COBHAM

SAILOR 6110 mini-C GMDSS

User manual

SAILOR 6110 mini-C GMDSS

User manual

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Warranties

Any attempt to install or execute software not supplied by Cobham SATCOM on the devices in this system will result in the warranty being void. Any attempt to modify the software on these devices in a way not specified by Cobham SATCOM will result in the warranty being void.

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Safety summary

The following general safety precautions must be observed during all phases of operation, service and repair of this equipment. Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design, manufacture and intended use of the equipment. Thrane & Thrane A/S assumes no liability for the customer's failure to comply with these requirements.

Observe marked areas
Under extreme heat conditions do not touch areas of the units that are marked with this symbol, as it may result in injury.

Microwave radiation hazards
During transmission the antenna in this system radiates Microwave Power. This radiation may be hazardous to humans close to the antenna. When the system is powered, make sure that nobody gets closer than the recommended minimum safety distance of 0.3 m (1 ft.).

Dangers de rayonnements micro-ondes
Lors de transmissions, l'antenne émet des rayons micro-ondes puissants. Ce rayonnement peut être dangereux pour les personnes à proximité de l'antenne. Lorsque le système est sous tension, assurez-vous que personne ne s'approche à moins de 0,3 m (1 pi.) de l'antenne, la distance de sécurité minimale recommandée.

Keep away from live circuits
Operating personnel must not remove equipment covers. Only qualified maintenance personal must make component replacement and internal adjustment. Under certain conditions, dangerous voltages may exist even with the cable removed. To avoid injuries, always disconnect power and discharge circuits before touching them.

Compass safe distance
Minimum safety distance: 5 m from the SAILOR 3027 GMDSS Terminal.

About the manual

Naming conventions

The following naming conventions are used for the SAILOR 6110 mini-C GMDSS in this manual:

Short name	Used for
SAILOR 6110	SAILOR 6110 mini-C GMDSS
SAILOR 3027	SAILOR 3027 GMDSS Terminal
SAILOR 6018	SAILOR 6018 Message Terminal
terminal	SAILOR 3027 GMDSS Terminal, or generally for mini-C terminals.

Intended readers

This manual is a user manual for the SAILOR 6110 mini-C GMDSS. The manual is intended for anyone who is using or intends to use this system. No specific skills are required to operate the SAILOR 6110. However, it is important that you observe all safety requirements listed in the beginning of this manual, and operate the system according to the guidelines in this manual.

Manual overview

Note that this manual does not cover installation of the system. For information on installation, refer to *SAILOR 6110 mini-C GMDSS, Installation manual (with SAILOR 6018 Message Terminal) [1]*.

This manual covers the SAILOR 6110 with the SAILOR 6018 Message Terminal. For information specific to the SAILOR 6006 Message Terminal, refer to the manuals *[8]*, *[9]* and *[10]*.

Part numbers for related manuals are listed in the next section.

This manual has the following chapters:

- *Introduction* contains an overview of the SAILOR 6110 and a brief description of each unit in the system.

- *Get started* explains how start up the system. It also contains a short guide to the most important functions.

- *Operation* explains how to set up and use the system with a SAILOR 6018 Message Terminal.
- *Service* contains information on software update and a short troubleshooting guide and explains how to check the status of the system.

Related documents

Ref	Title and description	Document no.
[1]	SAILOR 6110 mini-C GMDSS, Installation manual (with SAILOR 6018 Message Terminal)	98-154173
[2]	SAILOR 6018 Message Terminal, Installation manual	98-150478
[3]	SAILOR 6101 and SAILOR 6103 Alarm Panel, Installation and user manual	98-130981
[4]	SAILOR 6081 PSU and Charger, Installation and user manual	98-130980
[5]	SAILOR 6000 GMDSS Console system, Installation manual	98-131571
[6]	SAILOR 6194 Terminal Control Unit, Installation and user manual	98-131593
[7]	Moxa EtherDevice Switch, EDS-205A/208A Series, Hardware Installation Guide	1802002050023
[8]	SAILOR 6110 mini-C GMDSS, User manual (with SAILOR 6006 Message Terminal)	98-130753
[9]	SAILOR 6110 mini-C GMDSS, Installation manual (with SAILOR 6006 Message Terminal)	98-130752
[10]	SAILOR 6006/6007 Message Terminal, Installation manual	98-130088
[11]	Software Interface Reference Manual for the TT-3027C/D/M/LT/SSA mini-C transceiver[a]	98-147405

a. Only available for certified partners.

Typography

In this manual, typography is used as indicated below:

Bold is used for the following purposes:

- To emphasize words.
  Example: "Do **not** touch the antenna".

- To indicate what the user should select in the user interface.
  Example: "Select **SETTINGS > LAN**".

Italic is used to emphasize the paragraph title in cross-references.

Example: "For further information, see *Connecting Cables* on page...".

Contents

Chapter 4   Service

App. A   Conformity
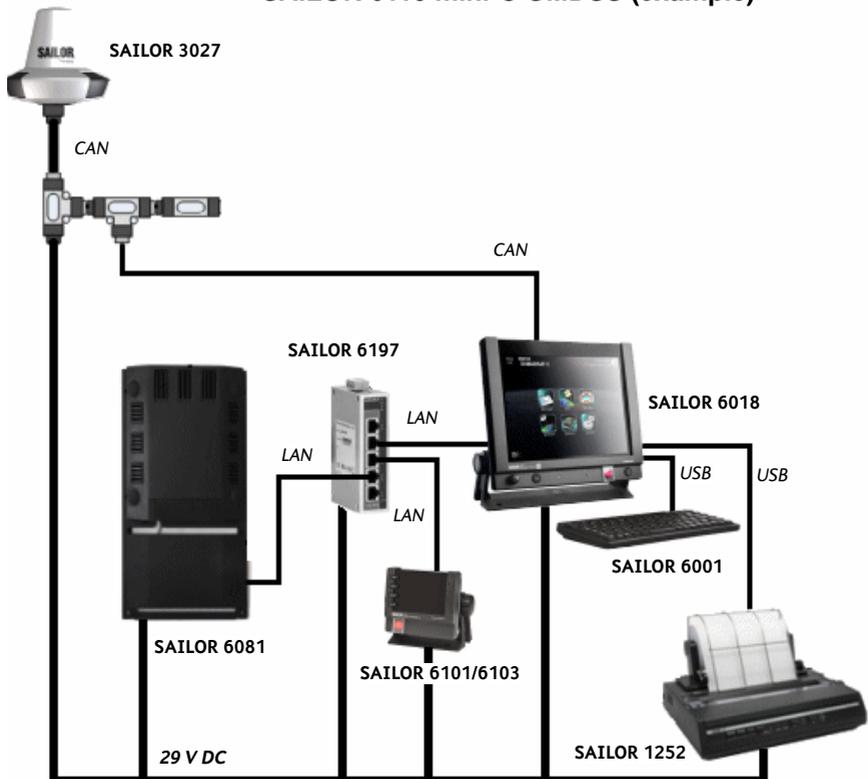
App. B   GNU License texts

Introduction

Welcome

Congratulations on the purchase of your SAILOR 6110 mini-C GMDSS!

With the SAILOR 6110 mini-C GMDSS you can send and receive data, including Distress alerts, via satellite through the Inmarsat C network.

The drawing below shows an example of a SAILOR 6110 mini-C GMDSS.

SAILOR 6110 mini-C GMDSS (example)

SAILOR 3027

CAN

CAN

SAILOR 6197

SAILOR 6018

LAN

LAN

USB   USB

LAN

SAILOR 6001

SAILOR 6081

SAILOR 6101/6103

29 V DC

SAILOR 1252

This chapter has the following sections:

- *System overview*
- *System units*
- *User interface*
- *The Inmarsat C services*

System overview

GMDSS

Global Maritime Distress and Safety System or GMDSS is a communication system to enhance safety at sea. This global system comprises both radio and satellite based technology carriers, and is currently mandatory for all vessels of over 300 GT and vessels otherwise included in SOLAS (the International Convention for the Safety of Life at Sea).

Overall satcom GMDSS service is operated by Inmarsat and overseen by IMSO, the International Mobile Satellite Organization and adheres to the IMO, the International Maritime Organization.

The SAILOR 6110 is a GMDSS approved communication system designed for use with the Inmarsat C satellite network.

The SAILOR 6110 mini-C GMDSS

The Inmarsat C satellite network is the link between the SAILOR 6110 and the destination office. It uses four geostationary satellites to cover the world. For each satellite there is an NCS, Network Coordination Station, handling registration of the mobile unit (in this case the SAILOR 3027) in the Inmarsat C system.

Each NCS is associated with a number of LESes, Land Earth Stations, which handle the transmission between the mobile units and the destination office.
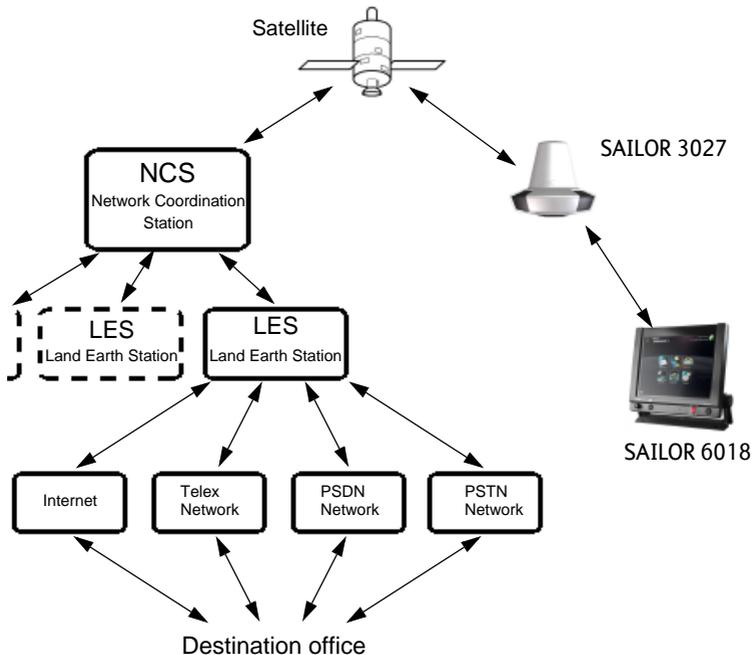
The SAILOR 3027 is connected to a SAILOR 6018 Message Terminal, where you can read and write messages and send Distress alerts. This communication is transmitted via the SAILOR 3027 to/from the Inmarsat C satellite network.

Introduction

System units

The basic SAILOR 6110 consists of the following units:

- SAILOR 3027 GMDSS Terminal.
  Contains both transceiver, GPS receiver and
  omnidirectional antenna for the Inmarsat C
  system. Connects to other equipment, primarily
  the SAILOR 6018, through a CAN interface
  carrying both power and bi-directional
  communication.

- SAILOR 6018 Message Terminal.
  Enables you to send and receive messages,
  send Distress alerts, monitor system status and
  test the system. The SAILOR 6018 has a touch-
  screen interface and comes with a SAILOR
  6001 keyboard.

- SAILOR 1252 Printer.
  Prints messages and reports from the SAILOR
  6018.

- SAILOR 6101/6103 Alarm Panel.
  Enables you to send Distress alerts and show
 visible and audible indication of incoming
  Distress messages.

For a more detailed description of the units, refer to the installation manual
for the SAILOR 6110 mini-C GMDSS and the manuals for the respective
units. See *Related documents* on page vi.

SSA option

The Ship Security Alert System provides ships with alarm buttons, which can be activated in case of a piracy or terrorist attack. The alarm is a covert signal that has no sound and no flashing lights, so it is not seen nor heard by any intruders on board the ship.

The SSA option consists of the SAILOR 6194 Terminal Control Unit and three to six SSA alarm buttons and one test button. It connects to the SAILOR 6110 system through the CAN interface. The CAN interface also provides the power for the SSA option.

SAILOR 6110 mini-C GMDSS with SSA
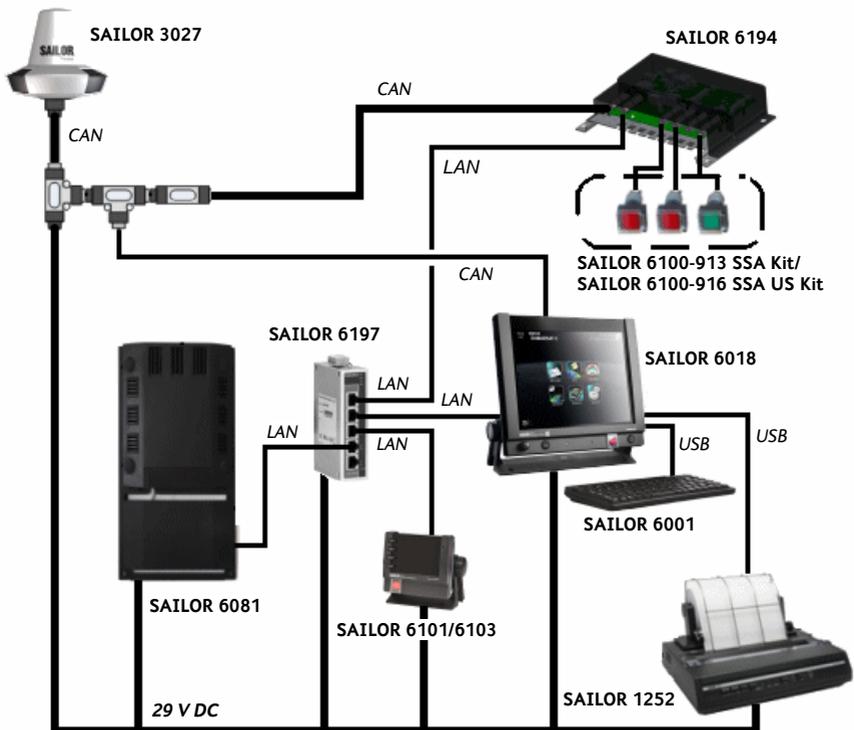
For further information on the SSA option, refer to the manual for the SAILOR 6194 Terminal Control Unit *[6]*.

User interface

The main user interface for the SAILOR 6110 is in the SAILOR 6018 Message Terminal. With the SAILOR 6018 Message Terminal you can send and receive messages, send Distress alerts, view system status and configure the system.

The SAILOR 6018 has a touch-screen for operating the system. You can also use the SAILOR 6001 keyboard, which is mandatory in GMDSS.

The SAILOR 6018 also has a Distress button, a Mute button, a Power button and a Dim knob. For details on the buttons, see *Buttons in the front panel* on page 23.

For details on how to use the SAILOR 6018, see *Operation* on page 19. To get started with the SAILOR 6110, see *Get started* on page 11.

The Inmarsat C services

The SAILOR 3027 supports the following services through the Inmarsat C system. For a description of these services, see the next sections.

■ *Distress alerts and Distress priority messages*

■ *Enhanced Group Call (EGC)*

■ *Message transmission*

■ *Position reports*

■ *Data reports and polling*

Distress alerts and Distress priority messages

If a ship or a crew is in grave and imminent danger, the crew can use the SAILOR 6110 to send a Distress alert by pushing a dedicated Distress button.

The alert contains information on the terminal's ID (ID of the SAILOR 3027), addressed LES, date/time of alert, ship's position, course, speed, time of last position update, nature of Distress, flag and speed update.

All Distress alerts are automatically routed through the addressed LES to an associated Maritime Rescue Coordination Centre (MRCC), which will establish communication with the ship and launch the Search And Rescue (SAR) operation the ship may need.

After sending the initial Distress alert, if time permits, it is possible to send a more detailed Distress priority message to give more details about the Distress event and ask for the required assistance.

The Distress priority message should be sent via the same LES as the Distress alert, to ensure that it is delivered automatically to the same MRCC.

Enhanced Group Call (EGC)

Two EGC services are available:

- EGC SafetyNET - the international safety service, which allows authorised maritime safety information (MSI) providers, such as meteorological offices, hydrographic officers and MRCCs to broadcast messages to all ships in certain geographical areas.

    MSI includes navigational and meteorological warnings, meteorological forecasts and other urgent safety-related information, which is addressed to all ships in NAVAREA / METAREA, user-defined circular or rectangular area or coastal area.

    Reception of SafetyNET messages is a mandatory function of the GMDSS equipment that is required to be carried in certain ships under the provision of the International Maritime Organisation's Safety Of Life At Sea (SOLAS) convention.

- EGC FleetNET - the international commercial service, which allows authorised information providers, such as commercial subscription services, shipping companies or governments to broadcast messages to selected groups of vessels, each of which has registered with the information provider and been added to a FleetNET closed group / network. The mobile terminals on these groups of vessels are identified by an ENID (EGC Network IDentification) common to the group.

    For further information on EGC via Inmarsat C read the Inmarsat Maritime Communications Handbook, Chapter 6, or visit the Inmarsat Maritime Safety Services website at www.inmarsat.com.

Message transmission

Ship to shore: Text and data from the SAILOR 3027 can be sent to:

- An e-mail address
- Any telex or fax (text, one way only) number
- Any computer connected to the public telephone and data networks (PSTN and PSDN), using a telephone modem number
- Another Inmarsat C / mini-C terminal
- A Short (or Special) Access Code (SAC).

The maximum message size is 10 kb for the SAILOR 3027.

Shore to ship: Text and data can be sent via telex, e-mail and the data and telephone (PSDN / PSTN) networks. To be able to send messages to ships, a shore-based message originator needs to be registered (to have a commercial service agreement) with an Inmarsat C service provider of their choice.

Ship to ship: Messages can also be sent in a ship-to-ship direction from one mini-C terminal to another.

Position reports

The SAILOR 3027 is integrated with a Global Navigational Satellite System (GNSS) receiver to provide highly reliable, round-the-clock position information of the ship, which can be used for position reporting.

The position reporting service is based on using the data reporting and polling protocol and allows a shore-based subscriber (base station or shipping company) to request position information from a vessel, as a single report or automatic reception at fixed intervals, e.g. every six hours.

The SAILOR 3027 can also be programmed to send regular position reports to any desired destination.

The position report includes ship's identity, latitude, longitude, course, speed, date / time of the position report and time of the last position update.

With the SAILOR 3027, the report is sent to a DNID (Data Network IDentifier) that is effectively a mailbox created on some LESes. The

SAILOR 3027 sends its reports to this mailbox and other tracking systems can then access and empty the mailbox. The SAILOR 3027 supports up to 64 DNIDs.

Up to 255 mobile terminals can use the same DNID, and the specific terminal is identified by a member number between 1 and 255.

The DNID must be created on the LES before the position-reporting feature can be used. Once the DNID account is created, the LES can download the DNID information to the desired terminals, thereby enabling them to send reports to the DNID.

Data reports and polling

Inmarsat C users may need to acquire information (short data reports) from vessels, or to collect data automatically at fixed or variable intervals.

The data reporting service allows for the transmission of information, in packets of up to 32 bytes on request or at prearranged intervals from the SAILOR 3027, to shore-based customers.

Polling allows shore-based subscribers to interrogate a SAILOR 3027 or a group of terminals by sending a special polling command. The polling command instructs the SAILOR 3027 or a group of terminals to send a data report immediately, start sending regular reports, change transmission schedule of reports or perform another task of the polled terminal(s).

Get started

This chapter explains how to register, start up and log on your
SAILOR 6110. It has the following sections:

- *Registration*

- *Initial configuration*

- *Start up the system*

Registration

Before using the SAILOR 3027 GMDSS Terminal on the Inmarsat-C system
you must register the terminal. In most cases the distributor has already
filled in the Service Activation Registration Form (SARF) for your
SAILOR 3027 when you receive the terminal.

For details on registration, see the Installation manual for the SAILOR 6110.

After registration you must use a SAILOR 6018 Message Terminal to set up
the mobile number in the SAILOR 3027. See *Set the mobile number in the
SAILOR 3027* on page 72.

Initial configuration

> **Note** The initial configuration may already have been done during installation of the system. If so, you can skip this section.

To select the Inmarsat C application

The first time the SAILOR 6018 is switched on, you are asked to select which Message Terminal application to use. The SAILOR 6018 Message Terminal can run Radiotelex or Inmarsat C.

1. If it is the first time, the SAILOR 6018 starts up on the **Select application** page.


2. Select **Inmarsat C** and tap **Store**.

When you have selected and stored **Inmarsat C**, the SAILOR 6018 automatically restarts with the Inmarsat C application.

If, at a later stage, you want to switch between the Radiotelex and Inmarsat C applications, do as follows:

1. During startup of the SAILOR 6018 and before the main screen appears, push the **Mute** button.

The **CONFIGURATION** page opens.
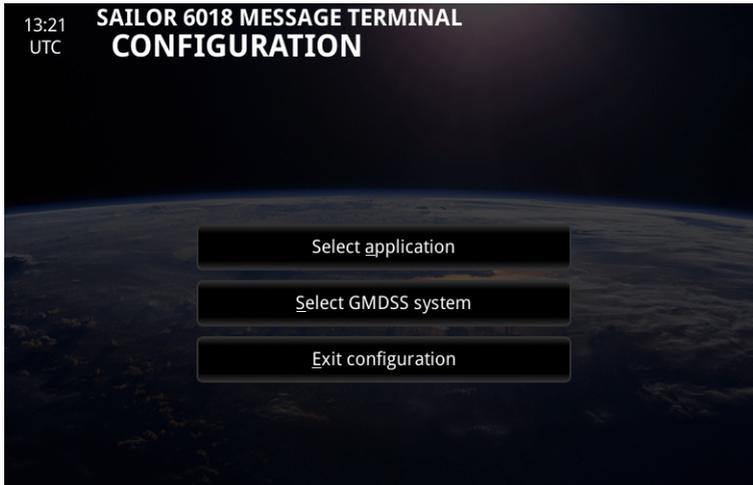
2. Select **Select application**.

3. Select the application you want to use and tap **Store**.

4. If you want to configure a duplicated system, select **Select GMDSS system** and continue as described in the next section.
   If not, select **Exit configuration**.

To configure a duplicated SAILOR 6110 mini-C GMDSS

If you have a duplicated system, you have to set up which is the primary and which is the duplicated SAILOR 6110. On the SAILOR 6018 in the primary system, do as follows:

1. During startup of the SAILOR 6018 and before the main screen appears, push the **Mute** button.

2. To configure a duplicated system, select **Select GMDSS system**.

3. Type in the password if you are prompted. The password is 1234.

4. Select **Primary** and tap **Store**.

5. On the SAILOR 6018 of the duplicated system, repeat steps 1 through 4, but select **Duplicated** instead of Primary in step 4.

In the SAILOR 6018, under **System > About**, you can see whether the system is a Primary or Duplicated system.

If you have an Alarm Panel in the system, the primary and duplicated systems will appear in the Alarm Panel as Inm-C 1 and Inm-C 2 respectively.
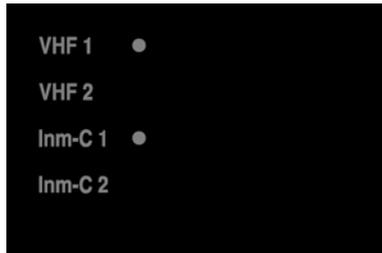
Mobile number (Network ID)

When the SAILOR 3027 GMDSS Terminal is registered at the Inmarsat Service Provider (ISP), the ISP returns a mobile number for the SAILOR 3027. This mobile number must be entered in the SAILOR 3027 to enable it for use in the Inmarsat C network. To check the number or to enter a new mobile number, select **Network > Settings** in the SAILOR 6018. For details, see *Set the mobile number in the SAILOR 3027* on page 72.

Get started

Start up the system

Power the system

When all units are connected correctly and you have registered the
SAILOR 3027, do as follows to power the system:

1. Make sure the power source is on.

2. Switch on the SAILOR 6018.

    - Use the power switch in the right
      side of the SAILOR 6018, or

    - if you have installed a remote
   on/off switch, use that instead.

The SAILOR 6018 starts up and sends a
signal to switch on the SAILOR 3027. The
SAILOR 6018 shows the current status in
the upper right corner of the display.
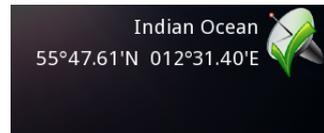
For an overview of the user interface, see *Overview of the screen* on
page 24.

Log into the satellite network

The SAILOR 3027 logs into the Inmarsat C network automatically at startup. The upper right corner of the display shows if the system is logged on.
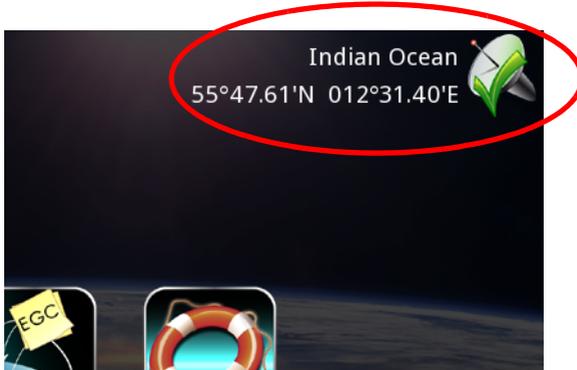
If, however, the selected satellite is no longer available, you must manually select another satellite to log into.

To log into the satellite network manually, do as follows:
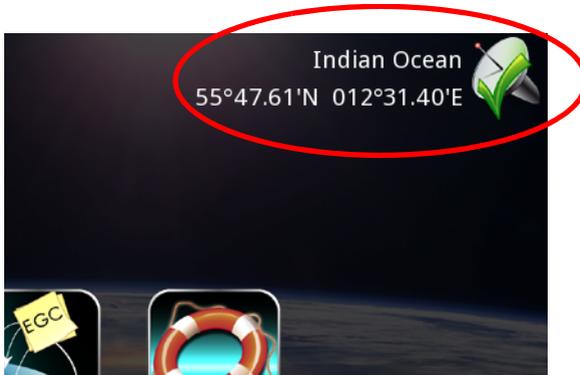
1. When the main menu of the SAILOR 6018 appears, select **Network**.

2. On the **Network Status** page select **Login**.

3. Select the Ocean Region to which you want to log in.

   If the selected satellite is available, the system will now log in.

   When the display shows the Ocean Region and the position, and there is a green check mark at the satellite symbol, the system is ready for use.

Note	The Ocean Region is only displayed if the system is idle and there are no errors - otherwise the text will show the current status.

Operation

This chapter describes how to operate the SAILOR 6110, primarily using the SAILOR 6018 Message Terminal. It has the following sections:

- *Send a Distress alert*
- *Overview of SAILOR 6018 Message Terminal*
- *Menu overview*
- *Work with messages*
- *Receive EGCs*
- *Print, save or delete EGCs or messages*
- *Network status*
- *Manage the list of Contacts*
- *Power status*
- *View system details*
- *Change regional settings and night mode*
- *Change the Distress alert settings*
- *Change the EGC settings*
- *Change the Message settings*
- *Change the Network settings*
- *Position*
- *Test Distress buttons in the system*
- *Use the SAILOR 1252 Printer*

For details on the Inmarsat C services, see *The Inmarsat C services* on page 7.

Send a Distress alert

| Important | Only send a Distress alert if you are in immediate danger! The Distress alert can be compared to a MAYDAY call. |

The procedure below applies to the SAILOR 6018 Message Terminal and to the SAILOR 6101/6103 Alarm Panel.

**To send a Distress alert**, do as follows:

1. Open the cover for the Distress button.

2. Push and hold the button until the light is steady and the buzzer stops (more than 3 seconds).

During this time the button light flashes and the buzzer sounds. After 3 seconds the red light goes steady on and the buzzer is silent. The display shows that the message is being sent.

The display also shows when the Distress alert is acknowledged from the LES. **Write down the LES number** - you must use the same number when you send a Distress message with more information for the MRCC.
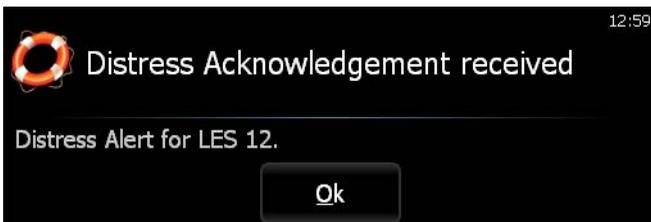
The below table shows the behavior of the Distress button on the SAILOR 6018.

Behavior	Meaning
Button light flashes, buzzer sounds	The Distress button is pushed. Hold until light and sound changes (more than 3 seconds).
Button light constant, buzzer is silent	The Distress alert is being sent (normally within 10 to 30 seconds)
Button light shortly off every 15 seconds	The Distress alert is confirmed

Important The MRCC normally sends a message to the alerting unit to gather more information about the situation.

If at all possible, respond to such messages with a Distress message sent to the same LES that was used for the Distress alert.

Operation

The LES used for the Distress alert is shown in the Distress popup windows. An example is shown in the previous page.

For information on how to send a Distress message, see *Write a Distress priority message* on page 28.

The MRCC may also send Distress EGCs to other ships in the area to request assistance (typically as Distress Relay or SAR Coordination request).

See also *Change the Distress alert settings* on page 64.

Clear Distress indications

If you want to turn off all Distress indications while a Distress alert is still active, do as follows:

Note This function will only turn off the visual and audible indications on board. It will not cancel the transmission of the Distress alert.

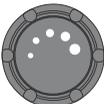1. On the SAILOR 6018, select **Distress**.

2. Select **Status**.

3. Select **Clear distress indications**.
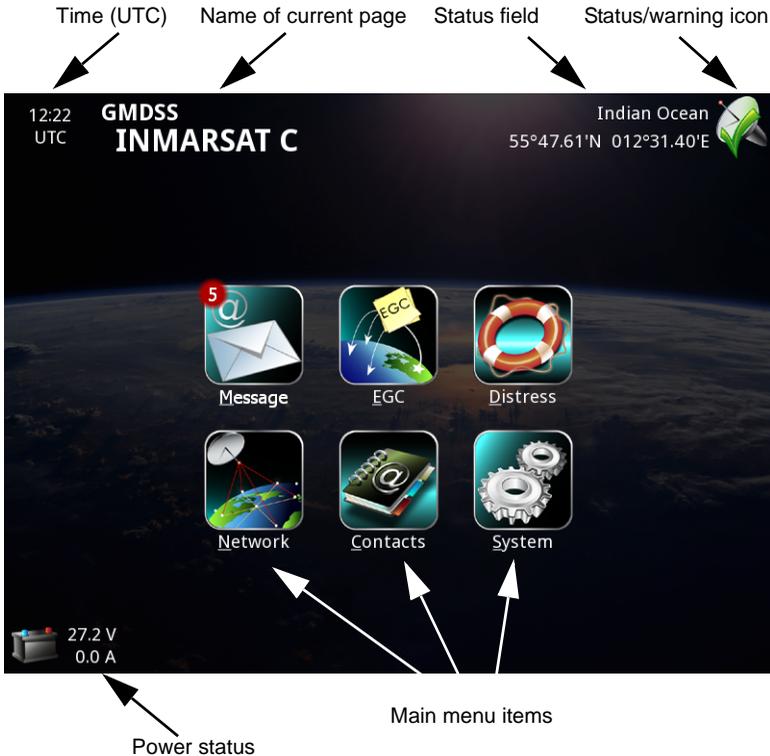
Overview of SAILOR 6018 Message Terminal

Buttons in the front panel

The buttons in the front panel have the following functions:

Control	Function
	The **Distress** button is used to send a Distress alert through the connected SAILOR 3027 terminal. See *Send a Distress alert* on page 20.
	The **Mute** button is used to mute the SAILOR 6018 and connected equipment, such as alarm panels. **Test**: Pushing the Mute button for more than 5 seconds will test the sound and the light in the buttons.
	Without remote on/off: To switch on: Push the button To switch off: Push and hold until the screen turns black. **With remote on/off**: The Power button cannot be used to switch the SAILOR 6018 on and off. You must use the remote switch. To restart the terminal: Push and hold power button for 2 seconds.
	Turn the Dim knob to control the display brightness. If an alarm appears while the brightness is at level zero, the display returns to the latest dim value and the alarm is displayed. **Night mode**: The SAILOR 6018 display automatically shifts between day and night mode, but you can set the ambient light intensity at which the SAILOR 6018 should shift between day and night mode. See *Change the ambient light intensity for shift to night mode* on page 62.

Operation

Overview of the screen

Below is an overview of the SAILOR 6018 main screen.

Time (UTC)   Name of current page   Status field   Status/warning icon

Main menu items

Power status

- **Time (UTC)**: This is the current time of day received with the position data. The presentation format can be changed under System > Settings > Regional settings.
- **Name of current page**: In each submenu this field shows the name of the page.
- **Status field**: This field shows a short status message next to the Status/warning icon.

- **Status/warning icon**: This icon can show:

 Status OK

 Warnings pending

 Critical error pending

For details of warnings and errors, see *Information of events* on page 91.

- **Main menu items**: Select these items to access the submenus. For an overview of the menu system, see *Menu overview* in the next page.

- **Power status**: Shows a short status of the backup battery.

Navigate the user interface of the SAILOR 6018

To navigate and select items in the user interface you can do one of the following:

Touch screen: Select items by touching them with your finger on the screen of the SAILOR 6018. Items in a grey frame such as in the example below can be selected by touching anywhere within the frame.

Operation

Keyboard: Use the tab and arrow keys to navigate through items and press **Space** to select them. When an item has an underlined letter, you may type Alt + <the underlined letter> to select the item, e.g. type Alt+S to select the System menu from the main screen.
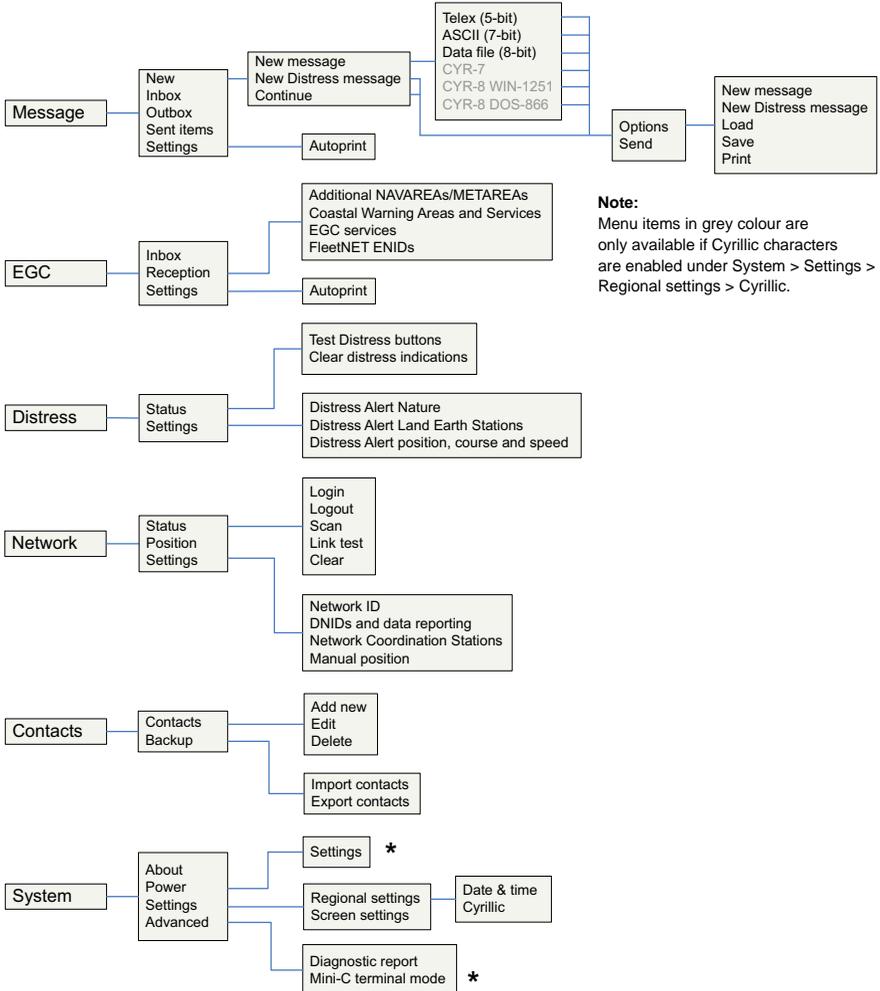
To sort a list

In lists, such as the message Inbox or the Contacts list, you can sort the list by selecting the heading of the column you want to sort by. E.g. to sort the names in the Contacts list, select Name. Select it again to toggle between ascending and descending order.

Menu overview

The below drawing shows the menu system of the SAILOR 6110.

Message
- New
- Inbox
- Outbox
- Sent items
- Settings

New message
New Distress message
Continue

Autoprint

- Telex (5-bit)
- ASCII (7-bit)
- Data file (8-bit)
- CYR-7
- CYR-8 WIN-1251
- CYR-8 DOS-866

Options
Send

- New message
- New Distress message
- Load
- Save
- Print

Note:
Menu items in grey colour are only available if Cyrillic characters are enabled under System > Settings > Regional settings > Cyrillic.

EGC

Inbox
Reception
Settings

- Additional NAVAREAs/METAREAs
- Coastal Warning Areas and Services
- EGC services
- FleetNET ENIDs

Autoprint

Distress

Status
Settings

- Test Distress buttons
- Clear distress indications

- Distress Alert Nature
- Distress Alert Land Earth Stations
- Distress Alert position, course and speed

Network

Status
Position
Settings

- Login
- Logout
- Scan
- Link test
- Clear

- Network ID
- DNIDs and data reporting
- Network Coordination Stations
- Manual position

Contacts

Contacts
Backup

- Add new
- Edit
- Delete

- Import contacts
- Export contacts

System

About
Power
Settings
Advanced

Settings *

- Regional settings
- Screen settings

- Date & time
- Cyrillic

- Diagnostic report
- Mini-C terminal mode *

The items in the menu overview are described in the following sections. Items marked * are described in the installation manual for the SAILOR 6110.

Operation

Work with messages

Write a Distress priority message

Note	Distress priority messages are sent to the MRCC only.
	Distress priority messages must be written in English.

To write a Distress priority message, do as follows:

1. From the main menu, select **Message**.

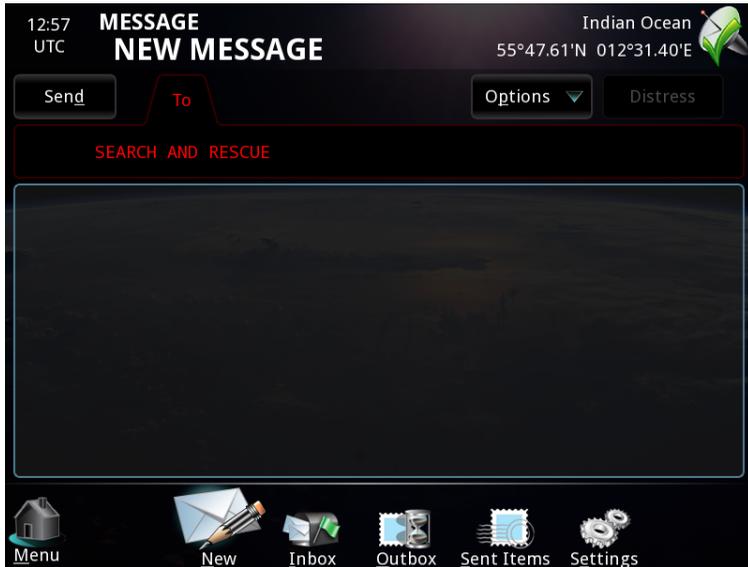2. At the bottom of the page, select **New** and then select **New Distress message**.

A popup window appears.

3. Read the message and select **Yes**.

The Distress message editor opens.

4. Use a keyboard to type your message text, or touch the screen and select the soft keyboard that appears in the top right corner of the display.

   The text must be in English. Note that Cyrillic characters cannot be selected for a Distress message.

5. When the message is ready to be sent, select **Send**.

A popup window appears.

6. Select the LES to be used for sending the message, or use the already selected LES.

> **Important** | The LES for the Distress priority message must be the same as the LES used from the start of the ongoing communication session.

7. Select **Send**.

You get a message saying: "Message scheduled for transmission", and later: "Distress message initiated".
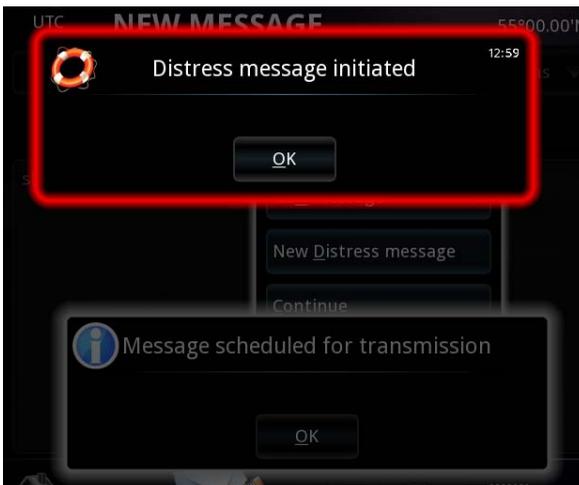
8. Select **OK**. The message is sent as soon as the network allows it.

Note Distress priority messages are sent to the MRCC only.

When the message is acknowledged you get a popup message.

You can also check the status of your message in the Outbox and Sent Items.

The message is moved from the Outbox to Sent items when it is sent, but it may not have been acknowledged yet. This is indicated by a question mark as shown below.

When the question mark changes to a check mark, the message has been acknowledged.

Write a routine priority message

Note You can enable the use of Cyrillic characters under **System > Settings > Regional settings > Cyrillic**. With Cyrillic characters enabled, you can change the keyboard to a Cyrillic keyboard for use in your message. For details, see *Use Cyrillic characters* on page 60.

To write a routine priority message, do as follows:

1. From the main menu, select **Message**.

2. At the bottom of the page, select **New**.
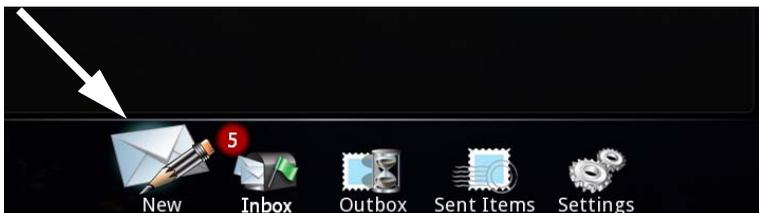
3. If you just want to type your text in the editor without changing the encoding, select **Continue**, skip the next 2 steps and go to step 6.

Operation

4. If you want a different encoding of the message, select **New message** instead of Continue. Then select the encoding you want.

> **Note** | You can also change the encoding at a later stage by selecting the encoding in the top right corner of the message page and then select what you want to convert to.
>
> If you have enabled Cyrillic characters, the encoding types for Cyrillic characters also appear in the list. For details, see *Use Cyrillic characters* on page 60.

5. If you want to send a data file in stead of typing in text, select **New message > Data file (8-bit)**, browse to the file you want to send and select it. The filename appears in your message. Continue to step 7.
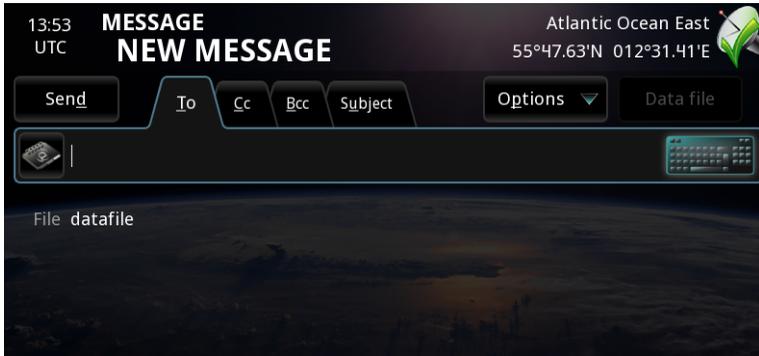
6. Use a keyboard to type your message text, or touch the editor field and select the soft keyboard in the top right corner of the display.


Note If you want to save your message without sending it, you can save it as a file. See the next section *Options for writing and sending messages* on page 39.

Operation

7. Select the tab page **To...** (1) and then select the Contacts icon (2).

8. Select the recipient(s) of the message from the Contacts[1] list. Then select **OK**.

> **Note** | If you select more than one recipient, the address type must be the same for all recipients. The system does not support different address types for one message.

---
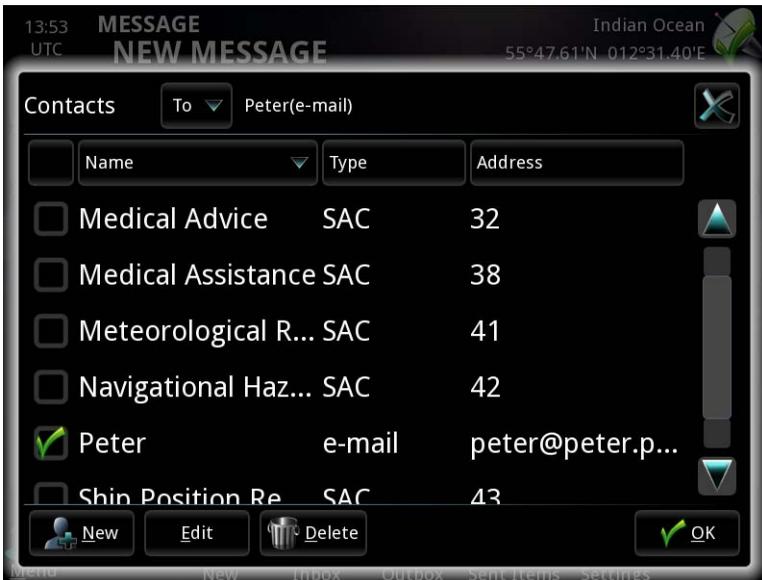
1. For information on how to edit the Contacts list, see *Manage the list of Contacts* on page 50.

9. Select the tab page CC or BCC at the top of the message editor if you want someone to receive a copy of the message. Then select or type in the recipient(s).
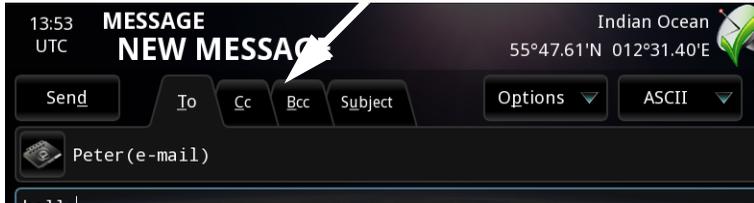
10. Select the tab page **S<u>u</u>bject** and type a subject or title for your message.

11. When the message is ready to be sent, select **Send**.

12. Select the service provider to be used for sending the message, or use the already selected service provider.

Operation
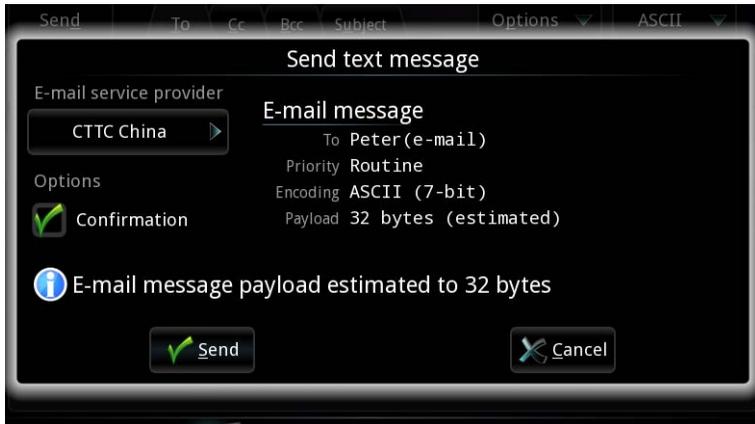
| Note | Thrane & Thrane A/S does not take responsibility for the correctness of the estimated payload for your message. |

13. If you want confirmation when your message is received, select **Confirmation**.

14. Select **Send**.

You get a message saying "Message scheduled for transmission". Select **OK**. The message is sent as soon as the network allows it.

Options for writing and sending messages

The **Options** menu in the right side of the **New message** page offers the following options when writing a message:

- **New message**
  - Telex (5-bit). Select this option if you want the message to be as small (and fast) as possible. Note that no special characters can be used, and all letters are converted to capital letters.
  - ASCII (7-bit). Select this option if size and speed are not very important and/or you want to be able to use special characters and small letters.
  - Data file (8-bit). Select this option if you want to send a data file instead of writing text in the editor.
  - If Cyrillic characters are enabled, you get some extra options. See *Use Cyrillic characters* on page 60.

- **New Distress message**

  Opens the Distress message editor so you can write a Distress message.

- **Load**

  Allows you to browse for a text file to load into the message editor.

- **Save**

  Allows you to browse to or type in a location where you can save your message to a file. If, for example, you have written a draft message that you want to send later, you can save the message and then load it back into the editor when you want to send it.

- **Print**. Prints the text in the message editor on the connected printer.

View messages in the Inbox

The Message icon in the main menu shows how many unread messages are in the Inbox.

Note The Inbox can hold 1000 messages. The oldest messages are automatically deleted when this limit is exceeded.

To view the messages in the Inbox, do as follows:

1. At the bottom of the **MESSAGE** page, select **Inbox**.

In front of each message one of the following icons is shown:

The message is unread

The message has been read

Distress priority message (unread)

Distress priority message (read)

Apart from the icons, the Inbox shows:

- the name of the sender if listed in your Contacts, otherwise the e-mail address or number of the sender. If neither is known: "No address".

- the subject, if any.

- the time and date of the message.

> **Note** | You can sort the Inbox by selecting the top of the column you want to sort by.

2. Select the message you want to read.

3. If the message is not displayed correctly, you can change the code page at the bottom of the page.
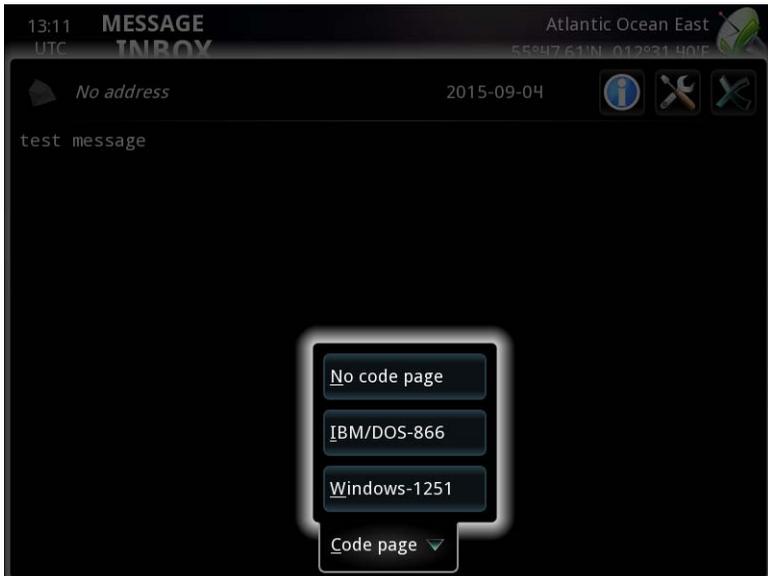
> **Note** | If you are going to print the message, the printer must also be set up for the correct encoding. For details, see the Configuration chapter of the Installation manual *[1]*.

For information on how to delete, print or save messages, see *Print, save or delete EGCs or messages* on page 47.

View messages in the Outbox

To view messages in the Outbox, click **Outbox** at the bottom of the **MESSAGE** page.

The Outbox holds messages that are scheduled for transmission, but have not yet been sent.

Select a message to see the contents.

View Sent items

Note | Sent items can hold 1000 messages. The oldest messages are automatically deleted when this limit is exceeded.

To view your sent messages, click **Sent Items** at the bottom of the **MESSAGE** page.

The Sent Items page shows all messages that have been sent from the SAILOR 3027, including Distress messages.

Note | You can sort the list by selecting the top of the column you want to sort by.

Select a message to see the contents.

The icon next to the message can show the status of the message:

Sent Distress message is not yet acknowledged.

Sent Distress message is acknowledged.

Only if Confirmation is requested: Sent message is not yet acknowledged.

If Confirmation is requested: Sent message is acknowledged.
If Confirmation is not requested: Message is sent.

Operation

Receive EGCs

View incoming EGCs

> **Note** You can receive various types of EGCs in the SAILOR 6018. For details about how to set up which EGCs to receive and which EGCs to print, see *Change the EGC settings* on page 68.

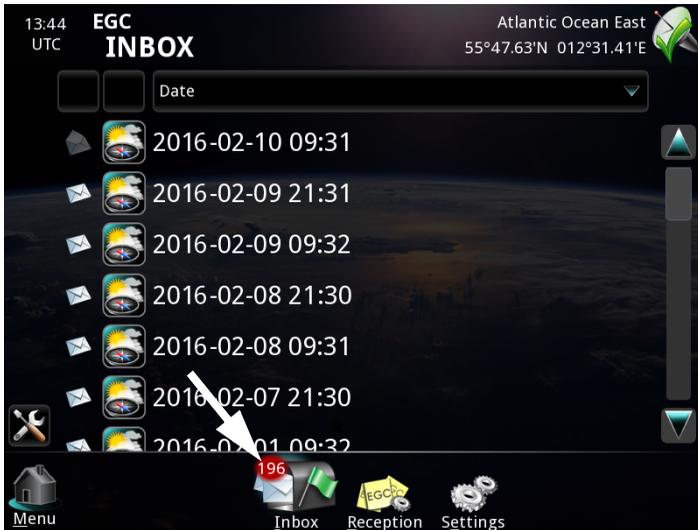The SAILOR 6018 shows incoming EGCs.

> **Note** The EGC Inbox can hold 1000 EGCs. The oldest EGCs are automatically deleted when this limit is exceeded.

To view EGCs, do as follows:

1. Select **EGC** from the main menu.

2. Select **Inbox** (may already be selected).

Apart from the time and date of the EGC, the list of incoming EGCs can show the following icons:

SafetyNET EGC. Meteorological warning, navigational warning, coastal warning and meteorological forecast.

SafetyNET EGC. Shore to ship Distress alert and search and rescue coordination

FleetNET EGC

System EGC

Default EGC. Only used if the EGC type is unknown.

The status of each EGC is shown with one of the below icons:

 The EGC is unread

 The EGC has been read

 Distress or Urgent priority EGC (unread)

 Distress or Urgent priority EGC (read)

> **Note** You can sort the EGC Inbox by selecting the top of the column you want to sort by.

3. Select an EGC to see the contents.

   If the EGC is not displayed correctly you can change the code page at the bottom of the page (see step 3 on page 41).

For information on how to delete, print or save EGCs, see *Print, save or delete EGCs or messages* on page 47.

Print, save or delete EGCs or messages

Use the tools symbol ⚒ to print, delete or save EGCs or messages. You can use the tools symbol from within an EGC or message or from the list of EGCs or messages (Inbox, Outbox or Sent items).

From the Inbox, Outbox or Sent items

To delete or save messages or EGCs from the Inbox, Outbox or Sent items, do as follows:

1. Click ⚒ in the lower left corner of the display.

2. Select the messages or EGCs you want to delete or save.

   You may use **Select all** to select all items or **Clear** all to remove all selections.

3. Select **Delete** to delete the selected messages or EGCs or **Save** to save the selected messages.

From within a message or an EGC

To delete, print or save a message or EGC, do as follows:

1. Select the message or EGC you want to delete, save or print.

2. Select ⚒ in the corner of the display.

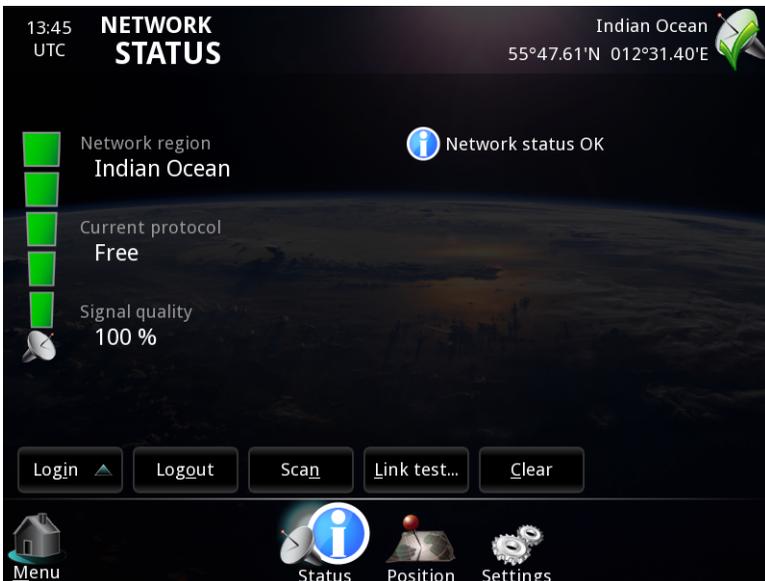3. Select **Delete**, **Print** or **Save**.

Operation

Network status

The top right corner of the display shows a short text about the current status.
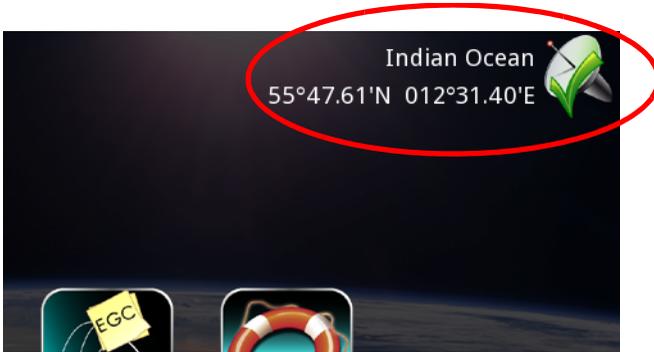
To view a more detailed network status, do as follows:

1. Select **Network** from the main menu.

2. Select **Status** at the bottom of the page.

Log into and out of the network

To log into the Inmarsat C network, select **Login** from the lower left side of the **NETWORK STATUS** page and select the region you want to log into. If you just want to use the region with the best signal, use Scan instead (see the next section).

To log out of the network, select **Logout** from the lower left side of the **NETWORK STATUS** page and select **OK**.

Scan the network

If you want the system to select the ocean region with the best signal, select **Scan** in the **NETWORK STATUS** page. The system will then scan for the best signal and log into that ocean region. Note that the scanning process may take a long time, because all ocean regions are scanned.

Clear the current protocol

If you want the system to immediately stop transmitting, select **Clear** in the **NETWORK STATUS** window.

The current protocol is then cleared, and any ongoing transmission is stopped.

Link test

Note To test basic system connectivity, we recommend that you send a short message to yourself instead of using the link test. For details on how to send a message, see *Write a routine priority message* on page 33.

Because the link test has low priority in the network, it takes a long time for the system to complete the test, and during this time the system has limited functionality.

If you still want to run a link test, first make sure the SAILOR 3027 is properly commissioned and logged in. The top right corner of the SAILOR 6018 display shows the status.

Operation

To run a link test using the SAILOR 6018, do as follows:

1. In the SAILOR 6018 display, select **Network** > **Status > Link test**...
   The Link test window shows the result of the latest link test if any.

2. Select **Perform link test**.

3. Select **Yes**.
   A window shows **Link test in progress**. When the test is complete, the window shows the results of the test.

4. Select **OK** to exit the Link test window.

Manage the list of Contacts

To manage your list of contacts, select **Contacts** from the main menu.

The list of Contacts opens.

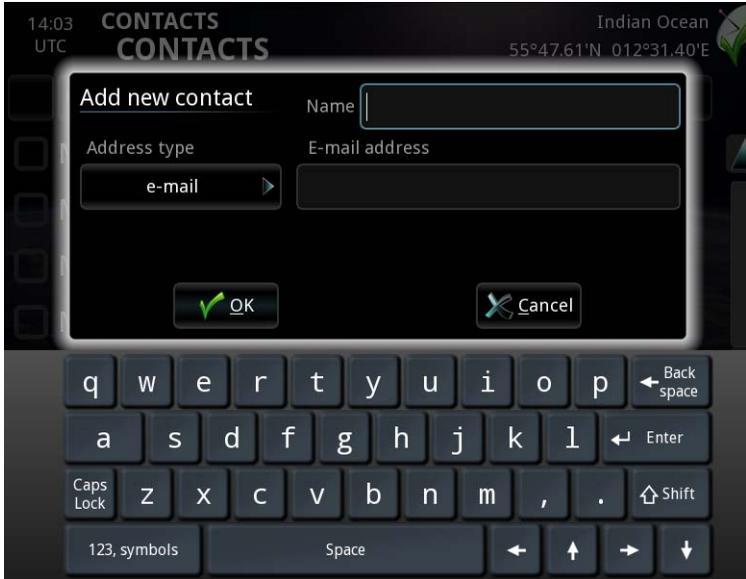
For each contact you can see the type and address.

From the bottom of the Contacts list you can add, edit or delete selected contact(s)

You can also access and manage your Contacts from within a message, by selecting the Contacts icon from the To... tab.

To add a new contact

Do as follows:

1. At the bottom of the **CONTACTS** list, select **New**.

2. Type in the name of your contact.

3. Select the **Address type** from the drop-down list.

4. Type in the details for your contact. The format of the address/number depends on the selected address type. See the table on the next page.

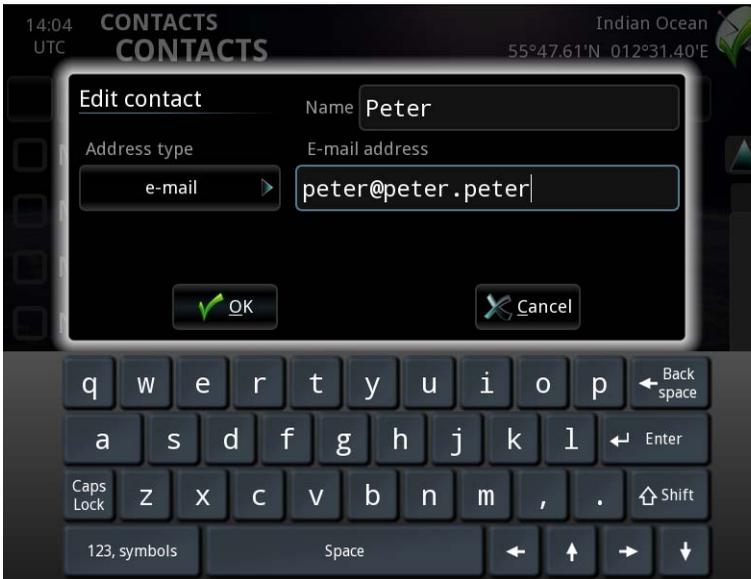5. Select **OK**.

The list is updated with the new contact.

Message formats and presentation:

Type	Format of number	Example	Presentation
E-mail	Standard e-mail address	info@cobham.com	5, 7 or 8 bit
Telex	Country code + subscriber no.	0045 99999999	5 or 7 bit
Fax	Country code + subscriber no.	0045 99999999	5, 7 or 8 bit
Inmarsat-C mobile	Mobile number	492388999	5, 7 or 8 bit
PSTN modem	Country code + subscriber no.	0045 99999999	5, 7 or 8 bit
Special access code	Predefined codes: • 32 - Medical Advice • 33 - Technical Assistance • 38 - Medical Assistance • 39 - Maritime Assistance • 41 - Meteorological Reports • 42 - Navigational Hazards and Warnings • 43 - Ship Position and Sail Plan Reports	32	5, 7 or 8 bit
X.25	DNIC (country code) + subscriber no.	2380 99999999	5, 7 or 8 bit

Operation

To edit a contact

Do as follows:

1. In the **Contacts** window, select the contact you want to edit.

2. Select **Edit**.

3. Edit the details.

   See the previous section for information on the contact details.

4. Select **OK**.

To delete a contact

Do as follows:

1. In the **Contacts** window, select the contact(s) you want to delete.

2. Select **Delete**.

3. Select **Yes** to confirm.

Power status

The bottom left corner of the display shows a short status of the backup battery.

- Negative current means the battery is supplying power.
- Red numbers mean that the values are outside normal operating range.

For a more detailed power status, do as follows:

1. Select the battery symbol in the bottom left corner or select **System** from the main menu and then **Power** at the bottom of the page.

2. To view the battery settings, select **Settings**.
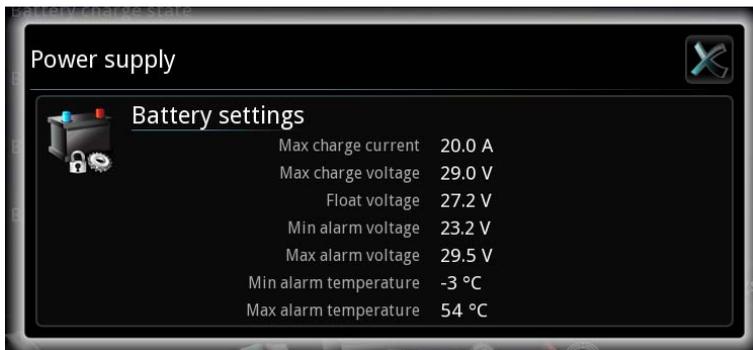
| **Important** | The default battery settings are suitable for most installations. Do not change these settings unless you have a special battery type or installation that requires different settings. Only skilled personnel should change the power settings, which are password protected. Refer to the installation manual for the SAILOR 6110 system for details. |

View system details

To see the type and software version of the units in the system, do as follows:

1. Select **System** from the main menu.

2. Select **About** at the bottom of the page.

   This page shows name, serial number and software version of each system unit. It also shows whether the system is a primary or duplicated system.

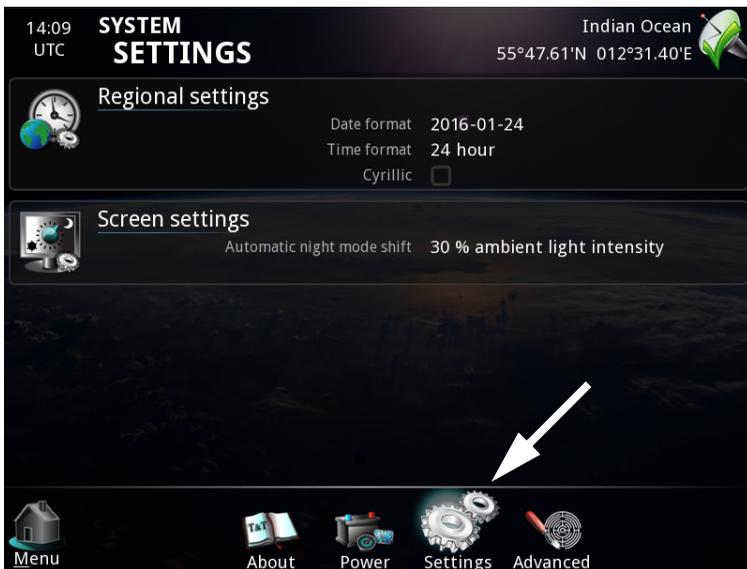3. Select one of the units to see more details.

Change regional settings and night mode

1. Select **System** from the main menu.

2. Select **Settings** at the bottom of the page.

Change the date and time settings

To change how date and time is displayed in the SAILOR 6018, do as follows:

1. Select **Regional settings** from the **SYSTEM SETTINGS** page.

2. Select the format for date and time and select **OK**.

Use Cyrillic characters

| Note | If you want to print Cyrillic characters on your printer you must also set up your printer as described in the Configuration chapter of the Installation manual *[1]*.

Enable Cyrillic characters

To enable the use of cyrillic characters in messages, do as follows:

1. Select **Regional settings** from the **SYSTEM SETTINGS** page.

2. Select **Cyrillic** and then **OK**.

To use Cyrillic characters

When Cyrillic characters are enabled, you can change your on-screen keyboard to a Cyrillic keyboard for use in the message editor.

1. First select the encoding you need. You can do this either

    • when you start a new message (**Message** > **New message**)

    • from the message editor (**Options** > **New message**)

    • from the message editor under the encoding format in the top right corner, as shown below.

    There are currently three encoding formats for Cyrillic characters.
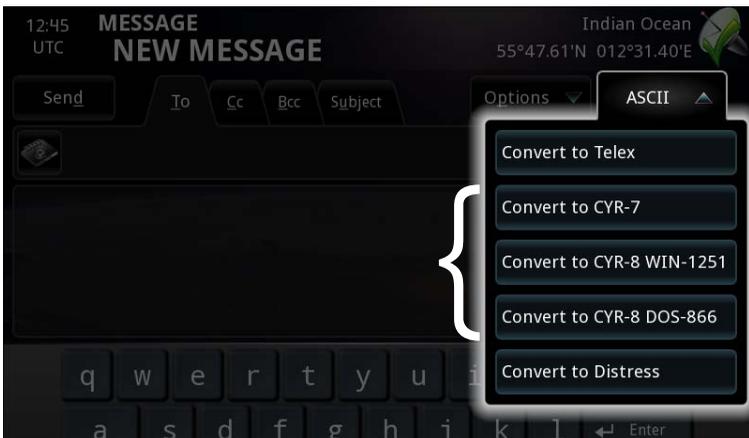
2. After selecting the encoding, touch the screen and then touch the keyboard symbol that appears in the message editor. To toggle between Cyrillic and latin characters, touch **[CY]** in the bottom left corner of the on-screen keyboard.
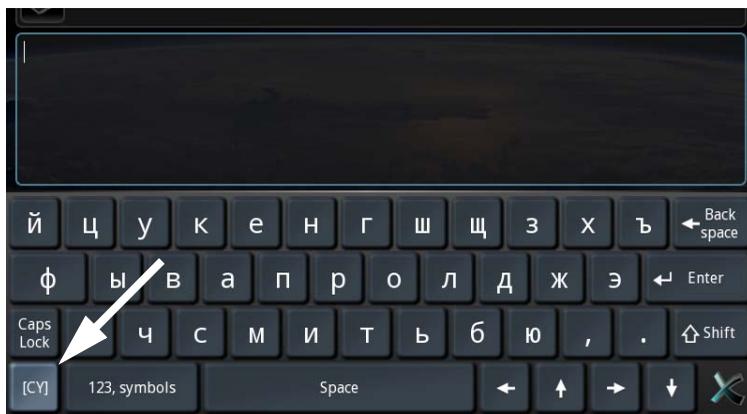
Change the ambient light intensity for shift to night mode

The SAILOR 6018 has a light sensor that detects the ambient light intensity. With this input, the SAILOR 6018 can automatically shift between day and night mode, depending on the ambient light intensity. To change the ambient light intensity at which the screen should shift between day and night mode, do as follows:

1. From the **System > Settings** menu, select **Screen settings**.


2. Use the arrows or select and drag the pointer until the right light intensity for shifting to night mode is achieved.

3. Select **OK**.

The screen will shift to night colours when the ambient light intensity is below the selected limit.

Note | You can select Always day mode by dragging the pointer all the way to the left, or Always night mode by dragging the pointer all the way to the right.
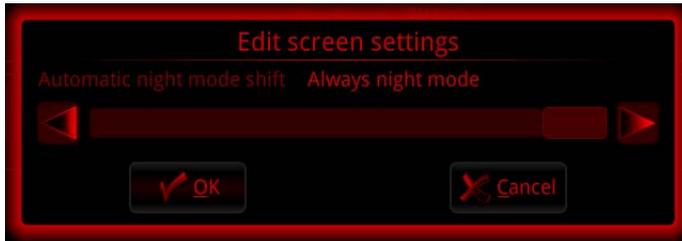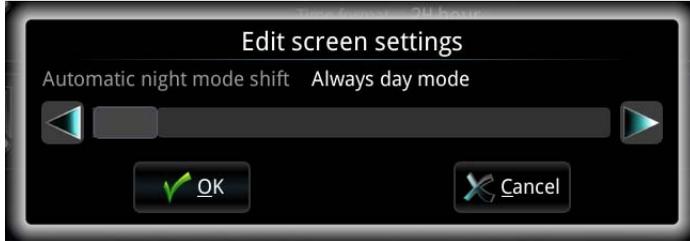
Change the Distress alert settings

You can temporarily change the settings for your Distress function.

| Note | The Distress Alert nature and the Distress Alert position, course and speed settings are only valid for the current Distress alert or maximum one hour. Then these settings are returned to the default settings. |

The entered Distress LESs remain in the system.

Default settings:

- Distress Alert Nature: Unspecified
- Distress Alert Land Earth Stations: 0, 0, 0, 0
  ("0" means the LES is automatically selected by the SAILOR 3027).
- Distress Alert Position, Course and Speed: Using latest GPS data

Distress alert nature

To change the announced nature of the Distress alert, do as follows:

1. From the main menu of the SAILOR 6018, select **Distress**.

2. Select **Settings**.

3. Select **Distress Alert nature**.

4. Select the nature of the Distress alert and select **OK**.

Distress alert Land Earth Stations

Note | Default setting is: 000, 000, 000, 000. This means that the LES is selected automatically.

To change the LESs to be used for the Distress alert, do as follows:

1. From the **DISTRESS SETTINGS** menu, select **Distress Alert Land Earth Stations**.

2. Type the LES number for each Ocean Region.

3. Select **OK**.

Distress alert position, course and speed

Default setting: **Use GPS position**.

> **Note** Do not change this setting unless you have good reasons to do so.
> It is normally best to show your current GPS position when
> sending a Distress alert.
>
> You may need to change the position, e.g. if the person(s) that
> need help are no longer on board the ship (man overboard).

To change the position, course and/or speed to manually entered values, do
as follows:

1. From the **Distress Settings** menu, select **Distress Alert position,
   course and speed**.
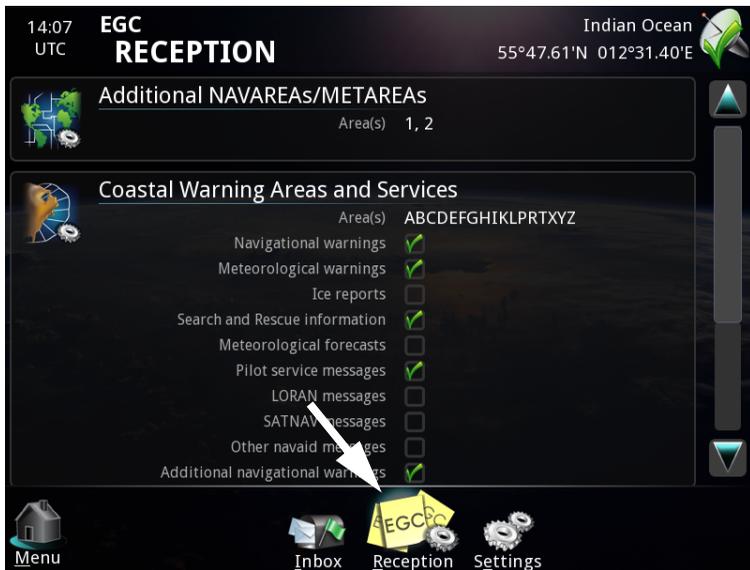
2. Select **Use manual position**.

3. Type or select the new values and select **OK**.

Change the EGC settings

Reception of EGCs

To change the settings for reception of EGCs, do as follows:

1. From the main menu, select **EGC**.

2. Select **Reception**.

3. To change the additional areas from which you want to receive meteorological or navigational EGCs, select **Additional NAVAREAs /METAREAs**.

   Then select or type in the numbers of the areas from which you want to receive EGCs, and select **OK**.

   > **Note** You always receive EGCs from the area in which you are located. The areas selected here are additional areas.

4. To change the Coastal Warning Areas and services, select **Coastal Warning Areas and Services**. Then type in the new area and select the services you want to receive. Then select **OK**.

5. To change the types of EGC service you want to receive, select **EGC services**. Then select the EGC services you want to receive and select **OK**.

> Note | Some SafetyNET EGCs cannot be disabled due to IMO SOLAS regulations.
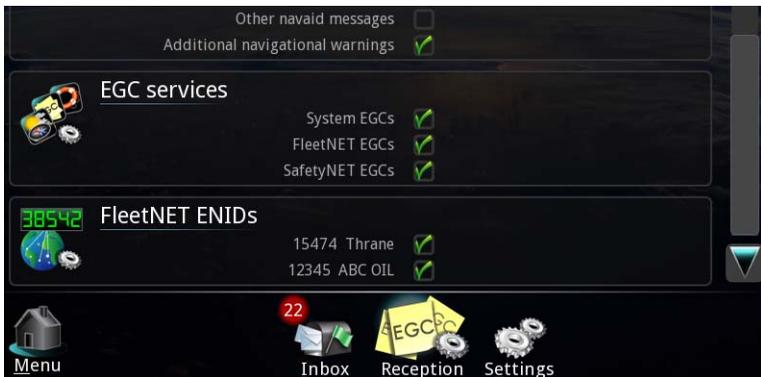
6. To enable or disable your FleetNET ENIDs, select **FleetNET ENIDs**, then select the ENIDs you want to enable or disable and select **OK**.
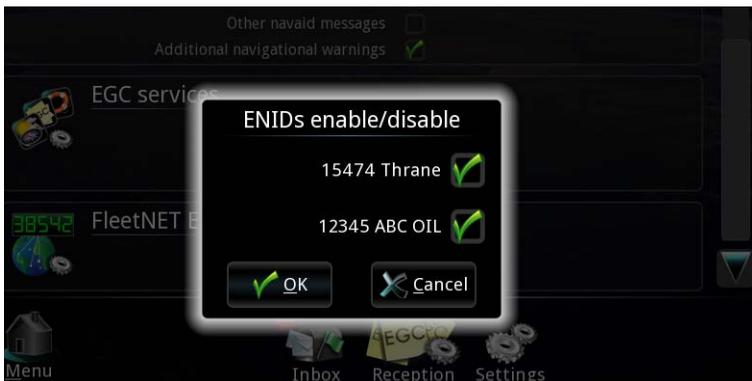
FleetNET ENIDs are the EGC Network IDs for the FleetNET groups or networks of which the vessel is a member.

Operation

Automatic print of EGCs

You can set up the SAILOR 6018 to automatically print certain types of
EGC. Do as follows:

1. From the bottom of the **EGC** page, select **Settings**.
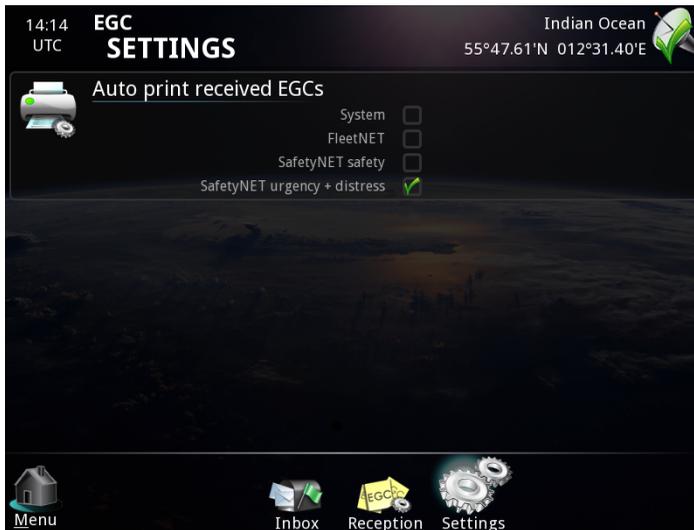
2. Select **Auto print received EGCs**.

3. Select the types of EGC you want to print automatically and select **OK**.

> **Note**   **SafetyNET urgency + distress** EGCs cannot be disabled -
> they are automatically sent to the printer.

Change the Message settings

Automatic print of messages

You can set up the SAILOR 6018 to automatically print certain types of messages. Do as follows:

1. From the main menu select **Message**.

2. Select **Settings**.

3. Under **Auto print received messages**, select **Routine** if you want to print Routine messages automatically when they arrive.

> **Note** Automatic print cannot be disabled for Distress messages.
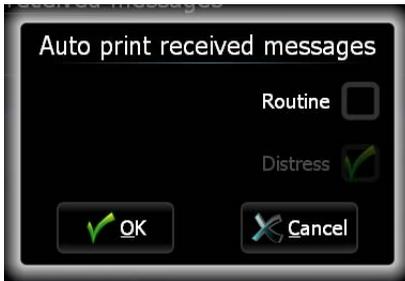
4. Select **OK**.

Change the Network settings

Network ID

Set the mobile number in the SAILOR 3027

After registration, the Inmarsat mobile number (network ID) must be set up in the SAILOR 3027. Do as follows:

1. From the main menu of the SAILOR 6018 select **Network**.

2. Select **Settings**.

3. Check that the mobile number listed under Network ID matches the mobile number in the documentation from your Inmarsat Service Provider.

4. If the mobile number is not correct, select **Network ID** and change the number.

---

5. When the number is correct select **OK**.

DNIDs and data reporting

DNIDs (Data reporting Network IDentification) are used for position reporting and data reporting. The DNIDs for a terminal must be created on a LES and downloaded to the terminal. When a DNID is downloaded to the SAILOR 3027 GMDSS Terminal, the terminal will send reports to a mail box on the LES according to the programs defined for the DNID. The SAILOR 6110 supports 64 DNIDs. For further information, see *Position reports* on page 9 and *Data reports and polling* on page 10.

You can see the DNIDs and their associated programs in the SAILOR 6018. Do as follows:

1. From the **NETWORK SETTINGS** page, select **DNIDs and data reporting**.

2. To see the program(s) associated with a DNID, select the DNID and select **View programs**.
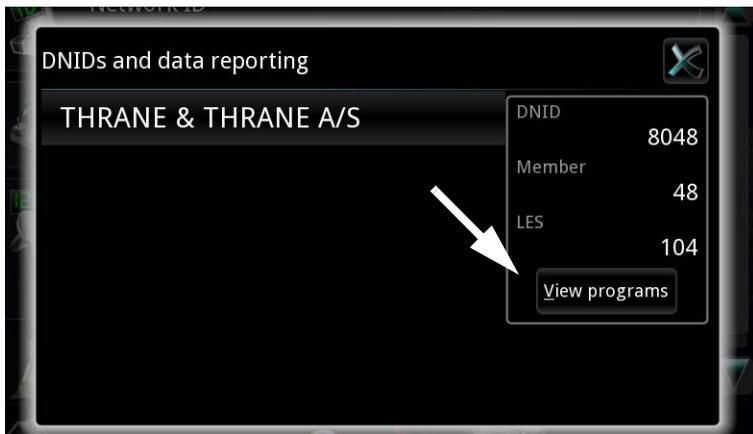
The Programs window opens.
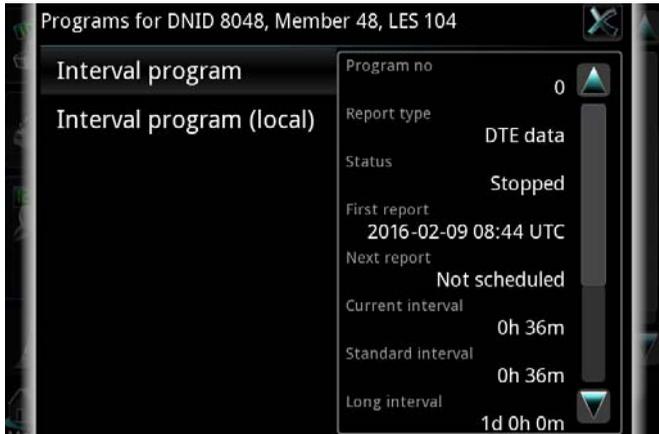
3. Select the program you want to see.

   In the right side of the Programs window you can see information about the selected program. The programs can be:

   - **Interval programs** instructing the SAILOR 3027 to send reports at regular intervals. The Interval programs are mostly remote programs, but may also be programs managed and defined locally, e.g. with a terminal program.

   - **Event programs** instructing the SAILOR 3027 to send reports when certain events occur.
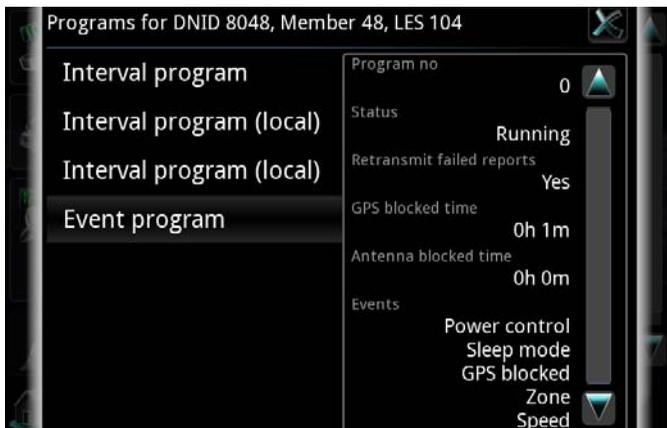
Network Coordination Stations

Add Network Coordination Stations

If you need to add a Network Coordination Station (NCS), do as follows:

1. In the **NETWORK SETTINGS** page, select **Network Coordination Stations**.

2. Select **New**.

3. Type in the ID and channel number of the new NCS.

4. Select **OK**.

Edit Network Coordination Stations

If you need to edit the information for a Network Coordination Station (NCS), do as follows:

1. In the **NETWORK SETTINGS** page, select **Network Coordination Stations**.

2. In the left column, select the NCS you want to edit.

   | Note | 044, 144, 244 and 344 cannot be edited nor deleted.

3. Select **Edit** in the right side of the page.

4. Change the ID and channel number as needed.

5. Select **OK**.

Position

To view your current position, course and speed, select **Network** from the main menu, and then **Position** at the bottom of the page.
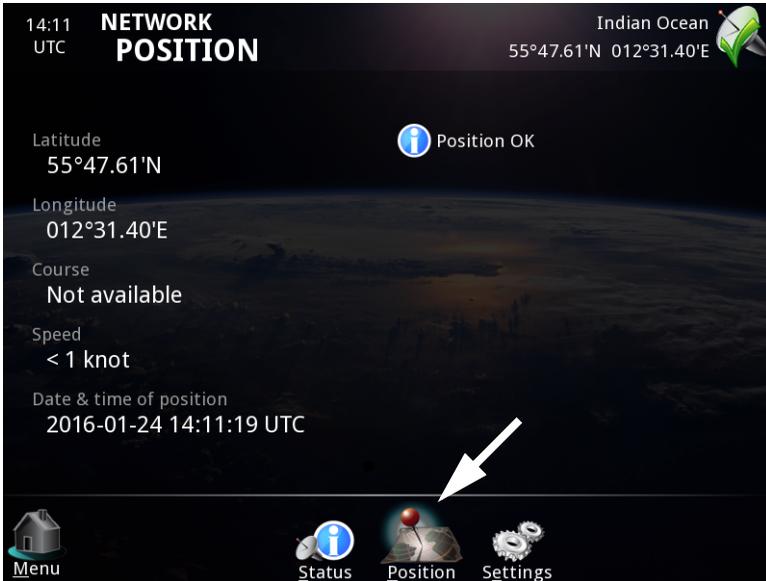
Enter a manual position

If there is no synchronization with the positioning system, you can enter a manual position. To enter a manual position, do as follows:

1. Under **Network** select **Settings** at the bottom of the page.
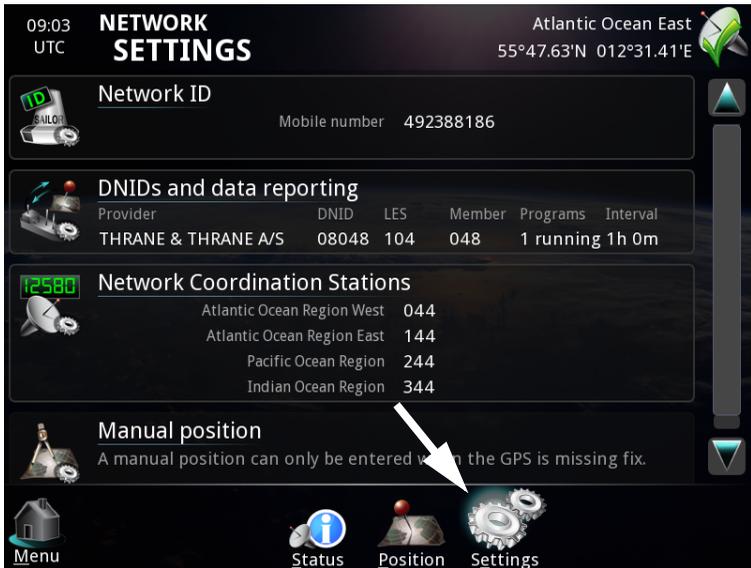
2. Select **Manual position**.

3. Enter the current position data, course, speed and UTC time.

4. Select **OK**.

The manually entered position data will be used by the system until the automatic position data is available again.

Test Distress buttons in the system

With the SAILOR 6018 you can test the **Inmarsat C** Distress buttons connected in your SAILOR 6110 system.

To test the Inmarsat C Distress buttons in the system, do as follows:

1. In the SAILOR 6018 display, select **Distress**.

2. Select **Status** at the bottom of the page.

3. Select **Test Distress buttons**.

The test is initiated.
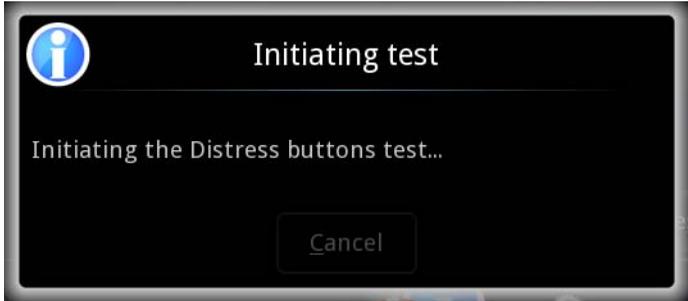
Wait until the following window appears.

> **Important** | Before pushing any Distress buttons, make sure the display of the SAILOR 6018 shows Test in progress. Otherwise you may accidently send a real Distress alert!

As long as the **Test in progress** window is showing, you can use Distress buttons connected to the system under test, without sending a real Distress alert.

Operation

> **Note** Before pushing any Distress buttons, check the units as
> follows:
>
> - On the alarm panel, make sure the display shows "Test"
>   next to the Inm C unit that is active (marked with a bullet),
>   before pushing the **Inm-C Distress** button.
> - On the SAILOR 6018, make sure the display shows "Test in
>   progress" before pushing the **Distress** button on the
>   SAILOR 6018.

4. Test the **Inmarsat C** Distress buttons on the connected units and on
   the SAILOR 6018 by pushing them as you would in a real Distress
   situation.

> **Important** Only Distress buttons on the SAILOR 6018 and
> connected SAILOR 6101 and SAILOR 6103 Alarm Panels
> are included in this test. **Do not** push any other Distress
> buttons, unless it is a distress situation!

The light and buzzer in the Distress buttons should work the same way
as in a real Distress situation. For details on the Distress buttons, see
Send a Distress alert on page 20.

5. When you have finished testing, or you need to send a real Distress
   alert, tap **Cancel** in the **Test in progress** window.
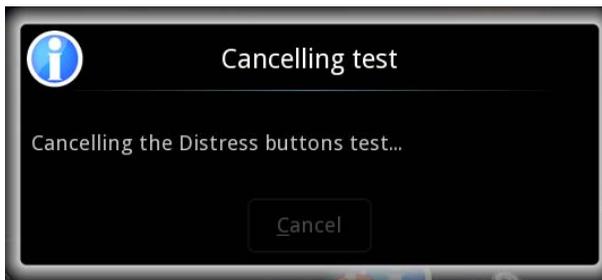
Use the SAILOR 1252 Printer

In the SAILOR 6110, the printer is primarily used to print EGCs and Safety messages from the SAILOR 6018.

For information on how to print EGCs and messages, see *Print, save or delete EGCs or messages* on page 47 and *Automatic print of EGCs* on page 70.

Printer indications in SAILOR 6018

The SAILOR 6018 Message Terminal shows a warning if:

- the printer is not connected
- the printer is out of paper
- the paper is low
- there is an error in the printer
- the printer is off-line

Operation

Front panel

The below drawing shows the front panel of the SAILOR 1252 Printer.
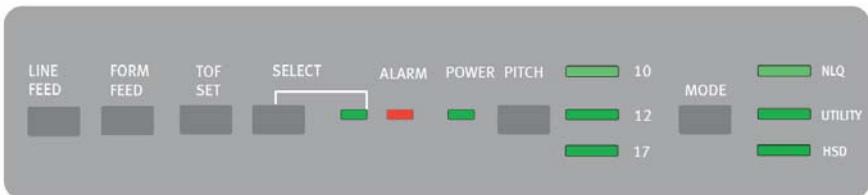
The next pages describe the functions of indicators and buttons on the printer front panel.

Indicators

The below table shows the function of each indicator.

Indicator	Behavior	Function
SELECT	Constant light	Printer is on-line
	Off	Printer is off-line
	Flashing, and ALARM is off	Printer is in sleep mode
	Flashing, and ALARM is on	Fault
ALARM	Constant light, and SELECT is off	Out of paper or paper jam (Cut sheet feeder only)
	Constant light, and SELECT is flashing	Fault
	Flashing, and SELECT is on	Printhead temperature protection circuit, firmware protection of line feed or space motor is operating. Normal print operation will resume after a cooling period.
POWER	Constant light	The printer is connected to the supply and is switched on.
PITCH		Shows the current character pitch selected.
MODE		Shows the current print mode selected - NLQ, Utility, HSD (HSD is SSD if 12cpi is selected).

Buttons

Normal functions

Indicator	Normal function
LINE FEED	Advances the paper one line for each push.
FORM FEED	Advances the paper to the next top of form (TOF) or ejects any single sheet paper from the printer.
TOF SET	Sets new top of form position.
SELECT	Sets printer on-line or off-line
PITCH	Changes the character pitch setting (cpi)
MODE	Changes the print style setting.

Additional functions if pushed at power on

Indicator	Function if pushed at power on
SELECT	Enters the printer's Menu Mode.
TOF SET	Selects the print pitch as 17cpi.
LINE FEED	Initiates the printer self test.
SELECT and LINE FEED	Initiates the printer's continuous rolling ASCII test.
SELECT and FORM FEED	Prints all data and control commands received as HEX codes for fault finding.

Operation

Use the SAILOR 1252 Printer

Service

This chapter gives guidelines for updating software and for troubleshooting and provides an overview of the different means of status signalling. It has the following sections:

- *Get support*
- *Troubleshooting guide*
- *Status signalling*

Get support

If this manual does not provide the remedies to solve your problem, you may want to contact your Inmarsat Service Provider or your local distributor.

To help with the troubleshooting, please generate a diagnostic report as described in the next page, and enclose the diagnostic report file when asking for support.

Airtime support

If you need assistance from your Inmarsat Service Provider, check your Airtime subscription documents for a contact number to call.

System support

Lists of certified partners and distributors are available on www.cobham.com/satcom. Select **Technical Service Partner List** from the menu to the right and select one of the dealers or partners lists shown.

Service

Generate a diagnostic report

To generate a diagnostic report, do as follows:

1. Select **System**.

2. Select **Advanced** at the bottom of the page.

3. Select **Generate diagnostic report**.

4. Choose the location where you want to save the file. You can save the file to a USB memory stick connected to the SAILOR 6018.

Troubleshooting guide

The below table provides information on some of the problems that might occur, including possible causes and remedies to solve the problems.

Problem	Possible cause	Remedy
The system cannot be switched on.	The SAILOR 6018 has a remote on/off switch, so the power button is disabled.	If the SAILOR 6018 is using a remote on/off switch, use that instead of the power button.
	There is no power on the input to the SAILOR 6018.	Check that all power cables between the ship power source and the SAILOR 6018 are connected correctly, and that the power source is on.
The SAILOR 6018 cannot switch off.	Software error	Push and hold the Power button for 10 seconds, or reboot via the power cable.
There is no signal or weak signal from the satellite.	The view to the satellite is blocked, or there is a hardware problem.	Make sure the SAILOR 3027 has a clear view in all directions. See the installation manual for details. If the view is not blocked, check the error log. If the problem persists, contact your local distributor.
	The system is set up to use one specific satellite, but the system is outside coverage from that satellite.	Log into a satellite that covers your area.

Service

Problem	Possible cause	Remedy
No connection between SAILOR 6018 and SAILOR 3027	The CAN cables between the SAILOR 3027 and the SAILOR 6018 are damaged or are not properly connected.	Make sure the CAN cables are properly connected and that the cables and connectors are not damaged.
No battery information in the SAILOR 6018	The Ethernet connection from the power supply is not working.	Check the Link activity indicator at the connection points in the Ethernet switch. Check that the Ethernet cables are connected correctly and are not damaged.
No connection between SAILOR 6018 and printer	The USB cable is damaged or is not connected properly.	Check that the USB cable is connected correctly and is not damaged.
The SAILOR 6018 shows "out of paper" although there is paper in the printer.	The paper is not placed correctly in the printer.	Adjust the paper to the left side of the printer.
The units in the SAILOR 6110 do not appear in the TMA (ThraneLINK Management Application).	The computer running the TMA is set up with a fixed IP address that does not match the local network with the SAILOR 6110 units.	Enable DHCP on your computer. If you need to have a fixed IP address on your computer, there must be a DHCP server in the network, and the IP address of your computer must be within the range provided by the DHCP server.

Status signalling

The SAILOR 6018 can show basic status and error messages. When an error occurs in the system, check the SAILOR 6018 for information first.

The SAILOR 1252 Printer also has some status LEDs. For further information see *Use the SAILOR 1252 Printer* on page 83.

Status information in SAILOR 6018

The upper right corner of the display shows the most important status information. You can also enter the individual pages from the main menu to see more detailed status information.

Information of events

Popup windows

When an event requires your attention, a popup window appears.

Example:
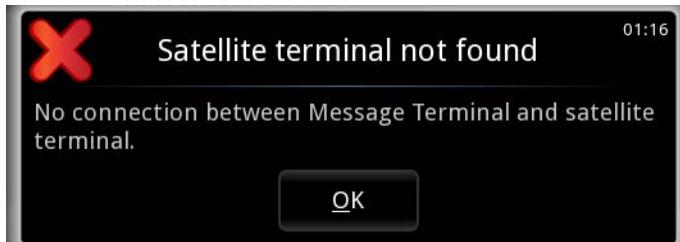
When you have read the text, select **OK** to close the window.

If the window indicates an error that requires your action, the warning or error icon will stay in the top right corner of the display as long as the problem persists.
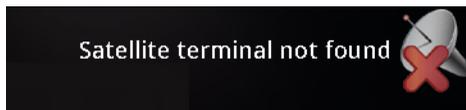
List of active warnings and errors

The top right corner of the display shows a short text about the current status. The icon in the corner can change depending on the situation.

Green check mark: The system is logged in and there are no errors or warnings.

Warning triangle: A warning is pending. Select the icon or press F1 to see a list of active warnings and errors.

Red cross: A critical error is present. Select the icon or press F1 to see a list of active warnings and errors.
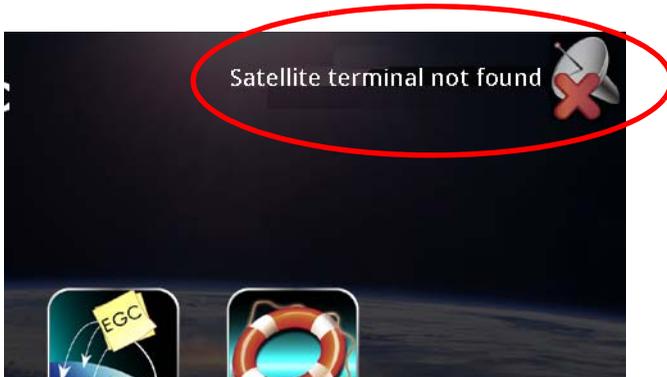
From the list of active warnings and errors you can access the event log.

Event log

From the list of active errors or warnings, you can select **Event log** to see a complete list of events. The list holds 100 events, including

- Errors
- Warnings
- Informational events
- Cleared warnings and errors.

Service and repair

Should your Cobham SATCOM product fail, please contact your dealer or installer, or the nearest Cobham SATCOM partner. You will find the Technical Service Partner list on www.cobham.com/satcom where you also find the Cobham SYNC Partner Portal, which may help you solve the problem. Your dealer, installer or Cobham SATCOM partner will assist you whether the need is user training, technical support, arranging on-site repair or sending the product for repair. Your dealer, installer or Cobham SATCOM partner will also take care of any warranty issue.

Repack for shipment

Should you need to send the product for repair, please read the below information before packing the product.

The shipping cartons for the SAILOR 6110 system have been carefully designed to protect the equipment during shipment. The cartons and their associated packing material should be used when repacking for shipment. Attach a tag indicating the type of service required, return address, model number and full serial number. Mark the carton "FRAGILE" to ensure careful handling.

Service

Note | Correct shipment is the customer's own responsibility.

Software update

For details on software update, see the installation manual *[1]*.

Conformity

CE (RED)

The mini-C GMDSS is CE certified as stated in the "EU Declaration of Conformity" enclosed in electronic copy on the next page.

Wheelmark (MED) and Inmarsat GMDSS

The mini-C GMDSS is Wheelmark approved and Inmarsat GMDSS approved.

EU Declaration of Conformity

Hereby **Thrane & Thrane A/S trading as Cobham SATCOM** declares that the following equipment complies with the specifications of:

RED directive 2014/53/EU concerning Radio Equipment

Equipment included in this declaration

Model	Description	Part no.
TT-6110A	SAILOR 6110 GMDSS System	406110A

The full text of the EU declaration of conformity is available at the following internet address:

http://sync.cobham.com/satcom/support/downloads

Document no.: 99-157522-A

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Glossary

C

CAN   Controller-Area Network. A message based protocol designed to allow microcontrollers and devices to communicate with each other within a vehicle without a host computer.

D

DNID   Data reporting Network IDentification code. An address code to an electronic mailbox at the Land Earth Station.

E

EGC   Enhanced Group Call. The system for broadcasting messages via the mobile satellite communications system operated by Inmarsat. EGC is part of the Inmarsat C system and supports two services: SafetyNET and FleetNET.

ENID   EGC Network IDentification code. An identification code for a group of EGC receivers. When an EGC message is sent using the ENID, all members of a group with that ENID receive the same message.

G

GMDSS   Global Maritime Distress and Safety System. The GMDSS system is intended to perform the following functions: alerting (including position determination of the unit in distress), search and rescue coordination, locating (homing), maritime safety information broadcasts, general communications, and bridge-to-bridge communications.

GNSS   Global Navigational Satellite System

GNU	GNU's Not Unix. A Unix-like computer operating system developed by the GNU project, ultimately aiming to be a "complete Unix-compatible software system" composed wholly of free software
GPL	General Public License
GPS	Global Positioning System. A system of satellites, computers, and receivers that is able to determine the latitude and longitude of a receiver on Earth by calculating the time difference for signals from different satellites to reach the receiver.
GT	Gross Ton

I

IMO	International Maritime Organization. A UN organization developing and maintaining regulatory framework for shipping. This framework includes safety, environmental concerns, legal matters, technical cooperation, maritime security and the efficiency of shipping.
IMSO	International Mobile Satellite Organisation. An intergovernmental organisation that oversees certain public satellite safety and security communication services provided via the Inmarsat satellites.

L

LAN	Local Area Network. A computer network covering a small physical area, like a home, office, school or airport. The defining characteristics of LANs, in contrast to wide-area networks (WANs), include their usually higher data-transfer rates, smaller geographic area, and lack of a need for leased telecommunication lines.
LES	Land Earth Station

LGPL   Lesser General Public License

M

MED   Marine Equipment Directive

METAREA   A geographical area established for the purpose of coordinating
              the broadcast of marine meteorological information.

MRCC   Maritime Rescue Coordination Centre

MSI   Maritime Safety Information. Navigational and meteorological
              warnings, meteorological forecasts and other urgent safety-
              related messages broadcast to ships.

N

NAVAREA   A geographical area established for the purpose of coordinating
              the broadcast of navigational warnings

NCS   Network Coordination Station

P

PSDN   Public Switched Data Network

PSTN   Public Switched Telephone Network. The network of the
              world's public circuit-switched telephone networks. It consists
              of telephone lines, fibre-optic cables, microwave transmission
              links, cellular networks, communications satellites, and undersea
              telephone cables all inter-connected by switching centres
              which allows any telephone in the world to communicate with
              any other.

R

RED   Radio Equipment Directive

S

SAC   Short Access Code

SAR   Search And Rescue

SARF   Service Activation Registration Form. A form used to register
                your mobile equipment for activation of the services you are
                going to use.

SOLAS   (International Convention for the) Safety Of Life At Sea.
                Generally regarded as the most important of all international
                treaties concerning the safety of merchant ships.

SSA   Ship Security Alert.The ship security alert system is provided to
                a vessel for the purpose of transmitting a security alert to the
                shore (not to other vessel!) to indicate to a competent
                authority that the security of the ship is under threat or has
                been compromised.

U

USB   Universal Serial Bus. A specification to establish communication
                between devices and a host controller (usually personal
                computers). USB is intended to replace many varieties of serial
                and parallel ports. USB can connect computer peripherals such
                as mice, keyboards, digital cameras, printers, personal media
                players, flash drives, and external hard drives.

UTC   Universal Time, Coordinated. The International Atomic Time
                (TAI) with leap seconds added at irregular intervals to
                compensate for the Earth's slowing rotation. Leap seconds are
                used to allow UTC to closely track UT1, which is mean solar
                time at the Royal Observatory, Greenwich.

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COBHAM