROOT, INFO and directory structure.

4.1.2 Update CD

A Base CD must always be issued before an Update CD can be created. The service operator determines the frequency of Update CD creation.

VPN will create a sequential and accumulative Update CD. An Update CD must only contain data released after the time of a Base CD creation. If a Base CD has been created in week No. 1, an Update CD should be created in week 2, 3, 4 etc. for a weekly CD service.

The following steps must be followed to create an Update CD for Finland:

1. Select *Download Released Cells* in the main window. The Date Filter must be used to select all the ENC information issued after the creation of the base CD.
2. Enable the Date Filter and type in the date the base CD was created, ref. Figure 29. For example, if the base CD was downloaded on VPN on 11 March 2008, you must type in 2008.03.11 in the date filter. Only ENC information issued on and after this date will now be displayed in the *ENC List Frame*.



Figure 29: Date field frame.

3. Select FI in the top directory in the *ENC List Frame* and press the ADD button. All the ENC information released by FI after the base CD was created will now be ready for download. VPN will automatically include the proper references to auxiliary text and picture files.
4. Press the “Download” button to initiate the transfer of ENC information as described in chapter 3.6. The operator must use the same level of protection (either encrypted or unencrypted) as on the Base CD, ref. Figure 14 and Figure 15.
5. Select a directory on your local computer to store the downloaded exchange set, ref. Figure 16. Note that the file references in the CATALOG.031 will always refer to the correct directory when the complete exchange set is copied to the top directory on a CD. The same directory structure as in Figure 28 will be created containing the update information released after the Base CD was created.
6. This procedure is repeated every week to create the Update CD. Remember that the date in the Date Filter in bullet 2 must always be 2008.03.11 when the Base CD was created. This will always ensure that an accumulative Update CD will be created containing all update information and new releases issued after the Base CD was created.
7. Note that if more updates are released the same day the Update CD is created, they will be included on the next Update CD as part of creating the accumulative updates.
8. It is also recommended to add a file on the CD indicating the type of CD (base or update) and the week of issue to enable systems to distinguish the CDs from each other.

This procedure will ensure that the customer only will need the Base CD and the last Update CD to have a complete set of data available to use in an ECDIS or ECS system.

5 Support

In case of problems using the VPN functionality, please contact our VPN Support Team at PRIMAR. They can be contacted at:

- E-mail: data@ecc.no
- Tel: +47 51 93 95 00
- Fax: +47 51 93 95 01

6 Terms and Definitions

Applet	Small java application. Applets make it possible for a Web page user to interact with the page to perform interactive animations, immediate calculations, or other simple tasks without having to send a user request back to the web server.
CD	CD-ROM storage device
ENC	Electronic Navigational Chart compliant with IHO's transfer standard S57
GDS	GeoData Distribution Server – Application used by PRIMAR to generate and store its products and deliver both the CD and on-line official ENC service
HO	Hydrographic Office
IP address	Internet Protocol address - Each computer on the Internet has one IP address that uniquely identifies it from all other computers on the Internet.
Java	Programming language expressly designed for use in the distributed environment of the Internet.
MB	Megabytes – 1.048.576 bytes
SSL	Secure Socket Layer - SSL has been universally accepted on the World Wide Web for authenticated and encrypted communication between clients and servers.
S57	IHO Transfer Standard for Digital Hydrographic Data.
VPN	Virtual PRIMAR Network – Internet based application enabling an HO to upload, manage and download its ENC information stored in the PRIMAR GDS database.