

User Guide for Nokia 6651 Phone



LEGAL INFORMATION

PART NO. 9231549, ISSUE NO. 1

Copyright © 2004 Nokia. All rights reserved.

Nokia, Nokia Connecting People, Nokia 6651, Pop-Port, and the Nokia Original Enhancements logos are trademarks or registered trademarks of Nokia Corporation. Other company and product names mentioned herein may be trademarks or trade names of their respective owners.

Electronic file created, April, 2004

US Patent No 5818437 and other pending patents. T9 text input software

Copyright © 1999–2003. Tegic Communications, Inc. All rights reserved.

Bluetooth is a registered trademark of Bluetooth SIG, Inc.



Includes RSA BSAFE cryptographic or security protocol software from RSA Security.



Java is a trademark of Sun Microsystems, Inc.

USE OF THIS PRODUCT IN ANY MANNER THAT COMPLIES WITH THE MPEG-4 VISUAL STANDARD IS PROHIBITED, EXCEPT FOR USE DIRECTLY RELATED TO (A) DATA OR INFORMATION (i) GENERATED BY AND OBTAINED WITHOUT CHARGE FROM A CONSUMER NOT THEREBY ENGAGED IN A BUSINESS ENTERPRISE, AND (ii) FOR PERSONAL USE ONLY; AND (B) OTHER USES SPECIFICALLY AND SEPARATELY LICENSED BY MPEG LA, L.L.C.

The information contained in this user guide was written for the Nokia 6651 product. Nokia operates a policy of ongoing development. Nokia reserves the right to make changes to any of the products described in this document without prior notice.

UNDER NO CIRCUMSTANCES SHALL NOKIA BE RESPONSIBLE FOR ANY LOSS OF DATA OR INCOME OR ANY SPECIAL, INCIDENTAL, AND CONSEQUENTIAL OR INDIRECT DAMAGES HOWSOEVER CAUSED. THE CONTENTS OF THIS DOCUMENT ARE PROVIDED "AS IS." EXCEPT AS REQUIRED BY APPLICABLE LAW, NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE MADE IN RELATION TO THE ACCURACY AND RELIABILITY OR CONTENTS OF THIS DOCUMENT. NOKIA RESERVES THE RIGHT TO REVISE THIS DOCUMENT OR WITHDRAW IT AT ANY TIME WITHOUT PRIOR NOTICE.

EXPORT CONTROLS

This device may contain commodities, technology, or software subject to export laws and regulations from the US and other countries. Diversion contrary to law is prohibited.

FCC/INDUSTRY CANADA NOTICE

Your device may cause TV or radio interference (for example, when using a telephone in close proximity to receiving equipment). The FCC or Industry Canada can require you to stop using your telephone if such interference cannot be eliminated. If you require assistance, contact your local service facility. This device complies with part 15 of the FCC rules. Operation is subject to the condition that this device does not cause harmful interference.

Nokia products may be covered by the following U.S. Patents.

4868846	4945633	5001372	5053928	5083240	5101175	5124672
5151946	5152004	5173927	5212834	5230091	5241583	5266782
5271056	5311151	5317283	5331638	5335362	5341149	5353328
5371481	5378935	4969192	5384782	5390223	5392460	5396657
5400949	5408504	5416435	5430740	5442521	5444816	5446364
5446422	5477422	5479476	5487084	5526366	5534878	5548616
5551067	5553125	5557639	5565821	5566201	5570369	5581244
5594797	5600708	5606548	5613235	5625274	5640395	5664053
5675611	5677620	5692032	5697074	5699482	5701392	5722074
5729541	5754976	5760568	5787341	5794142	5797102	5802465
5805301	5809413	5819165	5821891	5822366	5827082	5835858
5835889	5839101	5842141	5844884	5845219	5850607	5857151
5859843	5862178	5870683	5884103	5884190	5889770	5898775
5898925	5903832	5903839	5907823	5912570	5914690	5914796
5917868	5920826	5926147	5926769	5929813	5930233	5946651
5953665	5956332	5956625	5311179	5956633	5960354	5960389
5963901	5966378	5977887	5983081	5987137	5519885	5987639
5991857	6005857	6006114	6009328	6011853	6011971	6014113
6014551	6014573	6025802	6026161	6028567	6031827	6035189
6035194	6038238	6043760	6047196	6049796	6050415	6054954
6054966	6055439	6060193	6069923	6072787	6073001	6079993
6081732	6084471	6084855	6084920	6084962	6088746	6094587
6097964	6105784	5699406	6112099	6115617	6118775	6119002
6119180	6121846	6122498	6128322	6128509	6130650	6133884
6137789	6138091	6140966	6144243	6144676	6148209	6151485
6151507	6163609	6164547	6167038	6167248	6167273	6170073
6171127	6178535	6182101	6184592	6185295	6185302	6185422
6188909	6195338	6199035	6201712	6201876	6202109	6219560
6223037	6223059	6230020	6240076	6249584	6259312	6262735
6266321	6266330	6269126	6271794	6272361	6282436	6285888
6292668	6295286	6307512	6308084	6311054	6314166	6317083
6324389	6324412	6333716	6347218	6356759	6359865	6359904
6363259	6370362	6370389	6377803	6377820	6381468	6385254
6385451	6392605	6392660	6400958	6417817	6430163	6434133
6437711	6438370	6445932	6453179	6456237	6456826	6463278
6470470	6487397	6510148	6522670	6591116	6606508	5729534
5782646	5887266	5892475	5915440	5926138	5966374	5991716
6029128	6081534	6198928	6240079	6310609	6487424	5564074
5806003	5832381	5862489	5946634	5991627	6091717	6094426
6243455	6300887	6370390	6415163	6430721	6470313	6477151
6487288	6493564	6501957	6532226	6535979	6539236	6542931
6560460	6570860	6584089	6584161	6584314	6594486	6597914
6603773	6606593	6611507	6615169	6636491	6643513	6650905
6658064	6662155	6671286	6671511	6678361	6678531	6680955
6681099	6691085	6697347				

Contents

1	For your safety	1
	About your device	2
	Network services	2
	Shared memory	3
2	About your phone	4
	Find information about your phone	4
	Get help	4
	Contact your service provider	4
	Contact Nokia	5
	Guide updates	5
	Online tutorials	5
	Register your phone	5
	Accessibility solutions	6
	Nokia PC Suite	6
3	Overview of functions	7
	Camera and multimedia messages	7
	Support for GSM and WCDMA networks	7
	GPRS for fast data transfer	7
	Voice key	8
	Java™ applications	8
	Pop-port™ connection	8
	Receiving settings over-the-air	8
4	Your phone	9
	Keys	9
	Three selection keys	10
	Connectors	10
	Standby mode and display indicators	11
	Wallpaper and screen saver	11
	Using the camera lens cover	13

5	Getting started	14
	Installing the SIM card and the battery	14
	Installation	14
	Charging the battery	15
	Switching the phone on and off	16
	The Antenna	17
	Access codes	17
	Using the camera	18
6	Basic functions	20
	Making a call	20
	Calling a phone number saved in contacts	20
	Calling a recently dialed number	20
	Calling your voice mailbox	20
	Voice dialing	21
	1-touch dialing	21
	Making a conference call	21
	Answering or rejecting an incoming call	22
	Call waiting	22
	Options during a call	22
	Using the loudspeaker	23
	Using the voice key	24
	Voice recording	24
	Voice recognition	24
	Keypad lock (keyguard)	24
	Writing text	25
	Predictive text input	25
	Traditional text input	27
7	Using the menu	28
	Accessing a menu function	28
	List of menu functions	29

8	Menu functions.....	32
	Messages (Menu 1)	32
	Text and picture messages (SMS)	32
	Multimedia messages (MMS)	36
	Deleting messages	40
	Chat.....	40
	Voice messages.....	41
	Info messages.....	41
	Message settings	41
	Service commands	44
	Distribution lists.....	44
	Call log (Menu 2).....	45
	Missed, received and dialed calls	45
	Call counters and call timers.....	46
	Contacts (Menu 3).....	46
	Alternative ways to access functions in Contacts.....	47
	Selecting settings for contacts	47
	Saving names and phone numbers.....	47
	Finding a name in contacts.....	49
	Editing a name, number or text item	50
	Changing the image attached to a name.....	50
	Deleting contacts.....	50
	Copying contacts	51
	Voice dialing.....	51
	Sending and receiving a business card.....	52
	1-touch dialing.....	53
	Service numbers.....	54
	My numbers	54
	Caller groups.....	54
	Sending a message from contacts	55
	Profiles (Menu 4).....	55
	Settings (Menu 5)	56
	Personal shortcuts	56
	Time and date settings.....	57
	Call settings	57

Phone settings	59
Display settings.....	60
Tone settings.....	62
Enhancement settings	63
Security settings.....	63
Restoring factory settings	65
Camera (Menu 6).....	65
Taking a photo or recording a video clip	65
Adjusting the camera settings.....	65
Gallery (Menu 7)	66
Usage rights	69
Organizer (Menu 8)	69
Alarm clock.....	69
Calendar	70
To-do list.....	72
Wallet	73
Games (Menu 9).....	75
Adjusting the game settings	75
Starting a game	75
Downloading a game	76
Checking the memory status for games.....	76
Applications (Menu 10).....	76
Launching an application.....	76
Downloading a Java application	77
Checking the memory status.....	78
Extras (Menu 11)	78
Calculator	78
Voice commands.....	79
Countdown timer	80
Stopwatch.....	81
Connectivity (Menu 12).....	82
Bluetooth wireless technology	82
Infrared	84
GPRS	85

Services (Menu 13)	.87
Basic steps for accessing and using browser services.	.87
Setting up the phone for a browser service.	.87
Making a connection to a browser service	.89
Browsing the pages of a service	.89
Ending a browser connection	.90
Appearance settings.	.91
Cookie settings.	.91
Bookmarks.	.91
Service inbox	.92
Emptying the cache memory.	.93
Security features for browser connections	.94
Go to (Menu 14)	.95
SIM services (Menu 15).	.95
9 PC Connectivity	.96
Nokia PC Suite	.96
Using your phone as a modem	.97
10 Reference Information	.98
Charging and discharging	.98
Enhancements, batteries, and chargers	.99
Care and maintenance	.99
Additional safety information.	100
Operating environment	100
Medical devices	101
Vehicles.	102
Potentially explosive environments	102
Aircraft	103
Emergency calls	103
Certification Information (SAR)	104
Technical information	106
Appendix A Message from the CTIA	111
Appendix B Message from the FDA	115

1 For your safety

Read these simple guidelines. Not following them may be dangerous or illegal. Read the complete user guide for further information.



SWITCH ON SAFELY

Do not switch the phone on when wireless phone use is prohibited or when it may cause interference or danger.



ROAD SAFETY COMES FIRST

Obey all local laws. Always keep your hands free to operate the vehicle while driving. Your first consideration while driving should be road safety.



INTERFERENCE

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



SWITCH OFF IN HOSPITALS

Follow any restrictions. Switch the phone off near medical equipment.



SWITCH OFF IN AIRCRAFT

Follow any restrictions. Wireless devices can cause interference in aircraft.



SWITCH OFF WHEN REFUELING

Don't use the phone at a refueling point. Don't use near fuel or chemicals.



SWITCH OFF NEAR BLASTING

Follow any restrictions. Don't use the phone where blasting is in progress.



USE SENSIBLY

Use only in the normal position as explained in the product documentation. Don't touch the antenna unnecessarily.



QUALIFIED SERVICE

Only qualified personnel may install or repair this product.



ENHANCEMENTS AND BATTERIES

Use only approved enhancements and batteries. Do not connect incompatible products.



CONNECTING TO OTHER DEVICES

When connecting to any other device, read its user's guide for detailed safety instructions. Do not connect incompatible products.



BACK-UP COPIES

Remember to make back-up copies or keep a written record of all important information stored in your phone.



WATER-RESISTANCE

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



EMERGENCY CALLS

Ensure the phone is switched on and in service. Press  as many times as needed (for example, to exit a call, to exit a menu, etc.) to clear the display. Enter the emergency number, then press . Give your location. Do not end the call until told to do so.

• ABOUT YOUR DEVICE

The wireless device described in this guide is approved for use on the GSM 1900 and WCDMA networks. Contact your service provider for more information about networks.

When using the features in this device, obey all laws and respect privacy and legitimate rights of others.



Warning: To use any features in this device, other than the alarm clock, the phone must be switched on. Do not switch the device on when wireless phone use may cause interference or danger.

• NETWORK SERVICES

To use the phone you must have service from a wireless service provider. Many of the features in this device depend on features in the wireless network to function. These Network Services may not be available on all networks or you may have to make specific arrangements with your service provider before you can utilize Network Services. Your service provider may need to give you additional instructions for their use and explain what charges will apply. Some networks may have limitations that affect how you can use Network Services. For instance, some networks may not support all language-dependent characters and services.

Your service provider may have requested that certain features be disabled or not activated in your device. If so, they will not appear on your device menu. Contact your service provider for more information.

• SHARED MEMORY

The following features in this phone may share memory: contacts list; text and multimedia messages; images; video clips and ringing tones in the *Gallery* menu; bookmarks; calendar and to-do notes; Java™ games and applications.

Use of one or more of these features may reduce the memory available for the remaining features sharing memory. For example, saving many images, Java applications, etc., may use all of the available memory. Your phone may display a message that the memory is full when you try to use a shared memory feature. In this case, delete some of the information or entries stored in the shared memory features before continuing. Some of the features may have a certain amount of memory specially allotted to them in addition to the amount of memory shared with other features.

You can check the amount of free and used shared memory with the *Memory status* function in the [Phone settings](#).

2 About your phone

Congratulations on your purchase of the Nokia 6651 phone. Your phone provides many functions which are practical for daily use, such as a camera, alarm clock, calculator, calendar, and more. Your phone can also connect to a PC, laptop, or other device using the data cable, Bluetooth, or built-in IR port. To personalize your phone, you can set your favorite ringing tones, program a Go to menu, and change the wallpaper.

• FIND INFORMATION ABOUT YOUR PHONE

The label on the back of your phone, underneath the battery, contains the following information:

- Model number
- Phone type and FCC ID
- International mobile equipment identity (IMEI)

• GET HELP

If you need help, Nokia Customer Care is available for assistance. We recommend that you write down the following information and have it available if you call.

- The IMEI printed on the back of the phone, beneath the battery
- Your zip code

Contact your service provider

To use the network services available in your phone, you will need to sign up with a service provider. In many cases, the service provider will make available descriptions of their services and instructions for using features such as:

- Voice mail and voice privacy
- Call waiting, call forwarding, and caller ID
- Messaging
- News and information services
- Selected Internet services

Service providers may differ in their support of features. Before you sign up, make sure that your service provider supports the features that you want to use.

Contact Nokia

Please have your phone or enhancement with you when contacting either of the numbers below.

Nokia Customer Care Center, USA	Customer Care, Canada
Nokia Inc. 7725 Woodland Center Boulevard Suite 150 Tampa, Florida 33614 Tel: 1-888-NOKIA-2U (1-888-665-4228) Fax: 1-813-249-9619 TTY: 1-800-24-NOKIA (1-800-246-6542) (for TTY/TDD users only)	Nokia Products Ltd. 601 Westney Road South Ajax, Ontario L1S 4N7 Tel: 1-888-22-NOKIA (1-888-226-6542) Fax: 1-905-427-1070

Guide updates

From time to time, Nokia updates this guide to reflect changes. The latest version may be available at www.nokia.com/us.

Online tutorials

An interactive tutorial for this product may be available at www.nokiahowto.com

• REGISTER YOUR PHONE

Be sure to register your phone at www.warranty.nokiausa.com or call 1-888-NOKIA-2U (1-888-665-4228) so that we can serve you better if you need to call a customer center or to have your phone repaired.

- **ACCESSIBILITY SOLUTIONS**

Nokia is committed to making mobile phones easy to use for all individuals. For more information about phone features, enhancements, alternate format user guides, and other Nokia products designed with your needs in mind, visit the web site www.nokiaaccessibility.com or call 1-888-665-4228.

- **NOKIA PC SUITE**

Nokia PC Suite is a collection of powerful tools that you can use to manage phone features and data. For example, with PC Suite you can manage the photos from the phone camera, create new ringing tones, and create new wallpaper.

Nokia PC Suite software and documentation for the Nokia 6651 phone can be downloaded from the U.S. Mobile Phone products section of www.nokia.com/us.

3 Overview of functions

The Nokia 6651 phone is a versatile multimedia phone that provides many convenient features for daily use. Some of these features are briefly described here.

• CAMERA AND MULTIMEDIA MESSAGES

Your phone has a built-in camera that can be used for taking photos and recording short video clips with sound. After you have taken a photo or a video clip, you can attach it to a multimedia message and send it using the multimedia messaging service (MMS) to a compatible device (network service).

The photos can also be used as wallpaper in standby mode or as thumbnail pictures in contacts.

• Support for GSM and WCDMA networks

Your phone can be used in GSM 1900 and WCDMA networks.

The WCDMA network allows fast communications and simultaneous use of several call functions. When the phone is using a WCDMA network, you can take a photo during a call and send it in a multimedia message without ending the call (network service).

The phone selects the GSM or WCDMA network automatically according to the network parameters and the roaming agreements between the network operators.

• GPRS FOR FAST DATA TRANSFER

You can use the phone for GPRS (general packet radio service) high-speed data service. This is a network service.

GPRS can be used for accessing WAP and Internet services, sending and receiving text and multimedia messages, and downloading Java games and applications (network services).

To use GPRS service, subscribe to the service from your service provider and save the GPRS settings for the functions, such as multimedia messages and WAP services, that you want to use with the GPRS service.

• VOICE KEY

You can start a voice recording or make a call using voice dialing with the voice key  on the side of the phone.

To start voice recording, press . To activate voice dialing, press and hold . See [Voice dialing](#) and [Voice commands](#).

• JAVA™ APPLICATIONS

Your phone supports J2ME™ (Java 2 Platform, Micro Edition), which is a version of Java technology specifically designed for small consumer electronics products. The phone includes some Java applications and games.

You can install new applications and games from a PC with the Java installer software or download them from browser services. See [Applications \(Menu 10\)](#).

• POP-PORT™ CONNECTION

The Pop-Port™ connector allows fast data transfer between the phone and a PC using the DKU-2 cable. The PC needs a compatible USB port. The DKU-2 cable is supplied separately.

For the USB connection, you need one of the following operating systems installed on your PC: Windows 98 SE, Windows Me, Windows 2000, Windows XP.

• RECEIVING SETTINGS OVER-THE-AIR

In order to use network services such as WAP, MMS and GPRS, you need to have the proper settings on your phone. If you can receive the settings as an over-the-air (OTA) message, you only need to save them in your phone. For availability of the settings, contact your service provider.

4 Your phone

• KEYS

- 1 Power key 

Press and hold this key to switch the phone on or off.

If you press this key while the keypad is locked, the phone lights turn on for about 15 seconds.

- 2 Voice key 

Press this key to start voice recording. Press and hold this key to activate voice dialing. See also [Using the voice key](#).

- 3 Volume keys

Press the upper key to increase or the lower key to decrease the volume.

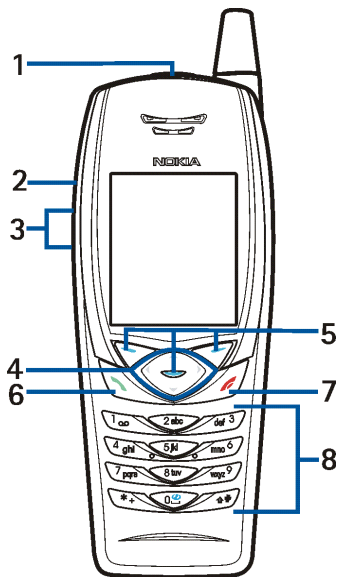
- 4 Scroll keys  ,  and 

With these keys you can scroll through different lists, such as contacts contents and the menu functions, and move the cursor for example when writing a message.

- 5 Three selection keys

Each key performs the function that is displayed above it. For example, pressing **Menu** in standby mode opens the list of menu functions.

- 6  dials a phone number or answers a call. Pressing this key in standby mode shows the most recently dialed numbers.



- 7  ends an active call or rejects a call. Exits from any function.
- 8  to  enter numbers and characters.
-  and  are used for various purposes in different functions.

Three selection keys

The function of these keys depends on the guiding text displayed above them.

The left selection key () usually opens a list of options related to the currently displayed function. In standby mode, this selection key is *Gallery*.

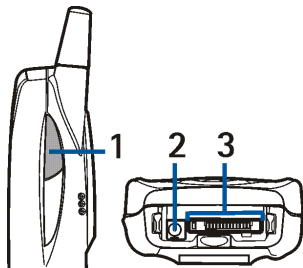
The middle selection key () , located in the middle of the scroll keys, usually performs the default operation of the current function. In standby mode, this selection key is *Menu*.

The right selection key () usually takes you back to the previous menu level in the menu functions. In standby mode, the function of this key depends on the settings in *Personal shortcuts* under the *Settings* menu, see page 56. If you personalize this key, *Go to* appears on the display, which allows you to quickly access the functions on the list.

Otherwise, the default for this key is either *Names*, which takes you to your contacts, or some other function customized by your service provider.

• CONNECTORS

- 1 Infrared port for wireless connection with a compatible device.
- 2 Charger connector
- 3 Pop-Port connector



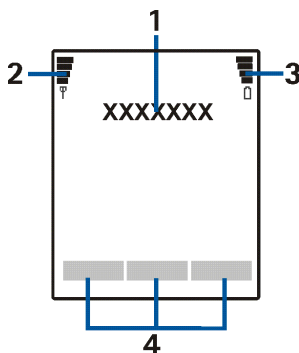
• STANDBY MODE AND DISPLAY INDICATORS

When the phone is ready for use and you have not keyed in any characters, the phone is in standby mode.

- 1 Shows the name of the network in which the phone is being used, or the operator logo.
- 2 Shows the signal strength of the cellular network at your current location. The higher the bar, the stronger the signal.

When using a WCDMA network, the  indicator appears below the bar.

- 3 Shows the battery charge level. The higher the bar, the more power in the battery.
- 4 Guiding texts for the three selection keys, see page [10](#).



Wallpaper and screen saver

You can set the phone to display a background picture, known as wallpaper, when the phone is in standby mode.

Screen saver is a power saving feature that is activated in standby mode if the phone is not used for a certain length of time.

For more information, see [Display settings](#).

Indicators and icons

Icon	Indicates...
	You have one or more text or picture messages.
	You have one or more multimedia messages.
	You have one or more voice messages.
	Your phone keypad is locked.
	The phone does not ring for an incoming call or text message because tones have been turned off or the <i>Silent</i> profile is selected.
	The alarm clock is set to On .
	The countdown timer is running.
	The camera is active. The indicator is red when you are recording a video clip.
	Bluetooth connection is active. When the indicator blinks, a Bluetooth connection is being established.
	The stopwatch is running in the background.
	The phone is being used in a WCDMA network. The icon is shown if the network supports it.
	The GPRS connection is active.
	The GPRS connection is suspended, for example if you have received or made a call during a GPRS connection. This indicator is shown in GSM networks only.
	IR connection indicator.
1 or 2	If you have two phone lines, the indicator displays the selected phone line.
	Forward all voice calls. All calls are forwarded to another number. If you have two phone lines, the indicator for line 1 is  and for line 2  .
	The loudspeaker is activated.
	Calls are limited to a closed user group.

Icon	Indicates...
	The timed profile is selected.
  	A headset, hands-free, loopset or music stand is connected to the phone.

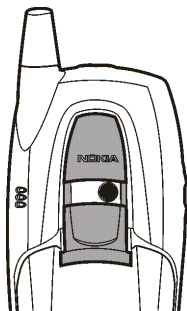
• USING THE CAMERA LENS COVER

The phone has a built-in camera that can be started by opening the lens cover at the back of the phone.

To open the cover, slide it toward the bottom of the phone to the position shown in the figure.

When you stop using the camera, close the lens cover carefully.

See also [Using the camera.](#)



5 Getting started

• INSTALLING THE SIM CARD AND THE BATTERY

Keep all SIM cards out of the reach of small children. For availability and information on using SIM card services, contact your SIM card vendor. This may be the service provider, network operator, or other vendor.

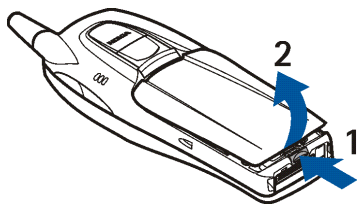
The SIM card and its contacts can easily be damaged by scratches or bending, so be careful when handling, inserting, or removing the card.



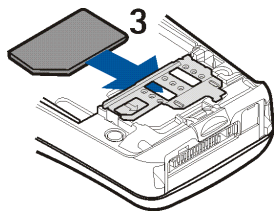
Note: Before installing or removing the SIM card and battery, always ensure that the phone is switched off and disconnected from any enhancement. Avoid touching electronic components while changing the covers. Always store and use the phone with the covers attached.

Installation

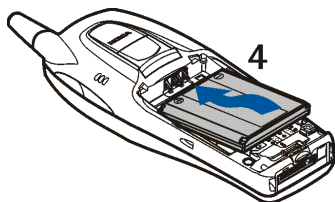
- 1 To remove the back cover, push the cover release button (1) and lift the cover (2).



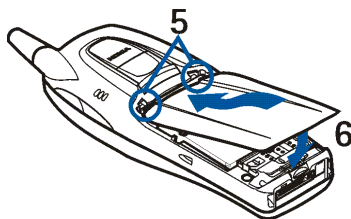
- 2 Slide the SIM card into the SIM card holder (3). Make sure that the SIM card is inserted properly and that the golden contact area on the card is facing down.



- 3 Align the golden connectors on the battery with the corresponding connectors on the phone (4). Push the opposite end of the battery toward the phone until the battery locks into place.

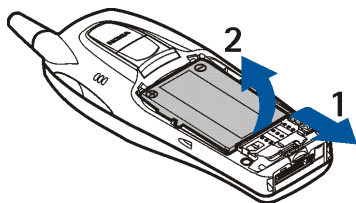


- 4 Insert the two catches of the cover into the corresponding slots on the phone (5). Press the cover until it locks into place (6).



REMOVING THE BATTERY

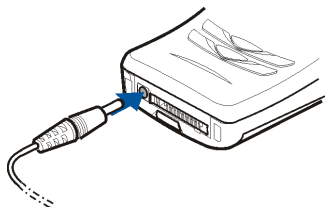
- 1 Remove the back cover.
- 2 Push the battery catch toward the bottom of the phone (1).
- 3 Lift the battery off the phone (2).
- 4 Install a new battery and replace the cover in the same way as when you install a SIM card.



• CHARGING THE BATTERY

Do not charge the battery when the back cover of the phone is removed. See [Charging and discharging](#).

- 1 Connect the charger to an ac wall outlet.
- 2 Connect the lead from the charger to the bottom of your phone.



If the phone is switched on, the word **Charging** appears briefly and the charging indicator bar starts scrolling. If the battery is completely empty, it may take a few minutes before the charging indicator appears on the display or before any calls can be made.

- 3 When the battery is fully charged, the charging indicator bar stops scrolling. Disconnect the charger from the ac wall outlet and the phone.

You can use the phone while the charger is connected.

The charging time depends on the charger and the battery used. Charging the BLC-2 battery, when the phone is in standby mode, takes about two hours when using the ACP-12 charger. If **Not charging** is displayed, wait for a while, disconnect the charger, plug it in again and retry. If charging still fails, contact your dealer.

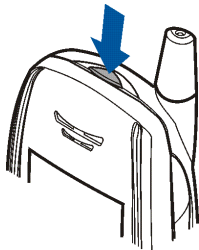
• SWITCHING THE PHONE ON AND OFF



Warning: Do not switch the phone on when wireless phone use is prohibited or when it may cause interference or danger.

Press and hold the power key .

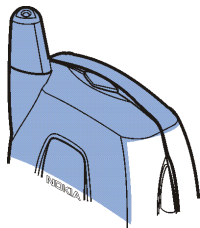
- If the phone asks for a code (PIN, UPIN, or security code), key in the code and press **OK**. See [Access codes](#).
- If the phone displays **Insert SIM card** even though the SIM card is properly inserted, or **SIM card not supported**, contact your service provider. Your phone does not support 5-V SIM cards.



• THE ANTENNA

Hold the phone as you would any other telephone with the antenna pointed up and over your shoulder.

Your phone has both an internal and an external antenna. As with any other radio transmitting device, do not touch either of the antennas (blue area in picture) unnecessarily when the phone is switched on. Contact with the antenna affects call quality and may cause the phone to operate at a higher power level than otherwise needed. Not touching the antenna area during a phone call optimizes the antenna performance and the battery life.



• ACCESS CODES

- **Security code:** This code is supplied with your phone. The security code protects your phone against unauthorized use. The preset code is 12345. Change the code and set the phone to request it using the *Access codes* and *Security level* functions in the *Security settings* menu (see page 63). Keep the new code secret and in a safe place separate from your phone.
- **PIN code:** The PIN (personal identification number) code may be supplied with the SIM card. It protects the SIM card against unauthorized use. If you activate the *PIN code request* function in the *Security settings* menu, the code is requested each time the phone is switched on.

If you enter an incorrect PIN code three times in succession, the SIM card is blocked. Enter the PUK code and press **OK**. Enter a new PIN code and press **OK**. Enter the new code again and press **OK**.

- **PIN2 code:** This code may be supplied with the SIM card and is required to access some functions, such as charging unit counters. If you enter an incorrect PIN2 code three times in succession, you are asked for the PUK2 code.
- **PUK and PUK2 codes:** The PUK and PUK2 codes may be supplied with

the SIM card. If this is not the case, contact your service provider.

- **Restriction password:** The restriction password is needed when using the *Call restrictions* function in the *Security settings* menu, see page [63](#).
- **Wallet code:** The wallet code is needed to use the wallet services, see page [73](#).
- **UPIN and UPUK codes:** The UPIN code may be supplied with the USIM card. The USIM card is an enhanced version of the SIM card and is supported by WCDMA mobile phones.

The UPIN code protects the USIM card against unauthorized use.

The UPUK code may be supplied with the USIM card and is needed to unblock a UPIN code.

• USING THE CAMERA

The phone has a built-in camera that can be used for taking photos and recording video clips. For information about the camera settings, see [Camera \(Menu 6\)](#).

Photos and video clips use shared memory, see page [3](#).

- 1 Open the lens cover at the back of the phone. See [Using the camera lens cover](#).

The live image appears on the display. You can use the display as a viewfinder.

Pressing **Options** allows access to the following functions. Select

- *Change mode* to set the camera to the desired operation mode. Select *Standard photo* to take a regular photo (in landscape orientation). Select *Portrait photo* to take a photo that can be attached to a name saved in contacts. Select *Video* to record a video clip. Select *Night mode* to take a photo when the lighting is dim and the camera needs a longer exposure time.

You can set the default mode in the *Camera* menu, see page [65](#).



Tip: To quickly change the camera mode, press and hold or when the live image is shown on the display.

- *Self-timer* to set the camera to take the photo within 10 seconds after you press **Start**.

While the self-timer is running, a second counter is shown at the top of the display and a beeping sound is heard. This sound can be set on or off using the *Camera sounds* setting in the *Camera* menu.

- *Mute* to turn off the microphone when the selected camera mode is *Video*.
 - *Open Gallery* to view the photos in the desired folder of the *Gallery* menu.
- 2 Press *Capture* to take a photo or *Record* to record a video clip. If you do not press *Capture* or *Record* within one minute, press *Continue* to activate the camera again.

- The approximate number of photos that can be saved in the phone is shown at the top of the display. This number is determined by the *Image quality* setting, the selected camera mode and the amount of free shared memory. If the distance to the subject is closer than 12 inches it may affect the sharpness of your photo.
 - When you record a video clip, the amount of remaining recording time is shown at the top of the display. The default maximum length of a video clip is 15 seconds. You can change this time using the *Video clip length* setting in the *Camera* menu. To stop the recording and save the video clip, press *Stop*. To pause the recording, press *Pause*. To resume the recording, press *Continue*.
- 3 The photo or video clip is displayed and saved with the default name in the *Images* or *Video clips* folder of the *Gallery* menu. You can define the default name in the *Camera* menu. The photos are saved in JPEG format and the video clips in 3GP format.

To delete the displayed photo, press *Delete*. To view the video clip, press *Play*. To capture a new photo or video clip, press *Back*.

If you press *Options*, you can select an option to, for example, rename the saved photo or video clip, or send it in a multimedia message (network service) or using an infrared or Bluetooth connection to a compatible device. You can also attach a portrait photo to a name or phone number in contacts.

A video clip can be sent in a multimedia message only if the length of the clip is 15 seconds at the most.

6 Basic functions

• MAKING A CALL

- 1 Key in the phone number, including the area code. If you key in an incorrect character, press  or  to move the cursor and **Clear** to delete the character to the left of the cursor.

To make an international call: Press  twice for the + character (replaces the international access code) and key in the country code, area code (omit the leading one, if necessary) and phone number.

- 2 Press  to call the number.

To adjust the volume: Use the volume keys on the side of the phone. Press the upper key to increase or the lower key to decrease the volume.

To use the phone hands free: See [Using the loudspeaker](#).

See also [Options during a call](#).

- 3 Press  to end the call or to cancel the call attempt.

Calling a phone number saved in contacts

Press  or  in standby mode. Key in the first letters of the name that has been saved with the phone number. Scroll to the name with  or . To view the default phone number saved with the name, press **Details** or press and hold . Press  to make the call.

Calling a recently dialed number

In standby mode, press  once to view up to 20 numbers you have last called or attempted to call. Scroll to the desired number or name, and press  to call the number.

To call the last dialed number, press  twice in standby mode.

Calling your voice mailbox

To call your voice mailbox (network service) in standby mode, press and hold , or press  and .

If the phone asks for the voice mailbox number, key it in and press **OK**. See also [Voice messages](#).

Voice dialing

You can dial a phone number by saying one or more words that have been attached to it. See [Voice dialing](#).

1-touch dialing

If you have assigned a phone number to one of the keys  to  (see [1-touch dialing](#)), you can call the phone number in the following ways:

- In standby mode, press the desired number key and .
- If the *1-touch dialing* function (see page [53](#)) is set on, press and hold the number key in standby mode until the call is started.

Making a conference call

Conference call is a network service that allows up to six people to participate in the same call.

- 1 Make a call to the first participant.
- 2 To make a call to a new participant, press **Options** and select *New call*.
Key in the phone number, or search for it in contacts, and press **Call** or . The first call is put on hold.
- 3 When the new call is answered, join the first participant to the call by pressing **Options** and selecting *Conference*.
- 4 To add a new participant to the call, repeat steps 2 and 3.
- 5 To have a private conversation with a participant:
Press **Options** and select *Private* and the desired participant. After the conversation, rejoin the conference call by pressing **Options** and selecting *Conference*.
- 6 To end the conference call, press .

• ANSWERING OR REJECTING AN INCOMING CALL

Press  to answer the call. If you want to mute the ringing tone, press **Silence**.

To reject the call, press , or press **Options** and select **Decline**. The rejected call will be forwarded if you have activated a call forwarding option such as **Forward if busy**.

If a compatible headset, such as HDB-4, is connected to the phone, you can answer and end a call by pressing the headset button.

When you receive a call, the phone may show the caller's phone number or name. The name is shown if you have saved it with the caller's phone number in contacts. If you have saved the same phone number with several names, the phone number will be shown. If the network does not inform the phone of the caller's phone number, the text **Private number** or **Call** will be shown.

Call waiting

You can answer a call while you have another call in progress if you have activated the **Call waiting** function in the **Call settings** menu (see page [57](#)). This is a network service.

During a call, press **Answer** or  to answer the waiting call, or press **Options** and select **Answer**. The first call is put on hold.

To switch between the two calls, press **Swap** or . To reject the waiting call, press **Options** and select **Decline**. To end the active call, press , or press **Options** and select **End call**. To end both calls, press **Options** and select **End all calls**.

• OPTIONS DURING A CALL

Many of the options that you can select during a call are network services. To check availability, contact your service provider.

Press **Options** during a call for some of the following functions:

Mute or *Unmute*, *End call*, *End all calls*, *Contacts*, *Menu*, *Hold* or *Unhold*, *New call* (network service), *Conference* (network service), *Private* (network service), *Answer*, *Decline*, *Swap* (network service), *Send touch tone*, *Loudspeaker* or *Handset*, *Lock keypad*, *Transfer* (network service), *Headset*, *Handsfree*, and *Record*.

Select

- *Touch tones* to send touch tone strings, for example, a password. Key in the touch tone string, or search for it in contacts. You can key in a wait character (w) or a pause character (p) by repeatedly pressing .
- *Transfer* to connect the held call to the active call and to disconnect yourself from the call.
- *Headset* or *Handsfree* to switch the active call to the respective compatible accessory when the accessory is connected to the phone.

• USING THE LOUDSPEAKER

The phone has a loudspeaker that allows you to use the phone hands-free during a call.



Warning: Do not hold the loudspeaker near your ear when the loudspeaker is in use because the volume may be extremely loud.

- To activate the loudspeaker during a call, press **Options** and select *Loudspeaker*, or press **Loudsp.** if available.
- To deactivate the loudspeaker, press **Options** and select *Handset*, or press **Normal** if available.

If a compatible device, such as the HDB-4 headset, is connected to the phone, the *Handset* option is replaced with *Handsfree* or *Headset*, and the selection key **Normal** changes to **Handsfr.** or **Headset**, respectively.

The loudspeaker is automatically deactivated when you end the call or connect an enhancement, such as a headset, to the phone.

• USING THE VOICE KEY

The voice key () , located on the side of the phone, can be used for voice recording and voice recognition.

Voice recording

You can record for example a name and a phone number and write them down later.

Press  to start voice recording. When recording, hold the phone in the normal position near to your ear.

To stop the recording, press . The recording is saved in the *Recordings* folder of the *Gallery* menu, see page [66](#).

Voice recording can be used also during a call (press *Options* and select *Record*). While recording a call, all parties to the call hear a faint beep approximately every five seconds.

Voice recognition

Press and hold  to activate voice dialing (see page [51](#)) or to use voice commands, see page [79](#). These functions can be used only in standby mode.

• KEYPAD LOCK (KEYGUARD)

You can lock the keypad to prevent the keys being accidentally pressed, for example, when your phone is in your handbag.

To lock the keypad, press *Menu* in standby mode and then  within 1.5 seconds.

To unlock the keypad, press *Unlock* and then  within 1.5 seconds.
When the keypad is locked:

- The indicator  is shown.
- The camera can be used normally.
- To answer a call, press . During the call, the phone can be operated normally. When you end or reject the call, the keypad will automatically be locked.

You can set the keypad to lock automatically after a certain length of time. See *Automatic keyguard* on page 59.

When the Keyguard is on, calls still may be possible to the official emergency number programmed into your phone. Enter the emergency number and press .

• WRITING TEXT

You can enter text for messages or notes using predictive or traditional text input.

Predictive text input

In predictive text input, you can key in characters by pressing a letter key once for each character. This method uses a dictionary built into the phone.

SETTING PREDICTIVE TEXT INPUT ON OR OFF

When writing text, press **Options** and select *Predictive text*.

- To set predictive text input on, select the language you want from the dictionary list. Predictive text input is only available for the languages on the list.
- To revert to traditional text input, select *Prediction off*.



Tip: To quickly set predictive text input on or off when writing text, press  twice, or press and hold **Options**.

USING PREDICTIVE TEXT INPUT

To use this input method, check that  is shown at the top of the display.

- 1 Write a word by using the keys  to . Press each key only once for one letter. The word may change after each keypress.

To write Nokia, press     .

- To move the cursor to the left, right, down or up, press , ,  or .
- To delete the character to the left of the cursor, press **Clear**. Press and hold **Clear** to delete several characters.
- To change the character case, press  repeatedly and check the indicator, for example Abc, at the top of the display.

- To insert a common punctuation mark, press and then repeatedly until the punctuation mark you want is displayed.
If you cannot find the punctuation mark by repeatedly pressing , press this key until the middle selection key changes to **Symbol**. Press **Symbol**, scroll to the character, and press **Insert** or .
 - To insert a special character, press and hold , scroll to the desired character and press **Insert** or .
 - To insert a number, press and hold the desired key. To insert several numbers, press and hold and key in the numbers. To continue writing text, press and hold .
- 2 If the displayed word is the one you want, press (a space is inserted), and write the next word.
- If the word is not the one you want, press **Options**, select **Matches** and the desired word, and press **Use**, or press repeatedly until the word appears.
To view the previous match, press **Prev**.
 - If the ? character is displayed after the word, the word that you intended to write is not in the dictionary. To add a word to the dictionary, press **Spell**, key in the word using traditional text input and press **Save**. When the dictionary becomes full, the new word replaces the oldest one that was added.
 - To edit the previous word, press to select it and modify it.
- 3 When using predictive text input, pressing **Options** can allow access to the following functions:
- Matches**: Shows a list of words that correspond to your entry.
 - Insert word** or **Edit word**: You can add a word to the dictionary using traditional text input.
 - Insert symbol**: You can select a special character from a list. Scroll to a character such as % and press **Insert**. You can also scroll to a character by pressing , , or , and select the character by pressing .

WRITING COMPOUND WORDS

Key in the first part of the word and confirm it by pressing . Repeat this with the last part of the word.

Traditional text input

In traditional text input, you can key in characters by pressing a number key one or more times for each character. To use this input method, check that  is shown at the top of the display.

Press a key one or more times until the desired character is displayed. Not all available characters are printed on the keys. The characters available depend on the language selected in the *Language settings* menu, see page [59](#).

- To insert a space, press .
- If the next letter you want is located on the same key as the present one, wait until the cursor is shown and key in the letter.
- To add a common punctuation mark or special character, press  repeatedly. Alternatively, press , scroll to the desired character and press **Insert**.
- To move the cursor to the left, right, down or up, press , ,  or .
- To delete a character to the left of the cursor, press **Clear**. Press and hold **Clear** to delete several characters.
- To insert a number, press and hold the desired key. To insert several numbers, press and hold  and key in the numbers. To continue writing text, press and hold .
- To change the character case, press  repeatedly and check the indicator at the top of the display.

7 Using the menu

Your phone offers a wide range of functions that are grouped in menus. Most of the menu functions are provided with a brief help text. To view the help text, scroll to the desired menu function and wait for about 15 seconds. To exit the help text, press **Back**.

The help text can be set to on or off using the *Help text activation* function in the *Phone settings* menu, see page 59.

• ACCESSING A MENU FUNCTION

BY SCROLLING

- 1 Press **Menu** in standby mode.
- 2 Scroll with  or  to a main menu, for example *Settings*, and press **Select** to open it.
- 3 Scroll to a submenu, for example *Call settings*, and press **Select**.
If the submenu contains further submenus, for example, *1-touch dialing*, repeat this step.
- 4 Scroll to a setting option, for example *Off*, and press **Select**.
Press **Back** to return to the previous menu level, and Exit to exit to standby mode.

BY USING A SHORTCUT NUMBER

The menus, submenus and setting options are numbered. This shortcut number is shown at the top right of the display.

Press **Menu** in standby mode. Within two seconds, key in the shortcut number of the main menu you want to open. Repeat this for the submenu and setting option.

• LIST OF MENU FUNCTIONS

1 MESSAGES



- 1 Text messages
 - 1 Create message
 - 2 Inbox
 - 3 Sent items
 - 4 Saved items
 - 5 Templates
 - 6 My folders
 - 7 Distribution lists
 - 8 Delete messages
- 2 Multimedia msg.
 - 1 Create message
 - 2 Inbox
 - 3 Outbox
 - 4 Sent items
 - 5 Saved items
 - 6 Delete messages
- 3 Chat
- 4 Voice messages
 - 1 Listen to voice messages
 - 2 Voice mailbox number
- 5 Info messages
 - 1 Info service
 - 2 Topics
 - 3 Language
 - 4 Info topics saved on SIM card¹
 - 5 Read²
- 6 Message settings
 - 1 Text messages
 - 2 Multimedia msg.
 - 3 Other settings
- 7 Service commands

2 CALL LOG



- 1 Missed calls
- 2 Received calls

- 3 Dialed numbers
- 4 Delete recent call lists
 - 1 All
 - 2 Missed
 - 3 Received
 - 4 Dialed
- 5 Call timers
 - 1 Duration of last call
 - 2 Duration of received calls
 - 3 Duration of dialed calls
 - 4 Duration of all calls
 - 5 Clear timers
- 6 GPRS data counter
 - 1 Data sent in last session
 - 2 Data received in last session
 - 3 All sent data
 - 4 All received data
 - 5 Clear counters
- 7 GPRS connection timer
 - 1 Duration of last session
 - 2 Duration of all sessions
 - 3 Clear timers

3 CONTACTS



- 1 Find
- 2 Add contact
- 3 Delete
- 4 Copy
- 5 Settings
 - 1 Memory in use
 - 2 Contacts view
 - 3 Memory status
- 6 1-touch dialing

- 1 Shown only if info message topics can be saved to the SIM card.
- 2 Shown only if info messages have been received.

- 7 Voice tags
- 8 Service numbers ¹
- 9 My numbers
- 10 Caller groups
- 4 PROFILES** 
 - 1 Normal
 - 1 Activate
 - 2 Customize
 - 3 Timed
 - 2 Silent
 - 3 Meeting
 - 4 Outdoor
 - 5 Pager
- 5 SETTINGS** 
 - 1 Personal shortcuts
 - 2 Time and date settings
 - 1 Clock
 - 2 Date
 - 3 Auto-update of date & time
 - 3 Call settings
 - 1 Call forwarding
 - 2 Anykey answer
 - 3 Automatic redial
 - 4 1-touch dialing
 - 5 Call waiting
 - 6 Summary after call
 - 7 Send my caller ID
 - 8 Line for outgoing calls¹
 - 4 Phone settings
 - 1 Language settings
 - 2 Automatic keypad
 - 3 Cell info display
 - 4 Welcome note
 - 5 Operator selection
 - 6 Confirm SIM service

- actions
- 7 Help text activation
- 8 Start-up tone
- 9 Memory status
- 5 Display settings
 - 1 Wallpaper
 - 2 Color schemes
 - 3 Operator logo
 - 4 Screen saver time-out
 - 5 Display contrast
- 6 Tone settings
 - 1 Incoming call alert
 - 2 Ringing tone
 - 3 Ringing volume
 - 4 Vibrating alert
 - 5 Message alert tone
 - 6 Keypad tones
 - 7 Warning tones
 - 8 Alert for
- 7 Enhancement settings²
 - 1 Headset
 - 2 Handsfree
 - 3 Loopset
- 8 Security settings
 - 1 Code in use
 - 2 PIN code request or UPIN code request³
 - 3 Call restrictions
 - 4 Fixed dialing¹
 - 5 Closed user group
 - 6 Security level
 - 7 Access codes
- 9 Restore factory settings
- 6 CAMERA** 
 - 1 Standard photo
 - 2 Portrait photo
 - 3 Night mode
 - 4 Video
 - 5 Settings

- 1 Shown if supported by your SIM card. For availability, contact your service provider.
- 2 Shown only if the phone is or has been connected to a compatible headset, handsfree unit or loopset.
- 3 The name of this setting depends on the *Code in use* setting.

7 GALLERY



8 ORGANIZER

- 1 Alarm clock
- 2 Calendar
- 3 To-do list
- 4 Wallet



9 GAMES

- 1 Select game
- 2 Game downloads
- 3 Memory
- 4 App. settings
 - 1 Application sounds
 - 2 Application lights
 - 3 Application shakes



10 APPLICATIONS

- 1 Select application
- 2 App. downloads
- 3 Memory



11 EXTRAS

- 1 Calculator
- 2 Voice commands
- 3 Countdown timer
- 4 Stopwatch



12 CONNECTIVITY

- 1 Bluetooth
 - 1 Bluetooth
 - 2 Search for audio enhancements
 - 3 Active device
 - 4 Paired devices
 - 5 Bluetooth settings
- 2 Infrared
- 3 GPRS
 - 1 GPRS connection
 - 2 GPRS modem settings



13 SERVICES

- 1 Home
- 2 Bookmarks
- 3 Download links
- 4 Last web addr.
- 5 Service inbox
- 6 Settings
- 7 Go to address
- 8 Clear the cache



14 GO TO



15 SIM SERVICES¹



¹ Shown only if supported by your SIM card.

8 Menu functions

• MESSAGES (MENU 1)



You can read, write, send and save text and multimedia messages. This is a network service. All messages are organized into folders.

Text and picture messages (SMS)

Your device supports the sending of text messages beyond the normal 160-character limit. If your message exceeds 160 characters, it will be sent as a series of two or more messages. In the navigation bar, 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.

Using special (Unicode) characters, such as Ë, â, á, ì, takes up more space. If there are special characters in your message, the indicator may not show the message length correctly. Before the message is sent, the device tells you if the message exceeds the maximum length allowed for one message. You can cancel sending by pressing Cancel or you can save the message in the inbox.

Text messages can contain pictures. Each picture message is made up of several text messages. Therefore, sending one picture message may cost more than sending one text message.

Before you can send text or picture messages, you need to save your message center number, see [Message settings](#).



Note: The message function can be used only if it is supported by your service provider. Only phones that offer compatible message features can receive and display messages.

WRITING AND SENDING A TEXT OR PICTURE MESSAGE

- 1 Press **Menu** in standby mode, and select *Messages*, *Text messages* and *Create message*, or press  in standby mode.
- 2 Key in the message, see [Writing text](#).

At the top the display, you can see the message length indicator counting backwards from 160.

- To insert a picture into the message, press **Options** and select *Insert picture*. The list of folders in the *Gallery* is shown. Scroll to the desired picture, press **Options** and select *Insert*. The picture is indicated by the  indicator on the top of the message. To view the text and picture together, press **Options** and select *Preview*. To change the picture or delete it from the message, press **Options** and select the desired function.
 - To use a text template as a base for the new message, press **Options** and select *Use template*. The list of templates in the *Templates* folder is shown. Scroll to the desired template, press **Options** and select *Insert*.
See also *Templates* in [Folders for text and picture messages](#).
 - To insert a phone number from contacts, press **Options** and select *Insert number*. Press **Find** or  and search for the number in contacts.
 - To insert a name from contacts, press **Options** and select *Insert contact* and the desired name. To insert a number or text item saved with the name, press **Options** and select *View details* and the desired number or text item.
 - To save the message in the *Archive* or *Templates* folder or in a folder that you have created inside the *My folders* folder, press **Options** and select *Save message*.
- 3 To send the message, press **Send** or , key in the recipient's phone number or search for it in contacts, and press **OK**.

Alternatively, press **Options** and select *Sending options*. Select

- *Send to many* to send the message to several recipients. Scroll to the first recipient and press **Send**. Repeat this for each recipient. When you have sent the message to everyone you want, press **Done**.
- *Send to list* to send the message using a distribution list. See [Distribution lists](#).
- *Sending profile* to send the message using the settings that you have defined earlier. For more information, see [Message settings](#).

The sent message is saved in the *Sent items* folder. For information about different folders for text and picture messages, see page [35](#).



Note: When sending messages, your phone may display the words *Message sent*. This is an indication that the message has been sent by your device to the message center number programmed into your device. This is not an indication that the message has been received at the intended destination. For more details about messaging services, check with your service provider.

READING AND REPLYING TO A TEXT OR PICTURE MESSAGE

When you receive a message, the  indicator and the number of new messages followed by *messages received* are displayed.

If the  indicator blinks, the text message memory is full. Before you can receive new messages, you need to delete some old ones. See page [40](#). Text messages use shared memory, see page [3](#).

- 1 Press **Show** to view the newly received message right away, or press **Exit** to view it later.

To view the message later, press **Menu** in standby mode, and select *Messages*, *Text messages* and *Inbox*. Select the desired message from the list. An unread message is indicated by .

- 2 Scroll through the message.
- 3 To reply to the displayed message, press **Reply**. Select
 - *Original text* if you want to include the original message in the reply.
 - *Template* or a standard answer such as *Thank you* if you want to use a preset text as a base for the new message.
- 4 To send your reply, press **Send** or .

Alternatively, press **Options** and select *Sending options* and the desired option. The options are the same as when sending a text or picture message, see page [32](#).

OTHER FUNCTIONS ACCESSIBLE WITH THE OPTIONS KEY

While reading a message, pressing **Options** also allows access to the following functions: *Delete*, *Use detail*, *Chat*, *Forward*, *Edit* (for text messages), *Edit text* (for picture messages), *Move*, *Rename*, *Copy to calendar*, *Save picture* (for picture messages), *Message details*.



Tip: You can use most of these functions without opening a message. For example, to forward a message, scroll to the desired message on the list, press **Options** and select *Forward*.

Select

- **Chat** to have a text-based conversation with the other person. See page [40](#).
- **Use detail** to extract a phone number, e-mail address or Web address from the message.
- **Move** to move the message to the **Archive** or **Templates** folder or to a folder that you have created inside the **My folders** folder.
- **Copy to calendar** to copy the message text to your phone calendar as a reminder note.
- **Save picture** to save the picture in the **Gallery** menu, if you are viewing a picture message.
- **Message details** to view the sender's name and phone number, the message center used, and the date and time of receipt.

FOLDERS FOR TEXT AND PICTURE MESSAGES

The phone has different folders for saving sent and received text and picture messages.

To open a folder, press **Menu** in standby mode, and select **Messages**, **Text messages** and one of the following folders:

- **Inbox** where the phone saves received messages.
- **Sent items** where the phone saves sent messages.
- **Saved items** where you can save messages for later use.
- **Templates** where you can save text messages that you want to use as a base when writing or replying to a message.

To edit or delete a template, select the desired template, press **Options**, and select the desired function.

- **My folders** where you can create new folders for your messages.

To add a folder, press **Add** (if the folder list is empty) or press **Options** and select **Add folder**. To delete or rename a folder, press **Options** and select the desired function.

Multimedia messages (MMS)

The phone can send and receive multimedia messages. This is a network service.



Note: Only devices that offer compatible multimedia message or e-mail features can receive and display multimedia messages. Multimedia message objects may contain viruses or otherwise be harmful to your device or PC. Do not open any attachment if you are not sure of the trustworthiness of the sender.

If *Allow multimedia reception* is set to *Yes* or *In home network*, your operator or service provider may charge you for every message you receive.

Sent and received multimedia messages use shared memory, see page [3](#). The default setting of the multimedia message service is generally on. The appearance of a multimedia message may vary depending on the receiving device.

WRITING AND SENDING A MULTIMEDIA MESSAGE

Before you can use the multimedia messaging service, you need to define its settings, see page [43](#). For the settings, availability and subscription to this service, contact your service provider.

Before sending a multimedia message, read the notes on page [38](#).

- 1 Press **Menu** in standby mode, and select *Messages, Multimedia msgs.* and *Create message*.
- 2 Key in a message, see [Writing text](#).
 - To insert an image, sound clip or video clip, press **Options** and select *Insert* and the desired option.
The list of folders in the *Gallery* menu is shown. Scroll to the desired file, press **Options** and select *Insert*. Copyright protections may prevent some images, ringing tones, and other content from being copied, modified, transferred or forwarded.
 - Your phone supports the sending and receiving of multimedia messages that contain several pages (slides). To add a new slide to the message, press **Options** and select *Insert* and *Slide*. Each slide can contain text, one image and one sound clip.
If you have added several slides to the message, you can open the desired slide by pressing **Options** and selecting *Previous slide*,

Next slide or Slide list.

To define how long each slide is shown, press **Options** and select *Slide timing*.

To move the text part to the top or bottom of the message, press **Options** and select *Text on top* or *Text on bottom*.

- To insert a name from contacts, press **Options** and select *More options*, *Insert contact* and the name from the name list. To insert a text item attached to the name, for example a postal address, press **Options** in the name list and select *View details* and the desired text item.

To insert a number from contacts, press **Options** and select *More options* and *Insert number*. Select the name and then the desired number.

- To insert a business card or a calendar note for sending it to a compatible device, press **Options** and select *Insert* and the desired option.
 - To delete an object or slide from the message, press **Options** and select *Delete* and the appropriate function.
 - To save the message in the *Saved items* folder, press **Options** and select *Save message*.
- 3 To add a subject to the message, press **Options** and select *More options* and *Edit subject*. Key in the subject and press **OK**.

To view for example the size, subject and recipient of the message, press **Options** and select *More options* and *Message details*.

To view the message or slide presentation before sending it, press **Options** and select *Preview*. When you scroll through the message, the function of the middle selection key changes according to the displayed object, for example a video clip. Press **Back** to return to the editor screen.

- 4 To send the message to a phone number, press **Send** or . To send the message to an e-mail address, press **Options** and select *Send to e-mail*.

To send the message to several recipients, press **Options** and select *Send to many*.

- 5 Key in the recipient's phone number or e-mail address, or search for it in contacts. Press **OK** to send the message.

If you pressed **Options** and selected *Send to many* in step 4, press

Options, select *Search number* or *Search e-mail*, and select the recipients one by one from contacts. When you have selected all the recipients, press **Done**. Press **Send** or  to send the message.

The message is saved in the *Outbox* folder until it is sent. The sent messages are saved in the *Sent items* folder if the *Save sent messages* setting is *Yes*. See [Settings for multimedia messages](#). For information about different folders for multimedia messages, see page [40](#).

NOTES FOR SENDING A MULTIMEDIA MESSAGE

- It may take more time to send a multimedia message than a text message.

During sending, the animated  indicator is displayed and you can use other functions of the phone.

If the sending is interrupted, the phone tries to resend the message a few times. If the sending fails, the message remains in the *Outbox* folder where you can try to resend it later.

- If you send a multimedia message to a phone which does not support multimedia messaging, the network may send a text message to the recipient that includes an Internet address where the multimedia message can be viewed (network service).

READING AND REPLYING TO A MULTIMEDIA MESSAGE

While the phone is receiving a multimedia message, the animated  indicator is displayed. When the message has been received, the  indicator and the text *Multimedia message received* are shown.

If the  indicator blinks, the memory for multimedia messages is full. Before you can receive new messages, you need to delete some old ones, see page [40](#). Multimedia messages use shared memory, see page [3](#).

Read also the notes for receiving multimedia messages on page [39](#).

- Press **Show** to view the newly received message right away or press **Exit** to view it later.

To view the message later, press **Menu** in standby mode, and select *Messages*, *Multimedia msgs.* and *Inbox*. Select the desired message from the list. An unread message is indicated by .

- Scroll through the message. The function of the middle selection key changes according to the displayed object. If the message contains a

slide presentation, the presentation is played automatically.

- To reply to the message, press **Reply** or **Options**, and select *Reply*.
- To listen to a sound clip or view a video clip, press **Play**.
- To save an image, sound clip, or video clip in the *Gallery* menu, press **Options**, and select *Open image*, *Open sound clip*, or *Open video clip*. Once the item is open, press **Options** and select the appropriate function.
- To view an image in a larger size, press **Options**, select *Open image*, and press **Zoom**. You can scroll the image with , , , and .
- To access the following functions, press **Options**:
View text, *Delete message*, *Reply to all*, *Use detail*, *Forward to no.*, *Forward to e-mail*, *Forward to many*, *Message details*, *Use detail*.
Select
Details to view information about the current object, for example its name, size and format.
Message details to view information about the multimedia message, for example its recipients, subject and size.
Use detail to extract a phone number, e-mail address or Web address from the message.



Tip: You can use most of these functions without opening a message. For example, to forward a message to another number, scroll to the desired message on the list, press **Options** and select *Forward to no.*

NOTES FOR RECEIVING A MULTIMEDIA MESSAGE

- If you receive a multimedia message that is too large for the phone, the network may send you a text message that includes an Internet address where you can view the multimedia message (network service).
- If the received message contains an object, such as an image or sound clip, that is not supported by the phone, the object may be replaced with its name and the text *Object format not supported*.
- Copyright protections may prevent some images, ringing tones, and other content from being copied, modified, transferred or forwarded.

FOLDERS FOR MULTIMEDIA MESSAGES

The phone has different folders for saving received and sent multimedia messages.

To open a folder, press **Menu** in standby mode, and select *Messages*, *Multimedia msgs.* and one of the following folders:

- *Inbox* where the phone saves received messages.
- *Sent items* where the phone saves sent messages if the *Save sent messages* setting in the *Multimedia msgs.* menu is *Yes*. See [Settings for multimedia messages](#).
- *Saved items* where you can save messages for later use.
- *Outbox* where a message is saved until it is sent. Press **Options** to, for example, resend a message whose sending has failed.

Deleting messages

TO DELETE A SINGLE MESSAGE:

- 1 Press **Menu** in standby mode and select *Messages*, *Text messages* or *Multimedia msgs.*, and the desired message folder.
- 2 Select the message you want to delete, press **Options**, and select the appropriate function.

TO DELETE ALL MESSAGES FROM A FOLDER OR ALL THE FOLDERS:

- 1 Press **Menu** in standby mode and select *Messages*, *Text messages* or *Multimedia msgs.*, and *Delete messages*.
- 2 To delete all the messages from a folder, select the desired folder and press **Yes**.

To delete all the text messages from all the folders, select *All messages* and press **Yes**.

Chat

Chat is a fast way to have a conversation using text messages. Each chat message is sent as a separate text message.

The messages received and sent during a chat are not saved.

- 1 To start a chat, press **Menu** in standby mode and select *Messages* and *Chat*. Key in or search contacts for the phone number of the person with whom you want to chat, and press **OK**.

Another way to start a chat: While reading a text message, press **Options** and select **Chat**.

- 2 Key in your nickname for the chat and press **OK**.
- 3 Write your message, and press **Send** or  to send it.
- 4 The reply message from the other person is shown above the message you sent. To reply to the message, press **OK** and repeat step 3.
- 5 To end the chat, press **Options** and select **Quit** in the editor screen.

During a chat, you can press **Options** and select **Chat history** to view the most recent messages of the current chat, or select **Chat name** to edit your nickname.

Voice messages

Voice mailbox is a network service and you may need to subscribe to it before using it for the first time.

Press **Menu** in standby mode, and select **Messages** and **Voice messages**. Select **Voice mailbox number** to save the number of your voice mailbox or **Listen to voice messages** to call it.

Each phone line may have its own voice mailbox number, see **Line for outgoing calls** on page 58.



Tip: Press and hold  for fast access to your voice mailbox.

Info messages

This network service allows you to receive messages on various topics from your service provider.

Press **Menu** in standby mode, and select **Messages** and **Info messages**. For available topics and their numbers, contact your service provider.

In WCDMA networks, it may not be possible to receive the info messages.

Message settings

Text message settings affect the sending of text messages. Multimedia message settings affect the sending and receiving of multimedia messages.

The **Font size** setting in the **Other settings** submenu affects both text and multimedia messages.

SETTINGS FOR TEXT MESSAGES

Press **Menu** in standby mode, and select *Messages*, *Message settings*, *Text messages* and *Sending profile*. Select the group of settings ('sending profile') whose settings you want to change, if your SIM card supports several profiles. *Default profile* is the sending profile that the phone will use if you do not select another profile.

Select

- *Message center number* to save the phone number needed for sending text and picture messages. You obtain this number from your service provider.
- *Messages sent via* to choose the message type *Text*, *E-mail*, *Paging* or *Fax* (network service).
- *Message validity* to choose how long the network should attempt to deliver your message to its recipient (network service).
- *Default recipient number* to save a phone number where messages are sent by default when this sending profile is used.
- *Delivery reports* to request the network to send delivery reports on your messages (network service).
- *Use GPRS* to set GPRS as the preferred bearer for sending text messages. When this setting is *Yes*, the phone sends a text message over a GPRS connection if this is possible.
- *Reply via same center* to allow the recipient of your message to send you a reply message using your message center (network service).
- *Rename sending profile* to change the name of the sending profile. The name of the default profile cannot be changed.

OVERWRITING SETTINGS

When the text message memory becomes full, the phone cannot receive new messages. However, you can set the phone to replace old messages with new ones automatically.

Press **Menu** in standby mode, and select *Messages*, *Message settings*, *Text messages* and *Overwriting in sent items* or *Overwriting in inbox*. Select *Allowed* to set the phone to replace the old text messages with new ones in the *Sent items* or *Inbox* folder, respectively.

SETTINGS FOR MULTIMEDIA MESSAGES

Press **Menu** in standby mode, and select *Messages*, *Message settings* and *Multimedia msgs.*

Select

- *Save sent messages* and *Yes* to set the phone to save sent multimedia messages in the *Sent items* folder. If you select *No*, the sent messages are not saved.
- *Delivery reports* to request the network to send delivery reports on your messages (network service).
- *Scale image down* to select whether images are scaled to a smaller size when inserted into a message.
- *Default slide timing* to define how long each slide in your presentation is shown by default.
- *Allow multimedia reception* to allow (*Yes*) or prevent (*No*) the receipt of multimedia messages or to allow it only in your home network (*In home network*).
- *Incoming multimedia messages* to set the phone to automatically fetch newly received multimedia messages (*Retrieve*), or select *Reject* if you do not want to receive multimedia messages.

This setting is not shown if *Allow multimedia reception* is set to *No*.

- *Connection settings* to define the settings for downloading newly received multimedia messages. Activate the connection set where you want to save the settings and then edit them. See also [Keying in the service settings manually](#).

For proper settings, contact your service provider.

- *Allow adverts* to allow or prevent the receipt of advertisements.
This setting is not shown if *Allow multimedia reception* is set to *No* or *Incoming multimedia messages* is set to *Reject*.

OTHER SETTINGS

To select the font size for viewing text and multimedia messages, press **Menu** in standby mode, and select *Messages*, *Message settings*, *Other settings*, and *Font size*.

Service commands

You can send service requests to your service provider (network service).

Press **Menu** in standby mode, and select *Messages* and *Service commands*. Key in the desired characters. Press and hold  to switch between letters and numbers. Press **Send** to send the request.

For proper commands, contact your service provider.

Distribution lists

You can create distribution lists for sending text and picture messages to several recipients at a time.

You may be charged separately for each recipient of a message to a distribution list.

- 1 Press **Menu** in standby mode, and select *Messages*, *Text messages* and *Distribution lists*.
- 2 To create a new list, press **Add** if there are no existing distribution lists, or press **Options** and select *Add list* if there are existing lists. Key in a name for the new list and press **OK**.

To view the names on a list, scroll to the desired list and press **View**.

To rename a list, scroll to the desired list, press **Options**, and select *Rename list*.

To delete all the names from a list, scroll to the desired list, press **Options**, and select *Clear list*.

To delete a list and all the included names, scroll to the desired list, press **Options**, and select *Delete list*.

- 3 If you opened a distribution list by pressing **View** in step 2, you can do one of the following:
 - To add a new name to the list, press **Add** and select the desired name from the internal contacts.
 - To view the contact information of a recipient, scroll to the desired name, press **Options** and select *View details*.
 - To delete a recipient from the list, scroll to the desired name, press **Options** and select *Delete contact*.

SENDING A MESSAGE USING A DISTRIBUTION LIST

Press **Menu** in standby mode, and select *Messages*, *Text messages* and *Create message*.

Write the message. Press **Options** and select *Sending options*, *Send to list* and the desired list.

• CALL LOG (MENU 2)



In this menu, you can view the phone numbers of missed, received and dialed calls, and the approximate length of your calls.

Missed, received and dialed calls

To view the phone numbers of missed, received and dialed calls, press **Menu** in standby mode and select *Call log*. Select

- *Missed calls* to view the ten phone numbers from which somebody has most recently tried to call you with no success (network service).



Tip: When a note about missed calls is shown in standby mode, press **List** to view the phone numbers. Scroll to the number you want to call back and press .

- *Received calls* to view the ten phone numbers from which you have most recently accepted calls (network service).
- *Dialed numbers* to view the 20 phone numbers that you have most recently called or attempted to call. See also [Calling a recently dialed number](#).
- *Delete recent call lists* to clear the lists of missed, received, and dialed calls.

Select whether you want to delete the phone numbers on all the lists, or only the numbers on the list of missed calls, received calls or dialed numbers. You cannot undo this operation.

NOTES ABOUT MISSED, RECEIVED AND DIALED CALLS

- The phone registers missed and received calls. The network must support these functions and the phone must be switched on and within the network's service area.
- If the phone number of a registered call has been saved with a name

in contacts, the name is shown on the call list. To view the phone number, press **View**. To call the number, press .

- If you press **Options** in the *Missed calls*, *Received calls* or *Dialed numbers* menu, you can view the date and time of the call and edit or call the registered phone number, save it in contacts, delete it from the list or send a message to the number.

Call counters and call timers



Note: The actual invoice for calls and services from your service provider may vary, depending upon network features, rounding off for billing, taxes and so forth. Some timers may be reset during service or software upgrades.

Press **Menu** in standby mode and select *Call log*. Select

- *Call duration* to view the approximate duration of your incoming and outgoing calls. The security code is needed to clear the timers.

Each phone line may have its own call timers. See *Line for outgoing calls* on page 58.

- *GPRS data counter* to view the amount of data that was sent and received during the last GPRS connection or the total amount of sent and received data. The counter unit is a byte.

Text messages sent and received over a GPRS connection are not included in the data count.

The security code is needed to clear the counters.

- *GPRS connection timer* to view the duration of the last GPRS connection or all GPRS connections. The security code is needed to clear the timers.

• CONTACTS (MENU 3)



You can save names and phone numbers (contacts) in the phone memory (internal contacts) and in the SIM card's memory (SIM contacts).

To access this menu, press **Menu** in standby mode and select *Contacts*.

The number of names that can be saved depends on their length, and the number and length of related phone numbers and text items. The phone supports SIM cards that can save up to 250 names and phone numbers.

Contacts saved in the phone memory use shared memory, see page 3.

Alternative ways to access functions in Contacts

You can access the functions by pressing **Names** in standby mode (or by pressing **Go to** and selecting **Contacts**). See also [Three selection keys](#).

Some functions can also be accessed when you press  or  in standby mode. Once in your list of contacts, press **Details** and scroll to a number or text item, then press **Options** and select the desired function.

To access the contacts during a call, press **Options** and select **Contacts**.

Selecting settings for contacts

Press **Menu** in standby mode and select **Contacts** and **Settings**. Select

- **Memory in use** to select the contact memory you want to use. If you want to search for names and phone numbers in both memories, select **Phone and SIM**. In this case, the names and numbers will be saved in the phone memory.
- **Contacts view** to select how the names, numbers and images are displayed in contacts. For example, select **Name and image** to view the names with the attached images.
- **Memory status** to view how much free memory is available in each contact memory.

Saving names and phone numbers

Names and numbers are saved in the memory you select. See [Selecting settings for contacts](#).

- 1 Press **Menu** in standby mode and select **Contacts** and **Add contact**.
- 2 Key in the name (see [Traditional text input](#)) and press **OK** to save it.
- 3 Key in the phone number, including the area code, and press **OK** to save it.
 - If you want to use the phone number while abroad, press  twice (for the + character), and key in the country code, area code (omit the leading zero, if necessary) and phone number.

- 4 To return to standby mode, press **Done**.



Tip: To quickly save a name and phone number, key in the phone number in standby mode and press **Save**. Key in the name and press **OK**.

SAVING MULTIPLE NUMBERS AND TEXT ITEMS PER NAME

You can save different types of numbers and text items per name in the phone contact memory.

The first phone number that you save with the name is the default number. It is indicated with a frame around the number type indicator, for example . When you select a name from contacts, for example to make a call, the default number is used unless you select another number.

- 1 Make sure that the selected memory is **Phone** or **Phone and SIM**.
- 2 Press or in standby mode.
- 3 Scroll to the name to which you want to add a number or text item, and press **Details**.
- 4 Press **Options**, and select **Add number**, **Add detail** or **Change type**.
 - To add a phone number, select **Add number** and one of the following number types: **General**, **Mobile**, **Home**, **Work** or **Fax**.
Key in the number, and press **OK** to save it.
 - To add a text item, select **Add detail** and one of the following text types: **E-mail address**, **Web address**, **Street address** or **Note**.
Key in the text item. To add a special character, press *, scroll to the desired character and press **Insert**. Press **OK** to save the text item.
 - To change the type of the selected number or text item, select **Change type** and the desired type.
- 5 Press to return to standby mode.



Tip: To quickly add a new number to a previously saved name, key in the number in standby mode, press **Options** and select **Add to contact**. Scroll to the desired name, press **Add** and select the number type.

CHANGING THE DEFAULT NUMBER

Press  or  in standby mode, scroll to the desired name and press **Details**. Scroll to the number you want to set as the default number. Press **Options** and select *Set as default*.

ADDING AN IMAGE TO A SAVED NAME OR NUMBER

You can add an image to a name or number saved in the internal contacts. The image is shown when you receive a call from the given phone number.

Press  or  in standby mode, scroll to the name (and number) to which you want to add an image and press **Details**. Press **Options** and select *Add image*. The list of folders in the *Gallery* menu is shown. Scroll to the desired image, press **Options** and select *Save to contacts*.



Tip: To quickly attach a new photo to a name or phone number, open the lens cover, check that the camera mode is *Portrait photo* and press **Capture**. Press **Options**, select *Attach to contact*, scroll to the desired name or phone number and press **Attach**.

To change an image attached to the name, see page [50](#).

Finding a name in contacts

- 1 Press **Menu** in standby mode and select **Contacts** and *Find*.
- 2 Key in the first letters of the desired name, if you want. You can press  or  to move the cursor inside the name.
- 3 Scroll to the desired name, and press **Details**.
 - If the name is saved on the SIM card,  is shown at the top of the display.
- 4 Scroll through the phone numbers and text items added to the name.
If a phone number or text item cannot be shown on one line, you can view it in its entirety by pressing **View** or .



Tip: To quickly find a name and phone number, press  or  in standby mode. Key in the first letters of the name and scroll to the desired name.

To view the default phone number for the name, press and hold , if the *Contacts view* setting is other than *Name and number*.

Editing a name, number or text item

- 1 Press  or  in standby mode, scroll to the desired name and press **Details**.
- 2 If the *Contacts view* setting is *Name and number*, scroll to the desired name, number or text item and press **Edit**.
If the *Contacts view* setting is other than *Name and number*, scroll to the desired name, number or text item. Press **Options** and select the desired function, for example *Edit detail* to edit a text item.
- 3 Edit the name, number or text item, and press **OK**.

Changing the image attached to a name

- 1 Press  or  in standby mode, scroll to the desired name and press **Details**.
- 2 If the *Contacts view* setting is *Name and number*, scroll to the current image and press **Change**.
If the *Contacts view* setting is other than *Name and number*, scroll to the image, press **Options** and select *Change image*.
- 3 Open the desired folder of the *Gallery* menu, select the new image, press **Options** and select *Save to contacts*.

Deleting contacts

Deleting a name and number will also delete the additional numbers, text items and image added to it. Deleting an image from contacts does not delete it from the *Gallery* menu.

- 1 Press **Menu** in standby mode and select *Contacts* and *Delete*.
- 2 To delete names and numbers one by one, select *One by one* and scroll to the name (and number) you want to delete. Press **Delete** and then **Yes**.

To delete all the names and numbers, select *Delete all* and scroll to the desired contacts list, that is *Phone* or *SIM card*. Press **Delete** and **Yes**, key in the security code and press **OK**.

DELETING A NUMBER, TEXT ITEM OR IMAGE ADDED TO A NAME

Press  or  in standby mode, scroll to the desired name (and number) and press **Details**. Scroll to the number, text item or image you want to delete, press **Options** and select the appropriate function (for example, *Delete detail* to delete a text item). Press **Yes**.

Copying contacts

You can copy names and phone numbers from the phone to the SIM card and vice versa. Text items or images saved in the phone will not be copied to the SIM card.

- 1 Press **Menu** in standby mode and select *Contacts* and *Copy*.
- 2 Select the copying direction, that is *From phone to SIM card* or *From SIM card to phone*.
- 3 Select *One by one*, *All* or *Primary numbers*. *Primary numbers* is shown only when you copy from the phone to the SIM card.
 - If you select *One by one* or *All* to copy all the numbers added to a name from the phone to the SIM card, each number may be saved separately on the card.
 - If you select *One by one*, scroll to the desired name and press **Copy**.
 - If you select *Primary numbers*, only the default numbers will be copied with the names.
- 4 Select whether you want to keep the original names and numbers (*Keep original*) or delete them (*Move original*).
 - If you selected *All* or *Primary numbers*, press **Yes** to start the copying or moving.

Voice dialing

You can dial a phone number by saying one or more words ('voice tag') attached to it. The voice tag can be, for example, a name.

Voice tags are saved in the phone. All the voice tags are deleted if you insert another SIM card into the phone and save new voice tags.

NOTES FOR USING VOICE DIALING

Before using voice tags, note the following:

- Voice tags are not language dependent. They are dependent on the speaker's voice.
- You must say the name exactly as you said it when you recorded it.
- Voice tags are sensitive to background noise. Record voice tags and use them in a quiet environment.
- When recording a voice tag or making a call by saying a voice tag, hold the phone in the normal position near to your ear.
- Very short names are not accepted. Use long names and avoid similar names for different numbers.



Note: Using voice tags may be difficult in a noisy environment or during an emergency, so you should not rely solely upon voice dialing in all circumstances.

RECORDING A VOICE TAG

Press  or  in standby mode, scroll to the desired name, and press **Details**. Press **Options** and select **Add voice tag**. Press **Start** and clearly say the words you want to record as the voice tag.

MAKING A CALL USING A VOICE TAG

Press and hold the right selection key () or the voice key () in standby mode until you hear a short tone. Say the voice tag clearly while holding the phone in the normal position near to your ear. The phone plays the voice tag and dials the related phone number.

If you use a compatible headset, such as HDB-4 or HDW-2, press and hold the headset button until you hear a short tone and say the voice tag clearly.

PLAYING, CHANGING OR DELETING A VOICE TAG

Press **Menu** in standby mode and select **Contacts** and **Voice tags**. Select the desired name or phone number and the function you want.

Sending and receiving a business card

You can send or receive a person's contact information as a business card.

SENDING A BUSINESS CARD

You can send a business card to a compatible phone or other device which supports the vCard standard.

- 1 Press  or  in standby mode, scroll to the desired name, and press **Details**. Press **Options** and select *Send bus. card*.
- 2 To send the business card using infrared, make sure that the other phone or the compatible device is set up to receive data using its infrared port and select *Via infrared*.

To send the business card as an over the air (OTA) message (network service), select *Via text message* or *Via multimedia*.

To send the business card using a Bluetooth connection to a compatible device, make sure that the device is within the operating range and select *Via Bluetooth*.

- 3 If the business card contains text items or several numbers, select whether you only want to send the default number (*Default number*) or all the numbers and text items added to the name (*All details*).

If you selected *Via Bluetooth* in step 2, select the device to which you want to send the business card.

RECEIVING A BUSINESS CARD

To receive a business card through infrared from a compatible device, activate the infrared port of your phone, see page [84](#). The user of the other device can now send the business card using infrared.

When you receive a business card, press **Show** to view it. Press **Save** to save the business card in your phone, or press **Exit** and then **Yes** to discard the business card.

1-touch dialing

You can set the keys  through  to work as 1-touch dialing keys. To make a call using 1-touch dialing, see page [21](#).

ASSIGNING A PHONE NUMBER TO A 1-TOUCH DIALING KEY

Press **Menu** in standby mode and select *Contacts* and *1-touch dialing*. Scroll to the desired key and press **Assign**. Press **Find** and select the name and number you want to assign to the selected key.

If a phone number is already assigned to the key, you can view the number by pressing **View** or change the number or delete the assignment by pressing **Options** and selecting the desired option.

Service numbers

You can call the service numbers of your service provider if they are available on your SIM card (network service).

Press **Menu** in standby mode and select **Contacts** and **Service numbers**. Scroll to the desired service name and press  to call it.

To view the phone number saved with the name, press **Details**. To copy the number, make it a 1-touch dialing number, or to send a message or business card to it, press **Options** and select the desired function.

My numbers

You can view the phone numbers assigned to your SIM card if this is allowed by the card.

Press **Menu** in standby mode and select **Contacts** and **My numbers**. Scroll to the desired name or number, and press **View**.

Caller groups

You can arrange the names and phone numbers saved in contacts into caller groups.

For each caller group, you can set the phone to sound a specific ringing tone and display a selected graphic when you receive a call from a phone number in the group.

To set the phone to ring only upon calls from the phone numbers belonging to a selected caller group, see **Alert for** in [Tone settings](#).

Press **Menu** in standby mode and select **Contacts**, **Caller groups** and the desired caller group. Select

- **Group name** to rename the group.
- **Group ringing tone** to select a ringing tone for the group. **Default** is the ringing tone that you have selected for the active profile in the **Profiles** menu, see page [55](#).
- **Group logo** and **On** to set the phone to display the group graphic. To turn the graphic off, select **Off**. To view the graphic, select **View**.

- *Group members* to add a name to the caller group or to delete a name from it.

To add a name, press **Add**, scroll to the desired name and press **Add**.

To delete a name, scroll to the desired name and press **Options** and select *Remove contact*.



Tip: To quickly add a name to a caller group, press  or  in standby mode, scroll to the desired name and press **Details**. Press **Options** and select *Caller groups* and the desired group.

CHANGING THE CALLER GROUP OF A NAME

Press  or  in standby mode, scroll to the desired name and press **Details**. Scroll to the current caller group and press **Change**. Select the new caller group.

Sending a message from contacts

You can send a text message to a person whose name or phone number is saved in contacts (network service).

Press  or  in standby mode, scroll to the desired name and press **Details**. Scroll to the desired number, press **Options** and select *Send message*. Key in the message and press **Send**. For more information, see [Writing and sending a text or picture message](#).

• PROFILES (MENU 4)



Your phone has several setting groups, called profiles, for which you can customize the phone tones for different events and environments.

To use a profile, first customize its settings and then activate it.

To access this menu, press **Menu** in standby mode and select *Profiles*.

- 1 Select a profile that you want to activate or whose settings you want to change.

For example, select the *Silent* profile if you want to mute all the phone tones.

- 2 Select *Activate*, *Customize* or *Timed*.

- To activate the selected profile, select *Activate* or *Timed*.

To activate the profile for a certain amount of time, select *Timed*

and set the end time. When this time expires, the previous profile that was not timed, becomes active.

- To change the profile settings, select *Customize*. Select the setting you want to change and make the change. For information on the settings, see [Tone settings](#). With *Profile name* you can rename the selected profile. The *Normal* profile cannot be renamed.

The name of the currently active profile is shown in standby mode, except when the *Normal* profile is active. If the profile is timed,  is shown in front of its name.



Tip: To change the profile quickly in standby mode, briefly press the power key  and select the profile you want to activate.

• SETTINGS (MENU 5)



In this menu, you can change various settings of the phone. You can also reset some menu settings to their default values.

To access this menu, press *Menu* in standby mode and select *Settings*.

Personal shortcuts

You can select the function for the right selection key shown in standby mode and the functions (personal shortcuts) that can be accessed by pressing *Go to* (if available) in standby mode or by entering the *Go to* menu.

To access this menu, press *Menu* in standby mode, and select *Settings* and *Personal shortcuts*. Select

- *Right selection key* to select the function for the right selection key. You can select, for example, *Go to* to access the shortcut list, or *Contacts* to open the *Contacts* menu. If you select *Contacts*, the right selection key is *Names* in standby mode.
- *Select Go to options* to select the functions that you can access by pressing *Go to* in standby mode or by entering the *Go to* menu. The *Go to* key is available in standby mode if you have selected *Go to* in the *Right selection key* setting.

Scroll to a function and press *Mark* to add it to the list. To remove a function from the list, press *Unmark*. To save the changes, press *Done*

and **Yes**.

- **Organize Go to options** to change the order of the functions on the list. Scroll to the desired function, press **Move** and select where you want to move the function to. To save the changes, press **Done** and **Yes**.

Time and date settings

To access this menu, press **Menu** in standby mode, and select **Settings** and **Time and date settings**. Select

- **Clock** to set the time, show (or hide) the time in standby mode or select the 12-hour or 24-hour time format and the time zone. The time zone setting is used with the **Auto-update of date & time** and **Calendar** functions.

The clock settings apply to several functions such as **Messages**, **Call log**, **Alarm clock** and **Calendar**.

If the battery is removed from the phone for a long time, you may need to set the time again.

- **Date** to show (or hide) the date in standby mode, set the date or select the date format or date separator.

If the battery is removed from the phone for a long time, you may need to set the date again.

- **Auto-update of date & time** to set the phone to automatically update the time and date according to the current time zone (network service). If you select **Confirm first**, the phone asks for a confirmation before the update.

Automatic update of date and time does not change the time you have set for the alarm clock, calendar or alarm notes. They remain in local time, which may cause some alarms that you have set to expire immediately after the update.

Call settings

To access this menu, press **Menu** in standby mode, and select **Settings** and **Call settings**. Select

- **Call forwarding** to forward your incoming calls to your voice mailbox or another phone number (network service). Forwarding options that are not supported by your SIM card or your service provider may not

be shown.

Select the desired forwarding option, for example *Forward if busy* to forward the calls when your number is busy or when you reject an incoming call. Set the forwarding option on (*Activate*) or off (*Cancel*), or check whether the option is activated (*Check status*).

- If you selected *Activate*, select where the calls are to be forwarded to. If you activate the forwarding option *Forward if not answered* or *Forward if not available*, you can also select the delay time after which the call is forwarded.
- If you selected *Check status*, press **Number** to view the phone number to which the calls are forwarded or **Details** to view the phone number and the delay time (available for *Forward if not answered* and *Forward if not available*).

Several forwarding options can be active at the same time. When all calls are forwarded,  is shown in standby mode.

Each phone line may have its own call forwarding settings. See *Line for outgoing calls*.

- *Anykey answer* and *On* if you want to answer an incoming call by briefly pressing any key, except , the selection keys and .
- *Automatic redial* to set the phone to make up to ten attempts to connect the call after an unsuccessful call attempt.
- *1-touch dialing* and *On* if you want to call the names and phone numbers assigned to the speed dial keys  to  by pressing and holding the corresponding key.
- *Call waiting* and *Activate* to request the network to notify you when you receive a new call during a call (network service). See also [Call waiting](#).
- *Summary after call* and *On* to set the phone to briefly display the duration of the last call.
- *Send my caller ID* to show (*Yes*) your phone number to the person you are calling or to hide it (*No*). This is a network service. Select *Set by network*, to use network settings for this feature.
- *Line for outgoing calls* to select the phone line 1 or 2 for making calls (network service). For example, you can use line 1 for personal calls and line 2 for business calls. Calls on both lines can be answered

regardless of the selected line.

If you select *Line 2* and have not subscribed to this network service, you will not be able to make calls. When line 2 is selected, 2 is shown in standby mode.

If supported by your SIM card, you can prevent accidental line selection by selecting *Lock*.



Tip: In standby mode, you can switch from one line to the other by pressing and holding .

Phone settings

To access this menu, press *Menu* in standby mode, and select *Settings* and *Phone settings*. Select

- *Language settings* to select the language for the display texts. If you select *Phone language* and *Automatic*, the phone selects the language according to the information on the SIM card. If the card includes several languages, you can select the desired one with the *SIM language* setting.

This setting also affects the date and time formats used, for example, in the calendar.

- *Automatic keyguard* to set the keypad to lock automatically after a certain length of time when the phone is in standby mode.

To activate the automatic keyguard, select *On* and set the time after which the keypad is locked. To deactivate the automatic keyguard, select *Off*.

See also [Keypad lock \(keyguard\)](#).

When keyguard is on, calls may be possible to the official emergency number programmed into your phone. Enter the emergency number and press .

- *Cell info display* to set the phone to indicate when it is used in a cellular network based on the micro cellular network (MCN) technology (network service).
- *Welcome note* to create a note that is shown briefly when the phone is switched on. Key in the note and save it by pressing *Save*. To delete the note, press *Options* and select *Delete*.

- *Operator selection* to set the phone to automatically select a cellular operator that is available in your area (*Automatic*) or to select the desired operator from a list (*Manual*).

If the operator only provides access to a GSM network, the  icon is shown beside the operator name. If the operator only provides access to a WCDMA network, the icon is . If the operator provides access to both a GSM and WCDMA network, the icon is .

The selected operator must have a roaming agreement with your home network. If no such agreement exists, *No network access* will be displayed and you must select another operator.

The phone stays in manual mode until automatic mode is selected or another SIM card is inserted into the phone.

- *Confirm SIM service actions* to set the phone to show confirmation messages (*Yes*) when you use SIM card services. See also [SIM services \(Menu 15\)](#).
- *Help text activation* to set the phone to show help texts that guide you in using the menu functions. See also [Using the menu](#).
- *Start-up tone* to set the phone to play a tone when the phone is switched on.
- *Memory status* to view the total amount of free and used shared memory and the amount of memory used by different functions. See also [Shared memory](#).

Display settings

To access this menu, press *Menu* in standby mode, and select *Settings* and *Display settings*. Select

- *Wallpaper* to set the phone to show a background image when the phone is in standby mode.

The wallpaper images can be found in the *Gallery* menu. You can save new images from received multimedia messages, download them from browser pages, or transfer them with Nokia PC Suite from your PC. Photos taken with the camera can be used as wallpaper.

To set an image as the wallpaper, do either of the following:

- To select the wallpaper image for the first time or to change the image, select *Select wallpaper*. Scroll to the desired folder in the

Gallery menu and press **Open**. Scroll to the image you want. Press **Open** and **Options**, and select *Set as wallpaper*.

- If you have previously used the wallpaper but have then selected *Off*, select *On*.

If you delete an image from the *Gallery* menu while it is used as the wallpaper, the image will still be used as the wallpaper until you change it.



Tip: To set an image as the wallpaper in the *Gallery* menu, open the desired image, press **Options** and select *Set as wallpaper*. See also [Gallery \(Menu 7\)](#).

- *Color schemes* to select the color for some parts of the phone display, such as the indicators for the signal strength and battery charge level.
- *Operator logo* to set the phone to display or hide the operator logo saved in the phone. If there is no operator logo available in the phone, this function is dimmed.

The operator logo is not displayed when the screen saver is active.

For availability of operator logos, contact your service provider. You can create your own logos using the Nokia Image Converter software, see [Nokia PC Suite](#).

- *Screen saver time-out* to set the time (time-out) after which the screen saver feature is activated.

The screen saver is a power saving feature which becomes active if the phone is not used for a certain length of time in standby mode. When the screen saver is active, a digital clock moves from the top to the bottom of the display and the rest of the display is blank.

Select the timeout from the available values, or select *Other* and set the value. The maximum timeout is 10 minutes.

You can deactivate the screen saver by pressing any key. The screen saver is automatically deactivated when the phone moves out of the network's coverage area.

- *Display contrast* to change the contrast of the display. Press ◀ to decrease or ▶ to increase the contrast level, and press **OK**.

Tone settings

You can change the tone and vibrator settings of the currently selected profile. The same settings can also be found in the *Profiles* menu, on page [55](#).

To access this menu, press **Menu** in standby mode, and select *Settings* and *Tone settings*. Select

- *Incoming call alert* to choose how the phone notifies you of an incoming voice call. The options are *Ringing*, *Ascending*, *Ring once*, *Beep once* and *Off*.

For example, if you select *Off*, the phone remains silent when you receive a call.

- *Ringing tone* to select the tone that rings when you receive a voice call. If you want to select a ringing tone saved in the *Gallery* menu, select *Open gallery* from the tone list.
- *Ringing volume* to select the volume level for the ringing tones and message alert tones.
- *Vibrating alert* to set the phone to vibrate when you receive a call or message. The vibrating alert does not work when the phone is connected to a charger, desktop stand or car kit.
- *Message alert tone* to select the tone you hear when you receive a message. To select the tone from the ringing tone list, select *Ringing tone* and the desired tone.
- *Keypad tones* to select the volume for keypad tones.
- *Warning tones* to set the phone to sound tones, for example, when the battery is running out of power.
- *Alert for* to set the phone to ring only upon calls from phone numbers that belong to a certain caller group. Scroll to the desired caller group or *All calls* and press **Mark**. You can select several groups. After you have made your selections, press **Done** and **Yes**.

For adding a member to a caller group, see [Caller groups](#).

ADDING NEW TONES TO YOUR PHONE

For availability of tones using the text messaging (SMS), multimedia messaging (MMS) or browser service, contact your service provider. The tones are saved in the *Gallery* menu.

You can create your own tones using the Nokia Sound Converter or Nokia PC Composer application included in the Nokia PC Suite software. See page 6.

Enhancement settings

You can define the settings that the phone uses by default when it is connected to a compatible headset, car kit, or inductive loopset. This menu is shown only if the phone has been connected to one of these accessories at least once.

To access this menu, press **Menu** in standby mode, and select *Settings* and *Enhancement settings*.

Select *Headset*, *Handsfree* or *Loopset*, if the corresponding accessory has been used with the phone. Select

- *Default profile* to select the profile that is automatically activated when you connect the selected accessory to the phone. You can select another profile while the accessory is connected.
- *Automatic answer* to set the phone to automatically answer an incoming call after five seconds. If *Incoming call alert* is set to *Beep once* or *Off*, automatic answer cannot be used.
- *Lights* to set the lights permanently on (*On*) or to remain on for 15 seconds after a keypress (*Automatic*). This setting is available only when *Handsfree* is selected.

Security settings

To access this menu, press **Menu** in standby mode, and select *Settings* and *Security settings*.

When security features that restrict calls are in use (call restrictions, closed user group, and fixed dialing), calls still may be possible to the official emergency number programmed into your phone.

Press **Menu**, and select *Settings* and *Security settings*. Select

- *Code in use* to set the phone to use the UPIN or PIN code. The UPIN code option is shown only if a USIM card is inserted into the phone.
- *PIN code request* (or *UPIN code request*, depending on the *Code in use* setting) to set the phone to ask for the PIN code of the SIM card (or the UPIN code of the USIM card) when the phone is switched on. Some cards do not allow this setting to be changed.

- *Call restrictions* to restrict the calls that can be made or received with the phone (network service). Select the desired restriction option and set it on (*Activate*) or off (*Cancel*), or check whether the option is active (*Check status*).
- *Fixed dialing* to restrict calls and text messages from your phone to selected phone numbers, if allowed by your SIM card. The PIN2 code is required to use this function.

To view the numbers on the fixed dialing list, select *Number list*, scroll to the desired name and press *View*.

To modify the fixed dialing list, press *Options* and select the appropriate function to add a number to the list, edit the selected number or delete it from the list, or delete all numbers from the list.

When you use fixed dialing, GPRS connections are not possible, except when sending text messages over a GPRS connection. In this case, the message center number and the recipient's phone number have to be included on the fixed dialing list.

- *Closed user group* to specify a group of people whom you can call and who can call you (network service). When you use a closed user group, the group number is shown in standby mode. For more information contact your service provider.
- *Security level* to define when the phone asks for the security code.

If you select *Phone*, the phone asks for the security code when a new SIM card is inserted into the phone.

If you select *Memory*, the security code is requested when the memory in use is *SIM card* and you want to change the memory to *Phone* or *Phone and SIM* or copy names and numbers from one contacts list to another. See also *Memory in use* under [Selecting settings for contacts](#).

When you change this setting, the numbers in the menus *Missed calls*, *Received calls* and *Dialed numbers* are deleted.

- *Access codes* to change the security code, PIN code, PIN2 code, restriction password or UPIN code. The codes can only include numbers from 0 to 9.

Restoring factory settings

You can reset some of the menu settings to their original values.

Press **Menu** in standby mode, and select *Settings* and *Restore factory settings*. Key in the security code and press **OK**. This function does not delete the information you have saved or downloaded to the phone.

• CAMERA (MENU 6)



In this menu, you can start the camera and adjust its settings.

To access this menu, press **Menu** in standby mode and select *Camera*.

The Nokia 6651 phone supports an image capture resolution of 640 x 480 pixels. The image resolution in these materials may appear different.

Taking a photo or recording a video clip

You can use the camera in this menu or as described on page [18](#).

To use the camera in this menu, select the camera mode (*Standard photo*, *Portrait photo*, *Night mode*, or *Video*), open the camera lens cover and take a photo or record a video clip. For more information, see page [13](#).

The photos and video clips are saved in shared memory, see page [3](#). If there is not enough memory to use the camera, delete some old photos or other files from the *Gallery* menu, see page [66](#).

Adjusting the camera settings

In the *Camera* menu, select *Settings* and

- *Default mode* to select the camera mode that will be used by default when you start the camera by opening the lens cover.
- *Image quality* to select how much a photo will be compressed when the phone saves it. Select *High*, *Normal* or *Basic*. *High* provides the best image quality but takes more memory. *Normal* and *Basic* provide lower image quality but take less memory.
- *Video clip length* to set the maximum length for video clips recorded with the camera. If you select *Default*, the maximum length is 15 seconds.
- *Camera sounds* to set the shutter and self-timer sounds on or off. The

shutter sound is heard when you take a photo. The self-timer sound is heard when the self-timer is running.

- *Default title* to define a default name for photos and video clips. If you want to use the preset title, select *Automatic*. If you want to define your own title, select *My title*.

• GALLERY (MENU 7)



In this menu, you can manage graphics, photos, recordings, tones and video clips saved in the phone. These files are arranged in folders.

The gallery uses shared memory, see page 3.

To access this menu, press **Menu** in standby mode and select *Gallery*, or press **Gallery** in standby mode. A list of folders is shown.

- 1 In the folder list, scroll to the desired folder.
- 2 Press **Open** to open the selected folder, for example *Images*, or press **Options** and select
 - *Delete folder* to delete the selected folder. The preset folders cannot be deleted.
 - *Move* to move the selected folder. Scroll to where you want to move the selected folder, press **Options** and select *Move here*. The preset folders cannot be moved.
 - *Rename folder* to give a new name to the selected folder. The preset folders cannot be renamed.
 - *Details* to view information about the selected folder.
 - *Type of view* to define how the folders and their contents are shown. The *Grid* option is useful with images and video clips.
 - *Sort* to arrange the folders by name, date, format or size.
 - *Add folder* to create a new folder. Key in a name for the folder and press **OK**.
 - *Memory status* to check the memory size and memory use of the folder.
 - *Downloads* to download video clips, graphics, and tones from a browser service (network service). Select *Graphic downloads*, *Tone downloads*, or *Video downloads*. A list of bookmarks is shown. Select *More bookmarks* to view the bookmarks available

in the **Services** menu. See page [87](#).

Select the bookmark of the browser page you want to access. If the connection fails, change the active set of connection settings in the **Services** menu (see [Making a connection to a browser service](#)), return to the **Gallery** menu, and try to connect to the page again.

For the availability of different browser services, pricing and fees, contact your service provider.



Important: Only install from sources that offer adequate protection against harmful software.

- **Activation key list** to view the list of available usage rights. Scroll to the desired file and press **Options**. Select **Details** to view the usage rights. See [Usage rights](#).
- 3 If you opened a folder in step 2, select the file you want to view or play and press **Open**.

Alternatively, press **Options** and select:

- **Delete** to delete the selected file.
- **Send** to send the file in a multimedia message (network service) or using an infrared or Bluetooth connection to a compatible device. For information about composing multimedia messages, see page [36](#).



Tip: To send the file in a multimedia message, you can press  instead of using the **Send** function.

- **Set as wallpaper** to use the selected image as the wallpaper. See also [Wallpaper and screen saver](#) on page [11](#).
- **Set as ring tone** to use the selected sound as a ringing tone for the active profile. See also [Profiles \(Menu 4\)](#).
- **Edit image** to add text, frames and clip-art to the selected image. Press **Options** and select **Insert text**, **Insert frame** or **Insert clip-art**.

If you selected **Insert frame** or **Insert clip-art**, scroll to the desired image, press **Options** and select **Insert**. Move the added image with the scroll keys and press **OK** to confirm the change, or press **Back** to change the frame or clip-art.

To save the changed image in GIF format, press **Save**, edit the image's name, press **OK**, scroll to the desired folder, press **Options** and select **Save**.

- *Set contrast* to change the contrast of an image or video clip.
 - *Move* to move the file to the desired folder. Scroll to the folder where you want to move the file, press **Options** and select *Move here*.
 - *Rename* to give a new name to the file.
 - *Details* to view for example the size and format of the file.
 - *Delete all* to delete all the files from the selected folder.
 - *Open in sequence* to show or play all the files in the selected folder one by one.
 - *Add folder* to create a new folder. Key in a name for the folder and press **OK**.
 - *Memory status* to check the memory size and memory use of the folder.
 - *Activation key list* to view the list of available usage rights. Scroll to the desired file and press **Options**. Select *Details* to view the usage rights. See [Usage rights](#).
- 4 If you opened a file in step 3, press **Play** to play a sound clip or video clip, or press **Zoom** to view an image in a larger size. You can scroll the image with , ,  and .

Pressing **Options** allows access, for example, to the following functions: *Set contrast*, *Mute audio* or *Unmute audio*, *Update rights*. Select

- *Set contrast* to change the contrast of an image or video clip.
- *Mute audio* or *Unmute audio* to turn the audio of a video clip off or on.
- *Activation key list* to update the usage rights of the selected file. This option is only shown if the usage rights of the file can be updated.



Tip: If you opened a file by pressing **Open** in step 3, you can browse through the files in the selected folder with  or .

Copyright protections may prevent some images, ringing tones, and other content from being copied, modified, transferred or forwarded.

Usage rights

Your phone supports usage rights to protect content that you have acquired to the phone. A piece of content, such as a ringing tone, can be protected and associated with certain usage rules, for example the number of usage times.

The usage rules are defined in the content's usage rights that can be delivered with the content or separately, depending on the service provider. You may be able to update these rights.

Always check the delivery terms of any content and usage rights before acquiring them, as they may be subject to a fee.

• ORGANIZER (MENU 8)



This menu contains an alarm clock, calendar, to-do list and electronic wallet.

To access this menu, press **Menu** in standby mode and select *Organizer*.

Alarm clock

You can set the phone to alarm at the desired time. The alarm clock works even when the phone is switched off if there is enough power in the battery.

To access this menu, press **Menu** in standby mode and select *Organizer* and *Alarm clock*.

To set an alarm, select *Alarm time*, key in the alarm time and press **OK**. To change the alarm time, select *On*.

To set a tone for the alarm, select *Alarm tone* and the desired tone. *Default* is the ringing tone that you have selected for the active profile in the *Profiles* menu, see page [55](#).

WHEN THE ALARM TIME EXPIRES

The phone will sound an alert tone and flash *Alarm!* and the current time on the display.

Press **Stop** to stop the alarm. If you let the phone alarm for a minute or press **Snooze**, the alarm stops for about ten minutes and then resumes.

If the alarm time is reached while the device is switched off, the device switches itself on and starts sounding the alarm tone. If you press **Stop**, the device asks whether you want to activate the device for calls. Press **No** to switch off the phone or **Yes** to make and receive calls. Do not press **Yes** when wireless phone use may cause interference or danger.

Calendar

The calendar helps you to keep track of reminders, calls you need to make, meetings and birthdays.

The calendar uses shared memory, see page 3.

To access this menu, press **Menu** in standby mode and select **Organizer** and **Calendar**. The month view is shown. You can scroll through the days, weeks and months with the scroll keys.



Tip: To quickly open the calendar in standby mode, press **▷**.

USING THE DIFFERENT CALENDAR VIEWS

- **Month view** shows the weeks of a month. The current day is indicated by a frame around it. If there are notes for the day, the day is shown in bold. To view the notes set for a day (day view), scroll to the desired day and press **View**.

In the month view, pressing **Options** allows access to the following functions: **Make a note**, **Go to date**, **Settings**, **Go to to-do list**, **Delete all notes**. Select

- **Make a note** to create a note for the selected day.
- **Go to date** to move to the desired day in the calendar.
- **Settings** to set the date, time, and time zone. Once set, you can select the date separator character (., /, or -) and the first day of the week (**Week starts on**). With **Auto-delete** you can set the phone to delete old notes automatically after a certain length of time. Repeated notes, for example birthday notes, will not be deleted.
- **Delete all notes** to remove all the notes from the calendar.
- **Day view** shows the notes set for the selected day. Press **View** to open the selected note (note view), or if there are no notes for the day, press **Add note** to create a new note.



Tip: To view the notes for the previous or next day, press ◀ or ▶.

In the day view, pressing **Options** allows access to the following functions: *Make a note*, *Delete*, *Edit*, *Move*, *Repeat*, *Go to date*, *Send note*, *Copy*, *Settings*, *Go to, to-do list*. Select

- *Repeat* to select the interval at which the note is repeated, for example *Every week*.
- *Send note* to send the note to a compatible device using infrared or Bluetooth connection, or as a calendar note or text message.
- *Move* or *Copy* to move or copy the note to another day.
- *Go to, to-do list* to access the *To-do list* menu where you can create a task and then copy it to the calendar. See [To-do list](#).
- **Note view** shows the note that you opened in the day view. If you have set an alarm for the note,  is shown at the top of the note.

You can scroll through the notes set for the selected day by pressing ◀ or ▶. Press **Edit** to modify the displayed note.

In the note view, pressing **Options** allows access to the following functions: *Delete*, *Move*, *Repeat*, *Send note*, *Copy*, *Settings*, *Go to to-do list*.

MAKING A CALENDAR NOTE

You can create a new note in the month or day view. For keying in letters and numbers, see [Writing text](#).

In the month view, scroll to the desired day, press **Options** and select *Make a note*. In the day view, press **Add note** if there are no notes for the day, or press **Options** and select *Make a note*.

Select one of the following note types:

-  **Meeting**: Key in the subject for the meeting and press **Save**. Key in the location for the meeting and press **Save**. Key in the start time for the meeting and press **OK**. Key in the end time and press **OK**.

To set the alarm for the note, select *With tone* or *Silent* (no alarm tone) and set the alarm time.

-  **Reminder**: Key in the note and press **Save**. To set the alarm for the note, select *Alarm on* and set the alarm time.
-  **Call**: Key in the phone number, press **Save**, key in the name and press **Save**. Or, if you want to search for the name and number in

contacts, press **Options**, select **Find** and select the desired name.

Key in the time for the call and press **OK**.

To set the alarm for the note, select **With tone** or **Silent** (no alarm tone) and set the alarm time.

-  **Birthday**: Key in the person's name and press **Save**. Or, if you want to search for the name in contacts, press **Options**, select **Find**, select the desired name, edit the name to your liking and press **Save**.

Key in the year of birth and press **OK**.

To set the alarm for the note, select **With tone** or **Silent** (no alarm tone) and set the alarm time.

-  **Memo**: Key in the subject for the memo and press **Save**. Key in the end day for the memo and press **OK**.

To set the alarm for the note, select **With tone** or **Silent** (no alarm tone) and set the alarm time.

WHEN THE PHONE SOUNDS AN ALARM FOR A NOTE

The phone beeps and displays the note. When a **Call** note is displayed, you can call the displayed number by pressing . To stop the alarm and view the note, press **View**. To stop the alarm without viewing the note, press **Exit**.

To-do list

In the to-do list, you can save notes for tasks you need to do and manage the tasks in different ways.

The to-do list uses shared memory, see page [3](#).

To access this menu, press **Menu** in standby mode, and select **Organizer** and **To-do list**. The list of current tasks are shown in order of priority.

- To add a new task, press **Add note** if the task list is empty, or press **Options** and select **Add** if there are existing tasks. Key in the subject for the task and press **Save**. Select the task's priority, for example **High**.
- In the task list, you can press **Options** and select the desired function to add a new task, sort the tasks by deadline, open the calendar for example to add a note, or delete all the notes that you have marked as done.

You can also delete the selected task, send it to a compatible phone, or save it to the calendar (without deadline and alarm).

- To view a task, scroll to the desired task on the list and press **View**. To edit the displayed task, press **Edit**.

To use other functions related to the displayed task, press **Options** and select the desired function. You can set the task's deadline and its alarm. You can also mark the task as done or not done, delete the task, change its priority, send it to a compatible device, open the calendar, or save the task to the calendar.

Wallet

In the **Wallet** menu, you can save personal information, such as credit card numbers, for paying for purchases with your phone in browser services which support this function.

To access this menu, press **Menu** in standby mode, and select **Organizer** and **Wallet**. You can also open the wallet by pressing **Options** and selecting **Use wallet info** in different browser services.

When you open the wallet for the first time, you need to create your own wallet code. At **Create wallet code**, key in the code (at least 4 digits) and press **OK**. Key in the code again at **Verify wallet code**. The code is requested when you open the wallet, if the **Code request** setting is on.

If you want to delete the wallet contents and the wallet code, key in ***#7370925538#** in standby mode and enter the security code.

SAVING AND CHANGING PERSONAL CARD INFORMATION

Before you can use the wallet, you need to save your credit card number and other information needed in paying for purchases. This information is arranged in setting groups called cards.

To save information about a card, select **Cards** in the **Wallet** menu, select the desired card, and select one of the following:

- **Card info** to save, for example, your credit card number
- **User info** to save your user name and password
- **Shipping info** to save your contact information

- **Billing info** to save the contact information if the invoicing address is not the same as the shipping address, for example, when using a company credit card
- **Receipt info** to save phone numbers and e-mail addresses where the service provider can send you a receipt for your purchase

To copy, clear, or rename a card, select **Cards** in the **Wallet** menu, select the desired card, and define the required settings.

PERSONAL NOTES

You can also save personal notes in the wallet.

Select **Personal notes** in the **Wallet** menu. The phone shows a list of existing notes, if any.

- To create a personal note, press **Add new** if the note list is empty, or press **Options** and select **Add new** if there are existing notes. Key in the note and its title.
- If there are existing notes on the list, you can press **Options** and select an option to delete or edit the selected note, add a new note, sort the notes by name or by date, or delete all the notes.
- To view a note on the list, press **View**. When the note is shown, press **Edit** to modify the note, or press **Options** and select an option to send the note as a text message, copy the note to the calendar, pick a number from the note (**Use detail**), or delete the note.

WALLET SETTINGS

Select **Settings** in the **Wallet** menu. Select

- **Code request** to set the wallet code request on or off
- **Change code** to change the wallet code

PAYING FOR YOUR PURCHASES WITH THE WALLET

- 1 Go to a browser service which supports the wallet function and choose the product you want to buy. See also [Making a connection to a browser service](#).
- 2 Read carefully through all the instructions available at the browser service.
- 3 To pay for your purchase, press **Options** and select **Use wallet info**.
- 4 Select the card you want to use for payment.

- 5 If you want the phone to fill in the online form with the wallet information, press **Fill in**. This selection key is shown only if the service supports the Electronic Commerce Modeling Language standard.

You can also fill in the form manually by selecting the card's fields one by one.

- 6 Approve the purchase. The form is sent forward.
- 7 To close the wallet, press **Options** and select **Close wallet**.

After using the wallet, empty the cache memory, see page [93](#).

• GAMES (MENU 9)



In this menu you can play Java games available in your phone. You may also be able to download new games using the **Game downloads** function in this menu.

For information about the Java version supported by the phone, see [Applications \(Menu 10\)](#). The games use shared memory, see page [3](#).

To access this menu, press **Menu** in standby mode, and select **Games**.

Adjusting the game settings

In the **Games** menu, select **Settings** to set sounds, lights and vibrations (**Shakes**) for the games.

When the **Vibrating alert** function in the **Tone settings** menu (see page [62](#)) is off, the phone does not vibrate even if you set **Shakes** on.

Starting a game

In the **Games** menu, select **Select game**. Scroll to the desired game or game set in the game list. Press **Open** or  to launch the game or to open the game set.

If you opened a game set, scroll to the desired game and start it by pressing **Open** or .

For other functions that you can access by pressing **Options** in the game list, see [Other options available for an application or application set](#).

Downloading a game

In the *Games* menu, select *Game downloads*. A list of bookmarks is shown. Select *More bookmarks* to view the bookmarks available in the *Services* menu, see page 87.

Select the bookmark of the page you want to access. If the connection fails, change the active set of connection settings in the *Services* menu, return to the *Games* menu and try to connect to the page again.

Follow the instructions available in the browser service.

For the availability of different browser services, pricing and fees, contact your service provider.

When downloading a game, it may be saved in the *Applications* menu instead of the *Games* menu.

Only install from sources that offer adequate protection against harmful software.

Checking the memory status for games

To view the amount of memory available for Java games, select *Memory* in the *Games* menu. See also [Checking the memory status](#).

• APPLICATIONS (MENU 10)



In this menu, you can use and manage Java applications installed on your phone. The phone supports J2ME (Java 2 Platform, Micro Edition), which is a version of Java technology specifically designed for small consumer electronics products.

Various service providers offer Java applications. Before you can use a Java application you have to transfer it to your phone. Java applications use shared memory, see page 3.

To access this menu, press **Menu** in standby mode, and select *Applications*.

Launching an application

- 1 In the *Applications* menu, choose *Select application* and the application or application set you want to use.
- 2 Press **Open** or  to launch the application or to open the

application set.

If you opened an application set, scroll to the desired application and launch it by pressing **Open** or .

OTHER OPTIONS AVAILABLE FOR AN APPLICATION OR APPLICATION SET

You can access the functions below by pressing **Options** in the applications list. Select

- **Delete** to delete the selected application or application set from the phone.
- **Web access** to set the application to ask for your permission to connect to the network (**Ask first**). If you select **Allowed**, the permission is not requested and the application may connect to the network automatically. If you select **Not allowed**, the connection is not allowed.
- **Update version** to check if a new version of the application is available for downloading from a site (network service).
- **Web page** to access a browser page related to the application. This option is shown only if the application contains the IP address of the site.
- **Connect via** to set the phone to use specific service settings if the application needs them. The phone uses as default the service settings for the browser.
- **Details** to view additional information about the application.

Downloading a Java application

You can download new Java applications in the following ways:

- In the **Applications** menu, select **App. downloads**. A list of bookmarks is shown. Select **More bookmarks** to view the bookmarks available in the **Services** menu, see page [87](#).

Select the bookmark of the page you want to access. If the connection fails, change the active set of connection settings in the **Services** menu, return to the **Applications** menu and try to connect to the page again.

Follow the instructions available in the browser service.

For the availability of different browser services, pricing and fees, contact your service provider.

- Press **Menu** in standby mode and select **Services** to access a browser page from which you can download the Java application you want. See [Browsing the pages of a service](#).
- Use the **Game downloads** function in the **Games** menu, see [Downloading a game](#).
- Use the Nokia Application Installer included in the Nokia PC Suite software to transfer new applications from a compatible PC to your phone.



Note: Your device may have some bookmarks loaded for sites not affiliated with Nokia. Nokia 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 internet site.

When downloading a game or an application, it may be saved in the **Games** menu instead of the **Applications** menu.

Checking the memory status

To check the amount of memory available for Java applications, select **Memory** in the **Applications** menu.

• EXTRAS (MENU 11)



In this menu, you can use a calculator, countdown timer and stopwatch, and record voice commands.

To access this menu, press **Menu** in standby mode, and select **Extras**.

Calculator

The calculator in your phone adds, subtracts, multiplies, divides, calculates the square and square root, and converts currency values.

To access this menu, press **Menu** in standby mode, and select **Extras** and **Calculator**.

- 1 When 0 is shown on the display, key in the first number in the calculation. Press  for a decimal point.
- 2 Press **Options** and select *Add, Subtract, Multiply, Divide, Square, Square root* or *Change sign*.



Tip: Alternatively, press  once to add, twice to subtract, three times to multiply or four times to divide.

- 3 Key in the second number, if needed in the calculation.
- 4 For a total, press **Equals**.
- 5 Press and hold **Clear** for a new calculation.



Note: This calculator has limited accuracy and is designed for simple calculations.

CONVERTING CURRENCY

The phone includes a calculator that can also be used for approximate currency conversions. Each time you want to calculate using a different exchange rate, you will need to save the new exchange rate.

- 1 To save the exchange rate, press **Options** and select *Exchange rate*. Select either of the available conversion options. Key in the exchange rate (press  for a decimal point) and press **OK**. The exchange rate is used in currency conversions until you change it.
- 2 To make the currency conversion, key in the amount to be converted, press **Options** and select *In domestic* or *In foreign*.



Tip: You can also make a currency conversion in standby mode. Key in the amount to be converted, press **Options** and select *In domestic* or *In foreign*.

Voice commands

You can access certain menu functions by saying a voice command. The voice command can be, for example, a function name.

To access this menu, press **Menu** in standby mode, and select *Extras* and *Voice commands*.

Before using voice commands, read [Notes for using voice dialing](#).

ADDING A VOICE COMMAND TO A MENU FUNCTION

In the *Voice commands* menu, open the folder, for example *Profiles*, which contains the desired function, for example *Silent*, scroll to the function, and press **Add**. Press **Start** and clearly say the words that you want to record as the voice command.

If the function already has a voice command, the indicator  is shown beside its name.

USING A VOICE COMMAND

Press and hold the right selection key () or the voice key () in standby mode until you hear a short tone. Say the command clearly while holding the phone in the normal position near to your ear. The phone plays the command and carries out the related function.

See also [Making a call using a voice tag](#).

PLAYING, CHANGING OR DELETING A VOICE COMMAND

In the *Voice commands* menu, scroll to the desired function.

To listen to the command, press **Playback**. To change or delete it, press **Options** and select *Change* or *Delete*.

Countdown timer

You can specify a length of time, after which the phone will sound an alarm.

To access this menu, press **Menu** in standby mode, and select *Extras* and *Countdown timer*.

Key in the amount of time (in hours, minutes, and seconds) after which the phone will alarm, and press **OK**. If you wish, write a note that is displayed when the time expires, and press **OK** to start the countdown timer. When the countdown timer is on,  is shown in standby mode.

- To change the countdown time, access the *Countdown timer* menu and select *Change time*. To stop the timer, select *Stop timer*.

If the alarm time is reached when the phone is in standby mode, the phone sounds a tone and shows the note, if available, or *Countdown time up*. If you press **Restart**, you can start the countdown timer again. If you want to stop the alarm, press **Exit**.

Stopwatch

You can measure time and take split times or lap times, for example, in different sports.

To access this menu, press **Menu** in standby mode, and select *Extras* and *Stopwatch*.

TAKING SPLIT TIMES OR LAP TIMES

In the *Stopwatch* menu, select *Split timing* or *Lap timing*, and press **Start**. Press **Split** to take a split time, **Lap** to take a lap time or **Stop** to stop the timing. You can scroll through the split or lap times shown below the overall time.

When the timing is stopped, you can press **Save** to save the lap or split times as a time set. To reset the times or to continue the timing, press **Options** and select *Reset* or *Start*.

Setting the timing to continue in the background

If you want to use other functions while the stopwatch is running, press . When the stopwatch is on,  is shown in standby mode. To view the time, access the *Stopwatch* menu and select *Continue*.

Using the stopwatch or allowing it to run in the background when using other features increases the demand on battery power and reduces the battery life.

VIEWING AND DELETING PREVIOUSLY TAKEN TIMES

In the *Stopwatch* menu, select

- *Show last* to view the most recent measured time set
- *View times* to view a saved time set
- *Delete times* to delete the saved time sets. To delete all the time sets, select *Delete all* and press **Yes**. To delete time sets one at a time, select *One by one*, scroll to the time set you want to delete, and press **Delete** and **Yes**.

• CONNECTIVITY (MENU 12)



In this menu, you can connect the phone to a compatible device using a Bluetooth or infrared connection.

For information on using the USB port, see [Pop-port™ connection, Connectors](#), and [Nokia PC Suite](#).

Bluetooth wireless technology

The phone supports Bluetooth technology which allows wireless connection to a compatible Bluetooth device within 32 feet (10 meters). This device is compliant with Bluetooth Specification 1.1 supporting the following profiles:

- Dial-Up Networking profile as a gateway
- Object Push profile as a client and server
- File Transfer profile as a server
- Handsfree profile as an audio gateway
- Headset profile as an audio gateway
- Generic Object Exchange profile
- Generic Access profile
- Serial Port profile with the PC connectivity software

To ensure interoperability between other devices supporting Bluetooth technology, use Nokia approved enhancements for this model. Check with the manufacturers of other devices to determine their compatibility with this device.

In this menu, you can set up and manage Bluetooth connections.

To access this menu, press **Menu** in standby mode, and select *Connectivity* and *Bluetooth*.

Since Bluetooth devices communicate using radio waves, your phone and the other Bluetooth device do not need to be in line of sight. The Bluetooth connection can, however, be subject to interference from obstructions such as walls or other electronic devices.

For compatibility between your phone and another Bluetooth device, consult the device's documentation and your Nokia dealer.

There may be restrictions on using Bluetooth technology in some locations. Check with your local authorities or service provider.

Features using Bluetooth technology, or allowing such features to run in the background while using other features, increases the demand on battery power and reduces the battery life.

SETTING UP A BLUETOOTH CONNECTION

- 1 To activate Bluetooth connectivity, in the *Bluetooth* menu, select *Bluetooth* and *On*.

When Bluetooth connectivity is on, the indicator (📶) is shown at the top of the display.

- If you activate Bluetooth for the first time, the phone asks for the Bluetooth device name of your phone. Accept the default name or change it. This name can be seen by other Bluetooth device users.
- 2 Select *Search for audio enhancements* in the *Bluetooth* menu to search for compatible devices with Bluetooth connectivity, for example the headset HDW-2. The found devices are shown as a list.
 - 3 Select the device that you want to connect to the phone.
 - 4 Enter the device's Bluetooth passcode to associate ('pair') and connect the device to your phone.

Pairing means that you create a connection with a compatible Bluetooth device by entering its passcode when you connect to it for the first time. Nokia accessories have fixed passcodes that are supplied with them.

When the connection is established, *Connected to* and the device's name are displayed.

- 5 Start using the device.

If you want to check which device using Bluetooth technology is currently connected to the phone, from the *Bluetooth* menu, select *View active device* and *Active device*. If you want to close the connection to the selected device, press *Disconnect*.

DEACTIVATING THE BLUETOOTH CONNECTIVITY FEATURE

If you do not intend to use Bluetooth connectivity for some time, you can deactivate it to save power. In the *Bluetooth* menu, select *Bluetooth* and *Off*.

VIEWING THE PAIRED DEVICES

You can check which devices using Bluetooth connectivity are currently paired with the phone. In the *Bluetooth* menu, select *View paired devices* and *Paired devices*, and scroll to the desired device.

If you want to delete the pairing to the device, press *Delete*.

If you press *Options*, the following functions may be available, depending on the status of the device and the Bluetooth connection. Select

- *Connect* to connect to the selected device
- *Assign short name* to give a nickname (visible only to you) to the selected device
- *Request conn. authorization* and *Auto-conn. without authorization* to select whether the phone connects to the selected device automatically (*No*) or after your permission (*Yes*).

BLUETOOTH CONNECTIVITY SETTINGS

You can define how your phone is shown to other devices with Bluetooth connectivity. In the *Bluetooth* menu, select *Bluetooth settings* and

- *My phone's visibility* to change the way the phone is visible to other devices with Bluetooth connectivity. Select *Shown to all* to show the phone (default setting) to all other devices with Bluetooth connectivity or *Hidden* to show the phone only to the paired devices.
- *My phone's name* to change the device name that can be seen by other users of devices with Bluetooth technology.

Infrared

The phone has an infrared port that you can use for connecting your phone to another IrDA-compliant device. Over infrared connection, you can transfer, for example, business cards and calendar notes.

To activate the infrared port, press *Menu* in standby mode, and select *Connectivity* and *Infrared*.

Do not point the IR (infrared) beam at anyone's eye or allow it to interfere with other IR devices. This device is a Class 1 Laser product.

SENDING AND RECEIVING DATA USING INFRARED

- Ensure that the infrared ports of your phone and the other device are pointing at each other and that there are no obstructions between the devices.

The preferable distance between the two devices in an infrared connection is three feet at the most.

- To receive data, activate the infrared port of your phone by pressing **Menu** in standby mode and by selecting **Connectivity** and **Infrared**. Ask the user of the sending phone to start the data transfer.
- To send data from your phone, select the function from which you want to send data over the infrared connection.

For example, to send a calendar note when you are viewing it in the **Calendar** menu, press **Options** and select **Send note** and **Via infrared**.

If data transfer is not started within two minutes after the activation of the infrared port, the connection is cancelled and has to be started again.

CHECKING THE STATUS OF THE INFRARED CONNECTION

- When **IR** is shown continuously, the infrared connection is active and your phone is ready to send or receive data using its infrared port.
- When **IR** blinks, your phone is trying to connect to the other device or the connection has been lost.

GPRS

In this menu you can define when the phone connects to the GPRS network (network service). You can also define the GPRS settings for using the phone as a modem with a PC (network service).

To access this menu, press **Menu** in standby mode, and select **Connectivity** and **GPRS**.

SELECTING THE GPRS CONNECTION MODE

In the *GPRS* menu, select *GPRS connection* and *Always online* or *When needed*.

- If you select *Always online*, the phone automatically registers to a GPRS network when you switch the phone on. The phone remains registered to the GPRS network even when you do not use it.

When *Always online* is selected and the GPRS service is available, **G** is shown on the display.

- If you select *When needed*, the phone registers to the GPRS network only when you access a service, for example a browser service, over GPRS connection. The phone does not remain registered to the GPRS network after the connection.

If you select *When needed*, establishing a GPRS connection may take longer than when *Always online* is selected.

GPRS MODEM SETTINGS

You can use the phone as a modem for GPRS connections when the phone is connected to a compatible PC using an infrared, Bluetooth or cable connection (network service). See also see [Connectivity \(Menu 12\)](#).

To define the settings for GPRS connections from your PC: In the *GPRS* menu, select *GPRS modem settings* and *Active access point* or *Edit active access point*. Select

- *Active access point* to activate an access point. Scroll to the access point you want to use and press **Activate**. The access point is a server that your phone contacts for an Internet connection.
- *Edit active access point* to change the access point settings. Select
 - *Alias for access point* to create a nickname for the active access point. Key in the name and press **OK**.
 - *GPRS access point* to define the access point name that is needed for GPRS connections. Key in the access point name and press **OK**.
Contact your service provider for the access point name.

If the access point name is set both in the phone and in the Nokia Modem Options software on your PC, the name defined in the Nokia Modem Options will be used.

• SERVICES (MENU 13)



This menu contains a browser that you can use to access various services. These services may include, for example, weather reports, news or flight times.

To access this menu, press **Menu** in standby mode and select **Services**.

Check the availability, pricing and fees of these browser services with your service provider. They will also give you instructions on how to use their services.

With your phone browser you can view services that use Wireless Mark-Up Language (WML) or extensible HyperText Markup Language (xHTML) on their pages.

Basic steps for accessing and using browser services

- 1 Save the settings that are needed to access the service that you want to use. See [Setting up the phone for a browser service](#).
- 2 Make a connection to the given service, see page [89](#).
- 3 Start browsing the pages of the service, see page [89](#).
- 4 When you want to finish browsing, end the connection to the service. See page [90](#).

Setting up the phone for a browser service

You may receive the service settings as an over the air (OTA) message from the service provider that offers the service you want to use. For more information, contact your service provider.

For appropriate settings, contact your service provider. The settings may be available, for example, on their Web site.

SAVING THE SERVICE SETTINGS RECEIVED AS A MESSAGE

- To save the received settings, press **Options** and select **Save**.

If no settings are saved yet under **Active service settings**, the new settings are saved under the first free connection set.

If there are settings saved in **Active service settings**, **Activate saved service settings?** will be displayed. To activate the saved settings, press **Yes**, or to save them only, press **No**.

- To discard the received settings, press **Options** and select **Discard**.
- To view the received settings first, press **Options** and select **View**. To save the settings, press **Save**.

KEYING IN THE SERVICE SETTINGS MANUALLY

- 1 In the **Services** menu, select **Settings**, **Connection settings** and **Active service settings**.

You need to activate the set to which you want to save the service settings. A set is a collection of settings needed for making a connection to a service.

- 2 Scroll to the set you want to activate and press **Activate**.
- 3 Select **Edit active service settings**.

Select each of the settings one by one and key in all the required settings according to the information you have received from your service provider.

- **Settings' name**: Key in the new name for the connection set and press **OK**.
- **Homepage**: Key in the homepage address of the browser service that you want to use, press  for a dot, and press **OK**.
- **Proxies**: Select **Enable** or **Disable**. If you enable the proxies, you can edit the **Primary proxy** and **Secondary proxy** settings.
- **Bearer settings**: Define the following settings:
GPRS access point: Key in the access point name and press **OK**. An access point name is needed to establish a connection to a GPRS network.

Authentication type: Select **Secure** or **Normal**.

Login type: Select **Manual** or **Automatic**.

If you select **Automatic**, the phone uses the **Password setting** that you have defined.

User name: Key in the user name and press **OK**.

Password: Key in the password and press **OK**. This setting is shown only if the **Login type** setting is **Automatic**.

Making a connection to a browser service

- 1 Activate the settings of the browser service that you want to use:
In the *Services* menu, select *Settings* and *Active service settings*.
Scroll to the set you want to use and press **Activate**.
If you want to use the same service as the previous time, you can skip this step.
- 2 Make a connection in one of the following ways:

- Open the homepage of the service: In the *Services* menu, select *Home*.



Tip: To quickly open the homepage, press and hold  in standby mode.

- Select the bookmark of the service: In the *Services* menu, select *Bookmarks* and a bookmark.
If the bookmark does not work with the current active service settings, activate another set of service settings and try again.
- Key in the address of the service: In the *Services* menu, select *Go to address*, key in the address (press  for special characters), and press **OK**.

It is not necessary to add the prefix `http://` in front of the address since it will be added automatically.

Browsing the pages of a service

After you have made a connection to the service, you can start browsing its pages.

The functions of the phone keys may vary in different browser services. Follow the text guides on the display.

If you receive or make a call during a GPRS connection,  will be shown to indicate that the GPRS connection is suspended (in GSM networks only).

USING THE PHONE KEYS WHILE BROWSING

- Use the scroll keys  or  to browse the page.
- To select a highlighted item, for example a link shown as underlined text, press **Open** or .



Tip: The function of the middle selection key depends on the item you have selected on the page.

- To key in letters and numbers, use the keys  - . To insert a special character, press , scroll to the desired character and press **Insert** or .
- Some or all of the following options may be available while browsing. Press **Options** and select the desired option. The service provider may also offer other options.

The options are: *Home, Shortcuts, Add bookmark, Bookmarks, History list, Download links, Last web addr., Other options, Save to folder, Reload, Quit.*

- *Home*: To return to the homepage of the service provider.
- *Shortcuts*: To open a new list of options that can be, for example, specific to the page.
- *Bookmarks*: To open the list of previously saved bookmarks, see page [91](#).
- *Add bookmark*: To save the current page as a bookmark.
- *History list* to view a list of Web addresses that you have visited previously. Scroll to the desired Internet address and press **Go to**.
- *Download links*: To view a list of bookmarks for downloading content.
- *Other options*: To view a list of further options. These include, for example, *Use detail* (to copy a detail from the page), *Go to address*, *Service inbox*, *Appear. settings*, *Security* (includes cookies and certificates), *Clear the cache* and wallet-related functions.

Reload: To reload and update the current page.

FUNCTIONS AVAILABLE WHILE BROWSING

You have access to phone functions and menus while you are browsing the pages of a browser service. For example, you can open the contacts list or make a phone call.

Ending a browser connection

To quit browsing, press **Options** and select *Quit*. When *Quit browsing?* is shown, press **Yes**. Alternatively, press  twice.

The phone ends the connection to the service.

Appearance settings

- 1 While browsing, press **Options** and select *Other options* and *Appear. settings*, or in the *Services* menu, select *Settings* and *Appearance settings*.
- 2 Select
 - *Text wrapping* to define whether the text continues on the next line if it cannot be shown on one line.
 - *Show images* to show or hide the images on browser pages. Hiding the pictures can speed up the browsing of pages that contain a lot of pictures.
 - *Font size* to select the size for text shown on browser pages.
 - *Alerts* to set the phone to alert when the connection or downloaded items are not secure.
 - *Character encoding* to select the character set that the phone uses for showing browser pages that do not include that information, or to select whether to always use Unicode (UTF-8) encoding when sending a Web address to a compatible phone.

Cookie settings

A cookie is data that a service saves in the cache memory of your phone. The cookie can be, for example, your user information. Cookies are deleted if you clear the cache memory.

You can set the phone to allow or prevent receiving cookies.

- 1 While browsing, press **Options** and select *Other options*, *Security* and *Cookies*, or in the *Services* menu, select *Settings* and *Security settings*.
- 2 Select *Cookies* and *Allow* or *Reject*.

Bookmarks

You can save page addresses as bookmarks in the phone. The bookmarks are saved in shared memory, see page [3](#).

- 1 While browsing, press **Options** and select *Bookmarks*, or select *Bookmarks* in the *Services* menu.
- 2 Scroll to the desired bookmark and press **Select** (or ) to make a connection to the page associated with the bookmark, or press **Options** for the following functions:
View, *Edit* or *Delete* to view, modify or delete the selected bookmark.

Send to send the selected bookmark directly to a compatible device (select *As bookmark*), or to send the bookmark as a text message (*As text message*).

New bookmark to create a new bookmark without connecting to the associated page. Key in the address and the title of the page and press **OK**.



Tip: To see the full title or address of a bookmark on the bookmark list, press and hold .

Your device may have some bookmarks loaded for sites not affiliated with Nokia. Nokia 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 internet site.

RECEIVING A BOOKMARK

When you have received a bookmark as an over the air (OTA) message, press **Save** to add it to the bookmark list, or press **Options** and select **View** to view the title and address of the bookmark or **Discard** to discard the bookmark.

Service inbox

The phone is able to receive service messages (pushed messages) from your service provider (network service). These messages can contain, for example, news headlines available in a browser service and the address of a service that offers the news.

To view a service message you have received:

- 1 When no connection is in progress

When a note about a new service message is shown, press **Show** to view the message right away or press **Exit** to view it later.

To view the message later, press **Menu** in standby mode, select **Services** and **Service inbox** and scroll to the desired message.

When a connection is in progress

Press **Options**, select **Other options** and **Service inbox** and scroll to the desired message.

2 Press **Retrieve** or **Options**.

- If you press **Retrieve** (or ) , the phone downloads the content indicated in the service message.
- If you press **Options**, you can select **Details** to view information about the service message or **Delete** to delete the message.

SERVICE INBOX SETTINGS

Press **Menu**, and select **Services**, **Settings** and **Service inbox settings**.
Select

- **Service messages** to allow or prevent the receipt of service messages.
- **Automatic connection** to set the phone to automatically activate the browser when the phone receives a service message.

Emptying the cache memory

The information or services you have accessed are stored in the cache of your phone. A cache is a memory location that is used to store data temporarily. If you have tried to access or have accessed confidential information requiring passwords, empty the cache after each use.

To empty the cache memory:

- When no connection is in progress, press **Menu** in standby mode, and select **Services** and **Clear the cache**.
- When a connection is in progress, press **Options** and select **Other options** and **Clear the cache**.

Security features for browser connections

Security features may be required for some services, such as banking services. For such connections you need security certificates. For more information, contact your service provider.



Important: Note 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 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. Certificates have a restricted lifetime. If **Expired certificate** or **Certificate not valid yet** is shown even if the certificate should be valid, check that the current date and time in your device are correct.

Before changing any certificate settings, you must make sure that you really trust the owner of the certificate and that the certificate really belongs to the listed owner.

CERTIFICATES

There are two kinds of certificates: server certificates and authority certificates.

- Server certificates

The phone uses a server certificate to create a connection with improved security to the service provider. The phone receives the server certificate from the service provider before the connection is established and its validity is checked using the authority certificates saved in the phone. Server certificates are not saved. The phone indicates if the identity of the Internet server cannot be verified, if the Internet server certificate is not authentic or if you do not have the correct authority certificate in your phone.

The security indicator  is displayed during a connection, if the data transmission between the phone and the Internet server is encrypted.

The security icon does not indicate that the data transmission between the gateway and the content server (or place where the requested resource is stored) is secure. The service provider secures the data transmission between the gateway and the content server.

- Authority certificates

Authority certificates are used by some browser services, such as banking services, for checking the validity of other certificates. You may be able to download authority certificates from a browser service, if the service supports the use of authority certificates. If you save the certificate, it is added to the certificate list in the phone.

To view the authority certificates in the *Services* menu, select *Settings, Security settings, Authority certificates*, and *Certificate list*.

• GO TO (MENU 14)



In this menu you can activate the same functions that can be accessed by pressing **Go to** in standby mode.

To access this menu, press **Menu** in standby mode and select *Go to*.

To remove functions from or add more functions to the list, see [Personal shortcuts](#).

• SIM SERVICES (MENU 15)



In addition to the functions available on the phone, your SIM card may provide additional services that you can access in menu 15. This menu is shown only if it is supported by your SIM card. The name and contents of this menu depend on the services available.

For availability, rates and information on using SIM services, contact your SIM card vendor, for example, network operator, service provider or other vendor.

You can set the phone to show the confirmation messages sent between your phone and the network when you are using a SIM service. Select the option *Yes* in the *Confirm SIM service actions* setting.

Using SIM services may involve sending a text message or making a phone call for which you may be charged.

9 PC Connectivity

You can access the Internet when your phone is connected to a compatible PC using an IR or Bluetooth connection, or a USB cable (sold separately). You can use the phone with a variety of PC connectivity and data applications.

Nokia PC Suite is a PC software package compatible with your Nokia phone. It provides you with a wide range of tools to manage your phone quickly and effectively on your PC.

You may find more information and downloadable files on the Nokia website, www.nokia.com/us.

• NOKIA PC SUITE

Nokia PC Suite contains the following applications.

- **Nokia Application Installer** to install Java applications from a compatible PC to the phone, or remove them from the phone.
- **Nokia Contacts Editor** to open, edit, save, and print phone contacts on your PC in connection with Nokia Phone Browser.
- **Nokia Content Copier** to copy or back-up information from your phone to a compatible PC or to another compatible Nokia phone.
- **Nokia Connection Manager** to select the connection type between the PC and the phone.
- **Nokia Image Converter** to make images in supported formats usable for multimedia messages and wallpaper, and portrait photos for contacts and to transfer them to your phone.
- **Nokia Modem Options** contains settings for HSCSD and GPRS connections.
- **Nokia Multimedia Player** to play MMS messages, audio and video files, and to create play lists of your favorite multimedia files.
- **Nokia PC Sync** to synchronize contacts, calendar, and to-do notes between your phone and a compatible PC.
- **Nokia Phone Browser** to view the contents of the *Gallery* folder of your phone on a compatible PC. You can browse picture files, video

clips, and transfer files between the phone and a PC.

- **Nokia Phone Editor** to edit your phone contacts list and settings from your PC.
- **Nokia Sound Converter** to edit polyphonic ringing tones in supported formats to be compatible with your phone and to transfer them to your phone.

• USING YOUR PHONE AS A MODEM

For information about connecting your phone to a compatible PC, see the documentation provided with Nokia PC Suite. For information about using a data communication application, refer to the documentation provided with it.

Making or answering phone calls during a PC connection is not recommended as it might disrupt the operation.

During an IR connection, place the phone on a stationary surface with the keypad facing down for better performance during data calls. Do not move the phone during a data call.

10 Reference Information

• CHARGING AND DISCHARGING

Your device is powered by a rechargeable battery. The full performance of a new battery is achieved only after two or three complete charge and discharge cycles.

The battery can be charged and discharged hundreds of times but it will eventually wear out. When the talk and standby times are noticeably shorter than normal, buy a new battery. Use only Nokia approved batteries, and recharge your battery only with Nokia approved chargers designated for this device.

Unplug the charger from the electrical plug and the device when not in use. Do not leave the battery connected to a charger. Overcharging may shorten its lifetime. If left unused, a fully charged battery will lose its charge over time. Temperature extremes can affect the ability of your battery to charge.

Use the battery only for its intended purpose. Never use any charger or battery that is damaged.

Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object such as a coin, clip, or pen causes direct connection of the positive (+) and negative (-) terminals of the battery. (These look like metal strips on the battery.) This might happen, for example, when you carry a spare battery in your pocket or purse. Short-circuiting the terminals may damage the battery or the connecting object.

Leaving the battery in hot or cold places, such as in a closed car in summer or winter conditions, will reduce the capacity and lifetime of the battery. Always try to keep the battery between 59°F and 77°F (15°C and 25°C). A device with a hot or cold battery may not work temporarily, even when the battery is fully charged. Battery performance is particularly limited in temperatures well below freezing.

Do not dispose of batteries in a fire! Dispose of batteries according to local regulations. Please recycle when possible. Do not dispose as household waste.

• ENHANCEMENTS, BATTERIES, AND CHARGERS



Check the model number of any charger before use with this device. This device is intended for use when supplied with power from ACP-12 and LCH-12.



Warning: Use only batteries, chargers, and enhancements approved by Nokia for use with this particular model. The use of any other types may invalidate any approval or warranty, and may be dangerous.

For availability of approved enhancements, please check with your dealer. When you disconnect the power cord of any enhancement, grasp and pull the plug, not the cord.

A few practical rules about accessories and enhancements:

- When you disconnect the power cord of any accessory or enhancement, grasp and pull the plug, not the cord.
- Check regularly that enhancements installed in a vehicle are mounted and are operating properly.
- Installation of any complex car enhancements must be made by qualified personnel only.

• CARE AND MAINTENANCE

Your device is a product of superior design and craftsmanship and should be treated with care. The suggestions below will help you protect your warranty coverage and enjoy your device for many years.

- Keep the phone and all its parts and accessories out of the reach of small children.
- Keep the phone dry. Precipitation, humidity and all types of liquids or moisture can contain minerals that will corrode electronic circuits. If your device does get wet, remove the battery and allow the device to dry completely before replacing it.
- Do not use or store the device in dusty, dirty areas. Its moving parts and electronic components can be damaged.

- Do not store the device in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the device in cold areas. When the device returns to its normal temperature, moisture can form inside the device and damage electronic circuit boards.
- Do not attempt to open the device other than as instructed in this guide.
- Do not drop, knock or shake the device. Rough handling can break internal circuit boards and fine mechanics.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the device.
- Do not paint the device. Paint can clog the moving parts and prevent proper operation.
- Use a soft, clean, dry cloth to clean any lenses (such as camera, proximity sensor, and light sensor lenses).
- Use only the supplied or an approved replacement antenna. Unauthorized antennae, modifications, or attachments could damage the device and may violate regulations governing radio devices.

All of the above suggestions apply equally to your device, battery, charger, or any enhancement. If any device is not working properly, take it to the nearest authorized service facility for service.

• ADDITIONAL SAFETY INFORMATION

Operating environment

Remember to follow any special regulations in force in any area and always switch off your device when its use is prohibited or when it may cause interference or danger. Use the device only in its normal operating positions. To maintain compliance with radio frequency exposure guidelines only use accessories approved by Nokia for use with this device. When the device is on and being worn on the body, always use an approved carrying case.

Parts of the device are magnetic. Metallic materials may be attracted to the device, and persons with a hearing aid should not hold the device to the ear with the hearing aid. Always secure the device in its holder, because metallic materials may be attracted by the earpiece. Do not place credit cards or other magnetic storage media near the device, because information stored on them may be erased.

Medical devices

Operation of any radio transmitting equipment, including wireless phones, may interfere with the functionality of inadequately protected medical devices. Consult a physician or the manufacturer of the medical device to determine if they are adequately shielded from external RF energy or if you have any questions. Switch off your phone 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.

PACEMAKERS

Pacemaker manufacturers recommend that a minimum separation of 6 inches (15.3 cm) be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research. To minimize the potential for interference, persons with pacemakers should

- Always keep the device more than 6 inches (15.3 cm) from their pacemaker when the device is switched on
- Not carry the device in a breast pocket
- Hold the device to the ear opposite the pacemaker to minimize the potential for interference

If you have any reason to suspect that interference is taking place, switch off your device immediately.

HEARING AIDS

Some digital wireless devices may interfere with some hearing aids. If interference occurs, consult your service provider.

Vehicles

RF signals may affect improperly installed or inadequately shielded electronic systems in motor vehicles such as electronic fuel injection systems, electronic antiskid (antilock) braking systems, electronic speed control systems, air bag systems. For more information, check with the manufacturer or its representative of your vehicle or any equipment that has been added.

Only qualified personnel should service the device, or install the device in a vehicle. Faulty installation or service may be dangerous and may invalidate any warranty that may apply to the device. Check regularly that all wireless device 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 device, its parts, or enhancements. For vehicles equipped with an air bag, remember that an air bags inflate with great force. Do not place objects, including installed or portable wireless equipment in the area over the air bag or in the air bag deployment area. If in-vehicle wireless equipment is improperly installed and the air bag inflates, serious injury could result.

Potentially explosive environments

Switch off your device when in any area with a potentially explosive atmosphere and obey all signs and instructions. Potentially explosive atmospheres include areas where you would normally be advised to turn off your vehicle engine. Sparks in such areas could cause an explosion or fire resulting in bodily injury or even death. Switch off the device at refueling points such as near gas pumps at service stations. Observe restrictions on the use of radio equipment in fuel depots, 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 below deck on boats, chemical transfer or storage facilities, vehicles using liquefied petroleum gas (such as propane or butane), and areas where the air contains chemicals or particles such as grain, dust or metal powders.

Aircraft

FCC regulations prohibit using your wireless device while in the air. The use of wireless telephones in an aircraft may be dangerous to the operation of the aircraft, disrupt the wireless telephone network, and may be illegal.

Failure to observe these instructions may lead to suspension or denial of telephone services to the offender, legal action, or both.

Emergency calls



Important: Wireless phones, including this device, operate using radio signals, wireless networks, landline networks, and user-programmed functions. Because of this, connections in all conditions cannot be guaranteed. You should never rely solely on any wireless device for essential communications like medical emergencies.

To make an emergency call:

- 1 If the phone is not on, switch it on. Check for adequate signal strength. Some networks may require that a valid SIM card is properly inserted in the phone.
- 2 Press the **End** key, , as many times as needed to clear the display and ready the phone for calls.
- 3 Key in the official emergency number for your present location. Emergency numbers vary by location.
- 4 Press the **Talk** key, .

If certain features are in use, you may first need to turn those features off before you can make an emergency call. Consult this guide or your service provider. When making an emergency call, give all the necessary information as accurately as possible. Your wireless phone may be the only means of communication at the scene of an accident. Do not end the call until given permission to do so.

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 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, or SAR. The SAR limit set by the FCC is 1.6W/kg.* Tests for SAR 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 phone model 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 (for example, at the ear and worn on the body) as required by the FCC for each model.

The highest SAR value for this model phone as reported to the FCC when tested for use at the ear is 1.27 W/kg, and when worn on the body, as described in this user guide, is 0.51 W/kg. (Body-worn measurements differ among phone models, depending upon available enhancements and FCC requirements).

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 PYANMM-1.

For body worn operation, this phone has been tested and meets the FCC RF exposure guidelines for use with a carry case, belt clip, or holder that contains no metal and that positions the handset a minimum of 5/8-inch (1.5 cm) from the body. Use of other carry cases, belt clips, or holders may not ensure compliance with FCC RF exposure guidelines. If you do not use a body-worn accessory and are not holding the phone at the ear, position the handset a minimum of 5/8-inch (1.5 cm) from your body when the phone is switched on.

*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 margin of safety to give additional protection for the public and to account for any variations in measurements. SAR values may vary depending on national reporting requirements and the network band. For SAR information in other regions please look under product information at www.nokia.com.

• TECHNICAL INFORMATION

Feature	Specification
Weight	148 g (5.2 oz) with 1000 mAh BLC-2 Li-Ion Battery
Dimensions	5.24 x 2.04 x 1.02 in (hwxwd)
Size (volume)	128 cm ³
Wireless networks	GSM 1900 and WCDMA 1900 networks
Frequency Range (Tx)	GSM 1900: 1850–1910 MHz WCDMA: 1850–1910 MHz
Frequency Range (Rx)	GSM 1900: 1930–1990 MHz WCDMA: 1930–1990 MHz
Tx output power	1 W (max)
Battery Voltage (nominal)	3.7 V
Operating Temperature	14°F to +131°F (-10°C to +55°C)
Memory capacity	6 MB shared memory
Number of entries in contacts	Up to 500
Talk time ^a	GSM: up to 4 hours WCDMA: up to 3 hours
Standby time	Up to 10 days

a. Battery talk and standby times are estimates only and depend on signal strength, network conditions, features used, battery age and condition (including the effect of charging habits), temperatures to which battery is exposed, use in digital mode, and many other factors. Please note that the amount of time a phone is used for calls will affect its standby time. Likewise, the amount of time that the phone is turned on and in the standby mode will affect its talk time.

• Nokia ONE-YEAR LIMITED WARRANTY

Nokia Inc. ("Nokia") warrants that this cellular phone ("Product") is free from defects in material and workmanship that result in Product failure during normal usage, according to the following terms and conditions:

- 1 The limited warranty for the Product extends for ONE (1) year beginning on the date of the purchase of the Product. This one year period is extended by each whole day that the Product is out of your possession for repair under this warranty.
- 2 The limited warranty extends only to the original purchaser ("Consumer") of the Product and is not assignable or transferable to any subsequent purchaser/end-user.
- 3 The limited warranty extends only to Consumers who purchase the Product in the United States of America.
- 4 During the limited warranty period, Nokia will repair, or replace, at Nokia's sole option, any defective parts, or any parts that will not properly operate for their intended use with new or refurbished replacement items if such repair or replacement is needed because of product malfunction or failure during normal usage. No charge will be made to the Consumer for any such parts. Nokia will also pay for the labor charges incurred by Nokia in repairing or replacing the defective parts. The limited warranty does not cover defects in appearance, cosmetic, decorative or structural items, including framing, and any non-operative parts. Nokia's limit of liability under the limited warranty shall be the actual cash value of the Product at the time the Consumer returns the Product for repair, determined by the price paid by the Consumer for the Product less a reasonable amount for usage. Nokia shall not be liable for any other losses or damages. These remedies are the Consumer's exclusive remedies for breach of warranty.
- 5 Upon request from Nokia, the Consumer must prove the date of the original purchase of the Product by a dated bill of sale or dated itemized receipt.
- 6 The Consumer shall bear the cost of shipping the Product to Nokia in Melbourne, Florida. Nokia shall bear the cost of shipping the Product back to the Consumer after the completion of service under this limited warranty.
- 7 The Consumer shall have no coverage or benefits under this limited warranty if any of the following conditions are applicable:
 - a) The Product has been subjected to abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized connections, unauthorized repair, misuse, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of Nokia, including damage caused by shipping.
 - b) The Product has been damaged from external causes such as collision with an object, or from fire, flooding, sand, dirt, windstorm, lightning, earthquake or damage from exposure to weather conditions, an Act of

God, or battery leakage, theft, blown fuse, or improper use of any electrical source, damage caused by computer or internet viruses, bugs, worms, Trojan Horses, cancelbots or damage caused by the connection to other products not recommended for interconnection by Nokia.

- c) Nokia was not advised in writing by the Consumer of the alleged defect or malfunction of the Product within fourteen (14) days after the expiration of the applicable limited warranty period.
 - d) The Product serial number plate or the enhancement data code has been removed, defaced or altered.
 - e) The defect or damage was caused by the defective function of the cellular system or by inadequate signal reception by the external antenna, or viruses or other software problems introduced into the Product.
- 8 Nokia does not warrant uninterrupted or error-free operation of the Product. If a problem develops during the limited warranty period, the Consumer shall take the following step-by-step procedure:
- a) The Consumer shall return the Product to the place of purchase for repair or replacement processing.
 - b) If "a" is not convenient because of distance (more than 50 miles) or for other good cause, the Consumer shall ship the Product prepaid and insured to:
Nokia Inc., Attn: Repair Department
795 West Nasa Blvd.
Melbourne, FL 32901
 - c) The Consumer shall include a return address, daytime phone number and/or fax number, complete description of the problem, proof of purchase and service agreement (if applicable). Expenses related to removing the Product from an installation are not covered under this limited warranty.
 - d) The Consumer will be billed for any parts or labor charges not covered by this limited warranty. The Consumer will be responsible for any expenses related to reinstallation of the Product.
 - e) Nokia will repair the Product under the limited warranty within 30 days after receipt of the Product. If Nokia cannot perform repairs covered under this limited warranty within 30 days, or after a reasonable number of attempts to repair the same defect, Nokia at its option, will provide a replacement Product or refund the purchase price of the Product less a reasonable amount for usage. In some states the Consumer may have the right to a loaner if the repair of the Product takes more than ten (10) days. Please contact the Customer Service Center at Nokia at the telephone number listed at the end of this warranty if you need a loaner and the repair of the Product has taken or is estimated to take more than ten (10)

days.

- f) If the Product is returned during the limited warranty period, but the problem with the Product is not covered under the terms and conditions of this limited warranty, the Consumer will be notified and given an estimate of the charges the Consumer must pay to have the Product repaired, with all shipping charges billed to the Consumer. If the estimate is refused, the Product will be returned freight collect. If the Product is returned after the expiration of the limited warranty period, Nokia's normal service policies shall apply and the Consumer will be responsible for all shipping charges.
- 9 You (the Consumer) understand that the product may consist of refurbished equipment that contains used components, some of which have been reprocessed. The used components comply with Product performance and reliability specifications.
- 10 ANY IMPLIED WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR USE, SHALL BE LIMITED TO THE DURATION OF THE FOREGOING LIMITED WRITTEN WARRANTY. OTHERWISE, THE FOREGOING LIMITED WARRANTY IS THE CONSUMER'S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. NOKIA SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF ANTICIPATED BENEFITS OR PROFITS, LOSS OF SAVINGS OR REVENUE, LOSS OF DATA, PUNITIVE DAMAGES, LOSS OF USE OF THE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF ANY SUBSTITUTE EQUIPMENT OR FACILITIES, DOWNTIME, THE CLAIMS OF ANY THIRD PARTIES, INCLUDING CUSTOMERS, AND INJURY TO PROPERTY, RESULTING FROM THE PURCHASE OR USE OF THE PRODUCT OR ARISING FROM BREACH OF THE WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL OR EQUITABLE THEORY, EVEN IF NOKIA KNEW OF THE LIKELIHOOD OF SUCH DAMAGES. NOKIA SHALL NOT BE LIABLE FOR DELAY IN RENDERING SERVICE UNDER THE LIMITED WARRANTY, OR LOSS OF USE DURING THE PERIOD THAT THE PRODUCT IS BEING REPAIRED.

- 11 Some states do not allow limitation of how long an implied warranty lasts, so the one year warranty limitation may not apply to you (the Consumer). Some states do not allow the exclusion or limitation of incidental and consequential damages, so certain of the above limitations or exclusions may not apply to you (the Consumer). This limited warranty gives the Consumer specific legal rights and the Consumer may also have other rights which vary from state to state.
- 12 Nokia neither assumes nor authorizes any authorized service center or any other person or entity to assume for it any other obligation or liability beyond that which is expressly provided for in this limited warranty including the provider or seller of any extended warranty or service agreement.
- 13 This is the entire warranty between Nokia and the Consumer, and supersedes all prior and contemporaneous agreements or understandings, oral or written, relating to the Product, and no representation, promise or condition not contained herein shall modify these terms.
- 14 This limited warranty allocates the risk of failure of the Product between the Consumer and Nokia. The allocation is recognized by the Consumer and is reflected in the purchase price.
- 15 Any action or lawsuit for breach of warranty must be commenced within eighteen (18) months following purchase of the Product.
- 16 Questions concerning this limited warranty may be directed to:
Nokia Inc.
Attn: Customer Service
7725 Woodland Center Blvd., Ste. 150
Tampa, FL 33614
Telephone: 1-888-NOKIA-2U (1-888-665-4228)
Facsimile: (813) 287-6612
TTY/TDD Users Only: 1-800-24-NOKIA (1-800-246-6542)
- 17 The limited warranty period for Nokia supplied attachments and accessories is specifically defined within their own warranty cards and packaging.

Appendix A Message from the CTIA (Cellular Telecommunications & Internet Association) to all users of mobile phones

© 2001 Cellular Telecommunications & Internet Association. All Rights Reserved. 1250 Connecticut Avenue, NW Suite 800, Washington, DC 20036. Phone: (202) 785-0081

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 seatbelts 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.

- 1 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.
- 2 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.

The wireless industry reminds you to use your phone safely when driving.

For more information, please call 1-888-901-SAFE.

For updates: <http://www.wow-com.com/consumer/issues/driving/articles.cfm?ID=85>

Appendix B Message from the FDA (U.S. Food and Drug Administration) to all users of mobile phones

©July 18, 2001 For updates: <http://www.fda.gov/cdrh/phones>

1. 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 radiofrequency energy (RF) in the microwave range while being used. They also emit very low levels of RF when in the stand-by 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.

2. 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 radiofrequency 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 subject of the safety questions discussed in this document.

3. 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 radiofrequency 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 far below the FCC safety limits.

4. 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 radiofrequency 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, glioma, 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.

5. 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 follow-up 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.

6. 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 radiofrequency 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.

7. How can I find out how much radiofrequency energy exposure I can get by using my wireless phone?

All phones sold in the United States must comply with Federal Communications Commission (FCC) guidelines that limit radiofrequency energy (RF) exposures. FCC established these guidelines in consultation with FDA and the other federal health and safety agencies. The FCC limit for RF exposure from wireless telephones is set at a Specific Absorption Rate (SAR) of 1.6 watts per kilogram (1.6 W/kg). The FCC limit is consistent with the safety standards developed by the Institute of Electrical and Electronic Engineering (IEEE) and the National Council on Radiation Protection and Measurement. The exposure limit takes into consideration the body's ability to remove heat from the tissues that absorb energy from the wireless phone and is set well below levels known to have effects.

Manufacturers of wireless phones must report the RF exposure level for each model of phone to the FCC. The FCC website (<http://www.fcc.gov/oet/rfsafety>) gives directions for locating the FCC identification number on your phone so you can find your phone's RF exposure level in the online listing.

8. What has FDA done to measure the radiofrequency energy coming from wireless phones?

The Institute of Electrical and Electronic Engineers (IEEE) is developing a technical standard for measuring the radiofrequency energy (RF) exposure from wireless

phones and other wireless handsets with the participation and leadership of FDA scientists and engineers. The standard, Recommended Practice for Determining the Spatial-Peak Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques, sets forth the first consistent test methodology for measuring the rate at which RF is deposited in the heads of wireless phone users. The test method uses a tissue-simulating model of the human head. Standardized SAR test methodology is expected to greatly improve the consistency of measurements made at different laboratories on the same phone. SAR is the measurement of the amount of energy absorbed in tissue, either by the whole body or a small part of the body. It is measured in watts/kg (or milliwatts/g) of matter. This measurement is used to determine whether a wireless phone complies with safety guidelines.

9. What steps can I take to reduce my exposure to radiofrequency 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 radiofrequency 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.

10. 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 radiofrequency 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.

11. What about wireless phone interference with medical equipment?

Radiofrequency 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 accompanied 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.

12. Where can I find additional information?

For additional information, please refer to the following resources:

- FDA web page on wireless phones
<http://www.fda.gov/cdrh/phones/index.html>
- Federal Communications Commission (FCC) RF Safety Program
<http://www.fcc.gov/oet/rfsafety>
- International Commission on Non-Ionizing Radiation Protection
<http://www.icnirp.de>
- World Health Organization (WHO) International EMF Project
<http://www.who.int/emf>
- National Radiological Protection Board (UK)
<http://www.nrp.org.uk/>

July 18, 2001 For updates: <http://www.fda.gov/cdrh/phones>