

Samsung Smartphone SGH-D720

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World Wide Web

http://www.samsungmobile.com

symbian OS

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Important safety precautions

Read these guidelines before using your wireless phone. Failure to comply with them may be dangerous or illegal.

Road safety at all times

Do not use a hand-held phone while driving; park the vehicle first.

Switching off when refuelling

Do not use the phone at a refuelling point (service station) or near fuels or chemicals.

Switching off in an aircraft

Wireless phones can cause interference. Using them in an aircraft is both illegal and dangerous.

Switching off near all medical equipment

Switch your phone off near medical equipment. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy. Follow any regulations or rules in force.

Interference

All wireless phones may be subject to interference, which could affect their performance.

Special regulations

Meet any special regulations in force in any area and always switch off your phone whenever it is forbidden to use it, or when it may cause interference or danger (in a hospital for example).

Water resistance

Your phone is not water-resistant. Keep it dry.

Sensible use

Use only in the normal position (held to the ear). Avoid unnecessary contact with the antenna when the phone is switched on.

Emergency call

Key in the emergency number for your present location, then press the key. Give all the necessary information as accurately as possible. Do not end the call until given permission to do so.

Keeping your phone away from small children

Keep the phone and all its parts including accessories out of the reach of small children.

Accessories and batteries

Use only Samsung-approved accessories and batteries. Use of any unauthorised accessories could damage your phone and may be dangerous.

Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers.

Qualified service

Only qualified service personnel may repair your phone.

For more detailed safety information, see page 285.

CAUTION

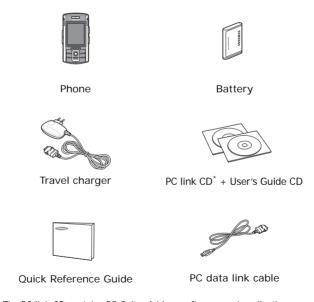
RISK OF EXPLOSION IF A BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

Getting started

Congratulations on the purchase of your new Smartphone! This chapter helps you set up your phone, charge the phone's batteries, and familiarise yourself with its different components.

What's in the box?

Your package contains the following items:



^{*} The PC link CD contains PC Suite, Add-on software, and applications.

In addition, you can obtain the following accessories for your phone from your local Samsung dealer:

- Standard battery
- Travel charger
- PC link CD
- Hand strap
- Memory card

- · Stylish handsfree car kit
- PC data link cable
- Straight headset
- · Car cradle
- Car charger/adapter

Note: The items supplied with your phone and available accessories may be different depending on your country or service provider.

Getting to know your phone

Front view



Rear view



Key	Description
9	Profile key. Press to open the list of the profiles. Press to select Switch off! to switch the phone off without pressing and holding . Press to select Lock phone to quickly lock the phone.
	Camera key. Press and hold to open the Camera application. In Camera, press to take a picture or to record a video clip.
[4]5]	Volume keys. Press to adjust the voice volume during a call. In Standby mode, press to adjust all the phone's sounds.
••• •••	Soft keys. Press either soft key to perform the command shown on the screen immediately above the keys.
ABC	ABC key. In Standby mode, press to switch between the Standby screen and Extend view. When entering text, press to change the text input mode.
	Menu key. Press to open the main menu screen, which contains a list of available features and applications.
	Talk/Voice command key. Press to: • dial a phone number on the screen. • answer an incoming call. • access call logs. In Standby mode, press and hold to open the Anyvoice application.

Key	Description
0	Navigation/OK key. Push to scroll through items on a screen. Push to move the cursor in a text input field. In Standby mode, push \(\) down to open the Web application and the other directions to access your favourite applications; you can assign applications to each key according to your preferences. Press to confirm your selection. Pressing this key is similar to the function of the "Enter" key on a keyboard. In Standby mode, press to open the Contacts application.
	Clear key. Press to clear one or more characters when you are in a text field. Press to delete contents in any application or remove add-on applications.
	End key. Press to end a call. Press to hide the currently activated application. Press and hold to turn the phone on or off.
1 00	Press to enter numbers and characters.
*+	Press to enter an international call prefix or pauses when entering a phone number. Press to display a list of symbols when you are in a text input field.
# *	Press to change case in a text input field. Press and hold to switch between text and number input modes.

Installing the SIM card

When you subscribe to a cellular network, you are provided with a plug-in SIM card loaded with your subscription details, such as your PIN, any optional services available, and much more.

- Keep all SIM cards out of the reach of small children.
- The SIM card and its contacts can easily be damaged by scratches or bending, so be careful when handling, inserting, or removing the card.
- When installing the SIM card, make sure that your phone is switched off before removing the battery.

A PIN (Personal Identification Number) is supplied with the SIM card from your network operator and must be entered when you switch on your phone for the first time.

Inserting the SIM card

- 1. If necessary, remove the battery by referring to page 18.
- 2. Insert and slide the SIM card under the two tabs, as shown, ensuring that the gold-coloured contacts of the card face down into the phone.



Removing the SIM card

To remove the SIM card, slide the card out of the holder, as shown.



Installing the battery

Your phone is powered by a rechargeable Li-ion battery. Use only approved batteries and chargers. Ask your local Samsung dealer for further details.

Note: You must fully charge the battery before using your phone for the first time. Fully recharging a discharged standard battery takes approximately 90 minutes.

Installing the battery

1. Slide down the battery cover and lift it away.



Place the battery so that the gold-coloured contact on the bottom right side align with the gold-coloured contact on the bottom right side of the phone and press the battery until it clicks into place.



3. Slide the battery cover towards the top of the phone until it clicks into place.



Make sure that the battery cover is securely locked before switching on the phone.

Removing the battery

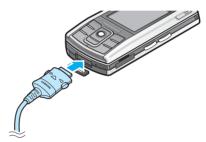
- If necessary, switch off the phone by pressing and holding until the power-off image displays. Or, you can also press and the OK soft key to switch off the phone.
- 2. To remove the battery, slide down the battery cover and lift it away.
- 3. Lift away the battery, as shown.



Charging the battery

Note: The phone can be used while the battery is being charged, but this causes the battery to charge more slowly.

1. Plug the connector of the travel charger into the bottom of the phone. Check that the arrow on the connector is facing up.

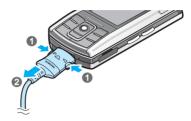


2. Plug the charger into a standard AC wall outlet.

You can see the LED on the charger indicating the charging progress by the following colours:

- · Red: the battery is being charged,
- Green: the battery is completely charged.
- Orange: the battery is not correctly plugged in or is operating at a too high or too low temperature.

3. When charging is finished, first unplug the charger from the power outlet. Then remove the charger from the phone by pressing the buttons on both sides of the connector and pulling the connector out.



Switching on or off the phone

- 1. Press and hold on the phone until the power-on image displays.
 - If you turn on the phone for the first time, you need to set the home city, current time, and date.
- 2. Enter the home city and press the Select soft key.
- 3. Enter the current time and press the **OK** soft key.
- 4. Enter the current date and press the **OK** soft key.
- 5. If the phone asks for a PIN, enter the PIN and press the **OK** soft key. For further details, see page 246.

6. If the phone asks for a lock code, enter the lock code and press the **OK** soft key. The default lock code is **00000000**. For further details, see page 246.

The phone searches for your network, and after finding it, the Standby screen appears on the display. Now, you can make or receive a call.

Note: To change the display language, use the **Phone**language option in the **Settings** menu. For further details, see page 230.

7. To switch off the phone, press and hold of until the power-off image displays. Or, you can also press and the **OK** soft key to switch off the phone.

Note: If your phone is closed, you first need to open it to activate the display and the keypad.

Using an optional memory card

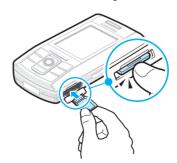
Using a memory card (MMC micro), you can store your multimedia files, such as video clips, sound files, photos, and messaging data, and back up information from your phone's memory.

Notes:

- Use only compatible memory cards with your phone. Other memory cards, such as Secure Digital (SD) cards, do not fit in the card slot and are not compatible with your phone.
 Using an incompatible memory card may damage the card, as well as the phone, and data stored on the card.
- When you insert/remove a locked memory card (indicated as "memory card locked" when you open the **Memory** application), you will not hear the system sound on insertion. Also, you will not hear the system sound and see the note on removal.

To insert a memory card:

- 1. Insert the card into the memory card slot with the label facing down.
- 2. Push the card in with your thumb until it locks into place. You will hear the system sound.



To remove the memory card:

- 1. Press 😰 to access the Menu.
- 2. Scroll to Extras using \bigcirc and press \bigcirc .
- 3. Scroll to **Memory** and press ().
- Press the Options soft key and scroll to Remove mem. card. Press the Select soft key.
- 5. Press the Yes soft key.
- Push the card in and release so that it is disengaged from the slot. Then slide the card out of the card slot and press the **OK** soft key.



WARNING!

- Removing the memory card without following the procedure above may cause damage to your data or the memory card.
- If you need to reboot the phone while installing an application on the memory card, do not remove the card until the reboot is complete; otherwise the application files may be lost.

General information

Your phone provides various functions which are very handy for daily use and for entertainment, such as Camera, MP3 Player, Messaging, Calculator, and Calendar.

This chapter provides some general information to help you use the applications.

Standby mode

The components described below are shown when your phone is ready for use, with no characters keyed in. In this state, the phone is in Standby mode.



А	Shows the signal strength of the cellular network at your current location. The more bars, the stronger the signal. The symbol is replaced with the GPRS symbol [G] when the GPRS connection has been set to When available and a connection is available on the network or on the current cell. See "Packet data (general packet radio service, GPRS)" on page 237 and "GPRS" on page 243.
В	Shows an analogue clock or a digital clock. See "Date and time settings" on page 245.
С	Indicates in which cellular network the phone is currently being used.
D	Shows the battery charge level. The more bars, the more power left in the battery.
E	Navigation bar. If the selected profile is General , the current date displays instead of the profile name. For further information, see "Navigation bar moving horizontally" on page 31 and "Profiles" on page 215.
F	Background image: You can select any image to be used as a background image in Standby mode. See page 218.
G	Shows the current shortcuts assigned to the soft keys. You can change soft key shortcuts. See "Standby mode" on page 232.

Indicators related to actions

One or more of the following icons may be shown when the phone is in Standby mode:

Indicator	Meaning
	Indicates that you have received new text or multimedia messages. When this indicator is blinking, the phone's memory capacity is insufficient to store the message(s) and you must delete some data.
@	Indicates that you have received new e-mails.
\neg	Indicates that you have received new chat messages.
0.0	Indicates that you have received voicemail messages. See "Calling your voice mailbox" on page 45.
ŝ	Indicates that there are messages waiting to be sent in Outbox . See "Outbox" on page 132.
*	Indicates that the Ringing type has been set to Silent in the currently active profile. See "Profiles" on page 215.
(in	Indicates that you have an active alarm.

Indicator	Meaning
•	Indicates that all calls to your phone are being diverted. indicates that all calls to the phone are being diverted to a voice mailbox. See "Call diverting settings" on page 252. If you have two phone lines, the divert indicator for the first line is and the indicator for the second line is .
2	Indicates that you can make calls using phone line 2 only (network service). See "Line in use (network service)" on page 235.
D	Indicates a data call.
G	Appears instead of the signal strength indicator when there is an active GPRS connection. indicates that there are multiple GPRS connections. indicates that the GPRS connection is put on hold during a voice call.
,±,	Indicates that a USB connection with a PC is active.
6	Appears when a headset is connected to your phone.
63	Appears when the Bluetooth feature is activated. For further details, see page 265.

Extend view

You will see the Extend view when you press in Standby mode. On the Extend view, you can see important information for the day, at a glance.

You can also quickly switch to applications you have recently accessed. Scroll to an application icon and press \bigcirc to open it.

Menu screen

In the Menu, you can access all of the applications for your phone. Press 🗃 to open the Menu screen.

Opening applications or folders

Scroll to an application or a folder by pushing \bigcirc up or down and press \bigcirc to open it.

Closing applications

Press the **Exit** soft key or select **Options** → **Exit**. You can also backstep by pressing the **Back** soft key as many times as you need to return to Standby mode. Any unsaved data is saved automatically.

If you press , the phone returns to the Standby mode and the application is left open in the background.

Note: Pressing will always end a call, even if another application is active and displayed on the display.

Rearranging applications

You can rearrange applications or folders on the Menu screen, and move applications into folders.

To change the location of an application on the Menu screen:

- 1. On the Menu screen, scroll to the application you want to move
- 2. Select **Options** → **Move**.

A check mark is placed beside the selected application.

3. Move the selection to the desired location and press the **OK** soft key.

To move an application to a folder:

- On the Menu screen, scroll to the application you want to move.
- 2. Select Options → Move to folder.
- 3. Select a folder and press the **OK** soft key.

Note: You can add a new folder by selecting Options → New folder.

Switching between applications

If you have several applications open and want to switch from one application to another, press and hold . The application switching window opens, showing a list of applications that are currently open.

Scroll to an application pushing \bigcirc up or down, and press the **Select** soft key to go to it or press \bigcirc and the **Yes** soft key to close it.

Note: The Telephone application cannot be closed with

Adding applications

You can add more applications to your phone by downloading installation files from the wireless web or by using the **Manager** application.

To download an application, select **Options** → **App**. **downloads**. You can select a bookmark for a preset website which provides you with a variety of applications available for download, or enter the URL address of the website. After accessing the website, search for an application and follow the onscreen instructions.

For details about installing applications by using the **Manager** application, see page 258.

Onscreen help

Your phone has a help function that you can access from any application which has the **Options** selection. To access the onscreen help, select **Options** \rightarrow **Help**.

Or, you can also get information about special menus by accessing **Help** from the Menu. To access a help function for the Menu, press [3] to open the Menu and then select **Help**.

Navigation bar - moving horizontally

On the navigation bar, you can see:

- editing indicators. See "Entering text" on page 37.



 small arrows or tabs which tell you if there are more views, folders, or files you can move to. Push
 left or right to move to the previous or next views, folders, or files.

Actions common to all applications

Adding items

When you are in an application, select **Options** and then an option for creating a new item, such as **New contact**, **Create message**, **New entry**, or **New note**. Options for creating an item are different in each application.

For information on how to insert text and numbers, see "Entering text" on page 37.

Opening items

When you are viewing a list of files or folders, to open an item, scroll to it and press \bigcirc or select **Options** \rightarrow **Open**.

Editing items

To edit an item, you sometimes need to first open it for viewing and then select **Options** \rightarrow **Edit**. Then you can change its contents.

Renaming items

To give a new name to a file or folder, scroll to it and select **Options** \rightarrow **Rename**.

Removing or deleting items

Scroll to the item and select **Options** → **Delete** or press To delete multiple items at one time, you first need to mark them. See the next section, "Marking an item."

Marking an item

There are several ways to select items on a list:

- To select one item at a time, scroll to it and select
 Options → Mark/Unmark → Mark. A check mark is
 placed next to the item.
- To select all of the items on the list, select Options → Mark/Unmark → Mark all.
- To unmark an item, scroll to it and select Options → Mark/Unmark → Unmark.
- To unmark all of the items, select Options → Mark/ Unmark → Unmark all.

Sending items

You can send items, such as contact information, pictures, sounds, and calendar entries, via one of various messaging services or via Bluetooth.

- 1. Open an item and select **Options** → **Send**.
- 2. Select a method; the choices are: Via text message, Via multimedia, Via e-mail, or Via Bluetooth.
 - If you opt to send the item in a text message, the text message editor screen opens. Enter a phone number in the To: field and then select Options → Send. For details, see page 113.
 - If you opt to send the item in a multimedia message, the Multimedia Slide screen opens. Enter the phone number of the recipient in the To: field. Add text and then select Options → Send. For details, see page 115.

- If you opt to send the item in an e-mail, the E-mail screen opens. Enter the e-mail address of the recipient in the To: field. Enter the message subject and add text, picture(s), video file(s), or sound(s), and then select Options → Send. For details, see page 119.
- If you opt to send the item via Bluetooth, see page 265.

Arranging items

You can arrange items such as pictures, sounds, and messages, into folders.

Creating folders

To create a new folder, select **Options** → **New folder**. You are asked to name the folder.

Moving items to an application folder

- Scroll to an item and select Options → Move to folder (not shown if there are no folders available).
 - A list of available folders opens.
- 2. Select the location to which you want the item moved and press the **OK** soft key.

Searching for items

You can search for a name, file, folder, or shortcut by using the search field. To search for a file and folder in **File manager**, you need to activate the search field by selecting **Options** → **Find**.

1. Start to enter text in the search field. The phone immediately starts to search for matches and highlights the best match.

To make the search more accurate, enter more letters. The phone highlights selection moves to the item that best matches your input.

2. When you find the correct item, press \(\) to open it.

Volume control

When you have an active call or are listening to a sound, press the Volume keys on the left side of the phone to increase or decrease the volume level, respectively.

Keypad lock (Keyguard)

You can open your phone to use the number keypad and close the phone to make it more compact. When you close the phone, it allows you to lock the exposed function keys to keep any accidental key presses from causing problems.

To lock the keypad, close the phone at any time. When a confirmation message displays:

- Press the No soft key, or if you do nothing for a second, the phone locks the keypad and appears on the navigation bar.
- Press the Yes soft key to use the exposed keys with the phone closed.

Once the keypad has been locked, to unlock the keypad, press the **Unlock** soft key and then press the **OK** soft key or open the phone.

Shared memory

Some features in your phone use shared memory: Contacts, text messages, multimedia messages, images and ringtones, camera, RealPlayer TM , calendar, to-do notes, and downloaded applications. Using any of these features leaves less memory for other features. This is especially true with heavy use of any of the features. For example, saving many images may use up all of the shared memory and your phone may display that the memory is full. In this case, delete some of the information or items taking up the shared memory.

Entering text

You can enter text in two different ways: using the method traditionally used in mobile phones-pressing a key repeatedly until the desired character displays-or Dictionary, which is a predictive text input mode.

Changing the text input mode

You can change the text input mode by pressing \bullet or \bullet , as follows:

Note: In the recipient field of the message screen, you must press [AC] first to change text input modes.

- To select the traditional text input mode, press
 until the indicator
 displays on the top right of the screen. Alternatively, press
 and select Dictionary → Off.
- To select the Dictionary text input mode, press until the indicator by displays on the top right of the screen. Alternatively, press and select **Dictionary** on.
- To select Number mode, press and hold until the indicator 123 displays on the top right of the screen. Alternatively, press and select Number mode. To return to the previous input mode, press and hold ...

Using traditional text input

Use the keys to go to enter text.

- Press a number key repeatedly until the desired character appears. Note that there are more characters available for a number key than are printed on the key.
- 2. Select the other letters in the same way.

Note: If the next letter is located on the same key as the present one, wait until the cursor appears or push oright to end the time-out period, and then enter the letter.

Tips for traditional text input

- To change cases, .Abc (Initial capital) and abc (Lower case), press (**).
- To insert a symbol or punctuation mark, press ★.
 Alternatively, press and select Insert symbol. Use to scroll through the list and press the Select soft key.
- The most common punctuation marks are available under \(\begin{align*} \properties \) Press \(\begin{align*} \properties \text{repeatedly to reach the desired punctuation mark.} \end{align*}\)
- To insert a number quickly, press and hold the corresponding number key.
- To insert a space, press .
- To move the cursor to the next line, press
 three times.
 H displays briefly and then the cursor moves.

Using Dictionary

1. Write the desired word by pressing the keys (2) to (9). Press each key only once for one letter. The word changes after every key press.

Note: Do not pay attention to what appears on the display. The word match is evolving. Wait until you have entered the whole word before you check the result.

For example, to enter "Hello" when the English Dictionary is selected, press 4 for H, 3 for e, 5 for I, and 6 for O.

The word suggestion changes after each keypress.

- 2. When you have finished the word, check that it is correct.

 - If the word is not correct, you have the following options:
 - Press repeatedly to view other matching words the dictionary has found, one by one.
 - Press and select Dictionary → Matches to view a list of matching words. Scroll to the word you want to use and press the OK soft key to select it.

- If the ? character is shown after word, the word you intended to enter is not in Dictionary. To add a word to Dictionary, press the **Spell** soft key, enter the word (max. 32 letters) using traditional text input, and press the **OK** soft key. The word is added to Dictionary. When Dictionary becomes full, a new word will replace the oldest added word.
- To remove the character and clear characters one by one from the word, press .
- 3. When the correct word displays, press to insert a space, so that the word is complete.

Tips for using Dictionary

- To change cases, .Abc (Initial capital) and abc (Lower case), press *.
- To remove a character, press c. Press and hold to clear more than one character.
- To insert a number, press and hold the corresponding number key.
- To insert a symbol or punctuation mark, press *.
 Alternatively, press and select Insert symbol. Use
 to scroll through the list and press the Select soft key.

Tip: Dictionary tries to guess which commonly used punctuation mark (. , ?!') is needed. The order and availability of the punctuation marks depend on the language being used.

 To view matching words the dictionary has found, one by one, press * repeatedly when a word is active (underlined).

You can also press [ASC], select **Dictionary** and select:

- Matches to view a list of words that correspond to your key presses, which is available only if the word is active (underlined). Scroll to the desired word and press ().
- Insert word to add a word (max. 32 letters) to Dictionary by using traditional text input.
 When Dictionary becomes full, a new word will replace the oldest added word.
- Edit word to open a view where you can edit the word, which is available only if the word is active (underlined).
- · Off to deactivate Dictionary.

Editing options

When you press (a), the following options appear (depending on the text input mode and situation you are in):

- Dictionary (predictive text input), Alpha mode (traditional text input), Number mode.
- Cut, Copy available only if text has been selected first. For details, see below.
- Paste available only when text has been either cut or copied to the clipboard.
- · Insert symbol, and
- Writing language changes the input language for all editors in the phone. See page 230.

Copying text

If you want to copy text to the clipboard, the following are the easiest methods:

- To select letters and words, press and hold AC. At the same time, push O left or right. As the selection moves, text is highlighted.
 To select lines of text, press and hold AC. At the same time, push O up or down.
- 2. When you have selected the text that you want, stop pushing ().
- 3. To copy the text to the clipboard, while still holding [ABC], press the **Copy** soft key.

You can also release [ABC], press it once to open a list of editing commands, and select **Copy** or **Cut**.

To insert the text into a document, while holding press the Paste soft key.

You can also press and select Paste.

Call functions

This chapter gives you information for using your phone's call functions.

Making a call

1.		andby mode, use the keypad to enter an area and phone number.	
		\bigcirc left or right to move the cursor. Press $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	
	intern intern	ternational calls, press twice for the national prefix (the + character replaces the national access code) and then enter the country the area code without o , and the phone er.	
	Note:	Calls described here as international may in some cases be made between regions of the same nation.	
2.	Press	to call the number.	
	Note:	To adjust the volume during a call, press the Volume keys on the left side of the phone.	
3.	To en	Fo end the call, press 🖲 or close the phone. You can	

Note: Pressing will always end a call, even if another application is active and displayed.

also use the End call soft key.

Accessing dialing options

After entering a number, press the **Options** soft key. You can access the following options:

- Add to Contacts: adds the number to the Contacts directory. Select Create new to create a new contact or Update existing to add information to an existing contact. For details about the Contacts application, see page 55.
- · Call: dials the number.
- Send: lets you send a text or multimedia message to the number

Making a call using Contacts

To open Contacts, press the Contacts soft key or
 in Standby mode.

You can also press (a) to open the Menu and then select Contacts

2. Scroll to the name you want.

Alternatively, enter the first few letters of the name in the search field at the bottom of the screen. Matching contacts are listed.

3. Press ♂ or select **Options** → **Call** to call to the contact.

If the contact has more than one phone number, scroll to the number you want and press or the Call soft key to start the call.

Making a call using name dialling

You can make a phone call by saying the name that has been assigned to a contact card in the Contacts directory. For details, see "Name dialling" on page 165.

Note: To use the Name Dial feature, the name and number that you want to dial must be in your Contacts directory. For details about the **Contacts** application, see page 55.

Calling your voice mailbox

The voice mailbox is a network service which acts as an answering machine where callers who are unable to reach you can leave voice messages.

To call your voice mailbox, press and hold $\overline{\mathbb{L}_{\infty}}$ in Standby mode.

If the phone asks for the voice mailbox number, enter it and press the **OK** soft key. You can obtain this number from your service provider.

Each phone line may have its own voice mailbox number. See "Line in use" on page 235.

Changing the voice mailbox number

To change the phone number of your voice mailbox, press \bigcirc to open the Menu, and then select **Tools** \rightarrow **Voice** mail \rightarrow **Options** \rightarrow **Change number**. Enter the number obtained from your service provider and press the **OK** soft key.

Speed dialling a phone number

Once you have stored a number in **Contacts**, you can assign the most frequently-used numbers to the speed dialling keys and quickly and easily dial them with only one keypress. See "Assigning speed dialling keys" on page 60.

- In Standby mode, press the corresponding speed dialling key and .
- If the **Speed dialling** function is set to **On** (see page 235), press and hold the corresponding speed dialling key until the call is started.

To view the speed dialling assignments, press 3 to open the Menu, and then select **Tools** \rightarrow **Speed dial**.

Dialling using a pause

When you call an automated system, like a banking service, you are required to enter a password or an account number. Instead of manually entering the numbers each time, you can enter the necessary DTMF tones separated by pauses before dialling.

Note: DTMF tones are the tones you hear when you press the number keys. DTMF tones allow you to communicate with computerised telephone systems, for example, voice mailboxes or telebanking systems.

- Enter the phone number you want to dial, such as a bank's teleservice number.
- 2. Press * repeatedly to insert a pause.

You can insert two types of pauses:

- p: inserts a pause of approximately two seconds between numbers. The numbers following "p" are sent automatically.
- w: if you use a pause of this type, the remaining sequence is not sent until you press [5].
- 3. Enter a number to be sent after the pause, such as your account number, PIN, etc.
- 4. Repeat steps 2 and 3 to add more pauses and numbers, if necessary.
- 5. Press to make a call.
- 6. After connecting, wait for a prompt from the system, and then press at each prompt, if applicable.

The DTMF tones are sent.

Answering a call

- 1. To answer an incoming call, open the phone if necessary, and press .
 - To reject a call, press <a>
 <a>

 The caller will hear a "line busy" tone.

Note: If you have activated the Tools → Settings → Call divert → If busy function to divert calls, for example, to your voice mailbox, rejecting an incoming call will also divert the call. See "Call diverting settings" on page 252.

 To quickly mute the call ringer, press the Silence soft key.

Note: If the Silent profile is active (see page 215), Reject displays in place of Silence to allows you to reject a call.

- To adjust the phone tones for different environments and situations, for example, when you want your phone to be silent, see "Profiles" on page 215.
- 2. To end the call, press or close the phone.

Using options during a call

While a call is in progress, you can access the following options by pressing the **Options** soft key.

Note: Depending on the status of your call, for example, having a second call or a call on hold, available options vary.

- Swap: switch between the active call and the call on hold.
- End active call: ends the active call.
- · End all calls: ends all calls.
- Hold: puts the current call on hold.
- Unhold: reactivates the call on hold.
- Mute: switches your phone's microphone off so that the other person on the phone cannot hear you.
- Unmute: switches your phone's microphone on.
- Mute key: switches the key tones off.
- Send key: switches the key tones on.
- New call: allows you to make a new call. When you select this option, the current call is placed on hold.
- Conference: allows you to make a conference call. You can have a conversation with up to 5 participants.
 - Private: (shown when you have a conference call) allows you to talk privately to a person during a conference call.
 - When the list of call participants appears, select one and press the **Private** soft key.

- Drop participant: (shown when you have a conference call) allows you to drop a person during a conference call. When the list of call participants appears, select one and press the Drop soft key.
- Transfer: connects an incoming call or a call on hold with an active call and disconnects you from both calls
- Send DTMF: allows you to send DTMF tones for numbers, such as passwords or bank account numbers. You can check or correct the numbers before sending.
- Help: shows the help information on the options available during a call.

Viewing the Log

In the **Log** application, you can monitor phone calls, text message call duration, packet data connections, and data calls registered by the phone. You can filter the log to view just one type of event and create new contact cards based on the log information.

Press (1) to open the Menu, and then select Log.

Recent calls

The phone registers the phone numbers of missed, received, and dialled calls. The phone registers missed and received calls only if the network supports these functions.

Press \bigcirc in Standby mode or press \bigcirc to open the Menu, and then select $\mathbf{Log} \rightarrow \mathbf{Recent \ calls}$.

Missed calls and received calls

These network services allow you to view the 20 most recent calls you have missed and calls you have accepted. To view the 20 most recent missed calls' originating phone numbers, select Log → Recent calls → Missed calls.

When you see a note about missed calls in Standby mode, press the **Show** soft key to access the list of missed calls. To call back, scroll to the number or name you want and press .

To view a list of the 20 numbers or names from which you have most recently accepted calls, select $Log \rightarrow Recent calls \rightarrow Received calls$.

Dialled calls

To view the 20 phone numbers that you have most recently called or attempted to call, select Log → Recent calls → Dialled calls.

You can also press 📉 in Standby mode to quickly open the Dialled numbers list.

Erasing recent call logs

- To clear all of the listed recent calls, select Options → Clear recent calls on the Recent calls screen.
- To clear the selected call type's log, open the call type whose contents you want to erase and select Options
 → Clear list.
- To clear an individual call log, scroll to the log and press cor select Options → Delete.

Call duration

Press \blacksquare to open the Menu, and then select $Log \rightarrow Call$ duration to view the duration of the last call, dialled and received calls, and total calls.

Note: The actual time invoiced for calls by your service provider may vary, depending upon network features, rounding-off for billing, and so forth.

Erasing call duration timers

On the Call duration screen, scroll to the call duration type you want to erase and select **Options** → **Clear timers**. For this, you need to enter the lock code. The default lock code is **00000000**. See "Security settings" on page 246.

GPRS counter

Press \square to open the Menu, and then select $Log \rightarrow GPRS$ counter to check how much data, measured in bytes, has been transferred to and from your phone.

The display shows the counters for all sent and received data, separately.

Resetting GPRS counters

On the GPRS data counter screen, scroll to the GPRS type you want to erase and select **Options** \rightarrow **Clear counters**. For this, you need to enter a lock code. The default lock code is **00000000**.

Viewing the general log

In the general log, for each communication event, you can see the sender or recipient's name or phone number.

Press 🗷 to open the Menu, select Log and push () right.

Note: Sub-events, such as a text message sent in more than one part and packet data connections, are logged as one communication event.

You can also view each communication event in details. Scroll to an event and press ○ or select **Options** → **View** details.

Filtering the log

By selecting a filter, you can display only log items of the specified type.

- 1. Select **Options** → **Filter**. A list of filters opens.
- 2. Scroll to a filter and press the Select soft key.

Erasing the contents of the log

To erase all the log contents permanently, select **Options** \rightarrow **Clear log**.

Log settings

Select **Options** \rightarrow **Settings**. The list of settings opens.

- Log duration: The log events remain in the phone's memory for a set number of days, after which they are automatically erased to free up memory.
 If you select No log, all of the log contents, Recent
 - If you select **No log**, all of the log contents, Recent calls log, and Message delivery reports are permanently deleted.
- Show call duration: When this option is set to Yes, you
 will see the call duration timer while you have an
 active call.

chapter 4

Contacts

In **Contacts**, you can store and manage a person's contact information, such as a name, phone numbers, and addresses, as a contact card.

To open Contacts, press (3) to open the Menu, and then select Contacts

You can also press the **Contacts** soft key or \bigcirc in Standby mode.

You can add a personal ringtone or a thumbnail image to a contact card. You can create contact groups.

Creating contact cards

You can create contact cards and save them selectively in your phone's memory or the SIM card.

Creating a new contact card in the phone's memory

- Open Contacts and select Options → New contact. An empty contact card opens.
- Fill in the fields you want and press the **Done** soft key. The contact card is saved and closed, after which you can see it in the Contacts list.

Note: On the Contacts list, a contact's last name will display first by default. You can set the Contacts list to display the first name first by selecting Options → Settings.

Creating a contact card on the SIM card

- 1. Open Contacts and select Options → SIM directory.
- 2. On the SIM directory screen, select **Options** → **New SIM contact**.
- 3. Enter a name and a phone number in each field.
- 4. Press the Done soft key.

Note: Once you have stored numbers on the SIM card, you can retrieve them by entering their location numbers, which are automatically assigned in the order in which the numbers are stored, and pressing . For example, pressing and then in Standby mode shows the first number stored in the SIM directory. You can then dial the number.

Assigning own number

You can register the phone number and name on the SIM card as the own number.

- 1. Open Contacts and select Options → SIM directory.
- On the SIM directory screen, select Options → My numbers.
- 3. Select the field you want to save.
- 4. Enter the name and phone number.
- 5. Press the **Done** soft key.

Copying contacts

- To copy contacts from the SIM card to your phone's memory, go to Contacts and select Options → SIM directory. Select the contact(s) you want to copy and select Options → Copy to Contacts.
- To copy contacts from the phone's memory to your SIM card, go to Contacts, scroll to the contact you want and select Options → Copy to SIM direct. Then scroll to the number type you want to copy and press the OK soft key. If you want to copy all contact information, scroll to AII and press the OK soft key.

Options when viewing contacts

To view details of a contact card, select the card from the Contacts list.

Contact information view (shows all information on the contact card. If you added an image to the contact card, the thumbnail image displays on the top left of the screen. The name field is always displayed in the contact information view, but other fields are only displayed if they contain information.

Note: Only fields that have information are displayed in the contact information view. Select Options → Edit if you want to see all of the fields and add more data to the contact card.

Changing contact information

- On the Contacts list, select the contact card you want to edit.
- To change the information on the contact card, select Options → Edit.
- 3. To save your changes and to return to the Contacts list, press the **Done** soft key.

Managing contact information

You can add input fields to the contact card to store more information about a person, or alternatively remove fields.

- 1. Open a contact card and select **Options** → **Edit**.
- 2. To add an extra field, select **Options** → **Add detail**.

To delete a field you do not need, select **Options** → **Delete detail**.

To rename the label of a contact card field, select $Options \rightarrow Edit label$.

3. When you have finished, press the **Done** soft key.

Adding a picture to a contact card

You can add a caller ID image to a contact card as a thumbnail image. See "Camera" on page 66 for more information on how to take and store pictures.

- 1. Open a contact card and select **Options** → **Edit**.
- Select Options → Add thumbnail.
- Select an image from the Images folder or one of the other folders where the image files you want are saved. The selected thumbnail image will be shown when the contact is calling you.

You can select **Add thumbnail** to replace the image with a different thumbnail or **Remove thumbnail** to remove the thumbnail from the contact card.

Assigning default numbers and addresses

If a person has several phone numbers or e-mail addresses, to speed up calling and sending messages, you can define certain numbers and addresses as defaults.

Open a contact card and select **Options** → **Defaults**. A pop-up window opens, listing the different options.

For example, scroll to **Phone number** and press the **Assign** soft key. A list of phone numbers in the selected contact card is shown. Scroll to the one you want to use as the default and press the **Select** soft key. When you return to the contact card view, you will see the default number underlined.

Assigning speed dialling keys

Speed dialling is a quick way to call frequently-used numbers. You can assign eight phone numbers speed dialling keys to . Number 1 is reserved for the voice mailbox.

- 1. Open the contact card.
- Scroll to the phone number you want and select Options → Assign speed dial.

The speed dialling grid opens, showing you the numbers from 2 to 9.

3. Scroll to a location and press the Assign soft key.

When you return to the contact information view, you will see the speed dial icon on the right side of the number.

To call the number by speed dialling, go to Standby mode, make sure that the speed dialling setting is activated (see page 235), and press and hold the appropriate speed dialling key.

Adding a ringtone for a contact card or group

You can set a ringtone for each contact card and group. When a person calls you, the phone plays the chosen ringtone if the person's contact information is saved in Contacts.

1. Open a contact card, or go to the group list and select a contact group.

- Select Options → Ringing tone. A list of ringtones opens.
- 3. Select the ringtone you wish to use for the contact or group.

To remove the ringtone, select **Default tone** from the list of ringtones.

Note: For an individual contact, the phone always uses the ringtone that was assigned last. If you first change a group ringtone and then the ringtone of a single contact that belongs to that group, the ringtone of the single contact is used the next time the contact calls you.

Sending contact information

You can send contact information via text and multimedia messages, e-mail services, and via Bluetooth. For details, see page 33.

When you send or receive contact information, the term "business card" is used. A business card is a contact card in a format suitable to be sent in a message, usually in vCard format.

Subscribed contacts

You can create a list for contacts whose presence status you want to be aware of (network service). You can view the contact's presence information if they allow you to view it and if it is not prevented by the network. You can view the subscribed contacts either by scrolling through the contacts or accessing the subscribed contacts list.

To connect to the Presence service, press [3] to open the Menu and then select **Presence**. You can also view subscribed contacts when you are not connected to the Presence service, but you cannot see the presence status of the contact.

Adding contacts to the subscribed contacts

- 1. On the Contacts list, push \bigcirc right once.
- If you have no contacts on your list, select Options → Subscribe new. The list of contacts is shown.
 - If you have not connected to the Presence service, the phone asks if you want to connect now. Select the **Yes** soft key.
- Select a contact from the list and if the contact has an ID saved, the contact is added to the subscribed contacts list. If there is more than one ID, select one of them.

After subscription to the contact, "Subscription activated" is shown.

Viewing subscribed contacts

See also "Viewing the presence of others" on page 227 to view the presence information.

On the Contacts list, push right once.
 The status information of the first contact on the subscribed contacts list is shown and it may include text and one or more of the following icons:
 , , or indicate that the person is either available, busy, or not available.
 indicates that the person's presence information is

- Scroll to the desired contact and press or select
 Options → Open to view the details of the selected
 contact.
- 3. If you press the **Options** soft key, you can select:
 - Open to view the details of the contact.
 - · Call to make a call.

not available.

- Create message to send a text or multimedia message to the selected contact.
- Switch tracking on/off to activate or deactivate the tracking for the contact's presence status. When the tracking is activated,

 appears on the list, and you will be notified if the presence status of the contact changes.

 appears when the tracking is deactivated.
- Open conversation to start a chat conversation.
- **Unsubscribe** to remove the selected contact from the list of subscribed contacts.

- Subscribe new to add a new contact to the list of subscribed contacts.
- My presence to view my presence status.

Unsubscribing a contact

- 1. On the Contacts list, push \bigcirc right once.
- Select the contact to subscribe and select Options → Unsubscribe.
- 3. If you are not logged into the Presence service, press the **Yes** soft key to log in.
- 4. Press the Yes soft key to confirm.

Contact groups

You can create contact groups, which can, for example, be used as distribution lists for sending text messages and e-mail.

Creating contact groups

- On the Contacts list, push right twice to open the group list.
- 2. Select **Options** → **New group**.
- 3. Enter a name for the group or use the default group name and press the **OK** soft key.

Adding contacts to a group

To add a contact to a group:

- On the Contacts list, scroll to the contact you want to add to a group and select Options → Add to group. A list of available groups opens.
- 2. Scroll to the group to which you want to add the contact and press the **Add** soft key.

To add multiple contacts at one time:

- On the groups list, open a group and select Options → Add members.
- 2. Scroll to a contact and press \bigcirc to mark it. Repeat this action for all the contacts you want to add.
- 3. When you have finished, press the **OK** soft key.

To check a contact's group:

- On the Contacts list, scroll to the contact you want to check the assigned group and select Options → Belongs to group.
- 2. After checking, press the Back soft key.

Removing contacts from a group

- 1. On the groups list, select the group you want to modify.
- 2. Scroll to the contact you want to remove and select Options → Remove from group.
- 3. When a confirmation message displays, press the **Yes** soft key to remove the contact from the group.



Entertainment

This chapter provides you with information about applications in which you can enjoy the use of multimedia files, such as Camera, MP3 Player, RealPlayer, Gallery, ImageCook, Game, and Music Maker.

Camera

Using Camera, you can take pictures of people or events while on the move.

You can also record video clips with sound.

Taking pictures

The camera produces JPEG pictures. JPEG is a standardised image compression format. JPEG files can be viewed with most common image viewers, image editors, and Internet browsers. You can recognise these files by their JPG extensions.

Important:

- Do not take pictures of people without their permission.
- Do not take pictures in places where cameras are not allowed.
- Do not take pictures in places where it may interfere with another person's privacy.

To take a picture with the phone open:

1. In Standby mode, press and hold on the right side of the phone. You can also press to open the Menu and select **Camera**.

The Camera application opens and the view to be captured on the Image screen displays.



Indicates the camera mode, camera settings, and the memory being used.

2. Locate the image you want by moving the phone and aiming the camera to the subject.

To zoom in on your subject before taking the picture, push \bigcirc up.

To zoom out, push O down.

To show the mirror image, press Ŋ.

Use the keypad to customise your camera options.

- Im: Turn the flash on or off.
- ¿zes: Activate or deactivate Night mode.
- 3 Select the memory where the picture is saved to.
- 4 : Adjust the brightness of the image.
- Select the white balance mode.

When the image you want to capture appears on the screen, press ○, or select Options → Capture.
 Do not move the phone before the camera starts to

save the picture. The picture is saved to either the phone's memory or the memory card, depending on the setting of **Memory in use**. See page 71.

After the picture has been saved:

- To view previously saved pictures, go to the Images folder in Gallery by selecting Options → Go to Gallery.
 See page 87.
- To change the name of the picture, select Options → Rename.
- To set the picture as the wallpaper for Standby mode, select Options → Set as wallpaper.
- To return to the Image screen to take a new picture, press () or the Back soft key.

Notes:

- Camera goes into Battery Saving mode, displaying "Camera on standby," if there have been no key presses within 2 minutes. To continue taking pictures, press ().
- The resolution of a digitally zoomed picture is lower than that
 of a non-zoomed picture, but the image remains the same
 size. You may notice the difference in image quality if you
 view the picture on a computer.

To take a picture with the phone closed:

1. When the phone is closed, press and hold on the right side of the phone.

The image to be captured displays on the display.

2. Locate the image you want by moving the phone and aiming the camera to the subject.

To show the mirror image, press Ŋ.

3. Press of to take the picture.

The picture is saved to either the phone's memory or the memory card, depending on the setting of **Memory in use**. See page 71.

Using the self-timer

You can set the camera to take a picture automatically after a predefined time. By delaying taking a picture, you can include yourself in the picture.

- 1. Select **Options** → **Self-timer**.
- Select a time delay from 5 seconds, 10 seconds, or 15 seconds.

The \int icon and the timer appear on the top right of the screen.

3. Press the **Activate** soft key or \bigcirc to take a picture. The timer counts down and the camera will take a picture after the predefined time.

Using Night mode

When the lighting is dim and the camera needs a longer exposure time for the picture to be of good quality, you can use Night mode.

To activate Night mode, select **Options** → **Activate night** mode.

To deactivate Night mode, select **Options** → **Deact. night** mode.

Changing Camera options

You can adjust the image quality, resolution, brightness, and flash setting and change the default image name and the memory location of saved images. These settings will be applied to all subsequent pictures that you take.

On the Image screen, press the **Options** soft key to access the following options:

- Flash on/off: Turn on or off the flash on the left side of the camera. The flash will light when you press \bigcirc or otin take a picture.
- Adjust: Adjust the image brightness, contrast, and white balance.

Brightness: Select the brightness of image by pushing \bigcirc left or right.

White balance: Change the white balance setting based on the lighting conditions.

 Mirror: Select whether or not the phone shows the mirror image. Settings: Change the other settings for taking a picture.

Image quality - Select an image quality. The better the image quality, the more memory the image consumes.

Image resolution - Select an image size. The image size is dictated by the resolution. Resolution is a measure of the sharpness and clarity of an image. Resolution is usually measured in pixels, for example, $640 \times 480 = 300$ kilopixels. The more pixels there are, the more detailed the picture is.

Default image name - By default, the camera names pictures in the format Image.jpg. Default image name allows you to set a name for the pictures taken. For example, if you set beach as the default image name, Camera will name all the pictures you take beach, beach (001), beach (002), and so on, until you change the setting again.

Memory in use - Select whether you want to store your images in the phone's memory or on the memory card, if you use one.

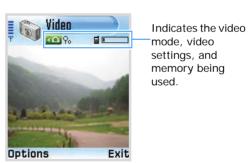
Light metering - Select your preferred light metering system. Light metering provides better exposure balance in your images. Select from **Center weighted** or **Matrix**. If you select **Center weighted**, it measures light in the entire frame, but emphasizes the weight in the centre of the frame. Use **Matrix** for general shooting.

Sensitivity - Change the ISO setting, which controls the sensitivity of your camera. For low light situations, lower the number to increase the quality. The higher the number, the faster the camera shutter functions and the more sensitive the camera is to light. Higher number selection may bring some distortion to an image.

Recording video clips

You can record video clips. Recorded video clips are in 3GP format, which is the standard video file format for Multimedia Messaging.

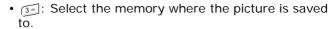
1. In the Image screen, push \bigcirc right. The Video screen displays.



To zoom in on your subject before or during recording, push \bigcirc up. To zoom out, push \bigcirc down.

Use the keypad to customise your record options.

- 1 Mute or unmute the audio.
- (2007): Determine the Night mode.



- 4. : Adjust the brightness.
- Select the white balance mode.
- 2. To start recording, press ○, ☐ or select **Options** → **Record**. The timer on the top right of the screen shows you the elapsed time.
- To pause recording at any time, press the Pause soft key or ○. To resume, press the Continue soft key or ○.
- 4. To stop recording before the maximum recording time is up, press the **Stop** soft key.

After the video has been saved, you will see the recording time on the top right of the still image. The video clip is saved to either the phone's memory or on the memory card, depending on the setting of your **Memory in use**. See page 75.

After the video clip has been saved:

- To immediately play the video clip you just recorded, select Options → Play.
- To access previously saved video clips, go to the Video clips folder in Gallery by selecting Options → Go to Gallery. See page 87.
- To change the name of the video clip, select Options → Rename.
- To return to the Video screen to record a new video clip, press () or the Back soft key.

Activating Night mode

When the lighting is dim and the camera needs a longer exposure time for the video to be of good quality, activate Night mode. Select **Options** → **Activate night** mode.

To deactivate Night mode, select **Options** → **Deact. night** mode.

Muting sound

If you don't want to record sound with the video, select **Options** → **Mute**. To deactivate Mute mode, select **Options** → **Unmute**.

Changing Video options

You can adjust recording time, resolution, and brightness and change the default name and the memory location of saved video clips. On the Video screen, press the **Options** soft key to access the following options:

 Adjust: Adjust the brightness, contrast, and white balance for the video image.

Brightness: Select the brightness of image by pushing \bigcirc left or right.

White balance: Change the white balance setting based on the lighting conditions.

• Mirror: Select whether the phone shows the mirror image or not.

• **Settings**: Change the other settings for recording a video clip.

Length: Select the recording time limit. If you select **Short**, the phone records a video of up to 100KB or 300 KB, which is the limit for sending an MMS message. If you select **Maximum**, the phone records a video to the limit of the memory remaining.

Video resolution: Select the video resolution from 352x288, 176x144, or 128x96.

Default video name: Define the default name of your video clips. For example, if you set Holiday as the default video clip name, Camcorder will name all of the video clips you take Holiday, Holiday(001), Holiday(002), and so on, until you change the setting again.

Memory in use: Select between Phone memory and Memory card.

MP3 Player

Using MP3 Player, you can play MP3 music files. You can download MP3 files from the Internet, transfer files from a computer, or receive files via Bluetooth. All of the MP3 files in the phone's memory or on the memory card are automatically added to the MP3 file list.

Playing MP3 files

Press to open the Menu and then select MP3 Play...

The MP3 Player screen opens.



- 2. Press \bigcirc to play the first MP3 file stored in the play list.
- 3. While playing music files:
 - To adjust the volume, press ⁸/₈, or push up or down.
 - To pause playback, select ______.

 - To skip to the previous or next file in the play list, select or .
 - To repeat all of the MP3 files in the play list, select
 - To view details about the current file, such as the file name, size, date received, and the file format, select Options → View details.
 - To set the playing music file as your call ringer, select Options → Set as ringing tone.

Using the MP3 play list

Before using MP3 Player, first add the MP3 files from the MP3 file list to the play list. For details on how to add the files to the play list, see page 78.

- On the MP3 Player screen, select Options → Go to play list. The Play list displays.
- 2. On the play list:
 - To play a file, select the file you want.
 - To open the MP3 Player screen, press the Player soft key.
 - To change the file order in the list, select Options → List move up or List move down.
 - To remove a file from the list, scroll to the file and select Options → Delete.
 - To remove all of the files from the list, select
 Options → Delete all.
 - To access the file details, such as the name, size and format of the file, scroll to the file and select Options → View details.

Using the MP3 file list

All MP3 files are automatically added to the MP3 file list, regardless of where they are stored. On the MP3 file list, you can add MP3 files to the play list and delete files permanently.

Adding MP3 files to the play list

1. Select Options → Go to file list.

All MP3 files in the phone's memory and on the memory card, if you use one, display.

You can view indicators, telling you the memory where the file is stored, next to the file name (for the phone's memory and for the memory card).

Note: When you save MP3 files in your phone's memory, the C directory, you need to copy them to the Nokia folder to let them display on the MP3 file list.

2. On the file list:

- To add a file to the play list, select the file you want and press *. A check mark displays beside the selected file.
- To add all of the MP3 files to the play list, select
 Options → Mark all.
- 3. To go to the MP3 Player screen, press \bigcirc or the **Player** soft key. The checked files are added to the play list.

Changing MP3 Player settings

On the MP3 Player screen, select **Options** → **Settings**. You can set the following options:

 Auto start: Choose On to automatically start playing files without pressing each time you open MP3 Player.

- Repeat: Choose On to repeat all files in order.
- Shuffle: Choose On to play the files in random.
- Equalizer: Set the equalizer to the genre you want.
- Quick play: Choose On to play the MP3 files without adding the files to the play list.
- Background: Set the MP3 Player screen to display the image pattern or to show you song lyrics, if supported, while playing files.

RealPlayer

With **RealPlayer**, you can play media files, such as music files, video files, audio files, and stream live content from the Internet, stored in the phone's memory or on a memory card, if you use one.

Files with extensions .3gp, .mp4, .amr, .rm, .ram, .ra, and .rv are supported by **RealPlayer**.

Press (2) to open the Menu, and then select RealPlayer.

Playing media files

You can play any music or video file stored in your phone's memory, or play a file directly from the Internet.

Playing media files from the phone's memory or the memory card

- 1. Select **Options** → **Open** and select:
 - Most recent clips to play one of the 6 most recent files played in RealPlayer. Select a file from the list.
 - Saved clip to play a file saved in the phone's memory or on the memory card, if available. Select a memory and then select a file from the memory directory.
 - Mem.card sound clips to play sound files saved on the memory card. Enter a track list name and press the OK soft key. A new track list is created and all of the sound files are retrieved from the memory card. This option is only available when a memory card is inserted into the phone.
- 2. Use the following options during playback:

If you are playing a video file:

- To move forward or backward in a video file, push and hold () up or down.
- To pause playback, press the Pause soft key.
- To resume playback, select **Options** → **Continue**.
- To stop playback, press the **Stop** soft key.

If you are playing a sound file:

- To adjust the volume, press

 \(\big| \) or push left or right.
- To pause playback, select
- To resume playback, select .

- To skip to the previous file, select
- To skip to the next file, select
- To move backward through a file, select . The player moves by 5-second decrements.
- To move forward through a file, select . The player moves by 5-second increments.
- To stop playback, select or press the Stop soft key.

If you are playing an MP3 file, see page 76.

Playing stream live content from the Internet

1. Select a streaming link from the web browser or a file containing the address for the streaming content.

The display shows a confirmation message for connecting to the server.

2. Press the Yes soft key to confirm.

Notes:

- You cannot connect to a site unless you have configured an access point. See page 238.
- Many service providers will require you to use an Internet access point (IAP) for your default access point. Other service providers allow you to use a WAP access point. Contact your service provider for more information.
- In RealPlayer, you can only open an rtsp:// URL address.
 You cannot open an http:// URL address. However,
 RealPlayer will recognise an http link to a .ram file since a .ram file is a text file containing an rtsp link.

- 3. Once you are connected to the server, playback begins with buffering of the streaming content.
 - To adjust the volume, push () left or right.
 - To pause playback, press the Pause soft key.
 - To resume playback, select **Options** → **Continue**.
 - To stop playback, press the **Stop** soft key.

Downloading files

To download files using the browser:

Select Options → Download and choose from Video clips, or Sound clips. The web browser opens and you can choose a bookmark for the website from which to download or enter a URL address of the website. See "Viewing bookmarks" on page 207.

To access the web browser, you must first configure your default access point. See "Access points" on page 238.

Using a track list

You can make your own track list.

Creating a track list

- From the RealPlayer main screen, select Options → New track list.
- 2. Select a folder or site and then the directory to which you want to save the track list.

If you use the memory card, first select the memory.

- 3. Enter a list name and press the **OK** soft key.
- 4. Select a folder from which you want to retrieve files and then select a file from the directory.
 - If you use the memory card, first select the memory. Once a file is selected, the Music player opens.
- To add more files, select Options → Edit track list. The track list opens.
- Select Options → Add sound clip and then select a memory (if you use one), a folder and then a file.
- 7. Repeat step 6 until you have finished adding files.
- 8. Press the **Back** soft key and then the **Yes** soft key to save the changes.

Opening a track list

- From the RealPlayer main screen, select Options → Open → Saved clip.
- 2. Select a folder where the list you want is stored and search for the list.
 - If you use the memory card, first select the memory.
- When you find the list, press the Select soft key.The Music player opens and the first file begins playing.

Editing a track list

 While playing files on a track list, select Options → Edit track list.

The track list opens.

- 2. Press the Options soft key and select:
 - Play to play the track list
 - Add sound clip to add more sound files to the list
 - **Delete** to remove the currently selected file from the list.
 - Move to change the file order. A check mark is placed to the right of the file. Move the selection to the place you want and press the OK soft key to move the file.
- 3. Press the **Back** soft key and then the **Yes** soft key to save the changes.

Viewing clip details

You can view the file details, such as the name, format, duration, file size, and the time and date when the file was saved. Access a file and select **Options** → **Clip details**.

Sending media files

You can send media files via multimedia message and e-mail services, and via Bluetooth. For details, see page 33.

Changing RealPlayer settings

When you select one of the settings, a tab view is opened. Push \bigcirc left or right to move between the different setting tabs.

To change the video file settings, select **Options** → **Settings** → **Video** to open the following list of settings:

- Contrast Adjust the brightness of video clips by pushing left or right.
- Repeat Choose On to play the currently playing video file repeatedly.

To change the audio file settings, select **Options** → **Settings** → **Audio** to open the following list of settings:

- Repeat Choose On to play the currently playing audio file repeatedly.
- Random play Choose On to play audio files in random

To change the connection settings for accessing video streaming services, select **Options** \rightarrow **Settings** \rightarrow **Connection** to open the following list of settings:

- Proxy Choose whether or not a proxy is used. If you want to use a proxy server, specify the following entries:
 - **Proxy serv. address**: Enter a proxy server address.
 - Proxy port number: Enter a proxy server port.
- Network Change items from the following list of network settings:
 - Default access point Enter the default access point.

- Online time Select the length of time RealPlayer stays online when inactive. After the specified period of inactivity, RealPlayer will disconnect from the server.
- Connection time-out Select the time RealPlayer
 waits for a response from the network to connect to
 a corresponding server when you select a link. If
 there is no response within the specified period of
 time, the connection attempt will be cancelled.
- Server time-out Select the length of time
 RealPlayer waits for a response from the
 corresponding server when you send a request to
 the server, for example, pausing and resuming
 playback. After the specified period of time,
 RealPlayer gives you an alert message of no
 response, and disconnects from the server.
- **Lowest UDP port** Enter the lowest port number of the server's port range.
- **Highest UDP port** Enter the highest port number of the server's port range.

Gallery

Use **Gallery** to store and organise your images, sound clips, video clips, streaming live contents from the Internet, and RAM files.

Press To open the Menu, and then select Gallery.

- Open Gallery to see a list of the folders in the phone's memory. Push
 right to see the folders on the memory card, if you use one.
- Select Images, Sound clips, or Video clips (or one of other folders that you have created).
- 3. In the open folder, you can see:
 - an icon depicting the type of each file in the folder, a small thumbnail picture (for an image),
 - · the file name.
 - the date and time the file was saved (for an image), or the file size, and
 - subfolders and the number of items inside them, if any.

Opening files

In a folder, select any file to open it. Each file will open in its corresponding application as follows:

- Images open in the Image viewer. See below.
- Sound clips open and play in the Music Player or MP3 Player application. See "Sound clips" on page 91.

- Video clips, RAM files, and streaming live content open and play in the RealPlayer application. See "Video clips" on page 92.
- Subfolders open to display contents.

I mages

In this folder, you can access pictures you have taken using the camera and images you have downloaded from the Internet or received in multimedia messages.

Note: With ImageCook, you can edit pictures using various edit options. See page 95.

Viewing an image

- 1. From the Gallery screen, select Images.
- 2. Push () up or down to browse through the pictures.
- 3. Press () to open a picture.

When you are viewing a picture, pushing \bigcirc left or right takes you to the next or previous picture in the current folder.

Using options in an image view

You can use the following options while you are viewing a picture:

 To zoom in or out, select Options → Zoom in or Zoom out.

- To view the picture on the full screen, select Options →
 Full screen. To go back to the normal view, press the
 right soft key.
- Moving the focus: To move the picture to the direction you want when you are zooming in, push
 oto move the focus up, down, right, or left.
- Rotating: To rotate the picture 90 degrees clockwise, select Options → Rotate → Right. To rotate the picture 90 degrees counterclockwise, select Options → Rotate → Left.

Note: Because these options are only for viewing, changes made in the image view are not saved.

Using the keypad shortcuts

In an image view, you can use the following keys:

- 📭 : rotates the picture 90 degrees counterclockwise.
- vi: scrolls up while zooming in.
- 3 color rotates the picture 90 degrees clockwise.
- 4: scrolls to the left while zooming in.
- 50: zooms in.
- 6 scrolls to the right while zooming in.
- Tree: zooms in. Pressing this key once again switches the display to Full screen view.
- 🐷: scrolls down while zooming in.
- 😈: zooms out.
- *: switches the view mode between the full screen view and the normal view.

Viewing image details

To view image details, such as format type, the time and date the image was created, resolution, size, colour type, select **Options** → **View details**. Push ○ up or down to scroll through image details.

Accessing other default folders

• Picture messages folder - Use this folder to store pictures received in picture messages.

Select Images \rightarrow Picture msgs. The six default pictures display.

To save a picture that you have received in a picture message, press [3] to open the Menu, and then select **Messaging** \rightarrow **Inbox**, open the message, and select **Options** \rightarrow **Save picture**.

• **Presence logos folder** - Use this folder to store user logos for the Presence service.

Select Images → Presence logos.

 Wallpapers folder - Use this folder to store pictures that you want to use as background images.

Select Images → Wallpapers.

Sending a picture

You can send pictures via multimedia message and email services, and via Bluetooth. For details, see page 33.

Setting a picture as wallpaper

You can set your pictures as wallpaper (background images) for Standby mode. Open the picture you want and select **Options** → **Set as wallpaper**.

Sound clips

In this folder, you can access sound clips you have recorded in **Recorder**, and audio files you have downloaded from the Internet or received in multimedia messages.

Playing sound clips

- 1. From the Gallery screen, select Sound clips.
- 2. Select the subfolder you want.
- 3. Push \bigcirc up or down to scroll to a sound clip or track list and press \bigcirc . The Music player screen opens and the sound clip plays.

If you select an MP3 file, the MP3 Player application opens and the MP3 file plays. For details, see page 76.

- 4. During playback, you can use the following options:
 - To adjust the volume, press
 √ or push left or right.
 - To pause playback, select
 - To resume playback, select .

- To move backward in a file, select . The player moves by 5-second decrements.
- To move forward in a file, select . The player moves by 5-second increments.
- To stop playback, select or press the Stop soft key.

Sending a sound clip

You can send sound clips via multimedia message and email services, and via Bluetooth. For details, see page 33.

Video clips

In this folder, you can access video clips you have recorded using the camera or video files you have downloaded from the Internet or received in multimedia messages.

Playing video clips

1. On the Gallery screen, select Video clips.

From the Video clips list, you will see:

- the size (kB) and file name of the video clip
- subfolders and the number of the items inside them, if any
- 2. Push \bigcirc up or down to scroll to a video clip and press \bigcirc .

The RealPlayer opens and the video clip starts playing. For details, see page 80.

Sending a video clip

You can send video clips via multimedia message and email services, and via Bluetooth. For details, see page 33.

Downloading files

To download files into Gallery using the browser:

Select Options → Gallery downloads and choose from Graphic downloads, Video downloads, or Tone downloads. The web browser opens and you can choose a bookmark for the website from which to download or enter a URL address of the website. See "Viewing bookmarks" on page 207.

To access the web browser, you must first configure your default access point. See "Access points" on page 238.

Uploading images to an image server (network service)

You can send your pictures to an image server to allow others to share your pictures online.

Note: You can upload only .JPG files to an image server.

Before you can upload images, you must enter the settings for the image server. See "Setting up the image server" on page 94. You can get these settings from your service provider.

Uploading an image

- To begin an upload, scroll to an image. If you want to upload more than one image or all of your images, select Options → Mark/Unmark.
- To upload the currently selected image, select Mark.To upload all images, select Mark all.
- 3. Select Options → Image uploader.
- 4. Select Upload.
- 5. Enter a name for the folder on the image server where the images will be stored, and press ().

Setting up the image server

- 1. Select Options → Image uploader → Settings.
- 2. Select Image servers.
- 3. Fill in the details for each field.

If you want to add a new image server, select **Options** → **New image server**.

4. When you are finished, press the **Back** soft key.

ImageCook

Use ImageCook to edit pictures you have taken using the camera and images you have downloaded from the Internet or received in multimedia messages. You can send pictures via one of the messaging services or via Bluetooth. You can also set pictures as wallpaper for Standby mode.

Press to open the Menu, and then select ImageCook.

Editing a picture

You can edit pictures by changing the image settings, applying a special effect, or adding decorative items.

- On the ImageCook screen, there is a list of the folders in the phone's memory. Push
 right to see the folders on the memory card, if you use one.
- Select Images or one of the other folders where the image files you want are saved.
- Scroll to the picture you want to edit and select Options → Edit.
- 4. You are asked to select the part of the image to be edited. You can edit specific parts of the image by cropping the area first. If you so desire, press the Yes soft key and select the part of the image you want to edit by pushing and selecting Options → Zoom in or Zoom out. When you select the part, press Options → Apply.

To change the image size to QCIF (176*144), press the **No** soft key.

5. Push O right or left to move between the edit options in the Navigation bar. The following icons indicate each edit option:

• ☆: for Adjust
• 圖: for Effect
• +□: for Add

6. Press the **Options** soft key and select an option.

By selecting the Adjust option, you can use:

- Rotate to rotate the picture 90 degrees clockwise or counterclockwise.
- Flip to flip the image vertically or change to its mirror image.
- Zoom to zoom in or out. Select Options → Zoom in or Zoom out.
- Undo to cancel your action.

By selecting the **Effect** option, you can use:

- Tone to select a colour tone.
- Magic effect to apply an effect, such as Negative, Sharp, Noise, Emboss, Mosaic, Edge, Blur, or Fisheye lens.
- Special effect to apply a special effect, such as B/W movie, Old movie, Warm, Fresh, or Horror.
- History to show you the original and previously edited status of image. Select the image to return to any of the images.

By selecting the Add option, you can use:

- Add frame to select a decorative frame. After selecting, press the Select and Apply soft key to add the frame to the picture.
- Add icon to select an icon. After selecting an icon, move the icon around the photo by pushing
 and press the Apply soft key to add the icon to the picture.
- Add text to enter text to be displayed on the picture. While entering text, you can change the colour or size of the text by selecting Options →
 Color or Size. After completing the entry, select
 Options → Insert to add the text to the picture. You can move the text position by pushing ○. Then press or select Options → Apply to fix the text.
- Add balloon to select a balloon. After selecting a balloon, move the balloon around the photo by pushing ○. To enter text in the balloon, select Options → Input text. While entering text, you can change the colour or size of the text, or the size of the balloon by selecting Options → Text color or Text size. After completing the entry, select Options → Insert text. You can also change the size of the balloon by selecting Options → Balloon size. Then select Options → Apply to fix the balloon.
- Focus to access and change previously added elements.

Note: You can view the help information on each edit option by selecting **Options** → **Help**.

7. When you are finished, select **Options** \rightarrow **Save**.

8. Enter a name and press the **OK** soft key.

If you use an existing name, the phone asks you if you want to replace. Press the **OK** soft key to confirm, or the **Cancel** soft key and then enter another name.

9. Press the Back soft key to return to the file list.

Sending a picture

You can send pictures via multimedia message and email services, and via Bluetooth. For details, see page 33.

Setting a picture as wallpaper

You can use your pictures as wallpaper (background images) for Standby mode. Select **Options** \rightarrow **Set as wallpaper**.

Games

In Games, you can enjoy two default games, Ziogolf and BubbleSmile. You can also download games from the Internet.

Press 🖭 to open the Menu, and then select Games.

Notes:

- Running certain games may consume the phone's battery faster (and you may need to connect the phone to the charger.)
- You can download games from various sources and store them in your phone. See "Installing Java™ applications" on page 261.

Ziogolf

You	can	enjoy	а	golf	game	on	your	phone.

	g g g
1.	In Games, select Ziogolf.
2.	Push \bigcirc up or down to access the following options:
	• New Game: allows you to start a new game.
	• Load Game: allows you to restart a saved game.
	• Best Score: shows you the high score table.
	 Credits: shows you information about the developers of Ziogolf.
	• Help : displays the key helper screen to show you the keys used to play the game.
	• Quit: allows you to exit the game screen.
3.	Select New Game.
4.	Scroll to a player pushing \bigcirc left or right and press \bigcirc .
5.	Enter a name for the player and press \bigcirc .
6.	To start the game, press \bigcirc or the right soft key.
7.	Press the right soft key and select a club.
8.	Press the left soft key and direct your swing by pushing \bigcirc left or right, and press \bigcirc to get ready to play a hole.
	Note : You can check the course of the ball by pushing \bigcirc .

Press and then press again where the strength of your swing is determined.
10.When the white line is near the 0 mark, press \bigcirc to hit the ball.
11.Press \bigcirc to continue the next swing.
12. Repeat steps 9 and 10 until you are on the green.
13. When you are on the green, select the direction of your putt, depending on the level of the surface displayed on the top right of the game screen, by pushing \(\) left or right. Then press \(\).
14. Press O when the white line is near the flag mark.
Each time you finish a hole, the display shows your score. Press () to go to the next hole. When you have finished 18 holes, the game is over.
While playing the game, press (to access the following options:
• Resume Game: returns to the game screen.
• Sound: switches the game sound on or off.
• Volume: adjusts the volume level for the game sound
Save Game: saves the current game.
• End Game: ends the game.

BubbleSmile

1. In Games, select BubbleSm...

The goal of this game is to score as many points as possible by rotating adjacent bubbles to create a row, either horizontally or diagonally, of 3 or more identical bubbles.

2. Push up or down to access the following options:
• TIMED MODE: is the game mode for beginners. In this mode, you play until time runs out. You set more time than in the Skilled Mode game.

• **SKILLED MODE**: is the game mode for more skilled users. In this mode, the more moves you make, the

faster the gange goes down. If you create a row of more than 4 identical bubbles, the gange goes up.
HIGH SCORE: shows the high score table.
 HOW TO PLAY: shows how to play the game.
 CREDITS: shows you information about the developers of BubbleSmile.
• EXIT: ends the game.
3. Scroll to a game mode by pushing \bigcirc up or down and press \bigcirc .
4. Push \bigcirc to move the band currently surrounding 3 bubbles to the desired location.
5. Press the left or right soft key to rotate the bubbles within the band clockwise or counterclockwise.
When a set of 3 or more identical bubbles are aligned, they disappear.

While playing the game, press \bigcirc to access the following options:

- RESUME GAME: returns you to the game screen.
- EFFECT: switches on or off the game sound.
- NON-SAVED N' END: ends the game without saving it.
- SAVED N' EXIT: saves the game and then exits it.

Music Maker

With **Music Maker**, you can make a music file and add effects to your recordings. After creating full-length songs, you can send them to your friends or set them as your ringtone.

Music Maker is a four-track audio-loop arranger that lets you create your own music on your phone in one of 5 sound styles. Additional styles can be downloaded from the web browser.

Press 😰 to open the Menu, and then select music ma...

Creating a music file

When accessing Music Maker, you start creating your own music.

 When the licence condition opens, press the OK soft key after reading it. Select a style from list. You can hear a sample sound which gives you an impression of the currently selected style each time you scroll through the options.

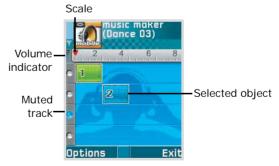
When you press the **Load** soft key, a help balloon with audio displays.

3. Move the selection to the track you want.

Each track has a special sound element.

the first track	percussion		
the second track	bass		
the third track	melody		
the fourth track	harmony and vocals		

4. Press \bigcirc to insert an object to the track.



Press
 oto change the sound of the object. By pressing
 oto, you can hear the different sound. Multiple sounds are available for each of the individual tracks.

6. Repeat steps 3 through 5 as you want.

While creating a song, use the following keys:

- To ~ (4.11): Mutes/Unmutes the corresponding track.
- 5 Decreases the volume.
- 6 : Increases the volume.
- Decreases the tempo.
- **1**: Increases the tempo.
- @: Changes the direction of the playback.
- #: Edits an object.
- *: Moves between the scale and the sound object.

To play only currently selected track, press **Options** \rightarrow **Track** \rightarrow **Solo on**.

To edit an object, select it and press **Options** \rightarrow **Object** \rightarrow **Edit** \rightarrow the options you want. For details, see page 105.

To apply various effects, press **Options** → **Object**. Then select an effect you want. To remove the effect, select **Reset**.

To apply a new style, press **Options** \rightarrow **Style** \rightarrow **Select**. Select the new sound style.

To add your recording, press **Options** → **Show Recorder**. Press \bigcirc and speak into the microphone. The sound object containing your recording is added to the current object.

To adjust each track's volume, press $Options \rightarrow Show$ Mixer

Select the part you want to play by selecting the scale at the top of the tracks and pressing \bigcirc continuously.

You can also change the starting point of your file by moving the scale. Push \bigcirc left or right to move the scale.

- 8. When you are satisfied, select **Options** → **Project** → **Save**.
- 9. Enter a name for the file and press the **OK** soft key.

Editing objects

While creating a music file, you can use the various edit options to change an object. Select an object you want and press \bullet repeatedly or select **Options** \rightarrow **Object** \rightarrow **Edit** \rightarrow and select:

- Move (\(\lefta\): moves the object.
- Change end (): increases or decreases the end point of the object.
- Change volume (1): changes the volume of the object.
- Change start (←): increases or decreases the start point of the object.
- Fade start (K): fades in or out the start point of the object.
- Fade end (→): fades in or out the end point of the object.

Opening a saved file

You can open a previously saved music file and continue working on it.

To open a saved music file, select **Options** \rightarrow **Project** \rightarrow **Load**.

Sending a music file

You can send files via multimedia message, and via Bluetooth. For details, see page 33.

Playing your music on multiple phone

You can connect your phone with other phones using the Bluetooth technology and play your music on them, as well as your phone.

First, enable the Bluetooth feature on your phone. For details, see page 265.

- Start Music Maker on both phones and select the style to work with.
- 2. On the phone which works as a server, select **Options**→ **Multiplayer** → **Start server**.
- On the other phone, select Options → Multiplayer → Connect to server. Select the start server phone. The connection between the two phones is established.
- 4. From the server phone, access the music file and start playback. You will listen to music both phones.

Setting the file as a ringtone

You can use your created music files as ringtones. Select **Options** \rightarrow **Set** as ringtone.

Changing Music Maker settings

You can change Music Maker settings.

To change the Music Maker settings, select **Options** → **Settings**. The following setting options are available:

- Number of bars: Select the number of bars display on the Music Maker screen. You can choose 4 or 8 bars.
- Themes: Choose the background you want to use in Music Maker.
- Assistant: Select the help character type which appears when you access Music Maker.
- Assistant options: Select the help character displaying method.
- Backlight: Choose the length of time the backlight remains on.

Note: You can view the help information on each category by selecting **Options** → **Instructions**.

chapter 6

Message services

Your phone provides you with various message service applications:

- Messaging
- Voice mail
- Chat

Messaging

In **Messaging**, you can create, send, receive, view, edit, and organise:

- text messages,
- · multimedia messages,
- · e-mails, and
- smart messages: special text messages containing data.

In addition, you can receive service messages and cell broadcast messages, and send service commands.

To go to **Messaging**, press at to open the Menu, and then select **Messaging**. You can also press the **Messag**. soft key in Standby mode.

Message folders

When you open **Messaging**, the **New message** function and a list of the following default message folders appears:

Inbox - contains received messages except for e-mail and cell broadcast messages. E-mail messages are stored in the Mailbox. Cell broadcast messages are stored in the Cell broadcast.

My folders - for organising your messages into folders. You can organise your messages by adding new folders within My folders.

Mailbox - When you open this folder, you can either connect to your remote mailbox to retrieve new e-mails or view previously retrieved e-mails offline. See page 128 for further information about online and offline modes. After you have defined settings for a new mailbox, the name given to that mailbox replaces Mailbox in the main view. See "Settings for e-mails" on page 140.

Drafts - stores draft messages that have not been sent.

Sent - stores the 20 most recent messages that have been sent successfully. To change the number of messages to be saved, see "Settings for other folders" on page 143.

Outbox - is a temporary storage place for messages waiting to be sent.

Cell broadcast - contains messages on various topics received from your service provider.

Reports - You can request the network to send you a delivery report of the text messages and multimedia messages you have sent. To turn on Report reception, select Options → Settings → Text message or Multimedia message, scroll to Receive report, and select Yes.

Notes:

- Receiving a delivery report for a multimedia message that has been sent to an e-mail address might not be possible.
- Before you can create a multimedia message, write an e-mail, or connect to your remote mailbox, you must have the correct connection settings. See "Settings needed for e-mail" on page 119 and "Settings needed for multimedia messaging" on page 116.

When you have opened one of the default folders, for example, **Sent**, you can easily move between folders: pushing \bigcirc right will open the next folder (**Outbox**), and pushing \bigcirc left will open the previous folder (**Drafts**).

General information

The status of any message is always either draft, sent, or received. Messages can be saved to the **Drafts** folder before they are sent. Messages are temporarily placed in **Outbox** to wait for sending. After a message has been sent, you can find a copy of the message in the **Sent** folder. Received and sent messages are in read-only state until you select **Reply** or **Forward**, which copies the message to an editor. Note that you cannot forward e-mails you yourself have sent.

Note: Messages or data that have been sent via Bluetooth are not saved in the **Drafts** or **Sent** folder.

Opening a received message

- When you receive a message, and the note "1 new message" are shown in Standby mode. Press the Show soft key to open the message. Press the Exit soft key to close the note.
- If you have more than one new message, press the Show soft key to open Inbox to see the message headings. To open a message in Inbox, select it.

Creating and sending new messages

You can start to create a message in two ways:

- By selecting New message → Text message,
 Multimedia message, or E-mail in the Messaging main view, or
- By starting to create a message while using an application that has the Send or Create message option. In this case, the file that was selected, such as an image or text, is added to the message.

Note: When sending messages, your phone may display the word "Sent." This is an indication that the message has been sent by your phone to the message centre number programmed into your phone. This is not an indication that the message has been received at the intended destination.

Adding a recipient to a message

When you create a message, there are several ways to add a recipient:

- add recipients from Contacts. To open the Contacts directory, press
 on the To: or Cc: field, or select Options → Add recipient. Scroll to a contact and press
 on the To: or Cc: field, or select Options → Add recipient. Scroll to a contact and press to mark it. You can mark several recipients at a time. Press the OK soft key to return to the message. The recipients are listed in the To: field and automatically separated with a semicolon(;).
- enter the phone number or e-mail address of the recipient in the To: field, or
- copy the recipient information from another application and then paste it in to the To: or Cc: field.
 See "Copying text" on page 42.

Press control to delete a recipient to the left of the cursor.

Sending options

To change how a message is sent, select **Options** → **Sending options** when you are editing a message. When you save the message, its sending settings are also saved. For details, see page 136.

Viewing message details

To view details of a message, select **Options** → **Message details**. The display shows the subject, the time and date the message was saved, message type, and the sender or recipient's number or address.

Text messages

You can create and send a simple text message or a picture message containing small images.

Creating and sending text messages

- Select New message → Text message. The editor opens with the cursor in the To: field.
- Press to select recipient(s) from Contacts or enter the phone number of the recipient. Add a semicolon
 to separate each recipient.
- 3. Push () down to move to the text field.
- 4. Enter the message text.
 - To add a message template, select Options → Insert
 → Template.

Note: Your phone supports the sending of multiple text messages at the same time. Therefore, the normal 160-character limit for one text message can be exceeded. If your text exceeds 160 characters, it is sent as two or more messages, and sending the message may cost you more.

On the navigation bar at the top of the display, you can see the message length indicator counting backwards from 160. For example, 10 (2) means that you can still add 10 characters for the text to be sent as two messages.

To set text sending options for the message, select
 Options → Sending options. See page 136.

5. To send the message, select **Options** \rightarrow **Send** or press

Creating and sending picture messages

Your phone allows you to send and receive picture messages. Picture messages are text messages that contain small black-and-white graphics. There are several default pictures available in the **Picture msgs**. folder.

Note: This function can be used only if it is supported by your network operator or service provider. Only phones that offer picture messaging features can receive and display picture messages.

To send a picture message:

- 1. There are two possibilities; either:
 - Open the Menu → Gallery → I mages → Picture msgs. and select a picture to be sent. Select Options → Send, or
 - Open the Menu → Messaging → New message →
 Text message → Options → Insert → Picture. Select
 a picture to be sent.
- Press to select recipient(s) from Contacts or enter the phone number of the recipient. Add a semicolon (;) to separate each recipient.
- 3. Push () down to move to the text field.
- 4. Enter the message text.

To send the message, select Options → Send or press

Note: Each picture message is made up of items worth several text messages' worth of information. Therefore, sending one picture message may cost more than sending one text message.

Sending smart messages

Smart messages are special text messages that can contain data. You can send smart messages, such as:

- picture messages. See page 114.
- business cards containing contact information in generic (vCard format).
- calendar notes (vCalender format).

For details about sending items from an application, see page 33.

Multimedia messages

A multimedia message can contain a combination of text and video clips, or text, images, and sound clips, but not a combination of images and video clips. You can send multimedia messages phone to phone or phone to email.

Note: This function can be used only if it is supported by your network operator or service provider. Only devices that offer compatible multimedia message or e-mail features can receive and display multimedia messages. Devices that don't have these features may receive details as a link to a web page.

Settings needed for multimedia messaging

For availability of and subscription to data services, please contact your network operator or service provider.

- Go to Tools → Settings → Connection → Access points and define the settings for a multimedia messaging access point. For further information on different data connections, see also "Connection settings" on page 236.
- Go to Messaging → Options → Settings → Multimedia message. Open Access point in use and select the access point you created to be used as the preferred connection. See also "Settings for multimedia messages" on page 138.

Note: You may receive the settings as a smart message from your network operator or service provider. See "Receiving smart messages" on page 124.

Creating and sending multimedia messages

Note: When you are sending a multimedia message to any phone other than an SGH-D720, you should use smaller image sizes and sound clips that are no longer than 1 minute. When you are sending a multimedia message to an e-mail address or to another SGH-D720, use a larger image size (network dependent).

 In Messaging, select New message → Multimedia message.

2.	Press O to select the recipient(s) from Contacts, or
	enter the phone number of the recipient. Add a
	semicolon(;) to separate each recipient.

- 3. Push () down and enter the message text.
- 4. You can add objects to the multimedia message in any order you want.
 - To add an image, select Options → Insert object → Image. If you select Insert new → Image, Camera opens and you can take a new picture. Press the Select soft key to insert the picture after taking it.

Note: When sending a multimedia message to another phone, set the default image size to **Small**. See page 140.

To add sound, select Options → Insert object →
 Sound clip. If you select Insert new → Sound clip,
 Voice recorder opens and you can record a new
 sound. Press the Select soft key to insert the sound
 clip after recording it. When sound has been added,
 the melody indicator is shown on the navigation
 bar.

Note: If you opt to add a video file, the resolution of the video must be smaller than 176 x 144.

- To add video, select Options → Insert object →
 Video clip. If you select Insert new → Video clip,
 Camera opens and you can record a new video.
 Press the Options soft key and select Select to
 insert the video clip after recording it.
- To enter text, push () down.

- To add more slides to your message, select Insert new → Slide. After adding slides, select Options → Move to scroll to another slide.
- To make a multimedia presentation using one of the image or sound templates, select Options → Create presentation. For a presentation, you can apply a colour and add an image to the background.
- To remove an added item, select Options → Remove, and select the item you want.
- To set the sending options for the multimedia message, select Option → Sending options. See page 138.

Note: When you add more than one image, sound, or video clip to a multimedia message, a slide is automatically added. You can scroll through the slides by pushing \(\int\) up or down.

5. To send the message, select **Options** \rightarrow **Send** or press $\boxed{5}$.

Previewing a multimedia message

To see what the multimedia message will look like, select **Options** → **Preview**.

Working with different media objects

 To see all of the different media objects included in a multimedia message, open a multimedia message and select Options → Objects to open the Objects view. A list of different objects and their file sizes displays. You can change the order of the objects, delete objects, or open objects in a corresponding application. To remove a multimedia object, select Options →
 Remove → I mage, Video clip, Slide or Sound clip. Press
 to remove text.

E-mail

Settings needed for e-mail

Before you can send, receive, retrieve, reply to, or forward e-mail, you must:

- Configure an Internet Access Point (IAP) correctly. See "Connection settings" on page 236.
- Define your e-mail settings correctly. See "Settings for e-mails" on page 140.

Note: Follow the instructions given by your remote mailbox and Internet service provider.

Creating and sending e-mails

- 1. Select New message → E-mail.
- Press
 oto select the recipient(s) from Contacts, or enter the e-mail address of the recipient in the To: field

Add a semicolon (;) to separate each recipient. If you want to send a copy of your e-mail to someone, enter the address in the **Cc**: field.

- 3. Push () down to move to the **Subject** field.
- Enter the e-mail subject and push down to move to the next field.

- 5. Enter the e-mail text.

 - Select Options → Insert → Template to add prewritten text to the e-mail.
 - You can check attachments in the e-mail by selecting Options → Attachments in an open e-mail. The Attachments view opens where you can add, view, and remove attachments.

Note: When you add an attachment, you need to select whether the image is stored in the phone's memory or on the memory card, if one is used.

- To remove an attachment, on the Attachments view screen scroll to the attachment and select Options
 → Remove.
- To set the sending options for the e-mail, select
 Options → Sending options. See page 140.
- To send the e-mail, press or select Options → Send.

Important: Copyright protections may prevent some images, sounds, and their contents from being copied, modified, transferred, or forwarded.

Note: E-mails are automatically placed in Outbox before sending. If something goes wrong while the phone is sending the e-mail, the e-mail is left in Outbox with the status Failed.

Inbox - receiving messages

Messages and data can be received using text message or multimedia service, via Bluetooth. When there are unread messages in Inbox, the icon changes to ...

In **Inbox**, the message icons tell you what kind of a message it is. Here are some of the icons that you may see:

- Tay for an unread text message,
- for an unread smart message, which may include a business card or a calendar entry,
- 🚼 for an unread multimedia message,
- for media files received via Bluetooth, and
- Tor an message of unknown type.

Viewing messages in Inbox

To open a message, select the message you want.

Push \bigcirc up or down to move up and down in the message. When you view a message, push \bigcirc left or right to move to the previous or next message in the folder.

Options in different message viewers

To use message options, press the **Options** soft key in a message view. Available options depend on the type of the message you have opened:

 Save picture - saves the picture to the Picture messages folder in Gallery.

- Save business card saves the contact card in a smart message to Contacts.
- Save to Calendar saves the memo in a smart message to Calendar.
- Play presentation plays the multimedia presentation from a multimedia message.
- Reply copies the address of the sender to the To: field. Select Reply → To all to copy the addresses of the sender and Cc: field recipients to the new message.
- Forward copies the message contents to an editor.
- Call allows you to call the sender by pressing ...
- Delete allows you to delete a message.
- View image displays an image in a multimedia message.
- Play sound clip plays the sound in a multimedia message.
- Play video clip plays the video in a multimedia message.
- Objects displays a list of all the different multimedia objects in a multimedia message.
- Message details shows detailed information about a message.
- Move to folder allows you to move message(s) to My folders or one of the folders you have created. See "Moving items to an application folder" on page 34.
- Add to Contacts allows you to copy the phone number or e-mail address of the message sender to Contacts. Choose whether you want to create a new contact card or add the information to an existing contact card.

Find - searches the message for phone numbers, e-mail addresses, and URL addresses. After the search, you can make a call or send a message to the found number or e-mail address, or save the data to
 Contacts or as a browser bookmark.

Viewing multimedia messages in Inbox

To open a multimedia message, select it. You can see an image, read a message, and hear a sound, simultaneously.

If a sound is playing, press the Volume keys on the left side of the phone to increase or decrease the volume. If you want to mute the sound, press the **Stop** soft key.

Multimedia message objects

To see what kinds of media objects have been included in the multimedia message, open the message and select **Options** → **Objects**. In the Objects view, you can view files that have been included in the multimedia message. You can choose to save the file in your phone or to send it, for example, via Bluetooth to another device.

To open a file, select it.

Important: Multimedia message objects may contain viruses or otherwise be harmful to your phone or computer. Do not open any attachment if you are not sure of the trustworthiness of the sender. For more information, see "Certificate management" on page 249.

Receiving smart messages

Your phone can receive many kinds of smart messages, which are text messages that contain data (also called Over-The- Air (OTA) messages). To open a received smart message, open Inbox and select the smart message.

- Picture message to save a picture in the Picture msgs. folder for later use, select Options → Save picture.
- Business card to save contact information, select
 Options → Save business card.

Note: If certificates or sound files are attached to business cards, they are not saved.

- Ringing tone to save a ringtone to Gallery, select Options → Save.
- Operator logo to save a logo, select Options → Save.
 The operator logo can now be seen in Standby mode instead of the network operator's own identification.
- Calendar entry to save an entry to Calendar, select
 Options → Save to Calendar.
- WAP message to save a bookmark, select Options →
 Save to bookmarks. The bookmark is added to the
 Bookmarks list. If the message contains both browser
 access point settings and bookmarks, to save the data
 select Options → Save all. Or, select Options → View
 details to view the bookmark and access point
 information separately. If you do not want to save all
 of the data, select a setting or bookmark, open the
 details and select Options → Save to settings or Save
 to bookmarks, depending on what you are looking at.

- E-mail notification tells you how many new e-mails you have in your remote mailbox. An extended notification may list more detailed information such as subject, sender, attachments, and so on.
- In addition, you can receive a text message service number, voice mailbox number, profile settings for remote synchronisation, access point settings for the browser, multimedia messaging or e-mail, access point login script settings, or e-mail settings. To save the settings, select Options → Save to SMS sett., Save to voice mail, Save to settings or Save to e-mail sett.

Tip: To later change the default access point settings for browser service or multimedia messaging, go to Services
 → Options → Settings → Default access point or Messaging → Options → Settings → Multimedia message → Access point in use.

Service messages

You can order service messages (push messages) from service providers. Service messages are notifications of, for example, news headlines, and they may contain a text message or an address for a browser service. For availability and subscription, contact your service provider.

Service providers can update an existing service message every time a new service message is received. Messages can be updated even if you have moved them to a folder other than Inbox. When service messages expire, they are deleted automatically.

Viewing service messages in Inbox

- 1. In Inbox, select a service message 🚳.
- To download or view the service, press Download message. The note Downloading message is displayed. The phone starts to make a data connection, if needed.
- 3. Press the Back soft key to return to Inbox.

Viewing Service Messages in the Browser

When you are browsing, select **Options** → **Read service** msgs. to download and view new service messages.

My folders

In **My folders**, you can organise your messages into folders, create new folders, and rename and delete folders. Select **Options** → **New folder** or **Rename folder**. For more information, see "Moving items to an application folder" on page 34. You can also create and store text templates in **My folders**.

Templates folder

You can use text templates to avoid rewriting messages that you send often.

Select **Templates** and:

- To create a new template, select Options → New template.
- To send a message using a template, select Options → Send.

Mailbox

When you open this folder, you can connect to your Mailbox:

- · to retrieve new e-mail headings or messages, or
- to view your previously retrieved e-mail headings or messages offline.

If you select Mailbox or New message → Email in the Messaging main view and you have not set up your email account, you will be prompted to do so. See "Settings for e-mails" on page 140.

When you create a new mailbox, the name you give to the mailbox automatically replaces **Mailbox** in the Messaging main view. You can have up to 6 mailboxes.

Opening a mailbox

When you open a mailbox, you can choose whether you want to view the previously retrieved e-mails and e-mail headings offline, or connect to the e-mail server.

- When you select your mailbox, the phone asks you if you want to Connect to mailbox?. Select Yes to connect to your mailbox or No to view previously retrieved e-mails offline.
- Another way to start a connection is to select Options
 → Connect.

Viewing e-mails when online

When you are online, you are continuously connected to your mailbox via a data call or a packet data connection. See page 27 for data connection indicators and page 236 for general information about data connections.

Note: If you are using the POP3 protocol, e-mails are not updated automatically in online mode. To see the newest e-mails, you need to disconnect and then make a new connection to your mailbox.

Viewing e-mails when offline

When you view e-mails offline, your phone is not connected to your mailbox. This mode may help you to save on connection costs.

To view e-mails offline, you must first retrieve e-mails from your mailbox. See the next section. After you have retrieved the e-mails to your phone, select **Options** → **Disconnect** to end the data connection.

You can continue reading the retrieved e-mail headings and/or the retrieved e-mails offline. You can enter new e-mails, reply to the retrieved e-mails, and forward e-mails. You can order the e-mails to be sent the next time you connect to the mailbox. When you open Mailbox the next time and you want to view and read the e-mails offline, answer No to the Connect to mailbox? query.

Retrieving e-mails from a mailbox

If you are offline, select **Options** → **Connect** to start a connection to your mailbox.

The mailbox view is similar to the **Inbox** folder in **Messaging**. You can move up and down on the list by pushing \bigcirc up or down. The following icons are used to show the status of e-mails:

- — new e-mail (offline or online mode), whose content has not been retrieved from the mailbox to your phone (the arrow on the icon is pointing downward).
- whose content has been retrieved from the mailbox (arrow pointing upward).
- a e-mails that are read and the content has been retrieved from the mailbox.
- • e-mail headings that have been read and the message content has been deleted from the phone and the server.
- When you have an open connection to your mailbox, select Options → Retrieve e-mail →
 - New to retrieve all new e-mails to your phone.
 - All to retrieve all messages from the mailbox.

To cancel retrieval, press the Cancel soft key.

 After you have retrieved the e-mails, you can continue viewing them online or select Options → Disconnect to end the connection and view the emails offline.

Opening e-mails

When you are viewing e-mail boxes either in online or offline mode, scroll to the e-mail you want to view and press ○ to open it. If the e-mail has not been retrieved (arrow on the icon is pointing downward) and you are offline, you are asked to retrieve e-mails. Press the **Yes** soft key. If you are online, the e-mail is automatically retrieved from the mailbox. Note that the data connection is left open after the e-mail has been retrieved. Select **Options** → **Disconnect** to end the data connection.

Disconnecting from a mailbox

When you are online, select **Options** → **Disconnect** to end the GSM data call or GPRS connection to the remote mailbox

Viewing e-mail attachments

Open a message that has the attachment indicator **①** and select **Options** → **Attachments** to open the Attachments view. In the Attachments view, you can retrieve, open, or save attachments. You can also send attachments via Bluetooth.

Important: E-mail attachments may contain viruses or otherwise be harmful to your phone or computer.

Do not open any attachment if you are not sure of the trustworthiness of the sender. For more information, see "Certificate management" on page 249.

Opening an attachment

- In the Attachments view, select an attachment.
 The attachment opens in the corresponding
- 2. Press the Back soft key to return to the e-mail viewer.

Saving an attachment

application.

To save an attachment, select **Options** → **Save** in the Attachment view. The attachment is saved in the corresponding application. For example, sounds can be saved in **Recorder** and text files (.TXT) in **Notes**.

Note: Attachments such as images can be saved on the memory card, if one is used.

Deleting e-mails

 To delete an e-mail from the phone while still retaining it in your mailbox:

Select Options → Delete → Phone only.

Note: The phone mirrors the e-mail headings in your mailbox. So, although you delete the message content, the e-mail heading stays in your phone. If you want to remove the heading as well, you have to first delete the e-mail from your remote mailbox and then make a connection from your phone to the remote mailbox again to update the status.

 To delete an e-mail from both the phone and from your mailbox:

Select **Options** \rightarrow **Delete** \rightarrow **Phone and server**. The email icon change to \bigcirc .

Note: If you are offline, the e-mail is first deleted from your phone. During the next connection to your mailbox, it is automatically deleted from your mailbox. If you are using the POP3 protocol, e-mails marked to be deleted are removed only after you have closed the connection to your mailbox.

Undeleting e-mails when offline

To cancel deleting an e-mail from both the phone and server, scroll to an e-mail that has been marked to be deleted during the next connection \mathbf{N} , and select **Options** \rightarrow **Undelete**.

Outbox

Outbox is a temporary storage place for messages that are waiting to be sent.

Status of the messages in Outbox

- Sending A connection is being made and the message is being sent.
- Waiting/Queued For example, if there are two similar types of messages in Outbox, one of them is waiting until the first one is sent.
- Resend at (time) Sending has failed. The phone tries to send the message again after a time-out period.
 Select Option → Send if you want to restart the sending immediately.

- Deferred You can defer sending messages while they are in Outbox. Scroll to a message that is being sent and select Options → Defer sending.
- Failed Sending has failed. The maximum number of sending attempts has been reached. If you are trying to send a text message, open the message, and check that the Sending settings are correct.

Messages are placed in **Outbox** when your phone is outside the network coverage area. You can also schedule e-mails to be sent the next time you connect to your mailbox.

Reports

In Reports, you can view delivery reports for your text and multimedia messages, if you set the Receive report option to Yes in the Text message and Multimedia message settings.

Note: No delivery reports can be received for messages sent to e-mail addresses.

Tip: You can define the receipt of delivery reports in the **Text message** and **Multimedia message** settings. For details, see page 136 and page 139 respectively.

- To clear a report, scroll to the report and select
 Options → Clear deliv. reports.

Viewing messages on a SIM card

Sometimes, text messages may be stored on the SIM card, depending on their specifications.

Before you can view the messages stored on the SIM card, you need to copy them to a folder in your phone.

- In the Messaging main view, select Options → SIM messages.
- Select Options → Mark/Unmark → Mark or Mark all to mark messages.
- 3. Select **Options** → **Copy**. A list of folders opens.
- 4. Select a folder. Go to the folder to view the messages.

Cell broadcast

You can access Cell broadcast (CB) messages on various topics, such as the weather or traffic conditions, received from your service provider by selecting **Cell broadcast** in the Messaging main view. For available topics and relevant topic numbers, contact your service provider.

You can also select **Options** → **Cell broadcast**.

When you access **Cell broadcast**, the screen shows:

- the status of the topic:
 - <a>Image: Grad of the control of t
 - (unread) and (read) for unsubscribed messages

 the topic number, topic name, and whether it has been flagged for Hotmark. You are notified when messages belonging to a flagged topic have arrived.

On the topic list:

- To add a topic, select Options → Topic → Add manually.
 Then enter the topic name and number.
- To change the name and number of a topic, scroll to it and select Options → Topic → Edit.
- To remove a topic, scroll to the topic and select
 Options → Topic → Delete. To delete all of topics, select
 Options → Delete all.
- To subscribe to a topic, scroll to the topic and select
 Options → Subscribe. To cancel the subscription to the
 topic, select Options → Unsubscribe.
- To receive a notification when a message related to a topic arrives, scroll to the topic and select Options → Hotmark. To remove the hotmark setting, select Options → Remove hotmark.

Note: A packet data (GPRS) connection may prevent cell broadcast reception. Contact your network operator for the correct GPRS settings. For further information on the GPRS setting, see "GPRS" on page 243.

Service command editor

You can send requests, such as activation commands for network services (also known as USSD commands), to your service provider. For more information, contact your service provider. To send a request:

- enter the command number(s) in Standby mode or when you have an active call, and press , or
- If you need to enter letters as well as numbers in Messaging, select Options → Service command.

Messaging settings

The Messaging settings have been divided into groups according to the different message types. Select the settings you want to edit.

Settings for text messages

Go to Messaging and select Options → Settings → Text message to open the following list of settings:

- Message contres Lists all of the text message service centres that have been defined. See "Adding a new text message centre" on page 137.
- Msg. centre in use (Message centre in use) Defines which message centre is used for delivering text messages and smart messages, such as picture messages.
- Receive report When this network service is set to Yes, the network informs you when a message has been delivered. Delivery reports are saved in the Reports folder.
- Message validity If the recipient of a message cannot be reached within the validity period, the message is removed from the text message service centre. Note that the network must support this feature. Maximum time is the maximum amount of time allowed by the network for the message to remain active.

 Message sent as - You can convert your text messages to another format. The options are Text, Fax, Paging, and E-mail. For further information, contact your network operator.

Note: Change this option only if you are sure that your service centre is able to convert text messages into these other formats

- **Preferred connection** You can send text messages via the normal GSM network or via GPRS, if supported by the network. See "GPRS" on page 243.
- Reply via same ctr. When this network service is set to Yes, the recipient's reply message is sent using the same text message centre. Note that this may not work between all operators.

Adding a new text message centre

1.	On the	Text	messag	e setting	view,	select	Message
	centres	and	select C)ptions →	New	msg. c	entre.

2.	Press	\bigcirc ,	enter	а	name	for	the	service	e c	centre,	and
	press	the	OK so	ft	key.						

3.	Push \bigcirc down and press \bigcirc , and then enter the
	number of the message service centre.

You can get the number from your service provider.

- 4. Press the **OK** soft key.
- To use the new settings, go back to the settings view.Select Msg. centre in use and select the new service centre.

Settings for multimedia messages

Go to Messaging and select Options → Settings → Multimedia message to open the following list of settings:

 Access point in use (Must be defined) - Select which access point is used as the preferred connection for the multimedia message centre.

Note: If you receive multimedia message settings in a smart message and save them, the received settings are automatically used for the Preferred connection. See "Receiving smart messages" on page 124.

• Multimedia reception - Select:

Only in home net. if you want to receive multimedia messages only when you are in your home network. When you are outside your home network, multimedia message reception is turned off.

Always on if you want to receive multimedia messages regardless of where you are.

Off if you do not want to receive multimedia messages or advertisements at all.

Important: When you are outside your home network, sending and receiving multimedia messages may cost you more.

If the settings **Only in home net**. or **Always on** have been selected, your phone can make an active data call or GPRS connection without your knowledge.

• On receiving msg. - Select:

Retr. immediately if you want the phone to retrieve multimedia messages instantly. If there are Deferred status messages, they are retrieved as well.

Defer retrieval if you want the multimedia message centre to save the message to be retrieved later.

Reject message if you want to reject multimedia messages. The multimedia message centre will delete the waiting messages.

- Allow anon. messages Select No if you want to reject messages from anonymous senders.
- Receive adverts Define whether or not you want to receive multimedia message advertisements.
- Receive report When this network service is set to Yes, the network informs you when your message has been delivered. Delivery reports are saved in the Reports folder.

Note: It may not be possible to receive a delivery report for a multimedia message that has been sent to an e-mail address.

- Deny report sending Select Yes, if you do not want your phone to send delivery reports for received multimedia messages.
- Message validity If the recipient of a message cannot be reached within the validity period, the message is removed from the multimedia message centre. Note that the network must support this feature. Maximum time is the maximum amount of time allowed by the network before a message is deleted.

 Image size - Define the size of images in multimedia messages. The options are: Small (max. of 160x120 pixels) and Large (max. 640x480 pixels). When you send a message to an e-mail address, the image size is set to Small.

Settings for e-mails

Go to Messaging and select Options → Settings → E-mail. To select the mailbox you want to use, select Mailbox in use

Settings for Mailboxes

Select **Mailboxes** to open a list of mailboxes that have been defined. If no mailboxes have been defined, you are prompted to do so. The following list of settings is shown:

- Mailbox name Enter a name for the mailbox.
- Access point in use (Must be defined) This is the Internet Access Point (IAP) used for the mailbox.
 Choose an IAP from the list. For more information on how to create an IAP, see also "Connection settings" on page 236.
- My e-mail address (Must be defined) Enter the e-mail address given to you by your service provider. The address must contain the @ character. Replies to your messages are sent to this address.
- Outgoing mail server (Must be defined) Enter the IP address or host name of the mail server that sends your e-mails.
- Send message Define how e-mail is sent from your phone. When you select Immediately, a connection to the mailbox is started immediately after you have made this selection. When you select During next conn., e-mail is sent the next time you connect to your remote mailbox.

- Send copy to self Select Yes to save a copy of the email to your mailbox and to the address defined in My e-mail address.
- Include signature Select Yes if you want to attach a signature to your e-mails, and to enter or edit a signature text.
- **User name** Enter your user name, given to you by your mail service provider.
- Password Enter your password. If you leave this field blank, you are prompted for the password when you try to connect to your remote mailbox.
- Incoming mail server (Must be defined) The IP address or host name of the mail server that receives your e-mails.
- Mailbox type Define the e-mail protocol your mail service provider recommends. The options are POP3 and IMAP4.

Note: This setting can be selected only once and cannot be changed if you have saved or exited from the mailbox settings.

- Security Select On to secure the connection to the remote mailbox.
- Retrieve attachments (for the IMAP4 protocol) Select
 Yes to retrieve e-mails with or without attachments.
- Retrieve headers (for the IMAP4 protocol) Limit the number of e-mail headers you want to retrieve to your phone. The options are All and User defined.
- APOP secure login (for the POP3 protocol) Select
 On to encrypt the sending of passwords to the remote e-mail server.

Settings for service messages

When you go to **Messaging** and select **Options** → **Settings** → **Service message**, the following list of settings opens:

- Service messages Choose whether or not you want to receive service messages.
- Download messages Choose Automatically if you want the phone to automatically connect to the server to receive service messages, or Manually if you want to manually connect to the server.

Settings for cell broadcast messages

Check with your service provider to see if Cell Broadcast (CB) messaging is available and what the available topics and related topic numbers are. Go to Messaging and select Options \rightarrow Settings \rightarrow Cell broadcast to change the settings:

- Reception Select On to receive CB messages.
- Language Select All to receive cell broadcast messages in every possible language, or Selected to choose in which languages you wish to receive CB messages. If the language you want is not found in the list, select Other.
- Topic detection Select On to save a topic number automatically when you receive a CB message that does not belong to any of the existing topics. The topic number is saved to the topic list and shown without a name. Choose Off if you do not want to save new topic numbers automatically.

Settings for other folders

Go to Messaging and select Options \rightarrow Settings \rightarrow Other to open the following list of settings:

- Save sent messages Choose Yes if you want to save a copy of every text message, multimedia message, or e-mail that you have sent. Messages will be saved to the Sent folder.
- No. of saved msgs. Define how many sent messages can be saved to the Sent folder at a time. When the limit is exceeded, the oldest message(s) will be deleted.

Voice mail

In **Voice mail**, you can access the voice mailbox to check new voicemails.

Press open the Menu and then select **Tools** → **Voice mail**.

Connecting to the voice mail server

You first need to define the number of your voicemail server. Enter the number obtained from your service provider and press the **OK** soft key.

If you want to search for the number in **Contacts**, press the **Find** soft key and select it.

Now, you can access the voicemail server by selecting Tools → Voice mail → Voice mailbox or on the Voice mailbox main view, select Options → Call voice mailbox. You can also press and hold [100] in Standby mode. Follow instructions from the server to check your voice mails.

Changing the voice mail server number

If you need to change the number of the voicemail server, go to **Voice mail** and select **Options** → **Change number**. Enter a new number and press the **OK** soft key.

Chat

Note: This function can be used only if it is supported by your network operator or service provider. Only phones that offer compatible chat features can receive and display chat messages.

Chat is a way of sending short text messages that are delivered over TCP/IP protocols to online users (network service). Your contact list shows you when the contacts on the list are online and available to participate in a chat conversation.

When you have written and sent your message, it stays on the display. The reply message appears below your original message.

You can use the other functions of the phone while you have an active chat session in the background. Depending on the network, the active chat session may consume the phone's battery faster and you may need to connect the phone to a charger.

Press 🗷 to open the Menu and then select **Chat**.

Before starting Chat

To access a chat service you need to set up a chat server and other settings. You may receive the settings from the service provider; see "Receiving smart messages" on page 124. You can also set up the settings manually; see "Settings for chat" on page 153.

Connecting to and disconnecting from the chat service

To connect to the chat service, go to **Chat**, and select **Options** → **Login**. When the phone has successfully connected, "Login completed" is displayed.

Tip: To set the phone to automatically connect to the chat service each time you access the Chat menu, select Options → Settings → Server settings → Chat login type → On app. start-up.

To disconnect from the chat service, select Logout.

Starting a chat session

When you enter **Chat** and connect to the chat service, you can select:

- Conversations to view the list of new and read chats or invitations to chats during the active chat session.
 Scroll to the message or invitation that you want and select Options → Open to read the message.
 - indicates new chat messages and indicates invitations.

On the Conversations list, scroll to a conversation, press the **Options** soft key and select:

- Open to open the conversation to start a chat session.
- Delete to delete the invitation, if the selected item is an invitation.
- New conversation to start a new conversation. You
 can select a participant from the Conversations list
 or enter the participant's ID manually, and then the
 phone sends an invitation to her/him.
- Set auto reply on to set the phone to send a preset reply automatically when a participant sends you a message or invitation.
- Blocking options → Add to blocked list to block messages from the current participiant. Select Add ID to list manually to add a contact to the blocking list or View blocked list to view blocked contacts. To unblock the contact, select Unblock.
- Chat contacts to view the contacts that you have added. You can also view the contacts provided from the server by selecting Options → My server contacts.

If you have received a new message from a contact, it is indicated by \blacksquare .

In **Contacts**, and indicates contacts currently online, and indicates contacts who are offline. Indicates blocked contacts and if there is no indicator, this means that the contact is unknown.

Scroll to a contact and press ○ or select **Options** → **Open conversation** to start a chat.

For details, see "Contacts for chat" on page 150.

 Chat groups to view the list of bookmarks to public groups provided by the network operator or service provider.

To start a chat session with a group, scroll to a group and select **Options** \rightarrow **Open** or press \bigcirc . You can also select **Options** \rightarrow **Join group** and enter a group ID. Enter the screen name that you want to use in the conversation.

When you start a group chat, press the **Options** soft key and select:

- **Send private msg.** to send a private message to a specific member of the chat group.
- **Send invitation** to send your invitation to the members of the chat group.
- Leave chat group to leave the chat group.
- Chat group to view information about the group. You can view the members and group details and change the group settings.
- Record convers. to save the current conversation in Notes.
- Stop recording. to stop saving the conversation.
- Options → New chat contact → Search from server to search for other chat users or public groups on the network.

If you select **Users**, you can search for a user by name, ID, phone number, or e-mail address.

If you select from the Chat groups list, you can search for a group by a group member, group name, or topic. • To start a chat session from **Contacts**, see "Viewing subscribed contacts" on page 63.

After joining a chat session, you can write your message and press to send it. Your message displays on the message list and the reply message displays below your message.

During a conversation, press the **Options** soft key and select:

- Send to send the entered message.
- Add to Chat contact to add the current partner to the Chat contacts list.
- Forward to send the selected message on the message list.
- Record convers. to save the current conversation in Notes.
- Stop recording to stop saving the conversation.
- Blocking options → Add to blocked list to block messages from the current participant. Select Add ID to list manually to add a contact to the blocking list, or View blocked list to view blocked contacts. To unblock the contact, select Unblock.

Ending a chat session

To end the chat session, select **Options** \rightarrow **End** conversation.

Accepting or rejecting a chat invitation

In Standby mode, when you have connected to the chat service and you receive an invitation, "1 new chat message" is displayed. Press the **Show** soft key to read it.

If you receive more than one invitation, the number of messages followed by new invitations received is displayed. Press the **Show** soft key, scroll to the invitation you want to view, and press the **OK** soft key.

- To join a private group conversation, select Options →
 Join. Enter the screen name that you want to use in
 the conversation.
- To reject or delete the invitation, select Options → Reject or Delete.

Reading a chat message

In Standby mode, when you have connected to the chat service and you receive a message from a person who is not taking part in the conversation, "1 new chat message" is displayed. Press the **Show** soft key to read it and start a conversation.

New messages received during an active chat session are held in **Conversations** in the **Chat** application.

If the message is from a person whose contact information is not in the contact list in **Chat contacts**, the sender's ID is shown. If the contact information can be found in the phone's memory and the phone recognises it, the sender's name is shown. To save a new contact in the phone's memory, Select **Options** → **Add to Chat contact** and add details and press the **Done** soft key.

Contacts for chat

In the Chat contacts list, you can save information about chat participants, check their availability, and set tracking to recognise when they log into or out of the Chat service.

When you open the Chat contacts list, the saved chat participants display. In **Contacts**, indicates contacts currently online, and indicates contacts who are offline. Indicates blocked contacts and if there is no indicator, this means that the contact is unknown.

Select Chat contacts → Options, and:

- New Chat contact → Enter manually or Add from Contacts. Create a new contact card or select one from the Contacts list.
- Reload user availab. to update the connection status of the contacts.
- My server contacts to view the Chat contacts list provided by your network operator or service provider.
- Settings to edit the Chat menu or server settings.

Scroll to a contact, and press \bigcirc to start to chat, or press the **Options** soft key and select:

- Contact details to view the selected contact details.
 You can also edit the details.
- Switch tracking on to receive a note when the connection status of the contact changes.
 appears on the Chat contacts list to indicate that tracking is activated for that participant.
- Belongs to groups to view which group the contact belongs to.

- Edit to change the contact information.
- Delete to remove a contact from the Chat contacts list
- Blocking options → Add to blocked list to block the messages from the selected contact. Select Add ID to list manually to add a contact to the blocking list or View blocked list to view the blocked contacts. To unblock the contact, select Unblock.

Chat groups

You can create your own private groups for a chat session, or use the public groups provided by the service provider. The private groups exist only during an active chat session. You can add only the contacts that are in your Contacts list to a private group. See page 55 for details on creating a new contact.

Accessing Public groups

You can bookmark public groups that your service provider may maintain. Connect to the chat service and select **Chat groups**. Scroll to a group that you want to chat with and select **Options** → **Open** or press ○. If you are not in the group, key in your screen name as your identity for the group. If you press the **Options** soft key, you can select **Delete group** to delete a group from your group list.

Creating a private group

- Connect to the chat service, select Chat groups → Options → Create new group.
- When a confirmation message to connect to the server displays, press the Yes soft key. You need to enter your ID and password.
- 3. Enter the group information.
 - Group name: Enter the group name.
 - Group topic: Enter the topic of the group chat.
 - Welcome note: Enter a welcome greeting that group members will see when they join the group.
 - Group size: Enter the maximum number of members who can join the group.
 - Allow search: Select Yes to allow the chat users to search for the group.
 - Editing rights: Assign rights for editing the group information to the creator of the group or the selected member(s).
 - **Group members**: Select **All** to allow all chat users to join the group or **Selected only** to add the selected users to the group.

When you select **Selected only**, In the Group members view, select **Options** → **Add member** → **Chat contact** or **Enter User ID**.

 If you select Chat contact, scroll to a contact and press
 oto place a check mark. When you have finished checking the contact(s) you want, press the Select soft key. If you select Enter User ID, enter the ID of the contact you want and press the OK soft key.

To remove a contact from the private group, scroll to it and select **Options** \rightarrow **Remove**. To remove all contact, select **Options** \rightarrow **Remove all**.

When you are finished, you need to press the **Back** soft key from the private group list.

- Banned list: Select Selected users, to set up the list
 of the chat contacts to be banned to join the group.
- Allow private msg.: Select Yes to allow private messages to the members of the group.
- 4. When you have finished, press the **Done** soft key.

Settings for chat

To change the settings for chatting, go to **Chat** and select **Options** \rightarrow **Settings**.

Chat settings

- Use screen name: Enter the screen name to be displayed on the chat screen as your identity.
- Chat presence: Select if you want your presence to be active for all members of a conversation, or only for the contacts stored in your Chat contacts list.
- Allow messages from: Select if you want to receive chat messages from all members of a conversation or only from the contacts stored in your Chat contacts list.

- Allow invitations from: Select if you want to receive invitations from all chat users or only from the contacts on your Chat contacts list.
- Message speed: Adjust the speed of the message transmission by pushing
 O left or right.
- Availability reloading: Select if you want to automatically or manually reload other chat users' availability status to indicate whether they are online or offline.

Server settings

- Servers: Add a new server or edit an existing server.
 To add a new server, press when New server highlights or select Options → New server.
 - Server name: Enter a name for the server.
 - Access point in use: Select an access point. You can add or edit an access point; for details, see page 238.
 - Web address: Enter your web address.
 - User ID: Enter your User ID.
 - Password: Enter your password.

Note: You can get the web address, user ID, and password from your network operator or service provider.

- **Default server**: Select the server you want to use.
- Presence login type: You can change the setting for the Presence login; for details about the presence service, see page 226. Select:

- Automatic to automatically log in to the presence service when you switch on the phone, regardless of your location.
- Aut. in home net. to automatically log in to the presence service when you are in your home network.
- On app. start-up to automatically log in to the presence service when you enter the Presence menu.
- **Manual** to display a confirmation message when you access the **Presence** menu.
- Chat login type: Select On app. start-up to automatically log in to the chat service when you access the Chat menu. Select Manual to display a confirmation message when you access the menu.

chapter 7

Scheduler

This chapter gives you information on how to keep track of your schedule and how to make a list of tasks you need to do.

Calendar

In Calendar, you can keep track of appointments, meetings, birthdays, anniversaries, and other events. You can also set a calendar alarm to remind you of upcoming events.

Press 🗷 to open the Menu, and then select Calendar.

Creating calendar entries

- 1. On the calendar, scroll to the date you want.
- 2. Select **Options** → **New entry** and select:
 - Meeting to remind you of an appointment that has a specific date and time.
 - Memo to write a general entry for a day.
 - Anniversary to remind you of birthdays or special dates. Anniversary entries are repeated every year.
- 3. Fill in the fields. Push \bigcirc up or down to move between fields.
 - Subject/Occasion Enter a description of the event.
 - Location Enter the place of a meeting.
 - Start time, End time, Start date, and End date.

- Alarm Select On to activate the fields for the Alarm time and Alarm date field. Once an alarm has been set for the entry, displays in the day view.
- Repeat until You can set an ending date for the entry to repeat, for example, the ending date of a weekly course you are taking. This option is shown only if you have selected to repeat the event.
- Synchronisation If you select Private, after synchronisation the particular calendar entry can be seen only by you. It will not be available to those with online access to view your calendar. This is useful when, for example, you synchronise your calendar with a calendar on a compatible computer at work. If you select Public, the calendar entry is visible to those who have access to view your calendar online. If you select None, the calendar entry will not be copied to your computer when you synchronise your calendar.
- 4. To save the entry, press the **Done** soft key.

Viewing Calendar

You can view the calendar in the month, week, or day view.

Month view

When you access Calendar, you can see your appointments in the month view. You can change the default view screen. See page 161.

In the month view, one row equals one week. Today's date is underlined. Dates that have calendar entries are marked with icons at the right bottom corner.

The currently selected date is highlighted.



Synchronisation icons in the month view:

- Private,
- **u** Public,
- a None, and
- the day has more than one entry.

To move to the day view, select the date you want to open.

To go to a certain date, select **Options** \rightarrow **Go to date**. Enter the date and press the **OK** soft key.

Tip: If you press •• in the month, week, or day view, today's date is automatically highlighted.

Scheduler

Week view

In the week view, the calendar entries for the selected week are shown in seven day boxes. Today's day of the week is underlined. Memos and Anniversaries are placed before 8 o'clock. Meeting entries are marked with coloured bars according to starting and ending times.

The colour of the bars varies depending on the synchronisation type.

In Calendar, select Options → Week view.



To view or edit an entry, select the cell that has the entry to move to the day view and select the entry you want to open.

Calendar entry icons in the day and week views:

- · No icon Meeting,
- <section-header> Memo, and
- 📛 Anniversary.

Synchronisation icons in the week view:

- Private
- Public
- I : None

Day view

In the day view, you can see the calendar entries for the selected day. The entries are grouped according to their starting times. Memos and Anniversaries are placed before the scheduled meeting.

In the month view or week view, select the date you want to open.



To open an entry for editing, select it.

Editing calendar entries

- 1. In the day view, select the entry.
- 2. Edit the entry fields and press the **Done** soft key.

Setting calendar alarms

- 1. Create a new Meeting or Anniversary entry, or open a previously created entry.
- 2. Scroll to Alarm and select On.
- 3. Enter the alarm time and date on the Alarm time and Alarm date field.
- 4. Press the **Done** soft key. An alarm indicator ***** is shown next to the entry in the day view.

Stopping a calendar alarm

The alarm duration is one minute. When the alarm sounds, press the **Stop** soft key to stop the calendar alarm. If you press the **Snooze** soft key, you can stop the alarm and cause it to sound again after 5 minutes.

Sending calendar entries

You can send Calendar entries via text and multimedia messages, e-mail services, and via Bluetooth. For further information, see page 33.

Deleting calendar entries

When you delete a repeated entry, you can choose one of the following options:

- All occurrences: all repeated entries are deleted.
- This entry only: only the currently selected entry is deleted.

Changing calendar settings

Select **Options** → **Settings** and select:

- Calendar alarm tone to select a personalised alarm tone.
- Default view to select the view that is shown when you first open Calendar.
- Week starts on to change the starting day of the week.
- Week view title to change the title of the week view to be the week number or the week dates, if a week starts with Monday.

To-do

In **To-do**, you can keep a list of tasks that you need to do.

Press 😰 to open the Menu, and then select **To-do**.

Creating tasks

1. Start entering a task. The editor opens and the cursor blinks after the letters you have keyed in.

You can also select **Options** \rightarrow **New to-do note** to open the editor.

2. Complete the task subject in the Subject field.

- 3. Scroll to the **Due date** field and enter the date by which you need to finish the task.
- Scroll to the **Priority** field and select a priority for the task
- 5. To save the task, press the **Done** soft key.

Viewing tasks

When you open **To-do**, a list of tasks displays. The task list is your "things to do" list. The note's priority icons display as follows:

- 👚 High, 🌗 Low, and No icon Normal.
- To delete a task, scroll to it and select Options →
 Delete or press and the Yes soft key.
- To mark or unmark a task as completed, scroll to it and select Options → Mark as done/Mark as not done. You can also press →. The check mark displays beside the task; ✓ task completed and ✓ not completed

Anyvoice

phone.

Your phone provides a set of powerful voice-enabled features that enhance the hands-free capabilities of your

Using **Anyvoice**, you can:

- make a call by saying any name from Contacts, without having to train the system to recognise names.
- retrieve contact information for a person on the Contacts list by saying the person's name.
- launch applications by voice.
- change settings that affect the way Anyvoice works on your phone.

To start **Anyvoice** and access the voice features of your phone:

Press and hold \bigcirc in Standby mode, or press \bigcirc to open the Menu, and then select **Usefulness** \rightarrow **Anyvoice**.

If contact cards have been changed automatically synchronise the contact list with them in **Contacts**.

When the phone prompts you with displaying "Please say a command," say one of the commands:

- Call [person's name]
- · Open [application]
- Name dial
- Name search

Note: **Anyvoice** can recognise up to 1000 different names of applications and contacts in **Contacts**.

Name dialling

You can make a phone call by saying a name that has been assigned to a contact card in the Contacts directory.

Note: To use the Name Dial feature, the name and number that you want to dial must be in **Contacts**. For details about **Contacts**, see page 55.

To place a call using Name Dial:

- 1. Go to **Anyvoice**. The Anyvoice main screen opens and the phone says "Please say a command."
- 2. Say "Name dial" after a beep sound.

You have 10 seconds to speak. If you don't say anything in that time (a progress bar shows the passage of time), it prompts you one more time.

3. Say the full name of the contact card, the first name followed by the last name.

Note: You can say "Call" and then a person's name stored in Contacts to make a call by voice command; for example, say "Call James Bond." This will save you a step for name dialling.

4.	If there are similar names, the phone displays the 3 best candidates. It then recites the name that most closely matches your command and the first available number type. If the name or type is not what you wanted, say "Next" or push \bigcirc right or down.
	To go back to a name or type recited previously, say "Previous" or push \bigcirc left or up.
	Repeat until you hear what you want.
5.	If you press \bigcirc or say nothing for 3 seconds, the phone dials the currently selected number.

Searching for contacts

Anyvoice lets you retrieve contact information for any name in the Contacts directory by saying that name. Your phone displays the information.

To view contact information by saying the name:

- Go to Anyvoice. The Anyvoice main screen opens and the phone prompts you, saying "Please say a command."
- 2. Say "Name search" after the beep.
- 3. Say the full name of the contact card, the first name followed by the last name.
- 4. If there are similar names, follow step 4 in "Name dialling" on page 166.
- 5. If you press \bigcirc or say nothing for 3 seconds, the phone displays the currently selected contact card.

Opening applications by voice

Anyvoice can also launch applications on your phone. By default, the applications displayed on the Anyvoice screen can be launched by voice command. You can add or remove applications to or from this list.

To open an application by saying the name of the application:

- Go to Anyvoice. The Anyvoice main screen opens and the phone prompts you, saying "Please say a command."
- Say "Open" after the beep and then the name of the application that you want to open; for example, say "Open Contacts."
- 3. If the phone finds multiple applications, follow step 4 on page 166.
- 4. If you press \bigcirc or say nothing for 3 seconds, the phone automatically opens the currently selected application; for example, **Contacts**.

Customising the application list

To add or remove an application to or from the voice command list:

- 1. Go to Anyvoice and select Options → Settings.
- 2. Push () right to display the application list screen.

Select an application you want to add. A check mark displays next to the selected application and the application is added to the application list.

If you want to cancel the selection, deselect it. A check mark disappears.

Note: Application names for recognition can be changed by selecting **Options** → **Rename**.

4. When you are finished, press the Back soft key.

Synchronising with Contacts

Sychronisation with **Contacts** must be done if contact cards have been changed. **Anyvoice** automatically defects the changes and sunchronise with **Contacts**. You can synchronise with **Contacts** manually by selecting **Options** → **Synchronize**.

Changing the voice recognition settings

To change the settings for using the **Anyvoice** application, select **Options** → **Settings**. The Settings screen displays.

- Time limit: sets the time limit your phone waits for your voice command. The default setting is 10 seconds.
- Voice guide: turns on or off the voice message guiding you through the voice command procedure.
- Voice volume: adjusts the volume for the voice guide message.

- Num. of results: sets the number of the best candidates the phone will display when there are similar names in Contacts.
- Accuracy level: adjusts the sensitivity in which your phone recognises a voice command. Change the setting if your phone has difficulty recognising your voice command.

Image Print

With Image print, you can print images that you taken using the camera on the phone or that you have received in multimedia messages, via Bluetooth printer, or memory card (DPOF) enabled printers. You can retrieve images from Gallery.

Press to open the Menu, and then select **Usefulness** → **ImagePrint**.

Printing pictures

You can print pictures as it is or as a sticker.

Printing basic pictures

- On the Image Print screen, select Gallery to see a list of pictures in the phone's memory. Push
 right once to see the pictures on the memory card, if you use one.
- 2. Scroll to the picture you want to print.

If you want to print multiple pictures at one time, scroll to the picture and select **Options** → **Mark**/ **Unmark** → **Mark** for the selected picture or **Mark** all for all pictures.

- You can specify the printing settings, such as image layout or image size. Select Options → Page format. For details, see page 172.
- 4. When you have finished, select **Options** → **Print to Bluetooth** Or **Print to mem.card**.
- 5. If you select Print to Bluetooth, the Select printer screen displays a list of BPP-enabled Bluetooth printers that have been already found. Select the printer you want to use. If no printers have been previously used, you can add the printer to the list. Select Options → Find printers. You can change the paper size in which the image is to be printed by selecting Options → Paper size.

If you select **Print to mem.card**, the phone writes a DPOF file to the memory card. Remove the memory card from the phone and insert the memory card into a DPOF capable printer for printing. For details about printing to a DPOF capable printer, refer to the printer User's Guide.

Printing stickers

You can print an image as a sticker.

- On the Print screen, select Gallery to see a list of pictures in the phone's memory. Push
 right once to see the pictures on the memory card, if you use one.
- 2. Select Options → Page format.
- 3. Select **Stickers** in **Page format** and select how many copies of the image to print on a page in Sticker layout. Push the **Back** soft key.
- 4. Select the sticker image you want to print. You can select only one image for sticker printing.
- 5. After selecting the image, you are asked to add a border to the image. Press the **Yes** soft key to add a border to the image, or the **No** soft key.
- 6. If you select **Yes** in step 5, you can select a border on the Select border screen.

If you select **No** in step 5, go to step 8.

Scroll to a border by pushing ○ right or left and press ○ or select Options → Select.

The Select printer screen displays a list of BPPenabled Bluetooth printers that have already been found.

8. Select the printer you want to use.

If no printers have been previously used, you can add the printer to the list. Select **Options** → **Find printers**.

Changing Image settings

You can change the image settings, such as the type of image to be printed, image layout, or image size.

- On the Select images screen, push ☐ left once or select Options → Page format.
- 2. The following options are available:
 - Page format: You can select the type of the image to be printed. If you select Stickers, the selected image prints as a sticker.
 - Image layout: You can select how many images to print.
 - Image size: You can select the image size. This
 option is only available when you selected 1 Up
 from the Image layout option.
- 3. When you finished, press the **Back** soft key.

Info print

With Info print, you can print a wide variety of data, such as messages and e-mails, contacts, calendar entries, and notes, via Bluetooth printer or memory card (DPOF) enabled printers.

Press

to open the Menu, and then select Usefulness

→ Info Print.

Printing messages

You can print SMS, MMS, and e-mail messages:

- SMS messages are simple text messages without pictures.
- MMS messages can contain as many attachments as the sending and receiving phones allow. Only JPEG attachments in MMS messages can be printed.
- E-mail text can be printed. When printing an e-mail, attachments are ignored. To print an image attached to email, first save the image to a file and then print the image.
- 1. On the Info Print screen, select Messaging.
- Select the folder where the messages you want are saved. The Email folder only appears when one email message is contained at least.
- Scroll to the message you want and select Options → Print to print the message.
 - The Select printer screen displays a list of BPPenabled Bluetooth printers that have been already found.
- 4. You can change the paper size in which the message is to be printed by selecting **Options** → **Paper size**.
- 5. Select the printer you want to use.

If no printers have been previously used, you can add the printer to the list. Select **Options** \rightarrow **Find printers**.

Printing e-mails with attachments

E-mail attachments cannot be printed. However, the body text of an e-mail with attachments may be printed. When selecting an e-mail with attachments for printing, you are asked if you want to continue. Press the **Yes** soft key to print the body text of the e-mail, or the **No** soft key to cancel printing.

If a JPEG image file is attached to an e-mail, you can print it by saving as a file.

Printing MMS messages with unsupported attachments

Some types of MMS attachments are not supported for printing. When the selected MMS message contains objects of these types, you are asked if you want to continue. Press the **Yes** soft key to print the parts of the MMS message that are printable, or the **No** soft key to cancel printing.

Printing contacts

You can print contact cards or contact groups stored in **Contacts**.

To print a contact card:

- 1. On the Info Print screen, select **Contacts** to see a list of contact cards in the phone's memory.
- 2. Scroll to the contact card you want to print.

If you want to print multiple contact cards at one time, scroll to the contact card and press \bigcirc to mark it. Repeat the action for all contact cards you want to print.

- When you have finished, press the Print soft key. The Select printer screen displays a list of BPP-enabled Bluetooth printers that have been already found.
- 4. Proceed from step 4 on page 173.

To print a contact group:

- 1. On the Print screen, select **Contacts** to see a list of contact cards in the phone's memory.
- 2. Push O right to open the group list.
- 3. Scroll to the group you want to print.

If you want to print multiple contact groups at one time, scroll to the group and press \bigcirc to mark it. Repeat the action for all contact groups you want to print.

- 4. When you have finished, press the **Print** soft key. The Select printer screen displays a list of BPP-enabled Bluetooth printers that have been already found.
- 5. Proceed from step 4 on page 173.

Printing calendar entries

You can print calendar entries created in Calendar.

1. On the Info Print screen, select Calendar.

The current day displays on the calendar list.

Select the date you want to print by pushing O right or left.

To go to a specific date, select **Options** \rightarrow **Go to date**. Enter the date and press the **OK** soft key.

- 3. When you have finished, select **Options** → **Print**.
- 4. Proceed from step 4 on page 173.

Printing notes

You can print notes created in Notes.

- 1. On the Info Print screen, select **Notes**.
- Select the note you want to print. The preview screen appears.
- Select Options → Print. The Select printer screen displays a list of BPP-enabled Bluetooth printers that have been already found.
- 4. Proceed from step 4 on page 173.

Notes

In **Notes**, you can create notes that are not associated with records in **Calendar**, **Contacts**, or **To-do**. The number of memos you can store depends on the memory available on your phone.

Press at to open the Menu, and then select Extras → Notes.

Creating a note

Start entering note text or select Options → New note.
 The display for entering note text appears.



- 2. Complete the note text.
- 3. When you are finished, press the **Done** soft key. The most recently saved note is placed in the first position, displaying the time the note was made.

Sending notes

You can send notes via text and multimedia messages, and e-mail services, and via Bluetooth. For details, see page 33.

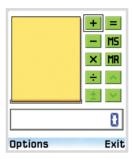
Setting as a Go to item

You can set a note as a Go to item so that you can quickly access it. Scroll to a note and select **Options** → **Add to 'Go to.**'

Calculator

Press

to open the Menu, and then select Extras →
Calculator.



- 1. Enter the first number of your calculation. Press to erase a mistake in the number.
- Scroll to the function you want using and press ○.

Use + to add, — to subtract, \mathbf{x} to multiply, or \div to divide.

- Enter the second number.
- 4. To get the result, select =.

Note: Calculator has limited accuracy and rounding errors may occur, especially in long division.

Tips for using the calculator

- To insert a decimal, press #1.
- To change a function, for example from + to -, press
 * until the function you want is selected on the screen.
- Press to clear the result of the previous calculation.
- Select MS or select Options → Memory → Save to save a number to the memory, indicated by M. To retrieve the number from the memory, select MR or select Options → Memory → Recall.
- To delete the number from the memory, select Options
 → Memory → Clear.
- To delete all of the calculations on the sheet, select
 Options → Clear screen.
- To retrieve the result of the last calculation, select
 Options → Last result.

Converter

In **Converter**, you can convert measurements such as Length from one unit (Yards) to another (Metres).

Press
 to open the Menu, and then select Extras → Converter.

Note: Converter has limited accuracy and rounding errors may occur.

Converting units

Note: You first need to set the currency rates. See page 181.

- Scroll to the Type field and press to open a list of measurement units.
- 2. Scroll to the measurement type you want to use and press the **OK** soft key.
- Scroll to the first Unit field and press

 to open a list of available units.
- 4. Select the unit from which you want to convert and press the **OK** soft key.
- 5. Scroll to the first **Amount** field and enter the value you want to convert.
 - Press * to add a decimal and press to for the +, (for temperature), and E (exponent) symbols.
- Scroll to the second **Unit** field and select the unit to which you want to convert.

The other **Amount** field charges automatically to show the converted value.

Note: The conversion order changes if you enter a value in the second **Amount** field. The result is shown in the first **Amount** field.

Setting a base currency and exchange rates

Before you can make currency conversions, you need to choose a base currency (usually your domestic currency) and enter exchange rates.

Note: The rate of the base currency is always 1. The base currency determines the conversion rates of the other currencies.

- Select Currency as the measurement type and select Options → Currency rates. A list of currencies opens and you can see the current base currency at the top.
- To change the base currency, scroll to the currency (usually your domestic currency), and select Options
 → Set as base curr.

Important: When you change the base currency, all previously set exchange rates are reset to **o** and you need to enter new rates.

3. To enter exchange rates, scroll to the currency, and enter a new rate, that is, how many units of the currency equal one unit of the base currency you have selected. See the example below:

If you set the Euro (EUR) as the base currency, a United Kingdom Pound (GBP) is approximately 1.63575 EUR. Thus, you would enter 1.63575 as the exchange rate for the GBP.

4. When you have finished, press the **Done** soft key.

5. Press the **Yes** soft key to save the changes.

After you have inserted all necessary exchange rates, you can make currency conversions, see "Converting units" on page 180.

Recorder

Recorder allows you to record telephone conversations and voice memos of up to 1 minute. If you are recording a telephone conversation, both parties hear a tone every five seconds during recording.

Press

to open the Menu, and then select Extras → Recorder.

Notes:

- Obey all local laws governing recording of calls.
 Do not use this feature illegally.
- Recorder cannot be used when a data call or a GPRS connection is active.

Recording a voice memo

- Press to starting recording when highlights.
 You can also select Options → Record sound clip.
 - To pause recording, press the Pause soft key or select
 - To resume recording, press the Record soft key or select

2. To stop recording, press the **Stop** soft key or select

The recorded sound clip is automatically saved in the **Sound clips** folder in **Gallery**.

After a sound clip has been saved:

- To play back the sound clip, select .
- To fast forward, select ...
- To fast rewind, select ...
- To change the name of the sound clip, select Options
 → Rename sound clip.
- To access previously saved clips, select $\textbf{Options} \rightarrow \textbf{Go}$ to Gallery.

You can send sound clips via multimedia message and e-mail services, and via Bluetooth. For details, see page 33.

You can change the saving location from the phone's memory to the memory card by selecting **Options** \rightarrow **Settings**.

Clock

In Clock, you can view the current time and date of your home city, set up the display of the time and date information, and check the time in other cities all over the world. You can also set an alarm to ring at a specified time.

Press at to open the Menu, and then select Extras → Clock.

The current time and date of the home city displays on the Clock screen.

Viewing world clock

To view the world time in other cities, first you must add the cities you want to the world clock screen.

To add the cities:

- 1. Push O right once in the home clock screen.
- 2. Select Options → Add city.
- 3. Scroll through the city list pushing () up or down.

Alternatively, enter the first few letters of the country or city. Starting entering letters displays the search filed. You can also search the country or city by selecting **Options** → **Find**.

This will search for countries and cities by their first few letters. For example, entering "p" will match "France, Paris" as well as "Paraguay, Asuncion," as both contain entries that start with "p." 4. Select the city you want.

You can view the current time of the selected city on the Clock screen.

5. Repeat from step 2 to add more cities, if necessary.

You can set a city on the world city list as the home city. The time and date of the selected city displays on the home clock screen. Scroll to the city you want and press Yes soft key to change the home city. Select Options → My home city and press the Yes soft key.

To remove the city from the list, select **Options** → **Remove**.

Changing clock settings

To change the time or date, select **Options** \rightarrow **Settings** on the Clock screen.

The following setting options are available:

- Time: Enter the current time. If the time format is set to 12-hour, you can change am/pm by pressing .
- Date: Enter the current date.
- Date format: Select the date display format, either dd mm yyyy (day, month, year), mm dd yyyy (month, day, year), or yyyy mm dd (year, month, day).
- **Date separator**: Select a separator for the date display.
- Time format: Select the time format, either 12-hour or 24-hour.
- Time separator: Select a separator for the time display.

- Clock type: Select a clock type to be displayed on the top of the Standby screen and Extend view, either Analogue or Digital.
- Autopower: Select On to set the phone to automatically switch on to ring an alarm if the time for the alarm comes while the phone is switched off.
- Auto time update: Select On if you want the mobile phone network to update the time and date, and time zone information to your phone. The phone reboots, turning itself off and then back on.
- Daylight-saving: Select On to use daylight savings.
 The indicator is shown on the home clock screen.

Setting an alarm

Push \bigcirc right twice in the home clock screen. You can set the following alarm modes:

- Once alarm: the alarm rings just once and is then deactivated.
- Daily alarm: the alarm rings every day at the same time.
- Morning call: the alarm rings to wake you up in the morning from Monday to Sunday.

To set an alarm:

- On the Alarm screen, select the type of alarm to be set.
- Select the Set time field.
- Enter the time for the alarm to sound and press the OK soft key.

- 4. Select **Alarm sound** and choose an alarm tone from the ringing tone list.
- 5. After you have finished, press the **OK** soft key to save your selection.

The alarm is active and the indicator $\mbox{\ensuremath{\below{R}}}$ is shown in Standby mode.

To change the alarm:

- 1. On the Alarm screen, select the type of alarm you want to remove.
- 2. To change the alarm, select the option you want from the list.
- 3. Change the option and press the **OK** soft key.

To remove the alarm:

- On the Alarm screen, select the type of alarm you want.
- 2. Scroll to Remove alarm and press the OK soft key.
- 3. When a confirmation message appears, press the **Yes** soft key.

You can also select **Options** → **Remove once alarm**, **Remove daily alarm**, or **Remove morning call** on the Alarm screen.

Turning off the alarm

When the alarm time comes, the phone will sound an alarm tone and flash "Once alarm," "Daily alarm," or "Morning call," the alarm icon, and the current time on the display.

- Press the **Stop** soft key to turn off the alarm.
- When the alarm tone sounds, press the Snooze soft key or 6 to stop the alarm and cause it sounds after 5 minutes. You can do this a maximum of 5 times.

If the alarm time comes while your phone is switched off, the phone switches itself on and starts ringing the alarm tone. If you press the **Stop** soft key, the phone asks whether you want to activate the phone for calls. Press the **No** soft key to leave the phone switched off or the **Yes** soft key to switch it on.

Note: You can select whether or not the phone rings the alarm tone while the phone is switched off using the Autopower option. See page 186.

Memory

If you have a memory card, you can use it to store your multimedia files like video clips and sound files, pictures, and messaging information, and to back up information from your phone's memory. For details about inserting the memory card, see page 22.

Press
 to open the Menu, and then select Extras → Memory. The display shows information about the currently installed memory card.

Important:

- Keep all memory cards out of the reach of small children.
- After formatting the memory card as FAT32 on your computer, if you insert the card into the phone and access the Memory application, the system will inform you that the memory card is corrupted and ask whether you will format it or not. This is because the system supports only FAT12 and FAT16 formats. Therefore, to use the memory card with your phone, you must format the card as FAT12 or FAT16.

Note: Details on how you can use the memory card with other features and applications of your phone are given in the sections describing these features and applications.

Removing the memory card

To remove the memory card from the phone safely, select **Options** → **Remove mem. card**. Then follow the onscreen instructions.

Backing up and restoring information

- You can back up information from your phone's memory to the memory card.
 - Select **Options** → **Backup phone mem.** When a confirmation message appears, press the **Yes** soft key.
- You can restore information from the memory card to the phone's memory.
 - Select **Options** → **Restore from card**. When a confirmation message appears, press the **Yes** soft key.

Formatting the memory card

You must format the memory card before you can use it for the first time.

Select **Options** → **Format mem. card**. When a confirmation message appears, press the **Yes** soft key.

Once you confirm, formatting starts.

Renaming the memory card

You can change the memory card name. Select **Options** → **Memory card name**. Enter the name you want and press the **OK** soft key to save the name.

Setting a memory card password

You can set a password to lock your memory card against unauthorised use.

Notes:

- Once a password for the memory card has been set, devices that do not support a feature related to the memory card password, such as Microsoft Windows, cannot read the card. You first need to remove the password on the phone.
- The password is stored in your phone and you don't have to enter it again while you are using the memory card on the same phone. When you use the memory card on another phone, you are asked for the password.

To set, change, or remove your password:

Select Options → Set password, Change password, or Remove password.

For every option, you are asked to enter and confirm your password. The password can be up to 8 characters long.

Important: Once the password is removed, the memory card is unlocked and can be used on another phone without a password.

Unlocking the memory card

When you insert another password-protected memory card in your phone, you are prompted to enter the password of the card.

To unlock the card, select **Options** → **Unlock memory** card. You are asked to enter the password.

Checking memory consumption

Using the **Memory details** option, you can check the memory consumption of different data groups and the available memory for installing new applications or software on your memory card.

Select Options → Memory details.

Wallet

Wallet provides you with a storage area for your personal information, such as credit and debit card numbers, addresses, and other useful data, for example, user names and passwords.

Press

to open the Menu, and then select Extras →

Wallet.

The information stored in the wallet can be easily retrieved while browsing, to automatically fill in online forms on browser pages, for example, when a service asks for credit card details. Data in the wallet is encrypted and protected with the wallet code that you have defined.

You can group wallet data into profiles that can be accessed, for example for making purchases online.

Due to the nature of the wallet, it will automatically close after 5 minutes of inactivity. Enter the wallet code to regain access to the contents. You can change this automatic time-out period, if required. See "Changing Wallet settings" on page 197.

Entering the wallet code

When you open the wallet for the first time, you must create your own access code:

 Enter a code of your choice (4 - 10 alphanumeric characters), and press the **OK** soft key. 2. You will be prompted to verify the code. Enter the same code and press the **OK** soft key. Do not give your wallet code to anyone else.

Each time you open the wallet you will be prompted for a wallet code. Enter the code that you have created and press the **OK** soft key.

Note: If you enter the wallet code incorrectly on 3 consecutive occasions, the wallet application will be blocked for 5 minutes. The block time increases if further incorrect wallet codes are entered.

Important: If you forget your wallet code, you will have to reset the code, and you will lose all information stored in the wallet. See "Resetting the wallet and wallet code" on page 198.

Storing personal card details

- 1. Select Cards from the Wallet main screen.
- 2. Select a type of card from the list.
 - Payment cards Credit and debit cards
 - Loyalty cards Membership and store cards
 - Online acc. cards Personal user names and passwords to online services
 - Address cards Basic contact details for home/ office
 - User info cards Customised personal preferences for online services

- Select Options → New card. The corresponding card form opens.
- Fill in the fields and press the Done soft key.

You can also receive card information directly to the phone from a card issuer or service provider (if they offer this service). You will be notified which category the card belongs to. Save or discard the card. You can view and rename a saved card, but you cannot edit it.

Once you have stored card information, you can open, edit, or delete fields in the cards. Any changes will be saved upon the exiting cards.

Creating a wallet profile

Once you have stored your personal card details, you can combine them together into a wallet profile. Use a wallet profile to send wallet data from different cards and categories to the browser.

- 1. Select Wallet profiles from the Wallet main screen.
- Select Options → New profile. A Wallet profile form opens.
- 3. Fill in the fields, as indicated below.

Some of the fields must contain data selected from the wallet. You must save the data under the relevant category before creating a wallet profile, or the profile cannot be created.

 Profile name - Choose and enter a name for the profile.

- Payment card Select a card from the Payment cards category.
- Loyalty card Select a card from the Loyalty cards category.
- Online access card Select a card from the Online acc. cards category.
- **Shipping address** Select a shipping address from the Address cards category.
- Billing address By default this is the same as the shipping address. If you require a different address, select a billing address from the Address cards category.
- **User info card** Select your personal information card from the user info cards category.
- Receive e-receipt Select a destination to which receipts for online transactions are delivered from the Address cards category.
- **Deliver e-receipt** Select whether or not receipts for online transactions are delivered to a phone number, e-mail address, or both.
- RFID sending Select whether or not your unique phone identification (ID) is sent with the wallet profile (for future development dependent on RFID-based ticketing) to services that require it.
- 4. When you are finished, press the **Done** soft key.

Viewing ticket details

You can receive notifications of items purchased online via the browser.

Received notifications are stored in the wallet. To view the notifications:

- 1. Select Tickets from the Wallet main screen.
- 2. Select the ticket you want.

You can view the validity dates, price, or other information about the ticket.

Note: None of the fields within the notification can be modified.

To delete a ticket, scroll to the ticket and select **Options** → **Delete**.

Creating personal notes

Personal notes are a means of storing sensitive information, for example, a bank account number. You can access the data in a personal note from the browser.

You can also send a note as a message.

- 1. Select **Personal notes** from the Wallet main screen.
- Select Options → New note. The Personal notes screen opens.
- 3. Write a note and press the **Done** soft key.
- 4. Enter the note title and press the **OK** soft key.

Retrieving information from Wallet to your browser

When using online mobile services supporting the wallet functionality, you can upload the data stored in your wallet to automatically enter your details into an online form. For example, by uploading your payment card details you do not need to key in the card number and expiry date each time you need them (depending on the content being browsed). Also, you can retrieve your user name and password stored as an access card when connecting to a mobile service that requires authentication.

Changing Wallet settings

On the Wallet main screen, select **Options** → **Settings**. You can set the following options:

- Wallet code Change your wallet code. You will be prompted to enter the current code, create a new code, and verify the new code.
- RFID Set the phone ID code, type, and sending options (for future development dependent on RFIDbased ticketing).
- Automatic close Change the automatic time-out period (1 - 60 minutes). After the time-out period has elapsed, the wallet code must be re-entered to gain access to the contents.

Resetting the wallet and wallet code

To reset both the contents of the wallet and the wallet code:

- 1. Key in *#7370925538# in Standby mode.
- 2. Enter the phone's lock code, and press the **OK** soft key. See "Security settings" on page 246.

Note: This operation erases all contents of the wallet.

When opening the wallet again, you must enter a new wallet code. See "Entering the wallet code" on page 192.

Viewer

Viewer is a revolutionary product for document browsing on thin-client computing platforms. It allows you to view content on your phone without any file-conversion or loss of content. Simply by using \bigcirc , you can scroll through your document sideways or vertically to view larger pages on a smaller screen, and zoom in or out to view intricate details or overviews.

To view a document, you must transfer documents from a computer. If you have installed the memory card, you can view the files stored in it.

Viewer supports most common desktop document formats including PDF, Word, Excel, and PowerPoint.

Press

to open the Menu, and then select Usefulness

Viewer. Once it is running, you will see the default blank page.

Viewing a document

 On the Viewer main screen, select Options → Open file(*). The Explore view opens. It shows the directories, such as C or E.

The "E" directory indicates the installed memory card. The "C" directory indicates your phone's memory.

2. Select the directory you want to open.

The name of the current folder's path location is shown at the top of the screen and the folders and documents in the selected driver appear.

Documents look like sheets of paper in various colours, depending on their type. The following document formats are supported:

Adobe PDF: M, Microsoft Word: M, Microsoft Power Point: M, Microsoft Excel: N, Plain Text: M.

- 3. Scroll to the folder or document you want to view using \bigcirc , and press \bigcirc .
- 4. If you select a folder icon, you will be shown the contents of that folder.

If you select a document icon, it will be opened.

Options in the document view

You can use the following options while you are viewing a document.

 To rotate the screen 90 degrees counterclockwise, select Options → Page → Rotate(9). **Note**: You can change the direction of the rotation in the **Preferences** option. See page 202.

- To zoom in or out, press the Mode soft key until the

 icon displays on the bottom right of the screen.
 Push to zoom in or out.
- To fit the width of the page on screen, select Options
 → Page → Fit to Width(7).
- To pan to a different part of the document, press the Mode soft key until the icon displays on the bottom right of the screen. Push to move in the direction you want.
- To navigate pages, if there is more than one page, select Options → Page → Goto Page(#), Next Page(3), Previous Page(1), First Page, or Last page.

Keypad shortcuts

In the document view, you can use the following keys:

- 1 navigates to the previous page.
- (2...): pans up.
- 3 : navigates to the next page.
- 🐠: pans left.
- 5 zooms in.
- 6 pans right.
- [7]: fits to the width of the page.
- 🐷: pans down.
- 19 rotates the screen.
- 🚁: opens a file.
- 🖭: zooms out.
- #1: allows you to go to the page you want to view.

Viewing History

The history view shows you previously visited documents as small thumbnail-images of the document, and the document's name, location, and the date of your visit.

To open the history view, select **Options** → **History**.

- To view information about a document, scroll to the document you want and press the Info soft key.
- To return to the most recently displayed document, select Options → Document.
- To return to any of the documents from the history view, select the thumbnail image of that page.
- To delete all of the documents in the history view, select Options → Clear all.

Note: Documents will remain on the History list until a certain number of days have passed. You can control this period in the **Preferences** option. See page 202.

Viewing Favourites

For your favourite documents, you can keep a list in the favourites view. This looks similar to the history view, but includes only those pages you have explicitly added. Before viewing favourites, you must first add the pages to your favourites. To open the favourites view, select $\mathbf{Options} \rightarrow \mathbf{Favourites}$.

To add the current page to your favourites, select
 Options → Add favourite. Enter the name you want
 and press the OK soft key.

- To return to the most recently displayed document, select Options → Document.
- To view information about a document, scroll to the document you want and press the Info soft key.
- To return to one of your favourites, select the thumbnail image of the page.
- To delete one of your favourites, scroll to the thumbnail image of the page and select Options → Delete favourite.

Changing Viewer settings

On the Viewer main screen, select **Options** → **Preferences**

You can use the following options:

- Start From: Select what is displayed in the document view when you first launch viewer. By default, when you first open the Viewer application, a blank page displays on the screen.
- **Keep History**: Set the period after which the thumbnail pictures and descriptions of pages are purged from the history memory.
- Rotate: Select the direction the screen will be rotated when the Rotate(9) option is used.

Internet

This chapter describes how to get access to the Internet and how to use the Internet applications.

Your phone has the following browser applications:

 Web - A browser in Wireless Application Protocol (WAP) format for accessing various types of information, entertainment, and other services provided by various WAP operators. WAP is suited to mobile devices with small screen displays and limited amounts of memory. WAP uses mainly text but does support pictures.

To connect to the Internet,

- · the wireless network you use must support data calls,
- the data service must be activated for your SIM card,
- you must have obtained an Internet access point from an Internet Service Provider (ISP), and
- you must have definded the proper web browser settings.

Note: Your phone is suited for access to the Internet by default, so that you can easily use the Internet Service. If the Internet browser doesn't work properly, you can download and update the browser settings from your service provider's website.

Your ISP can give you instructions on how to configure the browser settings. Follow the instructions carefully.

Web

Various service providers on the Internet maintain pages specifically designed for mobile phones, offering services such as news and weather reports, banking, travel information, entertainment, and games. With the web browser you can view these services as web pages written in WML, XHTML pages written in XHTML, or a mixture of both.

Press 🖭 to open the Menu, and then select **Web**.

Note: Check the availability of services, pricing, and tariffs with your network operator and/or service provider.

Service providers can also give you instructions on how to use their services.

Basic steps for accessing the browser service

- Save the settings that are needed to access the web service that you want to use. See page 205.
- Make a connection to the service. See page 206.
- Start browsing web pages. See page 208.
- End the connection to the service. See page 212.

Setting up the phone for the browser service

Receiving settings in a smart message

You may receive service settings in a special text message, a smart message, from the network operator or service provider that offers the service. See "Receiving smart messages" on page 124. For more information, contact your network operator or service provider.

Tip: Settings may also be available at the website of a network operator or service provider.

Entering settings manually

Follow the instructions given to you by your service provider.

- Go to Tools → Settings → Connection → Access points and define the settings for an access point. See "Connection settings" on page 236.
- Go to Web → Options → Bookmark manager → Add bookmark. Enter a name for the bookmark and the address of the browser page defined for the current access point.

Making a connection

Once you have stored all the required connection settings, you can access browser pages.

There are three different ways to access browser pages:

- · Select the homepage of your service provider,
- Select a bookmark from the Bookmarks view, or
- Press the keys (20) (90) to start to enter the address of a browser service. The Go to field at the bottom of the display is immediately activated and you can continue entering the address there. After you have entered the address, press the **Go to** soft key.

Connection security

If the security indicator displays during a connection, the data transmission between the phone and the browser gateway or server is encrypted.

Note: The security icon does not indicate that data transmission between the gateway and the content server (place where the requested resource is stored) is completely secure. It is up to the service provider to secure data transmission between the gateway and the content server.

Viewing bookmarks

A bookmark consists of an Internet address (mandatory), bookmark title, access point, and if the service requires, a user name and password.

Note: Your phone may have some pre-installed bookmarks for sites not affiliated with your phone. Your phone does not warrant or endorse these sites. If you choose to access them, you should take the same precautions, for security or content, as you would with any site.

To access the Bookmarks list while browsing, press and hold \bigcirc .

To return to the browser view again, select **Options** \rightarrow **Back to page**.

In **Bookmarks**, you can see bookmarks for different kinds of web pages.

Bookmark status is indicated by the following icons:

- The starting page defined for the access point. If you use another access point for browsing, the starting page is changed accordingly.
- The folder of automatic bookmarks. When you have activated the Automatic bookmarks option (see page 213), the web pages you have visited will be automatically bookmarked and the bookmarks will be saved in this folder.
- A folder you created.
- A default folder. You cannot delete folders of this type.
- 🇳 A bookmark.

When you scroll through bookmarks, you can see the address of the highlighted bookmark in the Go to field at the bottom of the display. On the right of a bookmark title, the data connection type indicator appears.

- 6 a packet data (GPRS) connection
- II GSM data connection

Adding bookmarks manually

- In the Bookmarks view, select Options → Bookmark manager → Add bookmark.
- Fill in the fields. Only the address must be defined.
 The default access point is assigned to the bookmark if none is selected. Press the ** key to enter special characters such as /, ., :, and @.
- 3. Select **Options** → **Save** to save the bookmark.

Sending bookmarks

You can send a bookmark via text message. For details, see page 33.

Browsing

On a web page, links appear underlined in blue. Images that act as links have a blue border around them.

Keys and commands used in browsing

- To open a link, press ().
- To scroll, use ().

- To enter letters and numbers in a field, press to
 Press to enter special characters, such as /,
 , :, and @. Press to clear characters.
- To go to the previous page while browsing, press the Back soft key. If the Back soft key is not available, select Options → Navigation options → History to view a chronological list of the pages you have visited during the current browsing session. The history list is cleared each time a session is closed.
- To check boxes and make selections, press ().
- To retrieve the latest content from the server, select
 Options → Navigation options → Reload.
- To change the display mode of the browser, select
 Options → Advanced options → Small screen. To return
 to the original status, select Options → Advanced
 options → Original screen.
- To open the Bookmarks screen and search for a bookmark, select Options → Bookmarks.
- To save a bookmark while browsing, select Options → Save as bookmark.
- To find a phone number, e-mail address, or URL address from web pages, select Options → Find.
- To view session and security details of the current browser page, select Options → Details.

Viewing new service messages while browsing

To download and view new service messages while browsing:

 Select Options → Advanced options → Read service msgs. (shown only if there are new messages). 2. Select the message you want to download and open.

For more information about service messages, see page 125.

Viewing saved pages

If you regularly browse pages containing information which doesn't change very often, for example a train timetable, you can save and then browse those pages when offline. If you have a memory card, you can save web pages to it, instead of to the phone's memory.

One a web page, select **Options** \rightarrow **Advanced options** \rightarrow **Save page** to save the page. Enter the page name and press \bigcirc .

The following icons are available on the Saved pages view:

- • A saved web page. In the Saved pages view you can also create folders in which to store your saved web pages.
- 🛅 A folder containing saved web pages.

To open the Saved pages view, push \bigcirc right in the Bookmarks view. In the Saved pages view, press \bigcirc to open a saved page.

If you want to start a connection to the web service and retrieve the page again, select **Options** → **Reload**.

Note: The phone stays online after you reload the page.

You can arrange the pages into folders by selecting Options → Saved Pages Mngr.

Downloading items

You can download items such as ringtones, images, operator logos, and video clips through the mobile browser. You may be charged for downlouding items.

Once downloaded, items are handled by the respective applications on your phone; for example, a downloaded picture will be saved in Images.

Note: Digital Rights Management (DRM) is a system for protecting the copyright of digital content that is distributed online. Copyright protections may prevent some images, ringtones, and other content from being copied, modified, transferred, or forwarded.

Downloading directly from the web page

To download an item directly from a web page:

- 1. Scroll to a link and select **Options** → **Open**.
- Choose the appropriate option to download the item, for example, Buy or Download.
- 3. Follow the onscreen instructions.

Using Wallet information for purchasing items

If the online content is compatible, you can use your wallet information to make the purchase:

- Select Open wallet. You will be prompted for your wallet code.
- 2. Enter the wallet code and press the **OK** soft key.

- Select the appropriate card category from your wallet
- 4. Select **Fill in**. This will upload the selected wallet information

If the wallet does not contain all information necessary for the purchase, you will be requested to enter the remaining details manually.

Ending a connection

To end a connection to the network:

- Select Options → Disconnect, or
- Select Option → Exit to quit browsing and to return to Standby mode.

Emptying the cache

The information or services you have accessed are stored in the cache memory of the phone.

A cache is a buffer memory that is used to store data temporarily.

If you have tried to access or have accessed confidential information requiring passwords (for example, your bank account), empty the cache of your phone after each use. To empty the cache, select **Options** \rightarrow **Navigation options** \rightarrow **Clear cache**.

Changing browser settings

In the Bookmarks view, select **Options** → **Settings**.

- Default access point If you want to change the default access point, press

 to open a list of available access points. The current default access point is selected. For more information, see "Connection settings" on page 236.
- Show images Choose if you want to view pictures when you are browsing. If you choose No, you can later load images during browsing by selecting Options → View images.
- Font size You can choose one of the five text sizes to be used on a web page: Largest, Large, Normal, Small, and Smallest.
- Default encoding To display text charcters correctly on a web page, select the appropriate language type.
- Automatic bookmarks You can turn on or off the automatic completion of address in the Bookmarks view. Once you have activated this option, when you enter an address, the list of the addresses containing the character(s) you entered, which are stored in the Auto. bookmarks folder, appears. You can quickly select the address you want.

To hide the **Auto. bookmarks** folder in the Bookmarks view, select **Hide folder**.

Screen size - You can select how to view web pages.
 To display the browser on the full screen, select Full screen.

- Rendering You can select how to browse the web page. Select:
 - **By speed** to download pages faster, but have with lower image quality.
 - By quality to get good image quality while browsing, but a slower page download speed.
- Cookies You can enable or disable the receiving and sending of cookies.
- Java/ECMA script You can enable or disable the supporting Java/ECMA script.
- Security warnings You can enable or disable viewing the security warnings you may get during browsing.
- Conf. DTMF sending The browser supports functions you can access while browsing. You can make a voice call while you are on a web page, send DTMF tones while a voice call is in progress, and save a name and phone number from a web page. Choose whether you want to confirm before the phone sends DTMF tones during a voice call.
- Wallet Select whether or not you use wallet data to fill in forms for online transactions or provide a service with your personal information.

chapter 10

Personalisation

You can customise your phone to suit your preferences and needs by using various tools, such as:

- Profile- sound settings for various environments
- · Theme- display theme settings
- · Go to- shortcuts for your favourite menus
- Mounut- fun character images to show the frequency of your phone use, among other things.

Profiles

In **Profiles**, you can adjust and customise the phone tones for different events, environments, or caller groups. There are 6 preset profiles: **General**, **Silent**, **Meeting**, **Outdoor**, **Pager**, and **Offline**, which you can customise to meet your needs.

You can see the currently selected profile at the top of the display in Standby mode. If the General profile is in use, only the current date is shown.

The tones can be default ringtones, tones received in a message or transferred to your phone via Bluetooth or from a computer connection, and then saved to your phone.

Press to open the Menu, and then select **Profiles**. A list of profiles opens.

Changing profiles

On the Profiles list, scroll to the profile you want and select $Options \rightarrow Activate$.

You can quickly change the profile, by pressing 9 on the right side of the phone. Scroll to the profile you want to activate and press the **OK** soft key.

Customising profiles

 To modify a profile, scroll to the profile on the Profiles list and select Options → Personalise.

A list of profile settings opens.

- Scroll to the setting you want to change and press
 to open the choices:
 - Ringing tone Choose a ringtone for voice calls from the list. If a memory card is used, tones stored on it have the icon next to the tone name.

Note: You can change ringtones in two places: Profiles or Contacts. See "Adding a ringtone for a contact card or group" on page 60.

- Ringing type Select the ringing type. When Ascending is selected, the ringing volume starts from level one and increases to the set volume level.
- Ringing volume Set the volume level for the ringtone and message alert tones.
- Message alert tone Choose the tone for messages.

- Chat alert tone Choose the tone for chat messages.
- Vibrating alert Set the phone to vibrate at incoming voice calls and messages.
- Keypad tones Set the volume level for keypad tones.
- Warning tones Set phone to sound a warning tone, for example, when the battery is running out of power.
- Alert for Set the phone to ring only upon calls from phone numbers that belong to a selected contact group. Phone calls coming from people outside the selected group have a silent alert. The choices are All calls or the list of contact groups, if you have created them. See "Creating contact groups" on page 64.
- **Profile name** Change a profile name. The General profile cannot be renamed.
- 3. When you are finished, press the Back soft key.

Creating a new profile

You can create a new profile by selecting **Options** → **Create new**. For further details about customising each option, see page 216.

Offline profile

The Offline profile lets you use the phone without connecting to the GSM wireless network to use the phone's applications.

Important:

In the Offline profile, you cannot make any calls, including emergency calls, or use other features that require network coverage.

To activate the Offline profile:

On the Profiles list, scroll to **Offline** and select **Options** → **Activate**.

The GSM is turned off and the signal strength indicator is disappeared. All GSM wireless phone signals to and from the device are disabled.

To leave the Offline profile, activate any other profile. When the confirmation message appears, press the **Yes** soft key. The phone re-enables GSM wireless transmissions (providing there is sufficient signal strength).

Theme

In **Themes**, you can change the look of your phone's display by activating a theme. A theme can include the idle screen wallpaper, colour palette, and background image in **Go to**. Edit a theme for more detailed personalisation.

Changing themes

To preview a theme, scroll to the theme and select **Options** → **Preview** to view the theme. Press the **Apply** soft key to activate the theme. You can activate the theme without previewing it by selecting **Options** → **Apply** from the Themes main view.

Editing themes

Group together elements from other themes, or images from **Gallery** to personalise themes further.

1. Scroll to a theme, select **Options** → **Edit**.

You can use the following options:

- Wallpaper Select an image from one of the available themes, or select your own image from Gallery, to use as a background image in Standby mode.
- Colour palette Change the colour palette used on all of the option list fields.
- Image in 'Go to' Select an image from one of the available themes, or select your own image from Gallery, to use as a background image in Go to.
- 2. Select the option you want to edit.

- 3. Change the current setting.
- 4. When you have finished, press the Back soft key.

Restoring themes

You can restore the currently selected theme to its original settings while editing. Select **Options** \rightarrow **Restore orig. theme**.

Downloading themes

You can download themes from the web browser. Select **Options** → **Theme downloads**. Then you can enter a URL address or a bookmark for the web site providing you with theme downloads.



Use **Go to** for storing shortcuts, links to your favourite photos, video clips, notes, sound files, browser bookmarks, and saved web pages.

Press (1) to open the Menu, and then select Go to.

You will see the following default shortcuts:

- 1 opens the day view in Calendar.
- description opens the Inbox in Messaging.
- A opens the Notes editor.

Adding shortcuts

Shortcuts can be added only from the individual application. Not all applications have this feature.

- Open the application and scroll to the item that you want to add as a shortcut to Go to.
- 2. Select Options → Add to 'Go to'.

Note: A shortcut in **Go to** is automatically updated if you move the item it is pointing to, for example, from one folder to another.

Using shortcuts

In Go to:

- To open a shortcut, select the icon. The item is opened in the corresponding application.
- To delete a shortcut, scroll to the shortcut you want to remove and select Options → Delete shortcut.
 Removing a shortcut does not affect the file it is referring to. You cannot delete the default shortcuts.
- To change the shortcut name, select Options → Edit shortcut name. Enter the new name. This change affects only the shortcut, not the file or item the shortcut refers to.
- To change the shortcut icon, select Options → Shortcut icon. Select an icon on the list. You cannot change the default shortcuts' icons.
- To change the order of shortcut items, select an item to move and select Options → Move. Select the position by pushing () and press the OK soft key.

- To change to the list view, select Options → List view.
- To return to the normal view, select Options → Grid view.

Mounut

Mounut is a system that shows a fun character expressing an emotion, depending on the frequency of your phone use, i.e., making and receiving calls and messages, adding contact cards or applications, or using the camera. You can also send the character along with your messages to enhance the message.

Press

to open the Menu, and then select Usefulness

→ Mounut.

Selecting a Mounut character

- On the Mounut main screen, select My Mounuts.
 The currently selected Mounut character displays.
- 2. Push \bigcirc left or right to scroll to one of the Mounut characters stored on your phone.
- 3. Press \bigcirc , or select **Options** \rightarrow **Giving life**.
- Once you have changed the Mounut character, a confirmation message displays to inform you that the emotion status will reset. Press the OK soft key to confirm.
- When you are finished, press the Back soft key to exit.

Viewing the emotional status of the Mounut character

- 1. On the Mounut main screen, select **My Mounuts**. You can view the selected Mounut character.
- 2. Select Options → Emotion status.

The display shows the value of the emotion status of your Mounut character with a bar graph. The value of the emotion status changes depending on the frequency of use of the phone. The emotion of the Mounut character is made up of Popularity, Sensibility, and Intelligence.

- Popularity: the value of the emotion status increases or decreases depending on the number of sent and received SMS/MMS messages, and incoming or outgoing calls.
- Sensibility: the value of the emotion status increases or decreases depending on the frequency in sending or receiving MMS/CBM messages, changing themes, taking pictures, and recording videos.
- Intelligence: the value of the emotion status increases or decreases depending on the frequency in adding, deleting, or editing contact cards, receiving SMS messages, sending MMS messages, and installing SIS files.
- 3. When you are finished, press the **Back** soft key to exit.

Each time the value of the emotion status is changed, the following events happen on your phone:

- Emotion: Your phone checks the value of the Mounut's emotion twice a day (11:00~13:00 and 17:00~19:00) and displays the emotion of the Mounut character. See page 223.
- Level changing: When the total number of the 3 bar graphs exceeds 30, the level of the Mounut character is raised from Level 1 to Level 2. In this case, an animated image showing the change of level appears, and the image of the Mounut character is upgraded. When the total number of the 3 bars drops below 30, the level of the Mounut character returns to the previous level status, Level 1.
- Ending: When it has been 100 days since you set up the Mounut character or the level of each bar graph is 20, an ending event happens on your phone. After the ending event, the Mounut character automatically is changed to another one.

Note: You can reset the emotion of the Mounut character. On the Status screen, select Options → Reset emotion. When the confirmation message appears, press the OK soft key. After resetting the emotion, the number of each bar is changed to 6.

Viewing the biorhythms of the Mounut character

- On the Mounut main screen, select My Mounuts. You can view the selected Mounut character.
- 2. Select Options → Biorhythm.

You can view the biorhythms of the Mounut character.

3. When you are finished, press the **Back** soft key to exit.

Changing Mounut settings

You can define or edit the general settings of your Mounut system.

- 1. On the Mounut main screen, select **Settings**.
- 2. Set the following options by pressing \bigcirc :
 - SMS action: When this option is selected, your phone informs you when an SMS message is delivered with your Mounut character. Also, by adding action emotions to your SMS message, you can control the Mounut character's behaviour on the recipient's phone.

The followings are corresponding emoticons and behaviour;

- Happy behaviour: :-), :), :-)), :))
- Sad behaviour: :<, :(, :C, :-((
- Angry behaviour: X-(, X(, :-L, :-@
- Tired behaviour: (:|, :S, :-&, :Z

If the received SMS message has specified behaviour emoticons, your Mounut character shows the proper behaviour corresponding with the emoticons.

- Help: When selected, your phone shows all help information in your phone with the Mounut character.
- Emotion: When selected, you can view emotion status of the Mounut character with animation and text, twice a day (11:00~13:00 and 17:00~19:00).
- Holiday event: When selected, your phone informs you of the defined holiday, such as May Day, New Year, and Christmas, with the Mounut character.
- When you are finished, press the Back soft key.Your settings are saved.

Presence

Presence (network service) provides you with enhanced communication services that you can share, for example, with your family, friends, and colleagues using compatible devices. You can share your current presence status with those who have access to the service and request the information. The requested information is shown on the subscribed contacts list in **Contacts**. You can control and personalise the information that you want to share with others, and control the list of persons who can view your presence status.

For the availability of the presence service, contact your network operator or service provider. You need to access the presence service before you can share your presence status with others. Other viewers need access to the presence service and a compatible phone to share your presence status.

Press 🖭 to open the Menu and select **Presence**.

Logging in to the Presence service

To log in to the Presence service, go to **Presence** and select **Options** → **Login**. Enter your user ID and password and press the **OK** soft key.

To disconnect from the service, select **Options** → **Logout**.

Viewing the presence of others

Go to Presence and select Public pres. → Options → Viewers → Public to view all of the persons who have subscribed to your presence information.

- To add a person to the Private viewers list, scroll to the one you want and select Options → Add to private list.
- To block allowing a person to view your presence information, scroll to the one you want and select Options → Block.

To view the list of the people who are allowed to view your personalised presence information, from the Presence main screen, select **Private pres.** → **Options** → **Viewers** → **Private**.

To view all of the people you have blocked from viewing your presence information, from the Presence main screen, select **Blocked pres.** → **Options** → **Viewers** → **Blocked**.

Changing your presence information

You can change your presence status, presence message, and logo to be displayed on the other private viewers' phones.

Go to Presence and select:

- Public pres. or Private pres. → Options → My availability to set your availability status to Available (indicated by), or to Busy (indicated by), or to Not available (indicated by).
- Private pres. → Options → Private message to set the text to be shown to others. Select Write message to enter a new message or select Previous messages to select one of the old messages as the status message.
- Private pres. → Options → My presence logo → On to personalise an image from the Images folder in Gallery. To select the default logo of the availability status, select Off.

Settings for Presence

Go to Presence and select Options→ Settings.

- Show presence to to select the groups with whom you want to share your presence status. Select Private & public, Private viewers, Public viewers, or No one.
- Sync. with Profiles to select whether you want to link your private message and availability setting to Profiles. Note that you cannot link a personalised status logo to a profile. See also "Profiles" on page 215.
- Server settings to change the server setting. Note that Presence shares the server with Chat. For details, see "Settings for chat" on page 153.

Settings

You can change various settings for your phone.

Changing the settings

Press \bigcirc to open the Menu, and then select **Tools** \rightarrow **Settings**.

- 1. Select a setting group you want to open.
- 2. Scroll to a setting you want to change and press () to
 - switch between options if there are only two (On/ Off).
 - open a list of options or an editor.
 - open a slider view. Then push left or right to increase or decrease the value.

Note: You may be able to receive some settings from your service provider in a text message. See "Receiving smart messages" on page 124.

Phone settings

Select **Tools** \rightarrow **Settings** \rightarrow **Phone** to change the general phone settings.

General

• Phone language: You can change the language for the display text of your phone. This change also affects the format used for the date and time and the separators used, for example, in calculations. There are three languages installed on your phone. If you select Automatic, the phone selects the language according to the information on your SIM card. After you have changed the phone language, you must restart the phone.

Note: Changing the settings for Phone language or Writing language affects every application in your phone and the change remains effective until you change these settings again.

- Writing language: You can change the writing language for writing on your phone. Changing the language affects:
 - the characters available when you press any key (() to ().
 - the predictive text dictionary used, and
 - the special characters that are available when you press * and ...

For example, you are using a phone where the phone language is in English but you want to enter all of your messages to French. After you change the language, the special characters or punctuation marks used in the French language are available when you press * and ...

• **Dictionary**: You can turn the Dictionary on or off for all of the editors in the phone. You can also change this setting when you are in an editor. Press Acc and select **Dictionary on**, or **Dictionary** → **Insert word** or **Off**.

Note: Dictionary is not available for all languages.

- Welcome note or logo: The welcome note or logo displays briefly each time you switch on the phone.
 Press to open the setting. Select Default if you want to use the default image or animation. Select Text to enter a welcome note (max, 50 letters). Select Image to select a photo or picture from Images in Gallery.
- Orig. phone settings: You can reset some of the settings to their original values. To do this, you need the lock code. See page 247. After resetting the settings, you must restart the phone. When a confirmation message appears, press the Yes soft key. Once you confirm, formatting starts.

Note: All documents and files that you have created are left as they are.

Standby mode

• Extend view: You can turn on the extended phone view. When it is on, Standby mode changes to the Extend view and the most recently-accessed applications display so that you can quickly access them. Also, message and scheduler information displays.

• Left selection key and Right selection key: You can change the shortcuts that appear over the left and right soft keys in Standby mode. In addition to an application, you can have the shortcut point to a function, for example, New message.

Note: You cannot create a shortcut to an application that you have installed.

 Left key, Up key, and Right key: You can change the shortcuts assigned to the left, right, and up directions.
 In Standby mode, you can access specific menu directly pushing \(\subseteq \text{left}, right or up. \)

Display

- Brightness: Use to change the brightness of the display by pushing \(\cap \) left or right.
- Backlight timeout: A backlight illuminates the display and the keypad. When you press key or open the phone, the backlight turns on and remains on for the backlight time-out period. You can select the length of time the backlight is on.
- Dimming timeout: After the backlight is off, your phone enters Dimming mode and then the display is turns off. Select the length of time the Dimming mode remains on.
- Service light:

 backlights to serve as a service light.
 It flashes at regular intervals when services are available on the phone. You can turn this service light feature On or Off.

Call settings

Select **Tools** \rightarrow **Settings** \rightarrow **Call** to change the call-related settings.

- Send my caller ID: This network service allows you to set your phone number to be displayed (Yes) or hidden (No) from the person whom you are calling. Or, the value may be set by your network operator or service provider when you make a subscription (Set by network).
- Call waiting: This network service allows the network to notify you of a new incoming call while you have a call in progress. Select Activate to request the network to activate call waiting, Cancel to request the network to deactivate call waiting, or Check status to check if the function is active or not.
- Automatic redial: When this setting is activated, your phone makes a maximum of 10 attempts to connect the call after an unsuccessful call attempt. Press for stop automatic redialling.

- Summary after call: Activate this setting if you want the phone to briefly display the duration of each call.
- Speed dialling: When this setting is activated, the numbers assigned to the speed dialling keys (200) to (200) can be dialled by pressing and holding the key. See also "Assigning speed dialling keys" on page 60.
- Connect tone: Select On, and you can hear a tone when your call is connected to the system.
- Call answering: Select the way answering an incoming call.
- Msg. alert during call: When this setting is activated, the phone alerts you to a new message during a call.
- Line in use (network service): This setting is shown only if the SIM card supports two subscriber numbers, that is two phone lines. Select which phone line (line 1 or line 2) you want to use for making calls and sending short messages. Calls on both lines can be answered, irrespective of the selected line.

Note: You will not be able to make calls if you select Line 2 and have not subscribed to this network service. To prevent line selection, select Line change → Disable if supported by your SIM card.

Connection settings

Select **Tools** \rightarrow **Settings** \rightarrow **Connection** to change the connection settings.

General information about data connections and access points

An access point is the point where your phone connects to the Internet by way of a data call or packet data connection. An access point can be provided, for example, by a commercial Internet service provider for mobile devices, or by a network operator.

To define the settings for access points, press \bigcirc to open the Menu, and then select Tools \rightarrow Settings \rightarrow Connection \rightarrow Access points.

A data connection is required to connect to an access point. Your phone supports the following data connections:

- GSM data call (
- Packet data (GPRS) connection ().

There are three different kinds of access points that you can define: MMS access point, browser access point, and Internet access point (IAP). Check with your service provider for what kind of an access point is needed for the service you wish to access. You need to set access point settings to:

- · send and receive multimedia messages,
- · send and receive e-mail,
- browse pages,

- download JavaTM applications,
- use image upload, or
- · use your phone as a modem.

Data calls

A data call enables data transmission rates to a maximum of 9.6 Kbps. For availability and subscription to data services, contact your network operator or service provider.

Minimum settings needed to make a data call

To insert a set of basic data call settings, press \square to open the Menu, and then select Tools \rightarrow Settings \rightarrow Connection \rightarrow Access points \rightarrow Options \rightarrow New access point \rightarrow Use default settings \rightarrow Data bearer \rightarrow Data call.

See "Creating an access point" on page 238 for further information.

Packet data (general packet radio service, GPRS)

Packet data, or General Packet Radio Service (GPRS), uses packet data technology where information is sent in short bursts of data over the mobile network. The benefit of sending data in packets is that the network is occupied only when sending or receiving data. Because GPRS uses the network efficiently, it allows for quick data connection set up and fast data transmission speeds.

Minimum settings needed to make a packet data connection

You need to subscribe to the GPRS service. For availability and subscription to GPRS, contact your network operator or service provider.

Press to open the Menu, and then select Tools → Settings → Connection → Access points → Options → New access point → Use default settings → Data bearer → GPRS.

See "Creating an access point" on page 238 for further information.

Pricing for packet data and applications

Both the active GPRS connection and the applications used over GPRS require fees, for example, using services, sending and receiving data, and text messages. For more detailed information on fees, contact your network operator or service provider.

Access points

 $Select \ \textbf{Tools} \rightarrow \textbf{Settings} \rightarrow \textbf{Connection} \rightarrow \textbf{Access points}.$

Creating an access point

You may have preset access point settings in your mobile phone. Or, you may receive access point settings in a smart message from a service provider. See "Receiving smart messages" on page 124.

If there are no access points defined when you open **Access points**, you are asked if you want to create one.

If there already are access points defined, to create a new access point, select **Options** → **New access point** and select:

- Use default settings to use the default settings. Make the needed changes and press the Back soft key to save the settings.
- Use existing settings to use existing setting information as the basis for the new access point settings. A list of existing access points is opened. Select one. Access point settings are opened with some fields already filled.

Fill in the following fields:

Notes:

- Begin filling in the settings from the top because depending on what data connection you select (Bearer type), only certain setting fields are available.
- Follow the instructions given to you by your service provider very carefully.
- Connection name: Enter a descriptive name for the connection.
- Data bearer: The options are GPRS and Data call.

 Depending on what data connection you select, only certain setting fields are available. Fill in all fields marked with Must be defined or with a red asterisk.

 Other fields can be left empty, unless you have been instructed otherwise by your service provider.

Note: To be able to use a data connection, the network service provider must support this feature, and if necessary, activate it for your SIM card.

Tip! Also see "Settings for multimedia messages" on page 138, and "Settings for e-mails" on page 140.

- Access point name (for GPRS only): The access point name is needed to establish a connection to the GPRS network. You obtain the access point name from your network operator or service provider.
- Dial-up number (for Data call only): The modem telephone number of the access point is needed.
- User name: Enter a user name if required by the service provider. The user name may be needed to make a data connection, and is usually provided by the service provider. The user name is often casesensitive.
- Prompt password: If you must enter a new password every time you log on to a server, or if you do not want to save your password to the phone, choose Yes.
- Password: A password may be needed to make a data connection, and is usually provided by the service provider. The password is often case-sensitive. When you are entering the password, the characters you enter are shown briefly and then changed to asterisks (*).
- Authentication: Choose Normal or Secure.
- Homepage: Depending on what you are setting up, enter either:
 - the service address, or
 - the address of the multimedia messaging centre.

- Data call type (for Data call only): Analogue, ISDN v.110, or ISDN v.120 define whether the phone uses an analogue or digital connection. This setting depends on both your GSM network operator and Internet Service Provider (ISP), because some GSM networks do not support certain types of ISDN connections. For details, contact your ISP. If ISDN connections are available, they establish connections more quickly than analogue methods.
- Maximum data speed (for Data call only): The options are Automatic, 9600, and 14400, depending on what you have chosen in Data call type.

Note: The speeds above represent the maximum speed at which your connection can operate. During any given connection, the operating speed may be less, depending on network conditions.

If you select **Options** \rightarrow **Advanced settings**, you can set the following options:

- Phone IP address: Enter the IP address of your phone.
- Primary name server: Enter the IP address of the primary DNS server.
- **Second. name server**: Enter the IP address of the secondary DNS server.
- Proxy serv. address: Enter the IP address of the proxy server.
- Proxy port number: Enter the port number of the proxy server.

Note: If you need to change the settings above, contact your Internet service provider to obtain these parameters.

DNS (Domain Name System) is an Internet service that translates domain names, such as www.samsung.com, into IP addresses, like 211.45.27.231.

The following settings are shown if you have selected **Data call** as the connection type:

 Use callback: This option allows a server to call you back once you have made the initial call, so that you have a connection without paying for the call. Contact your service provider to subscribe to this service.

Notes:

- Charges may apply for certain types of received calls, such as roaming calls. Contact your GSM network operator for more information.
- The phone expects the callback call to use the same data call settings that were used in the callback - request call. The network must support that type of call in both directions, to and from the phone.
- Callback type: Choose Use server no. or Use other no.
 Ask your service provider for the correct setting to use. This depends on the service provider's configuration.
- Callback number: Enter your phone's data phone number for the dial back server to use. Usually, this number is the data call phone number of your phone.
- Use PPP compression: PPP (Point-to-Point Protocol) is a common networking software protocol that enables any computer with a modem and a phone line to connect directly to the Internet.
 When set to Yes, this option speeds up the data transfer, if supported by the remote PPP server. If you have problems with establishing a connection, try setting this to No. Contact your service provider for quidance.

- Use login script: Choose Yes or No to use the login script.
- Login script: Insert the login script.
- Modem initialisation (Modem initialisation string): This controls your phone using modem AT commands. If required, enter characters specified by your GSM network service provider or Internet service provider.

Editing an access point

When you open Access points, the list of already available access points opens. Select the access point you want to edit.

Deleting an access point

On the list of access points, scroll to the access point you want to remove and select **Options** → **Delete**.

GPRS

The packet data settings affect all access points using a packet data connection.

Select Tools → Settings → Connection → GPRS.

GPRS connection: If you select **When available** and you are in a network that supports packet data, the phone registers to the GPRS network and sending text messages is done via GPRS. Also, starting an active packet data connection, for example, to send and receive e-mail, is quicker.

If you select **When needed**, the phone uses a packet data connection only if you start an application or action that needs it. The GPRS connection is closed once it is not used by any application.

Note: If there is no GPRS coverage and you have chosen **When available**, the phone periodically tries to establish a packet data connection.

Access point: The access point name is needed when you want to use your phone as a packet data modem for your computer. For more information on modem connections, see the User's Guide for the Internet Access programme included on the supplied Software CD-ROM.

Data call

The data call settings affect all access points using a data call

Select Tools → Settings → Connection → Data call.

 Online time: If there are no actions, the data call is dropped automatically after a time-out period. The options are User defined, in which case you enter a time, or Unlimited.

Configurations

You may receive configuration parameters for network settings by message from your service provider so that you can apply the parameters simply by opening the message. A configuration message can contain the settings for the web browser, chat, multimedia messages, and streaming video services. In this menu, you can access configuration messages you have received.

Select Tools → Settings → Connection → Configurations.

Select the configuration message you want to open. To apply the configuration to the corresponding menu, select **Options** \rightarrow **Save**.

Note: For opening some messages, you may need to enter the PIN code

Date and time settings

The date and time settings allow you to define the date and time used on your phone, as well as change the date and time format and separators.

Select Tools → Settings → Date and time.

In addition, the following options are available:

- Clock type: Choose Analogue or Digital to change the clock shown in Standby mode.
- Autopower: When this option is On, set alarms ring at the specified time, even if the phone is switched off.
- Auto time update: Choose if you want the mobile phone network to update time, date, and time zone information to your phone (network service).

Note: For the **Auto time update** setting to take effect, the phone needs to be restarted.

• Daylight-saving: Turn on or off Daylight Savings Time.

Security settings

Select Tools → Settings → Security.

Phone and SIM

Explanations for the different security codes that may be needed:

 PIN code (4 to 8 digits): The PIN (Personal Identification Number) code protects your SIM card against unauthorised use. The PIN code is usually supplied with the SIM card.

After 3 consecutive incorrect PIN code entries, the PIN code is blocked. If the PIN code is blocked, you need to unblock the PIN code before you can use the SIM card again. See the information about the PUK (PIN Unblocking Key) code.

- PIN2 code (4 to 8 digits): The PIN2 code, supplied with some SIM cards, is required to access some functions, such as call cost counters.
- Lock code (4 to 8 digits): The security code can be used to lock the phone and keypad to avoid unauthorised use.

Note: The factory setting for the lock code is **00000000**. To avoid unauthorised use of your phone, change the lock code. Keep the new code secret and in a safe place separate from your phone.

PUK and PUK2 codes (8 digits): The PUK (PIN Unblocking Key) code is required to change a blocked PIN code. The PUK2 code is required to change a blocked PIN2 code. If the codes are not supplied with the SIM card, contact the operator whose SIM card is in your phone for the codes.

You can change the following codes in the **Phone and SIM** menu: lock code, PIN code, and PIN2 code. These codes can only include numbers from **0** to **9**.

Note: Avoid using access codes similar to emergency numbers, such as 112, to prevent accidental dialling of the emergency number.

- PIN code request: When the PIN code request is active, the code is requested each time the phone is switched on. Note that deactivating the PIN code request may not be allowed by some SIM cards.
- PIN code/PIN2 code/Lock code: Open these settings if you want to change the codes.
- Autolock period: You can set an autolock period, a time-out after which the phone is automatically locked and can be used only if the correct lock code is entered. Select User defined to enter a number for the time-out in minutes or None to turn off the autolock period.

Notes:

- When the phone is locked, you may be able to call the emergency number programmed into your phone (e.g., 112 or other official emergency numbers).
- To lock the phone manually, press . From the list of commands, select **Lock phone**.

To unlock the phone, in Standby mode, press the **Unlock** soft key, enter the lock code, and press the **OK** soft key.

- Lock if SIM changed: Select Yes if you want the phone to ask for the lock code when an unknown, new SIM card is inserted into your phone. The phone maintains a list of SIM cards that are recognised as the owner's cards.
- Fixed dialling: You can restrict your outgoing calls to a limited set of phone numbers, if supported by your SIM card. You need the PIN2 code for this function. When this function is active, you can only call those phone numbers that are included on the fixed dialling list or which begin with the same digit(s) as a phone number on the list.

To activate the Fixed dialling feature, select **Options** → **Activ. fixed dialling**.

To add new numbers to the Fixed dialling contacts list, select **Options** → **New contact** or **Add from Contacts**.

Note: When Fixed dialling is activated, calls may be possible to certain emergency numbers in some networks (e.g., 112 or other official emergency numbers).

Closed user group (network service): You can specify
a group of people whom you can call and who can call
you. For more information, contact your network
operator or service provider. Select Default to activate
the default group agreed on with the network
operator, On if you want to use another group (you
need to know the group index number), or Off.

Note: When calls are limited to Closed user groups, calls may be possible to certain emergency numbers in some networks (e.g., 112 or other official emergency numbers).

 Confirm SIM services (network service): This allows you to set the phone to display confirmation messages when you are using a SIM card service.

Certificate management

In the Certificate management main view, you can see a list of authority certificates that have been stored in your phone. Push \bigcirc right to see a list of personal certificates, if available.

Authority certificates are used by some services, such as banking services, for checking signature or server certificates or other authority certificates.

Digital certificates are used to verify the origin of browser pages and installed software. However, they can only be trusted if the origin of the certificate is known to be authentic.

User certificates are issued to users by a Certifying Authority.

Digital certificates are needed if you:

- want to connect to an online bank or another site or remote server for actions that involve transferring confidential information, or
- want to minimise the risk of viruses or other malicious software, and be sure of the authenticity of software when downloading and installing software.

Important: Note, however, that even if the use of certificates makes the risks involved in remote connections and software installation considerably smaller, they must be used correctly in order for you to benefit from increased security. The existence of a certificate does not offer any protection by itself; the certificate manager must contain correct, authentic, or trusted certificates for increased security to be available.

Viewing certificate details - checking authenticity

You can only be sure of the correct identity of a browser gateway or a server when the signature and the period of validity of a browser gateway or server certificate have been checked.

You will be notified on the phone's display:

- if the identity of the browser server or gateway is not authentic or
- if you do not have the correct security certificate in your phone.

To check certificate details, scroll to a certificate and select **Options** → **Certificate details**. When you open certificate details, Certificate management checks the validity of the certificate and one of the following notes may appear:

- Certificate not trusted You have not set an application to use the certificate. For more information, see the next section "Changing the trust settings of an authority certificate."
- Expired certificate The period of validity has ended for the selected certificate.

- Certificate not valid yet The period of validity has not begun for the selected certificate.
- Certificate corrupted The certificate cannot be used.
 Contact the certificate issuer.

Important: Certificates have a restricted lifetime. If Expired certificate or Certificate not valid yet is shown even though the certificate should be valid, check that the current date and time in your phone are correct.

Changing the trust settings of an authority certificate

Scroll to an authority certificate and select $Options \rightarrow Trust settings$. Depending on the certificate, a list of the applications that can use the selected certificate is shown.

For example:

- Symbian installation/Yes the certificate is able to certify installation of native applications running on Symbian OS, which have an SIS extension.
- Internet/Yes the certificate is able to certify Internet servers.
- App. installation/Yes the certificate is able to certify installation of any other add-on applications.

Important: Before changing these settings, you must make sure that you really trust the owner of the certificate and that the certificate really belongs to the listed owner.

Call diverting settings

Call diverting is a network service that allows you to direct your incoming calls to another number, for example, to your voice mailbox number. For details, contact your service provider.

- 1. Select Tools → Settings → Call divert.
- 2. Scroll to one of the following diverting options.
 - All voice calls all calls are diverted.
 - If busy calls are diverted when you are already on another call.
 - If not answered calls are diverted when you do not answer the phone.
 - If out of reach calls are diverted when your phone is out of a service area.
 - If not available calls are diverted when your phone is turned off, you are already on another call, you do not answer the phone, or your phone is out of a service area.
 - All fax calls all fax calls are diverted.
 - All data calls all data calls are diverted.
- Select Options → Activate to activate the divert setting. Or, select Cancel to deactivate the divert setting or Cancel all diverts to cancel all active divert settings.

To check whether or not diverting is activated, select **Check status**.

- If you select Active, select where you want to divert your calls to; your voice mailbox or to another number.
- 5. Enter your voice mailbox number or the phone number you want and press the **OK** soft key. The phone sends your setting to the network.

Call barring settings

Call barring is a network service that allows you to restrict the making and receiving of calls with your phone. For this function, you need the barring password, which you can obtain from your service provider.

- 1. Select Tools → Settings → Call barring.
- 2. Scroll to one of the following barring options.
 - Outgoing calls calls cannot be made.
 - International calls international calls cannot be made.
 - International calls except to home ctry. When abroad, calls can be made only to numbers within the current country and to your home country, which is the country where your home network provider is located.
 - Incoming calls calls cannot be received.
 - Incoming calls when abroad calls cannot be received when you are using your phone outside of your home country.

- Select Options → Activate to request the network to activate call barring, Cancel to deactivate the selected call barring, or Check status to check if calls are barred or not.
 - Select Options → Edit barrings passw. to change the barring password.
 - Select Options → Cancel all barrings to cancel all active call barrings.
- 4. Enter the barring password and press the **OK** soft key.

The phone sends your setting to the network.

Notes:

- When calls are barred, calls may be possible to certain emergency numbers in some networks (e.g., 112 or other official emergency numbers).
- Call barring affects all calls, including data calls.
- You cannot have barring of incoming calls and Call diverting or Fixed dialling active at the same time.

Network settings

Select Tools → Settings → Network.

- Operator selection: Choose Automatic to set the phone to automatically search for and select one of the cellular networks available in your area, or choose Manual, if you want to select the desired network manually from a list of networks. When the connection to a manually selected network is lost, the phone sounds an error tone and asks you to select a network again. The selected network must have a roaming agreement with your home network, that is, the operator whose SIM card is in your phone.
- **Tip**: A roaming agreement is an agreement between two or more network service providers to enable the users of one service provider to use the services of other service providers.
- Cell info display: Select On to set the phone to indicate when it is used in a cellular network based on Micro Cellular Network (MCN) technology and to activate the reception of cell information.
- Band selection: You can use your phone in any of the following networks: GSM 900/GSM 1800, and GSM 1900.

To use a network dependant feature, or when you travel abroad, you may need to change the band.

Enhancement settings

You can change the headset or hands-free settings.

Select Tools → Settings → Enhancement → Headset or Handsfree.

Then select:

- **Default profile** to select the profile you want to be activated each time when you connect the headset to your phone or your phone is used as the handsfree. See "Profiles" on page 215.
- Automatic answer to set the phone to answer an incoming call automatically after five seconds when you connect the headset to your phone or your phone is used as the hands-free.

chapter 12

Managers

This chapter gives you information about using manager applications to allow you to manage multimedia files, add-on applications, and your device.

File manager

In **File manager**, you can browse, open, and manage files and folders in the phone's memory or on the memory card, if you use one.

Open **File manager** to see a list of the folders in the phone memory. Push \bigcirc right to see the folders on the memory card, if you use one.

You can browse, open, and create folders, mark, copy, and move items to folders. See "Actions common to all applications" on page 32.

Receiving files via a Bluetooth connection

Files are automatically received at the root level of the folder structure. Move or copy them to other folders.

Select **Options** \rightarrow **Send** \rightarrow **Via Bluetooth**. See "Sending data via Bluetooth" on page 268.

Viewing memory consumption

If you have a memory card installed on your phone, you will have a choice of two memory views, one for the phone memory and one for the memory card.

- Push O left or right to move from one memory tab to another.
- 2. To check memory consumption for the current memory, select **Options** → **Memory details**.

The phone calculates the approximate amount of memory currently in use and memory for storing data and installing new applications.

In the memory views, you can view the memory consumption of the different data groups: Calendar, Contacts, Documents, Messages, Images, Sound files, Video clips, Applications, Mem. in use, and Free memory.

Note: If the phone's memory capacity is getting low, remove some files, or move them to the memory card, if you use one, or to your PC by using PC Suite.

Application manager

In Manager, you can install new Symbian operating system applications (SIS files) and $Java^{TM}$ applications. You can also update and uninstall applications from the phone, and monitor installation history.

Press \square to open the **Menu**, and then select **Tools** \rightarrow **Manager**.

When you open Manager, you can see a list of:

- installation packages that have been saved to the phone's memory (indicated by),
- · partially installed applications, and
- fully installed applications that you can remove.

Notes:

- You can only use Symbian operating system applications with an SIS extension.
- Your phone supports J2ME[™] Java applications. Do not download PersonalJava[™] applications to your phone as they cannot be installed.

General information for installing applications

You can install applications that are specifically intended for this phone and suitable for the Symbian operating system.

Note: If you install an application that is not intended specifically for this phone, it may function and look different from what was originally intended.

Applications may be downloaded to your phone during browsing, received as attachments in multimedia messages or e-mails, or received via Bluetooth from another compatible device, for example a phone or a PC. If you are using PC Suite to transfer an application, place it in the Installed files folder in File manager.

Important: Only install software from sources that offer adequate protection against viruses and other harmful software.

To increase protection, the application installation system uses digital signatures and certificates for applications. Do not install the application if Application manager gives a security warning during installation.

Important: If you install an application that contains an update or repair to an existing application, you can only restore the original application if you have the original application or a full back-up copy of the removed application. To restore the original application, first remove the updated or repaired application and then install again from the original application or the back-up copy.

During installation, the phone checks the integrity of the application to be installed. The phone shows information about the checks being carried out and you are given options whether to continue or cancel the installation. Once the phone has checked the integrity of the application, it is installed on your phone.

Installing applications

Open Manager, scroll to an application installation package, and select Options → Install to start the installation.

Alternatively, search the phone's memory or the memory card, select an application. The installation starts.

Some applications may give the option of partial installation, allowing you to select the particular components of the application that you want to install. If you are installing an application without a digital signature or a certificate, the phone warns you of the risks. Continue the installation only if you are absolutely sure of the origin and contents of the application.

Installing Java™ applications

The .JAD/JAR file is required for installation. If you have .JAD/JAR files, you can directly install by selecting .JAD/JAR files in the File manager or Application manager. If it has been removed from the phone, you can download files from push messages or web page of various contents supplier, manufacture, and operator. If there is no access point defined for Application manager, you will be asked to select one. When you are downloading the .JAR file, you may need to enter a user name and password to access the server. You obtain these from the supplier or manufacturer of the application.

Java settings

To change the security settings that determine the actions that a Java application is permitted to do, select **Options** \rightarrow **Settings**.

Note: Not all Java applications permit you to change the security settings.

Removing applications

- 1. Scroll to an application and select **Options** → **Remove**.
- 2. Press the Yes soft key.

If you remove an application, you can re-install it only when you have the original application or a full backup of the removed application.

Once you have removed an application, you may no longer be able to open documents created with that application. If another application depends on the application that you removed, the other application may stop working. Refer to the documentation of the installed application for details.

Note: To send your installation log to a help desk so that they can see what has been installed or removed, select

Options → Send log → Via text message or Via email (available only if the correct e-mail settings are in place).

Device manager

Device manager allows a third party, such as your service provider, to assist you directly with phone settings. To allow device management, your phone must establish a connection and synchronise with the third party's server. You can start a configuration session from your phone, and you can accept or reject server-initiated synchronisation attempts.

This feature is operator dependent and may not be available on all phones. Contact your service provider for information and availability.

Press \square to open the Menu and select **Tools** \rightarrow **Dev. mgr.**

Creating a new profile

A device manager profile must be defined before you are connected to a server. The third party who is assisting you can help define the profile settings.

When you open **Device manager**, you are asked if you want to create a new server profile. Press the **Yes** soft key. You can set up the following options:

- Server name: Device manager server name.
- Server ID: Remote device manager server ID.
- Server password: Password used in server alerts.
 Enter the password that must be provided by the
 device manager server when synchronising with your
 phone.
- Access point (For web only): Internet access point your phone uses to establish the server connection.
 Choose from the list of access points defined in your phone.
- Host address: Device management server URL.
- Port (For web only): Device management server port.
- User name: Your user name for this profile.
- Password: Your password for this profile.
- Allow configuration: Device management allowed on this server, select Yes or No.

 Auto-accept all reqs.: Automatic or approved device management on this server. Select Yes to allow synchronisation without your verification, or select No to verify each synchronisation attempt.

To add a new profile, from the Device manager main screen, select **Options** \rightarrow **New server profile**.

Starting a configuration

To start a configuration session, select **Options** \rightarrow **Start configuration**. To disable or enable configurations from the server, select **Options** \rightarrow **Disable/Enable config.**

Connectivity

You can transfer data from your phone to a compatible device, for example, a phone or computer, via Bluetooth or a PC data link cable.

Bluetooth connections

Bluetooth is a short-range wireless communications technology. Devices with Bluetooth capabilities can exchange data over a distance of about 10 meters (30 feet) without requiring a physical connection.

Using Bluetooth, you can send or receive data, such as business cards and calendar notes, to and from devices.

Notes:

- Some devices may not be compatible with your phone.
- If there are obstacles between the devices, the maximum operating distance may be reduced.

Setting up the Bluetooth feature

To use a Bluetooth connection, press ☑ to open the Menu, and then select **Connect.**→ **Bluetooth**. Each time you access this feature, you are asked to give a name to your phone. If necessary, enter a new name.

You can set various Bluetooth function. The following options are available:

• Bluetooth: Activate or deactivate the Bluetooth feature. When this option is set to On, the Bluetooth icon 3 appears in Standby mode.

- My phone's visibility: Select Shown to all to allow other Bluetooth devices to search for your phone, or select Hidden to set your phone to be hidden from other Bluetooth devices.
- My phone's name: Change your phone's Bluetooth device name, which is displayed on other devices.
 The name can be up to 30 characters.

After you have set Bluetooth as active and changed My phone's visibility to Shown to all, your phone and this name can be seen by other Bluetooth device users.

Searching for and pairing with a Bluetooth device

- 1. On the Bluetooth screen, push \bigcirc right to move to the Paired devices screen.
- Select Options → New paired device to search for a new device.

If you have searched for devices before, the phone displays the **More devices** option above the devices you have searched for previously. To search for new devices, select the **More devices** option.

If you want to stop searching, press the **Stop** soft key.

3. Select a device with which to connect.

After searching for connectable devices, a list of devices you can connect to displays. The icon on the left of the device tells you the kind of device:

• 😈 : for a mobile phone

• 🚛 : for an unknown device

- 1 for a computer
- 📳: for a headset, hands-free car kit
- Enter a Bluetooth PIN and press the OK soft key. This
 code is used just once and you don't need to
 memorise it.

When the owner of the other device enters the same code, pairing is complete.

Note: Pairing means authentication. The users of Bluetooth-enabled devices must agree on the Bluetooth PIN, and use the same code for both devices in order to pair them. Some devices, especially headsets or hands-free car kits, may have a fixed Bluetooth PIN, such as 0000. If the other device has one, you must enter the code.

When the pairing is complete, you are asked to set the device to be authorised. Press the Yes soft key to confirm, or the No soft key.

Using device options

When you press the **Options** soft key on the Paired devices screen, you can access the following options from the device list:

- New paired device: to search for any devices you want to pair with.
- Connect/Disconnect: to connect the headset or handsfree car kit to your phone, or end the connection.
- Assign short name: to assign a short name to a device.

- Set as authorised/Set as unauthorised: to set whether
 or not the phone asks you to permit connection when
 specific devices try to connect to your phone. If you
 set a device as authorised, the icon is added next
 the device on the Paired devices list.
 - Delete: to delete the device.
 - Delete all: to delete all of the devices.
 - Help: shows help information on the Bluetooth feature
 - Exit: exits the current screen.

Receiving data via Bluetooth

Before receiving data, make sure that your phone's Bluetooth feature is active. When you receive data via Bluetooth, a tone is played and you are asked if you want to accept the data. If you accept, the item is placed in the Inbox folder in Messaging. Messages received via Bluetooth are indicated by or depending on the message type. See page 121.

Sending data via Bluetooth

- Make sure that the Bluetooth feature is active.
- Locate the item you want to send in an application, such as Calendar, Contacts, Camera, Camcorder, or File Manager.
- 3. Scroll to the item.

4. Select Options → Send → Via Bluetooth.

If the device to which you want to send does not appear on the list, search for and pair with the device by proceeding from step 2 on page 266.

The phone searches for devices within range and displays a list of available devices. Paired devices are shown with \P .

- Select the device from the list.
- If necessary, enter your PIN and press the **Done** soft key.

The item is sent to the device you selected.

The **Drafts** folder in **Messaging** does not store data sent via Bluetooth.

PC Suite

For further information on how to make a connection to a compatible computer via the Bluetooth device or using a PC data link cable, and how to install the PC Suite for the Samsung SGH-D720, see the PC Suite Install Remove Manual on the CD-ROM. You can find it in the "Software for PC" section. For further information on how to use the PC Suite for the Samsung SGH-D720, see the PC Suite online help.

Installing PC Suite

 Insert the PC Link CD into the CD-ROM drive of your compatible computer.

The CD-ROM should launch itself. If not, proceed as follows:

- a. Click the Start button on the Windows and select Programs → Windows Explorer.
- b. On the CD-ROM drive, locate a file named **Setup** and double-click it. The CD-ROM interface opens.
- Double-click PC Suite for Samsung SGH-D720 in the "Software for PC" section.
- Follow the instructions on the installation wizard screen.

The wizard will guide you through the installation process.

Remote synchronisation

The **Sync** application enables you to synchronise your calendar, notes, or contacts with various calendar and address book applications with other devices via Bluetooth, or on the Internet. Synchronisation takes place over a GSM data call or packet data connection.

Sync uses SyncML technology for synchronisation. For information on SyncML compatibility, please contact the supplier of the calendar, notes, or address book application with which you want to synchronise your phone data.

To open the **Sync** application, press \square and select **Connect.** \rightarrow **Sync**.

Creating a new synchronisation profile

1. If no profiles have been defined, the phone asks you if you want to create a new profile. Select **Yes**.

To create a new profile in addition to existing ones, select **Options** → **New sync profile**. Choose whether you want to use the default setting values or copy the values from an existing profile to be used as the basis for the new profile.

- 2. Define the following:
 - Sync profile name Enter a name for the profile.
 - Data bearer Select the method to synchronise.
 Select Web to synchronise with a server on the Internet. Select Bluetooth to synchronise with a Bluetooth device.
 - Access point (for Web only) Select the access point you want to use for the data connection.
 - Host address Enter the URL address of the server on the Internet. Contact your service provider or system administrator for the correct values.
 - Port (for Web only) Enter the port number of the server. Contact your service provider or system administrator for the correct values.
 - User name Enter your user ID for the synchronisation server. Contact your service provider or system administrator for your correct ID.

- Password Enter your password. Contact your service provider or system administrator for the correct password.
- Allow sync requests You can set whether or not you accept synchronisation request received from this server.
- Accept all sync reqs. You can set whether or not your phone ask for your confirmation before accepting synchronisation from this server.
- 3. Push O right and define which applications will be synchronised, **Contacts**, **Calendar**, and/or **Notes**.
- 4. Press the **Back** soft key twice to save the settings.

Synchronising data

In the Sync main view, you can see the different profiles, and what kind of data will be synchronised: Calendar, Contacts, Notes, or all.

To synchronise data with a server:

In the Sync main view, scroll to a profile and select
 Options → Synchronise. The status of the
 synchronisation is shown at the bottom of the screen.

To cancel synchronisation before it has finished, press the **Cancel** soft key.

2. You are notified when the synchronisation has been completed.

After synchronisation is complete, select **Options** → **View log** to open a log file showing the synchronisation status

(Complete or Incomplete) and how many calendar, notes, or contact entries have been added, updated, deleted, or discarded (if not synchronised) in the phone or on the server.

To synchronise data via Bluetooth:

- In the Sync main view, scroll to a profile and select Options → Synchronise.
- The phone searches for devices within range and displays a list of available devices. Paired devices are shown with

If you have searched for devices before, the phone displays the **More devices** option above the devices you have searched for previously. To search for new devices, select the **More devices** option.

If you want to stop searching, press the ${\bf Stop}$ soft key.

3. Select a device with which you want to synchronise. The status of the synchronisation is shown at the bottom of the screen.

To cancel synchronisation before it has finished, press the **Cancel** soft key.

Connection manager

In **Connection manager**, you can identify the status of multiple data connections, view details on the amount of data sent and received, and end unused connections.

Press
 to open the Menu, and then select Connect. → Conn. mgr..

Note: You can view details of data connections only. Voice calls are not listed.

When you open **Connection manager**, you will see a list of:

- open data connections, **D** Data call, **G** GPRS
- · the status of each connection, or
- the amount of data uploaded and downloaded for each connection, or
- the duration of each connection (Data call connections only).

Note: The actual time invoiced for calls by your service provider may vary, depending upon network features, rounding-off for billing, and so forth.

Viewing connection details

To view the details of a connection, scroll to a connection and select **Options** \rightarrow **Details**.

The following is displayed:

- Name the name of the Internet Access Point (IAP) in use, or Modem connection if the connection is a dialup connection.
- Bearer the type of data connection; Data call or GPRS.
- Status the current status of the connection.
- Received the amount of data, in bytes, received by the phone.
- Sent the amount of data, in bytes, sent from the phone.
- **Duration** the length of time that the connection has been open.
- Speed the current speed of both sending and receiving data in kB/s (kilobytes per second).
- Dial-up (Data call) the dial-up number used, or Name (GPRS) - the access point name used.
- Shared (not displayed if the connection is not shared)the number of applications using the same connection.

Ending connections

Scroll to a connection and select **Options** → **Disconnect** to end that connection only. Press the **Yes** soft key to confirm.

Appendix A: Troubleshooting

General problems

"Insert SIM card" displays

• Check that the SIM card has been correctly installed.

"No network coverage," "Unable to connect. No network coverage." or "Message sending failed" displays

- The network connection has been lost. You may be in a weak signal area (in a tunnel or surrounded by buildings). Move and try again.
- You are trying to access an option for which you have not taken out a subscription with your service provider. Contact the service provider for further details.

The bars above ∓ disappear

- If you have just turned on your phone, wait about 2 minutes, until your phone finds the network and receives a signal from the network.
- If you are in a tunnel or in an elevator, the phone may not be able to receive the network signal properly.
 Move to an open place.
- This may appear when you move between different service areas. It is normal.

The display is not clear

 In direct sunlight, you may not see the display clearly.
 Moving to a place with different lighting should solve this problem.

White lines appear on the display

 This may happen if you turn on the phone after a long period of disuse, or after removing the battery without turning off the phone. This is not related to the phone's life or performance. The display should correct itself shortly.

"Locked" displays

The automatic locking feature has been enabled. You
must press the Unlock soft key and enter the lock
code before you can use the phone. To disable this
feature, go to Tools → Settings → Security → Phone and
SIM and set Autolock period to None.

"PIN code" appears

- You are using your phone for the first time. You must enter the Personal Identification Number (PIN) supplied with the SIM card.
- The PIN check feature has been enabled. Each time
 the phone is switched on, the PIN has to be entered.
 To disable this feature, go to Tools → Settings →
 Security → Phone and SIM and set PIN code request to
 Off.

"PUK code" appears

 The PIN code was entered incorrectly three times in succession and the phone is now blocked. Enter the PUK supplied by your service provider.

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I forgot the lock, PIN, or PUK codes

 The default lock code is 0000000. If you forget or lose the lock code, contact your phone dealer. If you forget or lose a PIN or PUK code, or if you have not received such a code, contact your network provider. For information about passwords, contact your access point provider, for example, a commercial Internet Service Provider (ISP), service provider, or network operator.

Call problems

I have entered a number but it was not dialled

- Have you pressed <a>

 ?
- Check if your wireless connection to your mobile service provider is switched on and the signal from the GSM network is unobstructed.
- You may have set an outgoing call barring option.

My correspondent cannot reach me

- Is your phone switched on (pressed for more than one second)?
- Check if your wireless connection to your mobile service provider is switched on and the signal from the GSM network is unobstructed.
- You may have set an incoming call barring option.

My correspondent cannot hear me speaking

- Have you switched on the microphone?
- Are you holding the phone close enough to your mouth? The microphone is located at the bottom of the phone.

The audio quality of the call is poor

- Adjust the voice volume by pressing the Volume keys on the left side of the phone.
- Check the signal strength indicator on the display (平); the number of bars indicates the signal strength, from strong to weak.
- Try moving the phone slightly or moving closer to a window if you are in a building.

Calls to and from the phone are not connected properly, and are easily disconnected.

- Signals from the network are weak. Move to another area.
- Touching the antenna may lower the call quality. Be careful not to touch the antenna while using the phone.

Power and charging problems

"Battery low" appears on the display

 Your battery is insufficiently charged. Recharge the battery.

While charging, the LED on the travel charger blinks

- Disconnect the phone from the travel charger, remove the battery, and then replace it. Try charging again.
- If the problem persists, clean the metal contacts on the battery and the phone.
- If the actions above do not clear the problem, contact a Samsung service representative.

The phone malfunctions or does not function

 Remove the battery and then replace it. Turn on the phone. If the problem persists, contact a Samsung service representative.

The LED on the travel charger turns to yellow

 The travel charger is overheated. Disconnect the charger from the phone or unplug it from the power outlet. Wait until the charger cools down and then recharge the phone.

The battery's standby time is shorter than expected

 Batteries are subject to wear and tear. Standby time may grow shorter as time passes.

- Leaving the fully charged battery in a cold or hot place for a long period of time may reduce battery life.
- Standby time depends on where you use the phone.
 The actual time may differ from the battery's specifications.

Is it OK if I leave the phone connected to the power outlet after it is fully charged (indicated by the green LED on the charger is on)

 We recommend that you disconnect the phone from the charger or unplug the charger from the power outlet.

The phone becomes hot

 This may happen when you are on the phone or when you use applications, such as games, the Internet, or the camera, because the phone needs more power at those times. This does not affect the phone's life and performance.

The battery level seem sufficient, but the phone does not turn on

- Remove the battery from the phone and reinstall it. Then turn on the phone.
- Clean the metal contacts both on the battery and on the phone. Reinstall the battery and turn on the phone.

The phone turns off when the charger is connected

 Some dust on the contacts may cause unexpected power-off or charging problems. Clean the metal contacts both on the battery and on the phone.

Application problems

"Not enough memory to perform operation. Delete some data first." or "Memory low. Delete some data." displays

 To view what kind of data you have and how much memory the different data groups consume, go to Tools → File mgr. and select Options → Memory details.
 Delete old items from applications. If necessary, make a backup copy of your data using PC Suite or the memory card.

Browser

"No valid access point defined. Define one in Services settings." displays

 Insert proper browser settings. Contact your service provider for instructions.

The phone is unable to connect to the Internet

- Check if you have set up and are connected to an Internet service provider.
- Check if your wireless connection to your mobile service provider is switched on and the signal from the GPRS network is unobstructed.
- Verify with your service provider that your user name and password are correct.
- Verify with your Internet service provider that the network you are trying to connect is available, or try to connect it from another PC.

Calendar - Week numbers are missing

 If you have changed the Calendar settings so that the week starts on a day other than Monday, the week numbers will not be shown.

Camera - Images seem smudged

 Check that the camera lens protection window is clean.

Contacts - No number is dialled when you recall a contact card

- Check that a number has been stored in the contact card.
- Re-store the number, if necessary.

Bluetooth

I cannot end a Bluetooth connection

 If another device is connected to your phone, you can either end the connection using the other device or by deactivating Bluetooth. Go to Bluetooth and select the setting Bluetooth → Off.

I cannot find my friends Bluetooth-enabled device

- · Check that both have activated Bluetooth.
- Check that the distance between the two devices is not over 10 metres or that there are no walls or other obstructions between the devices.
- Check that the other device is not in **Hidden** mode.
- Check that both devices are compatible.

Log- The log appears empty

 You may have activated a filter, and no communication events fitting that filter have been logged. To see all events, select Options → Filter → All communication.

Messaging - I cannot select a contact card when creating a message

 If the contact card does not have a phone number or email address, you cannot select it. Add the missing information to the contact card in Contacts.

PC connectivity- Problems occur when connecting the phone to a PC.

 Make sure that PC Suite is installed and running on your PC. See the user's guide for PC Suite on the CD-ROM. For further information on how to use PC Suite, see the help function on PC Suite or visit www.samsungmobile.com.

Application does not respond

 Open the application switching window by pressing and holding . Then scroll to the application and press and the Yes soft key to close the application. Open it again.

If the above guidelines do not help you to solve the problem, take note of:

- the model and serial numbers of your phone
- · your warranty details
- a clear description of the problem

Then contact your local dealer or Samsung after-sales service.

Health and Safety Information

Exposure to Radio Frequency (RF) Signals

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on the safety standards that were developed by independent scientific organizations through periodic and through evaluation of scientific studies.

The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless phones employs a unit of measurement known as Specific Absorption Rate (SAR). The SAR limit recommended by the FCC is 1.6W/kg.

^{*} In the U.S. and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

SAR tests are conducted using standard operating positions specified by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output of the phone.

Before a new model phone is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. While there may be differences between the SAR levels of various phones and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/fccid after searching on FCC ID printed in the label on the phone.

For Body Operation

For body worn operation, this model phone has been tested and meets the FCC RF exposure guidelines when used with a Samsung-supplied or approved accessory designated for this product or when used with and accessory that contains no metal and that positions the handset a minimum from the body.

The minimum distance for this model phone is written in the FCC certification information from the body. None compliance with the above conditions may violate FCC RF exposure guidelines.

For more Information concerning exposure to radio frequency signals, see the following websites:

Federal Communications Commission (FCC) http://www.fcc.gov

Cellular Telecommunications Industry Association (CTIA): http://www.wow-com.com

U.S.Food and Drug Administration (FDA) http://www.fda.gov/cdrh/consumer

World Health Organization (WHO) http://www.who.int/peh-emf/en

Precautions When Using Batteries

- Never use any charger or battery that is damaged in any way.
- Use the battery only for its intended purpose.
- If you use the phone near the network's base station, it uses less power; talk and standby time are greatly affected by the signal strength on the cellular network and the parameters set by the network operator.

- Battery charging time depends on the remaining battery charge, the type of battery and the charger used. The battery can be charged and discharged hundreds of times, but it will gradually wear out. When the operation time (talk time and standby time) is noticeably shorter than normal, it is time to buy a new battery.
- If left unused, a fully charged battery will discharge itself over time.
- Use only Samsung-approved batteries and recharge your battery only with Samsung-approved chargers. When a charger is not in use, disconnect it from the power source. Do not leave the battery connected to a charger for more than a week, since overcharging may shorten its life.
- Extreme temperatures will affect the charging capacity of your battery: it may require cooling or warming first.
- Do not leave the battery in hot or cold places, such as in a car in summer or winter conditions, as you will reduce the capacity and lifetime of the battery. Always try to keep the battery at room temperature. A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Li-ion batteries are particularly affected by temperatures below 0 °C (32 °F).
- Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object (coin, clip or pen) causes a direct connection between the + and - terminals of the battery (metal strips on the battery), for example when you carry a spare battery in a pocket or bag. Shortcircuiting the terminals may damage the battery or the object causing the short-circuiting.
- Dispose used batteries in accordance with local regulations. Always recycle. Do not dispose batteries in a fire.

Road Safety

Your wireless phone gives you the powerful ability to communicate by voice, almost anywhere, anytime. But an important responsibility accompanies the benefits of wireless phones, one that every user must uphold.

When driving a car, driving is your first responsibility. When using your wireless phone behind the wheel of a car, practice good common sense and remember the following tips:

- Get to know your wireless phone and its features, such as speed dial and redial. If available, these features help you to place your call without taking your attention off the road.
- When available, use a hands-free device. If possible, add an extra layer of convenience and safety to your wireless phone with one of the many hands-free accessories available today.
- Position your wireless phone within easy reach. Be able to access your wireless phone without removing your eyes from the road. If you get an incoming call at an inconvenient time, let your voice mail answer it for you.
- Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow, ice and even heavy traffic can be hazardous.
- Do not take notes or look up phone numbers while driving.
 Jotting down a To Do list or flipping through your phonebook takes your attention away from your primary responsibility, driving safely.
- Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan calls when your car will be stationary. If you need to make a call while moving, dial only a few numbers, check the road and your mirrors, then continue.

- Do not engage in stressful or emotional conversations that may be distracting. Make the people to whom you are talking aware that you are driving and suspend conversations that have the potential to divert your attention from the road.
- Use your wireless phone to call for help. Dial the emergency number in the case of fire, traffic accident or medical emergencies. Remember, it is a free call on your wireless phone!
- Use your wireless phone to help others in emergencies. If you see a car accident, crime in progress or other serious emergency where lives are in danger, call the emergency number, as you would want others to do for you.
- If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured, or a vehicle you know to be stolen, call roadside assistance or any other special nonemergency wireless number.

Operating Environment

Remember to follow any special regulations in force in any area and always switch your phone off whenever it is forbidden to use it, or when it may cause interference or danger.

When connecting the phone or any accessory to another device, read its user's guide for detailed safety instructions. Do not connect incompatible products.

As with other mobile radio transmitting equipment, users are advised that for the satisfactory operation of the equipment and for the safety of personnel, it is recommended that the equipment should only be used in the normal operating position (held to your ear with the antenna pointing over your shoulder).

Electronic Devices

Most modern electronic equipment is shielded from radio frequency (RF) signals. However, certain electronic equipment may not be shielded against the RF signals from your wireless phone. Consult the manufacturer to discuss alternatives.

Pacemakers

Pacemaker manufacturers recommend that a minimum distance of 15 cm (6 inches) be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research and recommendations of Wireless Technology Research.

Persons with pacemakers:

- should always keep the phone more than 15 cm (6 inches) from their pacemaker when the phone is switched on.
- should not carry the phone in a breast pocket.
- should use the ear opposite the pacemaker to minimize potential interference.

If you have any reason to suspect that interference is taking place, switch your phone off immediately.

Hearing Aids

Some digital wireless phones may interfere with some hearing aids. In the event of such interference, you may wish to consult your hearing aid manufacturer to discuss alternatives.

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Other Medical Devices

If you use any other personal medical devices, consult the manufacturer of your device to determine if it is adequately shielded from external RF energy. Your physician may be able to assist you in obtaining this information. Switch your phone off in health care facilities when any regulations posted in these areas instruct you to do so. Hospitals or health care facilities may be using equipment that could be sensitive to external RF energy.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles. Check with the manufacturer or its representative regarding your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle. You should also consult the manufacturer of any equipment that has been added to your vehicle.

Posted Facilities

Switch your phone off in any facility where posted notices require you to do so.

Potentially Explosive Environments

Switch your phone off when in any area with a potentially explosive atmosphere and obey all signs and instructions. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death.

Users are advised to switch the phone off while at a refueling point (service station). Users are reminded of the need to observe restrictions on the use of radio equipment in fuel depots (fuel storage and distribution areas), chemical plants or where blasting operations are in progress.

Areas with a potentially explosive atmosphere are often but not always clearly marked. They include the areas below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), areas where the air contains chemicals or particles, such as grain, dust or metal powders, and any other area where you would normally be advised to turn off your vehicle engine.

Emergency Calls

This phone, like any wireless phone, operates using radio signals, wireless and landline networks as well as user-programmed functions, which cannot guarantee connection in all conditions. Therefore, you should never rely solely on any wireless phone for essential communications (medical emergencies, for example).

Remember, to make or receive any calls the phone must be switched on and in a service area with adequate signal strength. Emergency calls may not be possible on all wireless phone networks or when certain network services and/or phone features are in use. Check with local service providers.

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To make an emergency call:

- 1. If the phone is not on, switch it on.
- Key in the emergency number for your present location (for example, 911 or other official emergency number). Emergency numbers vary by location.
- 3. Press the <Send> key.

If certain features are in use (call barring, for example), you may first need to deactivate those features before you can make an emergency call. Consult this document and your local cellular service provider.

When making an emergency call, remember to give all the necessary information as accurately as possible. Remember that your phone may be the only means of communication at the scene of an accident; do not cut off the call until given permission to do so.

Other Important Safety Information

- Only qualified personnel should service the phone or install the phone in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty applicable to the device.
- Check regularly that all wireless phone equipment in your vehicle is mounted and operating properly.
- Do not store or carry flammable liquids, gases or explosive materials in the same compartment as the phone, its parts or accessories.

- For vehicles equipped with an air bag, remember that an air bag inflates with great force. Do not place objects, including both installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If wireless equipment is improperly installed and the air bag inflates, serious injury could result.
- Switch your phone off before boarding an aircraft. The use of wireless phones in aircraft is illegal and may be dangerous to the aircraft's operation.
- Failure to observe these instructions may lead to the suspension or denial of telephone services to the offender, or legal action, or both.

Care and Maintenance

Your phone is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you fulfill any warranty obligations and allow you to enjoy this product for many years

- Keep the phone and all its parts and accessories out of the reach of small children's.
- Keep the phone dry. Precipitation, humidity and liquids contain minerals that will corrode electronic circuits.
- Do not use the phone with a wet hand. Doing so may cause an electric shock to you or damage to the phone.
- Do not use or store the phone in dusty, dirty areas, as its moving parts may be damaged.
- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.

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- Do not store the phone in cold areas. When the phone warms up to its normal operating temperature, moisture can form inside the phone, which may damage the phone's electronic circuit boards.
- Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents or strong detergents to clean the phone. Wipe it with a soft cloth slightly dampened in a mild soap-and-water solution.
- Do not paint the phone. Paint can clog the device's moving parts and prevent proper operation.
- Do not put the phone in or on heating devices, such as a microwave oven, a stove or a radiator. The phone may explode when overheated.
- Use only the supplied or an approved replacement antenna. Unauthorized antennas or modified accessories may damage the phone and violate regulations governing radio devices.
- If the phone, battery, charger or any accessory is not working properly, take it to your nearest qualified service facility. The personnel there will assist you, and if necessary, arrange for service.

Acknowledging Special Precautions and the FCC and Industry Canada Notice

Cautions

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Compliance Information

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received.

Including interference that may cause undesired operation.

Information to User

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

Appendix A: CERTIFICATION INFORMATION (SAR)

THIS MODEL PHONE MEETS THE GOVERNMENT'S REQUIREMENTS FOR EXPOSURE TO RADIO WAVES.

Your wireless phone is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on safety standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless mobile phones employs a unit of measurement known as the Specific Absorption Rate (SAR). The SAR limit set by the FCC is 1.6 W/kg. SAR Tests are conducted using standard operating positions accepted by the FCC with the phone transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the phone while operating can be well below the maximum value. This is because the phone is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

Before a new model phone is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in

positions and locations(e.g., at the ear and worn on the body) as required by the FCC for each model.

The highest SAR values of this model phone as reported to FCC are Head: 0.323W/kg, Body-worn: 0.430W/kg in GSM 1900.

Body-worn operations are restricted to Samsung-supplied, approved or none Samsung designated accessories that have no metal and must provide at least 1.5cm separation between the device, including its antenna whether extended or retracted, and the user's body. None compliance to the above restrictions may violate FCC RF exposure guidelines.

The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model phone is on file with the FCC and can be found under the Display Grant section of http://www.fcc.gov/oet/fccid after searching on FCC ID A3LSGHD720.

In the United States and Canada, the SAR limit for mobile phones used by the public is 1.6 watts/kilogram (W/kg) averaged over one gram of tissue. The standard incorporates a substantial magin of safety to give additional protection for the public and to account for any variations in measurements.

Appendix B: Guide to Safe and Responsible Wireless Phone Use

Cellular Telecommunications & Internet Association

"Safety is the most important call you will ever make."

A Guide to Safe and Responsible Wireless Phone Use

TENS OF MILLIONS OF PEOPLE IN THE U.S. TODAY TAKE ADVANTAGE OF THE UNIQUE COMBINATION OF CONVENIENCE, SAFETY AND VALUE DELIVERED BY THE WIRELESS TELEPHONE. QUITE SIMPLY, THE WIRELESS PHONE GIVES PEOPLE THE POWERFUL ABILITY TO COMMUNICATE BY VOICE-ALMOST ANYWHERE, ANYTIME-WITH THE BOSS, WITH A CLIENT, WITH THE KIDS, WITH EMERGENCY PERSONNEL OR EVEN WITH THE POLICE. EACH YEAR, AMERICANS MAKE BILLIONS OF CALLS FROM THEIR WIRELESS PHONES, AND THE NUMBERS ARE RAPIDLY GROWING.

But an important responsibility accompanies those benefits, one that every wireless phone user must uphold. When driving a car, driving is your first responsibility. A wireless phone can be an invaluable tool, but good judgment must be exercised at all times while driving a motor vehicle whether on the phone or not.

The basic lessons are ones we all learned as teenagers. Driving requires alertness, caution and courtesy. It requires a heavy dose of basic common sense-keep your head up, keep your eyes on the road, check your mirrors frequently and watch out for other drivers. It requires obeying all traffic signs and signals and staying within the speed limit. It means using seat belts and requiring other passengers to do the same.

But with wireless phone use, driving safely means a little more. This brochure is a call to wireless phone users everywhere to make safety their first priority when behind the wheel of a car. Wireless telecommunications is keeping us in touch, simplifying our lives, protecting us in emergencies and providing opportunities to help others in need. When it comes to the use of wireless phones, safety is your most important call.

Wireless Phone "Safety Tips"

Below are safety tips to follow while driving and using a wireless phone which should be easy to remember:

- Get to know your wireless phone and its features such as speed dial and redial. Carefully read your instruction manual and learn to take advantage of valuable features most phones offer, including automatic redial and memory. Also, work to memorize the phone keypad so you can use the speed dial function without taking your attention off the road.
- When available, use a hands free device. A number of hands free wireless phone accessories are readily available today. Whether you choose an installed mounted device for your wireless phone or a speaker phone accessory, take advantage of these devices if available to you.
- 3. Position your wireless phone within easy reach. Make sure you place your wireless phone within easy reach and where you can grab it without removing your eyes from the road. If you get an incoming call at an inconvenient time, if possible, let your voice mail answer it for you.

- 4. Suspend conversations during hazardous driving conditions or situations. Let the person you are speaking with know you are driving; if necessary, suspend the call in heavy traffic or hazardous weather conditions. Rain, sleet, snow and ice can be hazardous, but so is heavy traffic. As a driver, your first responsibility is to pay attention to the road.
- 5. Do not take notes or look up phone numbers while driving. If you are reading an address book or business card, or writing a "to do" list while driving a car, you are not watching where you are going. It's common sense. Don't get caught in a dangerous situation because you are reading or writing and not paying attention to the road or nearby vehicles.
- 6. Dial sensibly and assess the traffic; if possible, place calls when you are not moving or before pulling into traffic. Try to plan your calls before you begin your trip or attempt to coincide your calls with times you may be stopped at a stop sign, red light or otherwise stationary. But if you need to dial while driving, follow this simple tip-dial only a few numbers, check the road and your mirrors, then continue.
- 7. Do not engage in stressful or emotional conversations that may be distracting. Stressful or emotional conversations and driving do not mix-they are distracting and even dangerous when you are behind the wheel of a car. Make people you are talking with aware you are driving and if necessary, suspend conversations which have the potential to divert your attention from the road.
- 8. Use your wireless phone to call for help. Your wireless phone is one of the greatest tools you can own to protect yourself and your family in dangerous situations-with your phone at your side, help is only three numbers away. Dial 9-1-1 or other local emergency number in the case of fire, traffic accident, road hazard or medical emergency. Remember, it is a free call on your wireless phone!

- 9. Use your wireless phone to help others in emergencies. Your wireless phone provides you a perfect opportunity to be a "Good Samaritan" in your community. If you see an auto accident, crime in progress or other serious emergency where lives are in danger, call 9-1-1 or other local emergency number, as you would want others to do for you.
- 10. Call roadside assistance or a special wireless non emergency assistance number when necessary. Certain situations you encounter while driving may require attention, but are not urgent enough to merit a call for emergency services. But you still can use your wireless phone to lend a hand. If you see a broken-down vehicle posing no serious hazard, a broken traffic signal, a minor traffic accident where no one appears injured or a vehicle you know to be stolen, call roadside assistance or other special non-emergency wireless number.

Careless, distracted individuals and people driving irresponsibly represent a hazard to everyone on the road. Since 1984, the Cellular Telecommunications Industry Association and the wireless industry have conducted educational outreach to inform wireless phone users of their responsibilities as safe drivers and good citizens. As we approach a new century, more and more of us will take advantage of the benefits of wireless telephones. And, as we take to the roads, we all have a responsibility to drive safely.

Cellular Telecommunications & Internet Association For more information, please call 1-888-901-SAFE.

For updates: http://www.wow-com.com/consumer/issues/driving/articles.cfm?ID =85

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Appendix C: Consumer Update on Wireless Phones

- U.S. Food and Drug Administration
- 1. What kinds of phones are the subject of this update?

The term wireless phone refers here to hand-held wireless phones with built-in antennas, often called cell, mobile, or PCS phones. These types of wireless phones can expose the user to measurable radio frequency energy (RF) because of the short distance between the phone and the user s head. These RF exposures are limited by Federal Communications Commission safety guidelines that were developed with the advice of FDA and other federal health and safety agencies. When the phone is located at greater distances from the user, the exposure to RF is drastically lower because a person's RF exposure decreases rapidly with increasing distance from the source. The so-called "cordless phones," which have a base unit connected to the telephone wiring in a house, typically operate at far lower power levels, and thus produce RF exposures well within the FCC's compliance limits.

2. Do wireless phones pose a health hazard?

The available scientific evidence does not show that any health problems are associated with using wireless phones. There is no proof, however, that wireless phones are absolutely safe. Wireless phones emit low levels of radio frequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the standby mode. Whereas high levels of RF can produce health effects (by heating tissue), exposure to low level RF that does not produce heating effects causes no known adverse health effects. Many studies of low level RF exposures have not found any biological effects. Some studies have suggested that some biological effects may occur, but such findings have not been confirmed by additional research. In some cases,

other researchers have had difficulty in reproducing those studies, or in determining the reasons for inconsistent results.

3. What is FDA's role concerning the safety of wireless phones?

Under the law, FDA does not review the safety of radiation emitting consumer products such as wireless phones before they can be sold, as it does with new drugs or medical devices. However, the agency has authority to take action if wireless phones are shown to emit radio frequency energy (RF) at a level that is hazardous to the user. In such a case, FDA could require the manufacturers of wireless phones to notify users of the health hazard and to repair, replace or recall the phones so that the hazard no longer exists.

Although the existing scientific data do not justify FDA regulatory actions, FDA has urged the wireless phone industry to take a number of steps, including the following:

- Support needed research into possible biological effects of RF of the type emitted by wireless phones;
- Design wireless phones in a way that minimizes any RF exposure to the user that is not necessary for device function; and
- Cooperate in providing users of wireless phones with the best possible information on possible effects of wireless phone use on human health

FDA belongs to an interagency working group of the federal agencies that have responsibility for different aspects of RF safety to ensure coordinated efforts at the federal level. The following agencies belong to this working group:

- National Institute for Occupational Safety and Health
- Environmental Protection Agency Federal Communications Commission

- Occupational Safety and Health Administration
- National Telecommunications and Information Administration
- The National Institutes of Health participates in some interagency working group activities, as well.

FDA shares regulatory responsibilities for wireless phones with the Federal Communications Commission (FCC). All phones that are sold in the United States must comply with FCC safety guidelines that limit RF exposure. FCC relies on FDA and other health agencies for safety questions about wireless phones.

FCC also regulates the base stations that the wireless phone networks rely upon. While these base stations operate at higher power than do the wireless phones themselves, the RF exposures that people get from these base stations are typically thousands of times lower than those they can get from wireless phones. Base stations are thus not the primary subject of the safety questions discussed in this document.

4. What is FDA doing to find out more about the possible health effects of wireless phone RF?

FDA is working with the U.S. National Toxicology Program and with groups of investigators around the world to ensure that high priority animal studies are conducted to address important questions about the effects of exposure to radio frequency energy (RF).

FDA has been a leading participant in the World Health Organization International Electromagnetic Fields (EMF) Project since its inception in 1996. An influential result of this work has been the development of a detailed agenda of research needs that has driven the establishment of new research programs around the world. The Project has also helped develop a series of public information documents on EMF issues.

FDA and the Cellular Telecommunications & Internet Association (CTIA) have a formal Cooperative Research and Development Agreement (CRADA) to do research on wireless phone safety. FDA provides the scientific oversight, obtaining input from experts in government, industry, and academic organizations. CTIA-funded research is conducted through contracts to independent investigators. The initial research will include both laboratory studies and studies of wireless phone users. The CRADA will also include a broad assessment of additional research needs in the context of the latest research developments around the world.

5. What steps can I take to reduce my exposure to radio frequency energy from my wireless phone?

If there is a risk from these products—and at this point we do not know that there is—it is probably very small. But if you are concerned about avoiding even potential risks, you can take a few simple steps to minimize your exposure to radio frequency energy (RF). Since time is a key factor in how much exposure a person receives, reducing the amount of time spent using a wireless phone will reduce RF exposure.

If you must conduct extended conversations by wireless phone every day, you could place more distance between your body and the source of the RF, since the exposure level drops off dramatically with distance. For example, you could use a headset and carry the wireless phone away from your body or use a wireless phone connected to a remote antenna

Again, the scientific data do not demonstrate that wireless phones are harmful. But if you are concerned about the RF exposure from these products, you can use measures like those described above to reduce your RF exposure from wireless phone use.

6. What about children using wireless phones?

The scientific evidence does not show a danger to users of wireless phones, including children and teenagers. If you want to take steps to lower exposure to radio frequency energy (RF), the measures described above would apply to children and teenagers using wireless phones. Reducing the time of wireless phone use and increasing the distance between the user and the RF source will reduce RF exposure.

Some groups sponsored by other national governments have advised that children be discouraged from using wireless phones at all. For example, the government in the United Kingdom distributed leaflets containing such a recommendation in December 2000. They noted that no evidence exists that using a wireless phone causes brain tumors or other ill effects. Their recommendation to limit wireless phone use by children was strictly precautionary; it was not based on scientific evidence that any health hazard exists.

7. Do hands-free kits for wireless phones reduce risks from exposure to RF emissions?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that hands-free kits reduce risks. Hands-free kits can be used with wireless phones for convenience and comfort. These systems reduce the absorption of RF energy in the head because the phone, which is the source of the RF emissions, will not be placed against the head. On the other hand, if the phone is mounted against the waist or other part of the body during use, then that part of the body will absorb more RF energy. Wireless phones marketed in the U.S. are required to meet safety requirements regardless of whether they are used against the head or against the body. Either configuration should result in compliance with the safety limit.

8. Do wireless phone accessories that claim to shield the head from RF radiation work?

Since there are no known risks from exposure to RF emissions from wireless phones, there is no reason to believe that accessories that claim to shield the head from those emissions reduce risks. Some products that claim to shield the user from RF absorption use special phone cases, while others involve nothing more than a metallic accessory attached to the phone. Studies have shown that these products generally do not work as advertised. Unlike "handfree" kits, these so-called "shields" may interfere with proper operation of the phone. The phone may be forced to boost its power to compensate, leading to an increase in RF absorption. In February 2002, the Federal trade Commission (FTC) charged two companies that sold devices that claimed to protect wireless phone users from radiation with making false and unsubstantiated claims. According to FTC, these defendants lacked a reasonable basis to substantiate their claim.

9. What about wireless phone interference with medical equipment?

Radio frequency energy (RF) from wireless phones can interact with some electronic devices. For this reason, FDA helped develop a detailed test method to measure electromagnetic interference (EMI) of implanted cardiac pacemakers and defibrillators from wireless telephones. This test method is now part of a standard sponsored by the Association for the Advancement of Medical instrumentation (AAMI). The final draft, a joint effort by FDA, medical device manufacturers, and many other groups, was completed in late 2000. This standard will allow manufacturers to ensure that cardiac pacemakers and defibrillators are safe from wireless phone EMI.

FDA has tested hearing aids for interference from handheld wireless phones and helped develop a voluntary standard sponsored by the Institute of Electrical and Electronic Engineers (IEEE). This standard specifies test methods and performance requirements for hearing aids and wireless phones so that no interference occurs when a person uses a compatible phone and a compatible hearing aid at the same time. This standard was approved by the IEEE in 2000.

FDA continues to monitor the use of wireless phones for possible interactions with other medical devices. Should harmful interference be found to occur, FDA will conduct testing to assess the interference and work to resolve the problem.

10. What are the results of the research done already?

The research done thus far has produced conflicting results, and many studies have suffered from flaws in their research methods. Animal experiments investigating the effects of radio frequency energy (RF) exposures characteristic of wireless phones have yielded conflicting results that often cannot be repeated in other laboratories. A few animal studies, however, have suggested that low levels of RF could accelerate the development of cancer in laboratory animals. However, many of the studies that showed increased tumor development used animals that had been genetically engineered or treated with cancer causing chemicals so as to be pre-disposed to develop cancer in the absence of RF exposure. Other studies exposed the animals to RF for up to 22 hours per day. These conditions are not similar to the conditions under which people use wireless phones, so we don t know with certainty what the results of such studies mean for human health.

Three large epidemiology studies have been published since December 2000. Between them, the studies investigated any possible association between the use of wireless phones and primary brain cancer, gioma, meningioma, or acoustic neuroma, tumors of the brain or salivary gland, leukemia, or other cancers. None of the studies demonstrated the existence of any harmful health effects from wireless phone RF exposures. However, none of the studies can answer questions about long-term exposures, since the average period of phone use in these studies was around three years.

11. What research is needed to decide whether RF exposure from wireless phones poses a health risk?

A combination of laboratory studies and epidemiological studies of people actually using wireless phones would provide some of the data that are needed. Lifetime animal exposure studies could be completed in a few years. However, very large numbers of animals would be needed to provide reliable proof of a cancer promoting effect if one exists. Epidemiological studies can provide data that is directly applicable to human populations, but 10 or more years followup may be needed to provide answers about some health effects, such as cancer. This is because the interval between the time of exposure to a cancer-causing agent and the time tumors develop - if they do - may be many, many years. The interpretation of epidemiological studies is hampered by difficulties in measuring actual RF exposure during day-to-day use of wireless phones. Many factors affect this measurement, such as the angle at which the phone is held, or which model of phone is used.

12. Which other federal agencies have responsibilities related to potential RF health effects?	
Additional information on the safety of RF exposures from various sources can be obtained from the following organizations.	
FCC RF Safety Program: http://www.fcc.gov/oet/rfsafety/	
Environmental Protection Agency (EPA): http://www.epa.gov/radiation/	
Occupational Safety and Health Administration's (OSHA): http://www.osha-slc.gov/SLTC/radiofrequencyradiation/ index.html	
National Institute for Occupational Safety and Health (NIOSH): http://www.cdc.gov/niosh/emfpg.html	
World health Organization (WHO): http://www.who.int/peh-emf/	
International Commission on Non-Ionizing Radiation Protection: http://www.icnirp.de	
National Radiation Protection Board (UK):	

http://www.nrpb.org.uk