Setting up a Windows 98SE modem device

The PC communicates with the MPDS terminal as if it were a modem. Follow the steps below to set-up a modem device under Windows 98SE that will communicate with the Inmarsat terminal:

1. Connect one end of a serial cable into your PC’s COM port. Connect the other end into the socket marked "MPDS" or "RS 232" on the terminal.

If the Control Panel window is not already open; from the Windows "Start" menu, select the option "Settings -> Control Panel". The control panel window will appear.

Double click on the "Modems" icon.

2. In the "General" tab, click <Add>.

3. When asked whether to allow Windows to detect the modem, tick the "Don’t detect my modem; I will select it from a list" box, to stop Windows detecting the modem automatically, click <Next>.

5. Under "Select the port..." choose "COM1" or the port to which the Inmarsat terminal is connected, if different, click <Next>.

6. Windows should report: 'Your modem has been set-up successfully'.

Close the Control Panel window by selecting the ‘Close’ option from the ‘File’ menu, click <Finish>.

7. From the Modem Properties panel, select the newly added modem from the list click the <Properties> button.
8. Set the Maximum speed to 115200 using the drop down box. 
Select the "Connection" tab and click the <Advanced> button.

9. In the Extra settings box enter the string in upper case AT+WS45=4;+WLES=XXX where XXX is the LESO code as issued by your service provider.

Close the properties box by clicking <OK> twice and then <Close>.

Close the Control Panel window by selecting the "Close" option from the "File" menu.

Setting up a Windows 98SE Networking profile

To successfully connect to the Internet via an MPDS capable terminal, follow these steps:

10. From the "Start" menu, select "Programs->Accessories->Communications->Dialup Networking".
Select "Make New Connection".

In the wizard window that appears, type a name in the box provided, select the previously installed modem and then click <Next>. 
11. Enter “123” in the “Telephone number” box, leave the area code box blank and ignore the "Country or region code" box. Press <Next> and then <Finish> to return to “Dial-up Networking”.

Select the new network profile, right click and select "Properties".

12. In the "General" tab un-tick "Use area code and Dialling Properties".

13. Select "Server Types" tab, select “PPP Internet, Windows NT Server, Windows 98" from the “Type of Dialup Server” box. Un tick all other boxes except "TCP/IP"

   click the <TCP/IP Settings> button.

14. Select "Server assigned IP address" and "Specify name server addresses”. Enter the IP addresses for your DNS servers as provided by your service provider.
   Click <OK> to exit page and <OK> to return to “Dial-up Networking”.

   ![Image of the Make New Connection window](image-url)
From the “Start” menu select “Settings->Control Panel->Network” and select “TCP/IP->Dial-up Adapter” from the Installed components list and click <Properties>.

A TCP/IP Properties warning box will appear, click <OK>.

Select the "Bindings" tab and un-tick "Client for Microsoft Networks" and click <OK>.

Select the "DNS Configuration" tab and select "Enable DNS”. Enter a name in the "Host" box and click <OK> to return to the "Network" window.

Click <OK> to return to the "Network" page.
18. Select the "Dial-Up Adapter" and click <Properties>.

19. Select the "Advanced" tab, highlight "IP Packet Size" and change to "Large" in the "Value" box. Click <OK> and <OK> again to return to the Control Panel.

Close the Control Panel window by selecting the "Close" option from the "File" menu.

From the "Start" menu, select "Programs->Accessories->Communications->Dial-up Networking". Select the previously created profile and double click to bring up the "Connect to" box.

20. Enter the username and password for the MPDS LESO you are using. These details can be obtained from your LESO. Click the <Connect> button to connect to the Internet.
Optimising the connection

During an MPDS connection, you are only charged for data that is sent and received. Therefore, it does not matter how long you are connected, but only how much data you send and receive. Keeping this to a minimum is essential to keeping costs down.

Follow these steps to minimise the data you send and receive:

Careful software configuration

Every package you use to send and receive data (or to create data) can benefit from careful configuration to ensure less data is sent and received. Consider the following advice.

- Choose data formats carefully; many desktop applications create large output files. Can another, simpler, format be used?
- Compress data; Zip all documents/files that are to be sent and received.
- Go through application configurations checking that extra data is not sent and received. For example, e-mail applications do not need to add signatures, or send delivery reports.
- Check that all unnecessary network applications are stopped when not in use. For example, new 'ticker tape', instant messaging and even e-mail applications can generate unwanted traffic.

Monitoring traffic

If you are aware of the traffic being sent and received by your PC, you can see which applications are generating the most traffic, and which are generating totally unwanted traffic. Even if you cannot fix the problem yourself, it can be brought to the attention of your IT department, you may be able to better configure an application, or change the way in which it operates.

A simple way of monitoring your connection is to check the bytes sent and received after each connection using the dial-up networking statistics available in the properties of the “system tray icon” whilst you are connected.

Inmarsat also provide two tools to enable you to monitor traffic:

- IP Consultant
- Cost Comparison Tool

Another Shareware tool is DUmeter

Useful tools and applications

CommVew is a relatively cheap network analyser.
DrTCP is a tool for adjusting TCP/IP registry settings without using Regedit (Advanced Users).