Setting up Wideye Sabre 1™ with BGAN LaunchPad

Version 1.0
02 August 2010

inmarsat.com/bgan

The mobile satellite company™

Contents

Managing the terminal 23

Telephony settings 24

Introduction

1   Introduction

1.1   About this guide

This document introduces the Wideye Sabre 1™ terminal and explains how to set up the terminal for use on the BGAN network, register with the network and set up data, voice and text connections.

It is intended for first time end-users, Distribution Partners, Service Providers and anyone who wants to use a BGAN terminal to connect to the BGAN network and use network services. A previous knowledge of satellite communications is useful, but not essential.

The sections include:

*   Introducing the terminal – a brief overview of the physical features and interfaces of the terminal and the available services.

*   Setting up the terminal – includes installing the battery and SIM card, connecting to a computer and registering with the network

*   Making data, voice and text connections – an explanation of how to make a voice call, how to make IP data connections and how to send and receive a text message.

*   Managing the terminal and telephony settings.

1.2   Other sources of information

Refer to the following documentation for further details:

*   This is one of a series of PDF documents in BGAN Product support. Product support is designed to help you make the most of your BGAN terminal. Other documents in the series are available for download from **www.inmarsat.com/support**. Click on **BGAN**, then click on **User guides**.

This Web site also gives further information on the BGAN service, including Industry solutions.

*   For help in using BGAN LaunchPad, refer to "BGAN LaunchPad User Guide", available for download from **www.inmarsat.com/support**, click on **BGAN**, then click on **LaunchPad guides**.

*   For further information on the Sabre terminal, refer to the "Sabre 1 V1 User Guide", available for download from **www.wideye.com.sg**.

1.3   Upgrading software

*   To download the latest USB drivers and BGAN LaunchPad software, go to **www.inmarsat.com/support**, click on **BGAN**, then select from the options listed under **Product Updates**.

*   To download the latest terminal firmware, select **Update > Versions and Availability** from BGAN LaunchPad.

Getting Started

2   Introducing the terminal

This section introduces the physical characteristics, interfaces and services available on the Wideye Sabre 1 (also referred to as the "terminal" throughout this document).

2.1   Physical characteristics

Item	Specification
Manufacturer	Add Value
Physical dimensions	295mm x 195mm (11.6in x 7.7in.)
Weight (including battery)	1.65kg (3.63lbs)
External power	15 Volts DC
Battery life	Transmit: 1 hour continuous at <= 72kbps Receive: 3 hours continuous (without transmit) Stand-by time: 36 hours
Ingress protection	IP 54

2.2   Interfaces

Interface	Equipment needed
Ethernet 10BASE-T	IP data device, Ethernet-enabled
Bluetooth	Bluetooth specification 1.2 (Class 1)

2.3   Services

Services	Specification
Standard IP data	Up to 384kbps (receive) 240kbps (send)
Streaming IP data	32kbps, 64kbps (symmetrical)
Phone	1 x RJ11 PSTN port
Text	To other BGAN terminals or cellular mobile phones. From other BGAN terminals and some mobile phones, depending on service provider.

3   Setting up the terminal

This section explains how to set up the Wideye Sabre 1 terminal and connect to the BGAN network. The steps described are:

a. Installing the SIM card and battery.

b. Powering on and charging the battery.

c. Installing BGAN LaunchPad on your computer.

d. Obtaining a GPS fix.

e. Connecting the terminal to your computer using the Ethernet interface.

f. Defining DNS Settings.

g. Pointing the terminal and registering with the BGAN network.

Pre-requisites

Before you start, make sure that you have:

•   The BGAN terminal.

•   The AC mains power adapter, supplied with the terminal.

•   The rechargeable battery, supplied with the terminal.

•   A USIM card, supplied by your Service Provider.

•   The Ethernet cable supplied with the terminal.

•   The BGAN LaunchPad installation CD, supplied with the terminal. Make sure that your PC or Mac has the minimum system requirements for BGAN LaunchPad (refer to page 4 for details).

The following are the minimum hardware and software requirements for using BGAN LaunchPad to manage the Wideye Sabre 1 on your computer.

Hardware requirements

You must have the following on your computer:

- **Support for Ethernet.**
- **Intel Pentium III CPU, or equivalent.**
- **100Mb of free hard disk space.**
- **128Mb of RAM.**
- **CD-ROM drive.**
- **Operating systems: You must have one of the following operating systems on your computer:**
- **Microsoft Windows Vista.**
- **Microsoft Windows XP with SP2.**
- **Microsoft Windows 7.**
- **Mac 10.x. or Mac 9.2.**

3.1   Installing the SIM card and battery

To prepare the terminal for connection:

a.   Remove the battery door by placing your thumbs on the battery door and pushing outwards in the direction shown.

b.   To insert the battery door, align the guiding rail was shown below. Make a slight twist to the battery door with your thumb to allow the rib (part A) to slide along the guiding rail while pushing it inwards.

c. Insert the **SIM card**, with the gold contacts facing left as shown, into the **SIM** slot. The **SIM card** can be removed by pressing on the card and removing it from the slot.
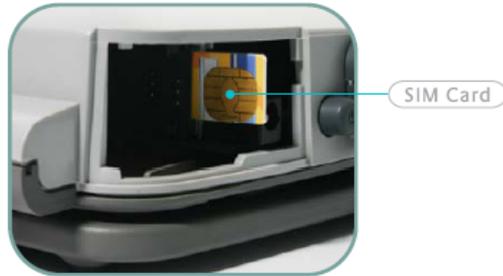
d. Installing the battery:
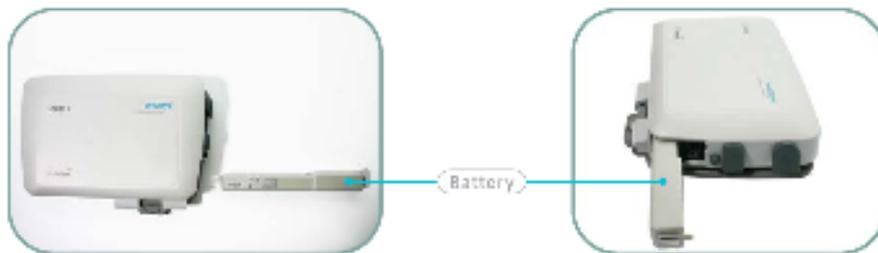
e. To charge the battery, insert the **Power Adapter** connector fully into the **Power** socket. Do not remove the battery from the Sabre whilst it is charging.

3.2   Powering on and charging the battery

To power the terminal using the power adapter:

a.   Insert the power adapter output connector into the DC **Power Socket** on the right hand side of the terminal.

b. Insert the plug end into any AC outlet between 100 and 240 VAC.

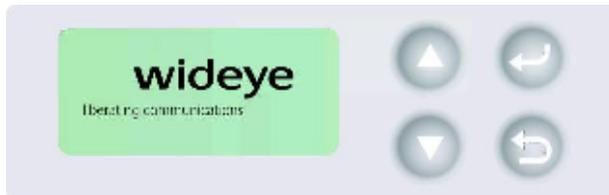c. Press and hold the **On/Off Switch** for 3 seconds.

d. The **wideye** logo is displayed on the LCD:

Note   The battery charges automatically whenever the terminal is connected to a power source.

3.3   Obtaining a GPS fix

The BGAN network requires a valid GPS fix to successfully register your BGAN terminal.

To obtain a GPS fix:

a. Take the Wideye Sabre 1 outside and place the terminal on a flat surface, facing upwards and with an unobstructed view of the sky. Ensure that the GPS antenna in the terminal is pointing in the direction of the satellite.

b. Press the **On/Off Switch** for 3 seconds. The terminal performs GPS acquisition automatically.

c. Leave the terminal to acquire a GPS fix. This may take a few minutes. Once the GPS fix has been acquired the LCD displays **New GPS** for 2 seconds.
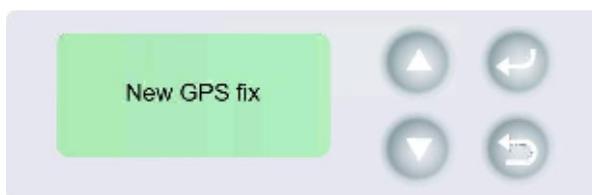
d. The LCD displays the new estimated direction and elevation angle to which the antenna should point. In addition a **GPS** indicator is displayed to right of the LCD display to indicate that new GPS coordinates are being used.
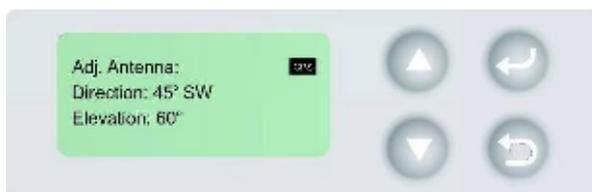
e. For subsequent use, the terminal will not acquire a new GPS, but will prompt the user if previously stored GPS coordinates should be used.

f. Use the **Up** and **Down Buttons** to select **Yes** and then press **Enter** if stored coordinates should be used, or select **No** and press **Enter** if a new GPS location is required, then repeat steps a. through d.

About GPS

The Global Positioning System (GPS) uses 24 orbital satellites to fix the position of the terminal anywhere on the globe.
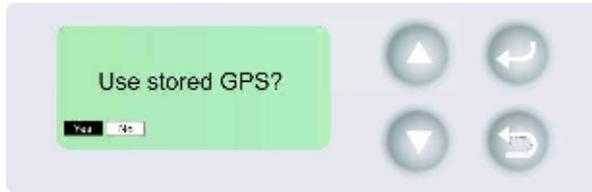
- **In normal operation, a GPS receiver, such as that built in to the Terminal, needs to be able to receive signals from at least three satellites so that it can then calculate latitude, a longitude and an altitude – this position fix is referred to as a 3-dimensional or 3-D fix. If only two GPS satellites can be seen by the GPS receiver, then the last available altitude measurement is assumed and the GPS receiver calculates a position fix based on latitude and longitude only. This simpler position fix is referred to as a 2-dimensional or 2-D fix and is quicker and easier to obtain than a 3-D fix, but may be less accurate.**

  Note: You can register with the BGAN network with a 2-D or a 3-D fix.

- **The GPS receiver may take between a few seconds and 20 minutes to obtain a GPS fix, depending on how frequently the GPS receiver is being used. The frequency of use determines the how quickly the GPS Terminal is able to start.**

  - Hot start **- if the GPS receiver is being used frequently, (that is, at least every two to six hours), it is regularly updated with data from the GPS satellites and so only takes a short time to obtain a GPS fix after being switched on.**

  - Warm start **- if a GPS receiver has not been used for more than six hours, then it will take longer to obtain a GPS fix, perhaps up to 45 seconds.**

  - Cold start **- if the GPS receiver has not been used for some time or is 300 km or more from where it was last used, it can take between 10 and 20 minutes to obtain a valid position fix.**

- **Following successful registration and providing the Terminal is left switched on and remains stationary, the GPS is no longer needed. Periodically, the BGAN terminal contacts the BGAN network to inform the network that it is still switched on. In addition, the BGAN network periodically checks each terminal for activity and if there has been no traffic through the terminal and the terminal has not automatically contacted the BGAN network as described above, then the terminal will be de-registered from the network.**

3.4 Connecting the terminal to your computer

Connecting over Ethernet

Note   For the Ethernet interface to work without any further setup, your computer must be configured to obtain an IP address and a DNS server address automatically. To check that these settings are configured on your computer, refer to the documentation for your operating system.

Note   For details on how to configure DNS Server addresses for the terminal, refer to Ethernet on page 20.

To connect the BGAN terminal to your computer using Ethernet:

a.   Insert one connector on the supplied Ethernet cable into the terminal's Ethernet port.

b.   Insert the other connector into your computer's Ethernet port. A message confirming connection is displayed on your computer.

Tip   Some corporate computers are configured with a static IP address. If your computer has a static IP address, you must go into your operating system's IP Properties option and change your computers settings to obtain an IP address automatically before your computer can communicate with the terminal.

IP addressing on the Wideye Sabre 1

- **In normal operation, the terminal uses its built-in DHCP server to allocate IP addresses automatically. If you want to manually set up IP addressing, you can use the terminal's default range of IP addresses, as shown below:**

Terminal IP address	192.168.1.35
Default range of IP addresses	192.168.1.10 to 192.168.1.50
Subnet mask	255.255.255.0
DNS	If you use BGAN.INMARSAT.COM as your APN, the default DNS addresses are 172.30.66.7 and 172.30.34.7 If you use another APN, your Distribution Partner supplies you with a DNS address for your APN.

Refer to the Solutions Guide document "BGAN and IP data connections" for further details.

3.5   Installing BGAN LaunchPad

To install BGAN LaunchPad on your computer:

a.   Insert the BGAN LaunchPad Installation CD into your computer's CD-ROM drive.

b.   Follow the on-screen instructions.

> **Interfacing with the BGAN terminal**
>
> **BGAN LaunchPad is Inmarsat's easy-to-use software interface, that provides step-by-step instructions on connecting to the BGAN network and setting up satellite connections. You can use BGAN LaunchPad to manage data connections, send and receive text messages, monitor telephone usage and upgrade software. The interface can be installed on any computer connected to the terminal and accessed by double-clicking on a desktop icon. With BGAN LaunchPad, you have access to all the latest customisation options and features of the BGAN service. You can also update firmware automatically using BGAN LaunchPad.**

3.6   Registering with the network

Establishing a connection and registering successfully with the network requires careful orientation of the terminal towards the satellite, a process called pointing. Accurate and precise pointing is important, because a badly-pointed antenna can reduce the data rate achievable over the network, or even restrict access to services. When pointing is complete, you can register the terminal with the BGAN network.

Use BGAN LaunchPad to step through the process of pointing the terminal and registering with the network. In addition, you can use the terminal's signal strength indicator lights and, optionally, the terminal's audio buzzer to point the terminal. To do this:

a.   Open BGAN LaunchPad by clicking on the **BGAN LaunchPad** icon on your desktop.

BGAN
LaunchPad

The following screen is displayed:

Note   The coverage map and "Welcome to BGAN" area are provided to assist you in pointing, but the location shown may not correspond to your GPS fix. This does not affect network registration.

b. BGAN LaunchPad suggests the recommended pointing angle and direction to correctly position the terminal.

- Using the terminal's built-in compass, rotate the terminal left or right until it points in the correct horizontal direction, known as the azimuth. Make sure the compass is horizontal to get an accurate reading.

- Tilt the terminal slowly up or down until it points in the correct vertical direction, known as the elevation.

c. Monitor the signal strength on the status bar:
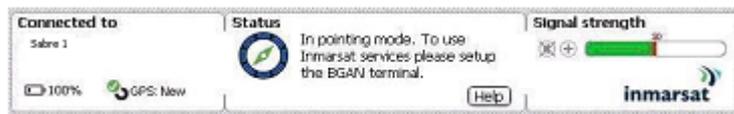
Use this information to further adjust the antenna position to obtain optimal signal strength.

Note   If the signal strength is not sufficient, registration may not be possible and the terminal may not be able to open a data connection.

Note   Wideye Sabre 1 has a built-in audio buzzer that can be used to assist with antenna pointing

d. When you have positioned the terminal to obtain the optimal signal strength, you are ready to register with the network. Click on **Register with Network now**.

By default, BGAN LaunchPad opens a standard IP data connection after successful registration. The status zone reads **Standard Data Connection Open. Ready for Phone, Text and Data**.

Using BGAN LaunchPad during pointing and registration

Note the following about BGAN LaunchPad during pointing and registration:

- **During pointing, the location shown on the coverage map is based on your previous location. The coverage map displays your current position only after you exit pointing and register with the network.**

- **During pointing, signal strength information is provided by the satellite's global beam. Once you have registered, the signal strength is provided by the satellite's regional beam. Therefore the signal strength bar shown in BGAN LaunchPad may change after registration. Once you have opened a data connection, signal strength is provided by the spot beam.**

- **To check the actual signal strength, select** Help > Diagnostic Report **in BGAN LaunchPad. The actual signal strength is given in the dialog box that is displayed.**

Tip   You can make or receive phone calls and send and receive a text message even if you do not have an IP data connection.

Automatic mode

Terminal automatic data connection – By default, the terminal automatically opens a data connection after you register with the network. However, there is a minimum charge for opening an IP data connection (unless you are on a lease package) and data may be transferred across the connection even if you are not actively using an application (for example, your computer may be receiving automatic updates).

If you do not want to incur these charges, you can switch off the automatic connection feature using BGAN LaunchPad. Refer to "BGAN LaunchPad User Guide" for details.

Voice and Data Connections

4 Making voice, data and text connections

4.1 Making a voice connection

You can use any of the following interfaces to make and receive voice calls:

- Wideye Sabre 1 corded analog handset (RJ11 phone).

- Bluetooth handset supporting cordless telephone profile (CTP).

- Bluetooth headset

4.2 Making an IP Data Connection

Pre-requisites

Before you can open an IP data connection, ensure that you have done the following:

- Installed a provisioned SIM card, supplied by your Service Provider. The SIM card contains Access Point Name (APN) information, therefore Inmarsat recommends that you do not change the APN after installing the SIM card.

- Connected your computer to the BGAN terminal using the Ethernet interface.

- Pointed the terminal to obtain the maximum possible signal strength.

- Registered with the BGAN network.

Note   If the terminal is in automatic connection mode, the first user to connect is automatically assigned a data connection. All other users must use BGAN LaunchPad to open their own data connection.

Opening a standard data connection

By default, when you first register with the BGAN network, the terminal opens a standard IP data connection. The standard connection is an always-on, best effort connection and is suitable for most basic data applications. It is charged by the amount of data sent and received.

To check that the standard connection is open, select the **Data** tab in BGAN LaunchPad.

The following screen is displayed:

If the standard connection is open, the words **Disconnect Standard** are displayed below the connection icon.

Note   If the standard connection is closed, the words Connect Standard display below the connection icon. Click on the icon to open the standard connection.

You can now browse the Internet, send and receive email and use other IP applications. All traffic is transferred across the standard connection.

Note   If more than one user wants to open a data connection, each user must open a separate session of BGAN LaunchPad. Refer to "BGAN and IP data connections" for details.

Opening a streaming data connection

If you require a guaranteed data rate for your connection (if, for example, the application is time critical), you can connect using one of the dedicated streaming connections at the following data rates:

• 32kbps streaming

• 64kbps streaming

Each streaming class connection is charged by the length of time that the connection is live. When you open a streaming connection, the standard connection is closed.

Tip   By default, error correction (also called network packet retransmission) is switched off. Inmarsat recommends that you turn error correction off for UDP/IP connections, as this feature is not required for this connection type. Refer to "BGAN and IP data connections" for details.

To open a streaming connection:

a.   Select the **Data** tab in BGAN LaunchPad:

The following screen is displayed:

b.   Select the required streaming connection, for example **64 Streaming**. You will be prompted to confirm that you want to close your current connection and open a new connection, charged by time:

c.   Click on **OK**. The new data connection opens and the following screen is displayed:

The **Standard** connection is closed and the **64 Streaming** connection is open. All traffic is transferred across the selected streaming connection.

Note   If you subsequently want to close the streaming connection and open another streaming connection, or reopen the standard connection, repeat steps 1 to 3.

Note   If you want to close the currently open connection, click on the icon.

Configuring a dedicated streaming connection

In addition to the default connections, BGAN LaunchPad enables you to configure and open one or more dedicated streaming connections (you can associate one of the icons shown above with a dedicated streaming connection). These are assigned to specific applications, for example Win Media, to ensure that the connection for this application's data is not shared with any other application.

You must open a pre-configured standard or streaming connection (called a primary connection) before you can open a dedicated streaming connection (secondary connection). This is because each dedicated streaming connection creates a virtual IP data connection which shares the IP address of the pre-configured standard or streaming connection.

For details on configuring dedicated streaming connections, using **Win Media** as the example application, refer to "BGAN LaunchPad User Guide".

Traffic Flow Templates

Each dedicated streaming connection is associated with a Traffic Flow Template (TFT). A TFT, also called an Application Template, assigns a priority to a selected type of traffic in order to maximize performance.

BGAN LaunchPad supports the following pre-configured TFTs, any one of which can be selected when you configure a dedicated streaming connection to ensure that the defined traffic has its own dedicated connection:

• FTP

• QuickLink

• QuickTime

• Real Media

• Streambox

• WinMedia

If you wish to want to define your own TFT for another application, contact your Service Provider for assistance.

To open a dedicated streaming connection:

a. Select the **Data** tab in BGAN LaunchPad.

b.   In this scenario, you have set up a dedicated streaming connection for **Win Media**. The standard connection is currently open.   The newly-created dedicated streaming IP data connection (**Win Media**) has been added to the list of available connections.

c.   Select the required dedicated streaming connection, for example **Win Media**. The following message is displayed, asking you to confirm that you want to open a dedicated connection in addition to your current connection:

d.   Click on **OK**. The new data connection opens and the following screen is displayed:
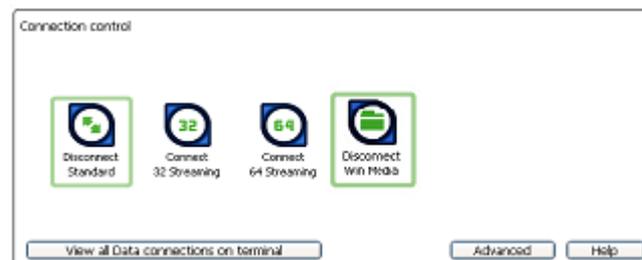
The **Standard** and the **Win Media** connections are both open. All traffic other than Win Media data continues to use the standard connection.

You can open up to 10 dedicated streaming connections in addition to your default connection.

If you can't make a data connection:

If you can't open a data connection, check that the default Access Point Name (APN) is set correctly. The APN is stored on your SIM and must be configured as the access point for each of your data connections for the data connection to open successfully.

Tip   If you want to open a dedicated streaming connection, the APN of the dedicated streaming connection must be the same as that of the existing standard or streaming connection.

To check the default APN is set correctly:

a. Select **BGAN Services > LaunchPad APN Options**. The **APN Configuration** screen is displayed:

b. Verify the **Current Default APN** text box to ensure you are connected to the correct APN. If not, either:

• Click on **Fetch from SIM**, or

• Select the required APN from the **Select APN** drop-down list and click on **Make default**.

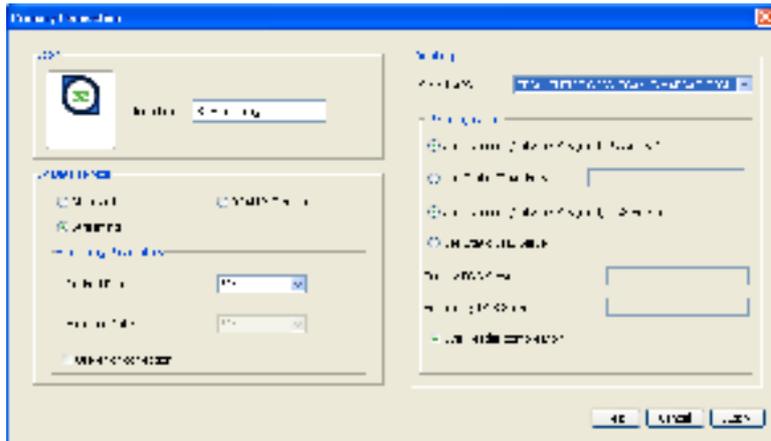**To check that the APN for a specific data connection is set to the default:**

a. In BGAN LaunchPad, select the **Data** tab.

The following screen is displayed:
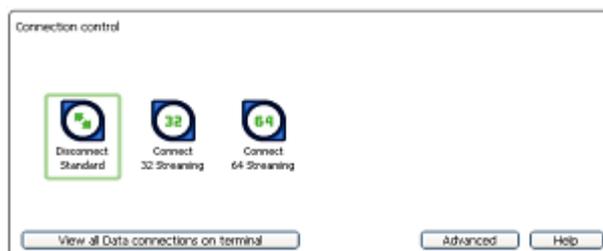
Right-click on the connection you want to verify and select **Edit**. The **Primary Connection** screen is displayed:

b. Verify the displayed APN in the **Select APN** field. If it is not correct, select the required APN from the drop-down list and click on **OK**.

Tip   Some Distribution Partners assign usernames and passwords to the APN. You may need to enter these when accessing or changing APN details.

4.3   Sending or receiving a text message

You can send text messages from a BGAN terminal to another BGAN terminal and from a BGAN terminal to a mobile phone. You can also sending a text messages from a mobile phone to a BGAN terminal, but only on those networks with which Inmarsat has an agreement.

To access text features, select the **Text** tab in BGAN LaunchPad:

The following screen is displayed:
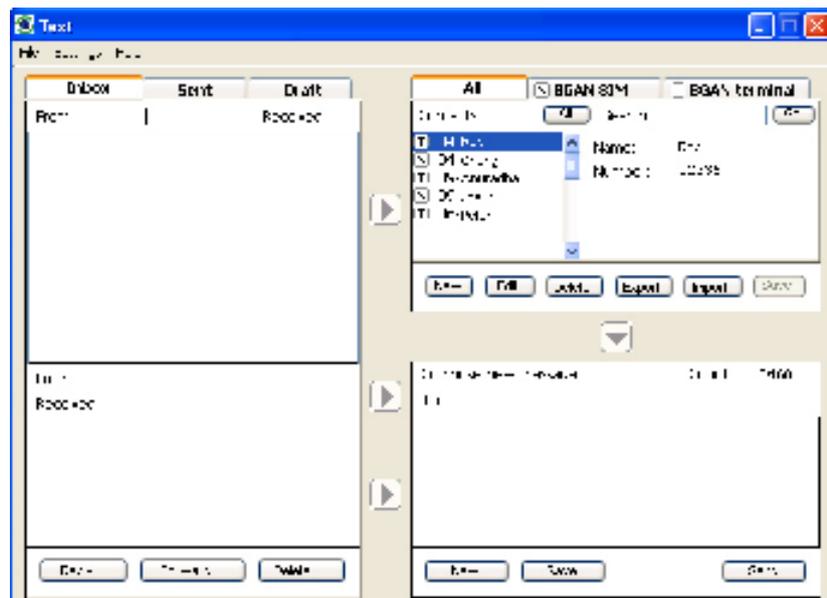
Refer to "BGAN LaunchPad User Guide" for details on using this screen.

Note   LaunchPad advises you with a pop-up message when a new text has been received.

Configuring Terminal Interfaces

5 Bluetooth

5.1 Introduction

Note the following about Bluetooth connections on the Wideye Sabre 1:

- You can connect a Bluetooth handset, a Bluetooth headset or a Bluetooth data device to the built-in Bluetooth antenna on the terminal. One device at a time can connect to the Bluetooth interface.

- The terminal supports various Bluetooth profiles. Remember to activate/install the profile(s) you are going to use on your computer. For a list of supported profiles, refer to the documentation supplied with your terminal.

- The Product CD supplied with the terminal contains a driver for the Wideye Bluetooth Data Dongle (not supplied). You can use this dongle if you do not already have a Bluetooth application installed on your computer. Refer to the SABRE I User Manual for details on installing the driver for the Bluetooth data dongle.

- The Bluetooth device should be placed within a maximum distance of 100 m from the terminal.

  Note   This is the maximum distance in open air; the actual distance may be shorter, depending on the environment. In an office environment, you should be able to establish a connection to an adjoining room.

Connecting from your Bluetooth device to the terminal

To search for and pair with your Bluetooth-enabled device from the terminal using BGAN LaunchPad:

a. Select **Terminal > Bluetooth Interface Settings**. The **Configure Bluetooth Interface** dialog box is displayed:
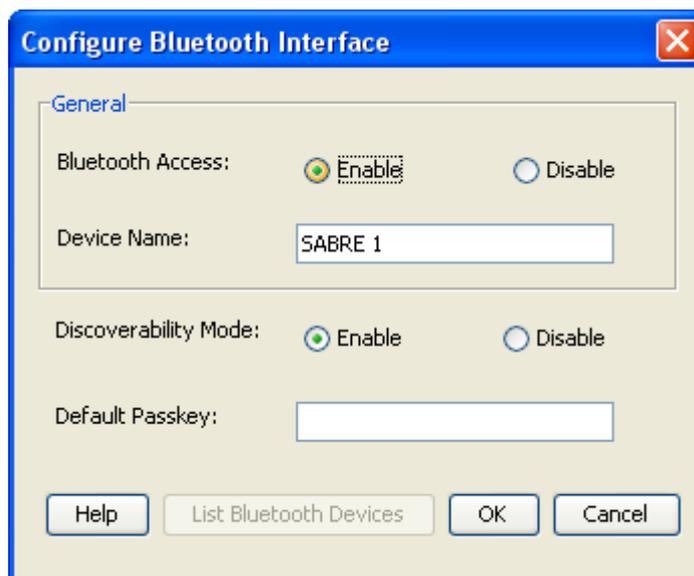
b. If **Bluetooth Access** is not enabled, check **Enable**. Note the following:

- The device name of the terminal is listed in the Device Name text box. The default is Lotus, but you can change this if required.

- The current discoverability mode is displayed as either Enable or Disable. You can change this if required.

- The current passkey displays as encrypted text in the Default Passkey text box. The default is 0000, but you can change this if required.

   Note   The Bluetooth device that you want to pair with must also be enabled.

c. Click on **List Bluetooth Devices** to list all Bluetooth devices within range. A screen similar to the following is displayed, giving the device address and current status, including pairing information.

Discovered BlueTooth Devices		
Friendly Name	Device Address	Status
Pocket PC	00:05:4E:00:0D:13	In-Range - Not Paired
Anna's Phone	00:80:37:45:ER:08	In-Range - Paired
BGAN Terminal	00:60:57:TR:60:67	In-Range - Paired
Laptop Number One	00:10:C6:2A:DF:78	In-Range - Not Paired

If required, either:

- Pair a device by right-clicking on an unpaired device and selecting **Pair**. Enter the passkey when prompted, or

- Unpair a device by right-clicking on a paired device and selecting **Un-pair**.

d. Click on **OK** to save the configured settings, or click on **Cancel** to exit without saving. When you have paired the device and the terminal, the Bluetooth software automatically installs two Bluetooth modems on your computer, one for BGAN LaunchPad and one for dial-up networking.

e. BGAN LaunchPad automatically detects the Bluetooth connection and you can use your device to access Bluetooth services.
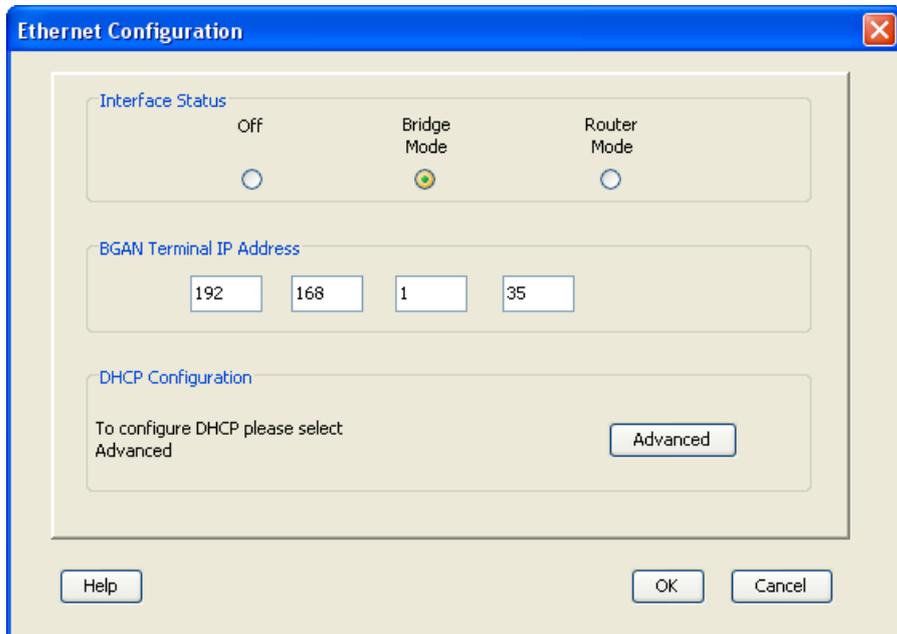

6   Ethernet

The Wideye Sabre 1 Ethernet interface supports two operating modes:

Router Mode. This is the default mode. In this mode the terminal acts as a router. This mode uses standard TCP/IP over Ethernet to connect to the network. If you choose this mode, the terminal initially assigns an IP address to the connected device, then allocates a public IP address.

Bridge Mode. In this mode the terminal acts as a modem. This mode requires you to install device drivers on your computer to create a serial connection. If you choose this mode, the core network allocates a public IP address directly to your computer (or other connected equipment). Refer to the documentation supplied with your terminal for details on installing the device drivers.

To activate and configure the Ethernet interface:

a. Select **Terminal > Configure Ethernet**. The following screen is displayed:

b. Check either **Bridge Mode** or **Router Mode**, or alternatively turn the Ethernet interface **Off**.

c. Click on **Advanced** to configure DHCP and DNS settings. The **DHCP Configuration** screen is displayed:
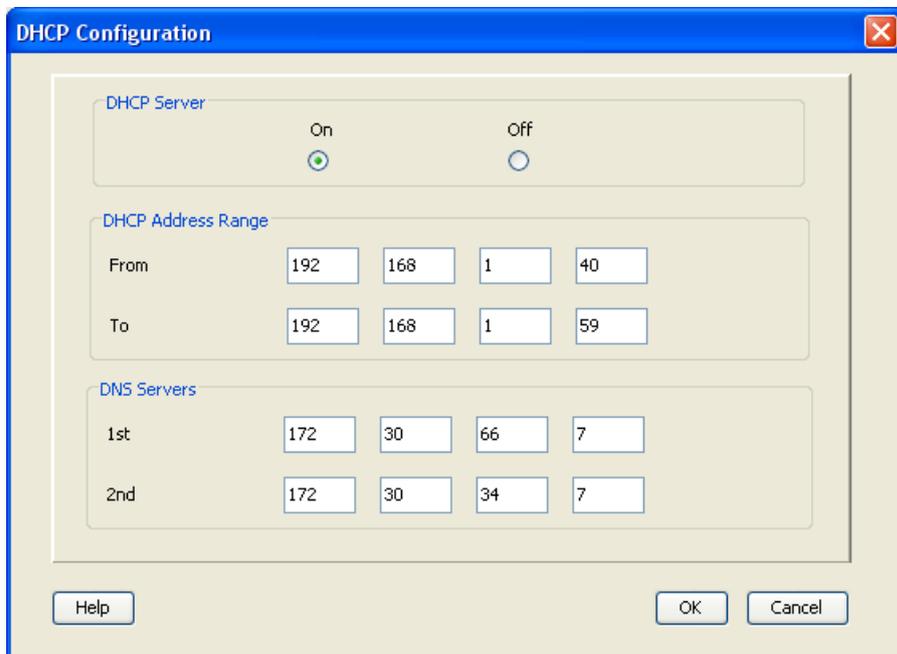
d. Turn the DHCP Server **On**, if required. The screen displays the current DHCP Address Range, and the IP addresses of the 1st and, if required, 2nd DNS Server.

e. If required, edit the DHCP address range by typing in a new start IP address in the **From** fields, and a new end IP address in the **To** fields.

f.   If you chose **Router Mode**, and you are using a DNS Server with a static IP address, you can change the IP address of the DNS Server. Type in the IP address of the 1st, and, if required, the 2nd DNS Server.
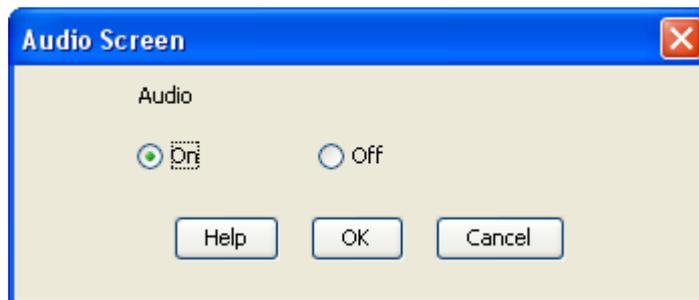
g.   Click on **OK** to save settings.

Managing the terminal

7 Enabling or disabling audio screen

The terminal has a built in audio buzzer which you can use to assist you in pointing the terminal.

To turn the audio buzzer on or off:

a. **Select Terminal > Audio Screen**. The **Audio Screen** dialog box is displayed:
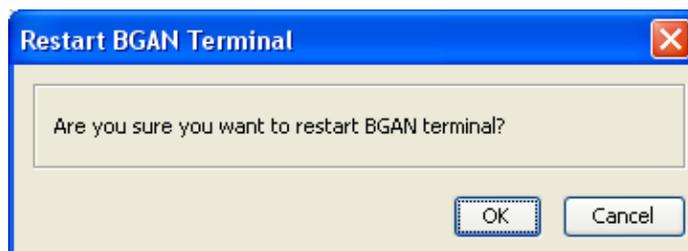

b. Check either **On** or **Off** to switch the audio screen on or off as required.

c. Click on **OK** to save the setting, or on **Cancel** to exit without saving.

8 Restarting the terminal

If required, you can turn the terminal off and back on again from LaunchPad.

To do this:

a. Select **Terminal > Restart Terminal**. The **Restart Terminal** dialog box is displayed:
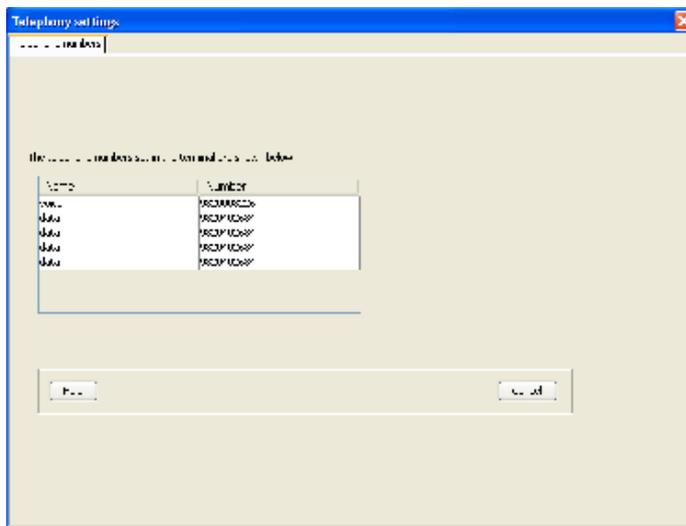

b. Click on **OK** to restart the terminal.

Telephony settings

9   Viewing telephone numbers

You can display the terminal's telephone numbers in LaunchPad if they have been supplied by
your service provider.

To do this:

a.   Select **BGAN services > Telephony Settings** (or click on **Advanced** in the **Phone** window).
     The **Telephony settings** window is displayed:

b.   The telephone numbers available to you are displayed in the **Telephone numbers** tab.

10   Setting up call forwarding

You can forward incoming calls to another phone using the **Call Forwarding** options.

To select call forwarding options:

a.   Select **BGAN services > Telephony Settings**: (or click on **Advanced** in the **Phone** window). The **Telephony Settings** window is displayed.
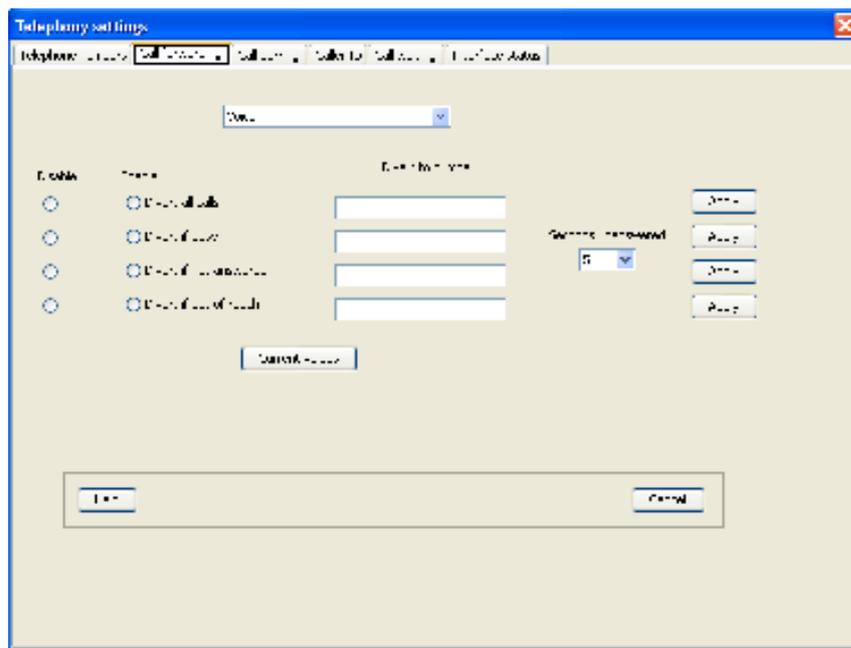
b.   Select the **Call Forwarding** tab. The following window is displayed:

c.   From the drop-down list, select the service on which you want to set up call forwarding, either **Voice or Data**.

d.   Check **Enable** or **Disable** for each call forwarding option as required. If you enable a call forwarding option, enter the number of the telephone to which you want to forward the call in the text box alongside your selection. If you check **Divert if not answered**, enter the amount of time you want the phone to ring unanswered before the call is diverted, in the **Seconds unanswered** text box.

e.   If required, click on **Current Values** to display the current network settings for this service.

f.   Click on **Apply** to save the displayed configuration, and select another **Telephony settings** tab, click on **Save** to save the displayed configuration and exit the **Telephony settings** screen, or click on **Cancel** to exit without saving.

11 Setting up call barring

You can bar selected types of outgoing or incoming call using the **Call Barring** options. Before you can do this, you must enter the PIN supplied by your Service Provider.

To select call barring options:

a. Select **BGAN services > Telephony Settings**: (or click on **Advanced** in the Phone window). The **Telephony Settings** window is displayed.

b. Select the **Call Barring** tab. The following window is displayed:
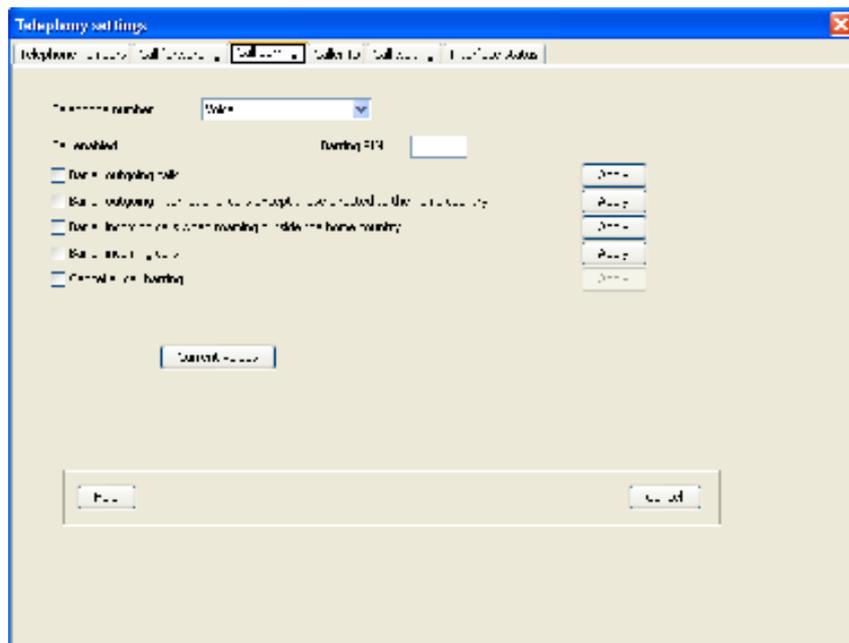
c. In the **Telephone number** drop-down list, select the service on which you want to set up call barring: either **Voice or Data**.

d. In the **Barring PIN** text box, enter the PIN supplied by your Service Provider. You cannot set up call barring options unless you enter the correct PIN.

e. Check any box if you want to activate a call barring service. If you choose **Cancel all call barring**, no other services are available to you. You must uncheck this box again to have access to the other services.

f. If required, click on **Current Values** to display the current network settings for this service.

g. Click on **Apply** to save the displayed configuration, and select another **Telephony settings** tab, click on **Save** to save the displayed configuration and exit the **Telephony settings** screen, or click on **Cancel** to exit without saving.

12 Setting up caller ID

You can enable **caller ID** if you want to see the number of an incoming caller, or allow a caller to see your number.

To set up **caller ID**:

a. Select **BGAN services > Telephony Settings**: (or click on **Advanced** in the **Phone** window). The **Telephony Settings** window displays.

b. Select the **Caller ID** tab. The following window is displayed:
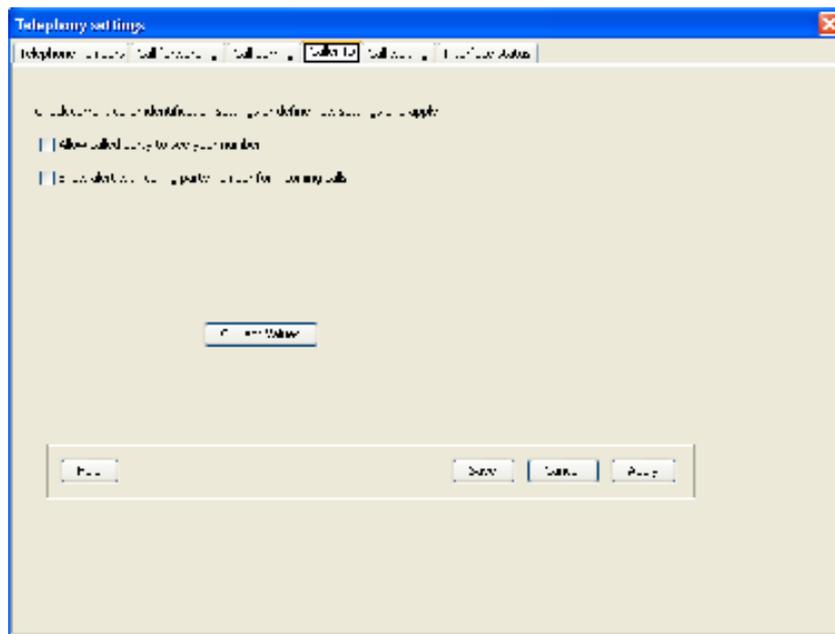
c. Check **Allow Called Party to see your number** if you want to allow the caller to see your number.

d. Check **Show alert with calling party number for incoming calls** if you want to see the number of an incoming caller.

e. If required, click on **Current Values** to display the current network settings for this service.
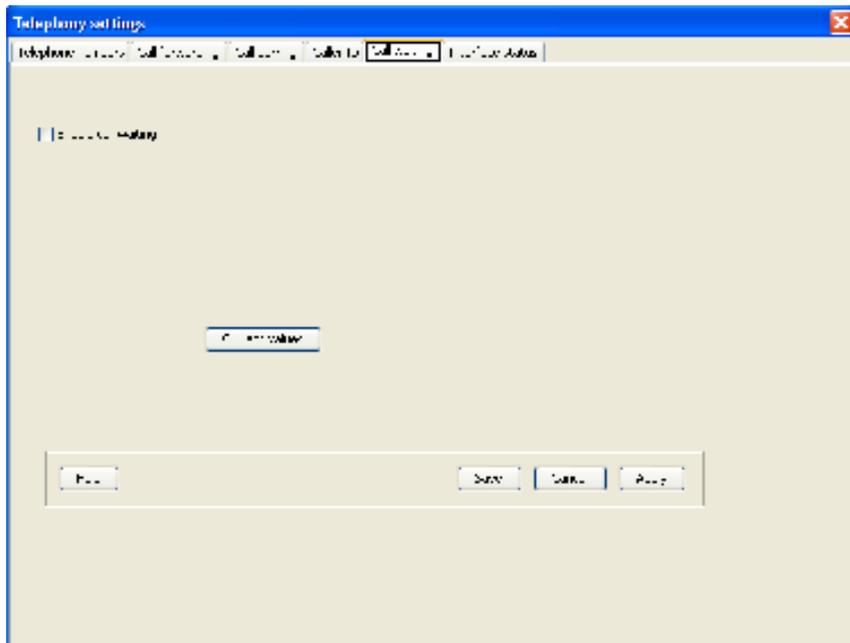
Click on **Apply** to save the displayed configuration, and select another **Telephony settings** tab, click on **Save** to save the displayed configuration and exit the **Telephony settings** screen, or click on **Cancel** to exit without saving.

13 Setting up call waiting

You can enable call waiting if you want to be notified that another caller is waiting which you are on a call.

To set up call waiting:

a. Select **BGAN services > Telephony Settings**: (or click on **Advanced** in the **Phone** window). The **Telephony Settings** window is displayed.

b. Select the **Call Waiting** tab. The following window is displayed:

c. Check **Enable Call Waiting** to activate call waiting, or uncheck to turn call waiting off.

d. If required, click on **Current Values** to display the current network settings for this service.

e. Click on **Apply** to save the displayed configuration, and select another **Telephony settings** tab, click on **Save** to save the displayed configuration and exit the **Telephony settings** screen, or click on **Cancel** to exit without saving.

14   Configuring Interface Status

    a.   Select **BGAN services > Telephony Settings**: (or click on **Advanced** in the **Phone** window). The **Telephony Settings** window is displayed.

    b.   Select the **Interface status** tab. The following window is displayed:

    c.   Check **US** or **European Caller Line ID Phone connected** or **Disable Telephone interface** if no interface is required..

    d.   If required, click on **Current Values** to display the current network settings for this service.

    e.   Click on **Apply** to save the displayed configuration, and select another **Telephony settings** tab, click on **Save** to save the displayed configuration and exit the **Telephony settings** screen, or click on **Cancel** to exit without saving.