Nokia 7710 User's Guide

Table of Content

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 device 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 devices may be susceptible to interference, which could affect performance.

SWITCH OFF IN HOSPITALS Follow any restrictions. Switch the device off near medical equipment.

SWITCH OFF IN AIRCRAFT Follow any restrictions. Wireless devices can cause interference in aircraft.

SWITCH OFF WHEN REFUELLING Do not use the device at a refuelling point. Do not use near fuel or chemicals.

SWITCH OFF NEAR BLASTING Follow any restrictions. Do not use the device where blasting is in progress.

USE SENSIBLY Use only in the normal position as explained in the product documentation. Do not 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.

WATER-RESISTANCE Your device is not water-resistant. Keep it dry.

BACK-UP COPIES Remember to make back-up copies or keep a written record of all important information.

CONNECTING TO OTHER DEVICES When connecting to any other device, read its user guide for detailed safety instructions. Do not connect incompatible products.

EMERGENCY CALLS Ensure the device is switched on and in service. Press and hold ⌕ to show the phone keypad on the screen. Key in the emergency number, then press ⌕. Give your location. Do not end the call until given permission to do so.

About your smartphone

The wireless smartphone described in this guide is approved for use on the EGSM 900, GSM 1800, and GSM 1900 networks. Contact your service provider for more information about these networks.

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

WARNING: To use any features in this smartphone, other than active alarms, the smartphone 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 smartphone 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 utilise 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 smartphone. If so, they will not appear on your smartphone menu. Contact your service provider for more information.

This smartphone supports WAP 2.0 protocols (HTTP and SSL) that run on TCP/IP protocols. Some features of this smartphone, such as those used with MMS and Web browser require network support for these technologies.

Shared memory

The following features in this smartphone may share memory: contacts, text messages, multimedia messages, images, ringing tones, audio files, video clips, calendar and to-do notes, and downloaded 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 may use all of the available memory. Your smartphone 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.

Enhancements, batteries, and chargers

Check the model number of any charger before using it with this smartphone. This smartphone is intended for use when supplied with power from ACP-12 and AC-1A.

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.

Always switch the smartphone off and disconnect the charger before removing the battery.

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.

Your smartphone and its enhancements contains small parts. Keep them out of reach of small children.

Getting started

The Nokia 7710 smartphone provides a variety of media applications, such as a camcorder, a music player, Visual Radio™, RealPlayer, and a Web browser. Additionally, the smartphone contains various useful functions , such as a word processor, a clock, a calculator, and a calendar.

Parts of the smartphone

Front and top side

Fig. 1 Front and top side

1   Press to swap between the loudspeaker and earpiece during a voice call. Press to start or end voice recording. Press and hold to activate voice dialling.

2   Press to end or reject a call. Press to open the Dialler view of the Telephone application.

3   Press to answer a call. In the Telephone application's Dialler view and in Desk, press to view the most recently called numbers.

4   Scroll key. Press on the top , bottom , left , and right to move the cursor on the screen, and to select items. Press in the middle to activate or select. Press to call a dialled number, a selected speed dial number, or a selected contact. Press on the right and left to adjust the volume of the earpiece, headset, and loudspeaker.

5   Menu key. Press to open the menu. Press repeatedly to move between dialog pages.

6   Microphone

7   Desk key. Press to open the Desk application, which is the main view for the smartphone. For more information, see "Desk" on page 32. A long press opens a list of recently used applications that you can switch to. Can also be used to open alternative My view. For more information see "My view settings" on page 118

8   Esc key. Closes dialogs or returns to previous view. It also cancels actions in dialogs where **Cancel** button is available. If an application stops responding, press this key for at least 5 seconds to close the applications running in the background and free some memory. To prevent out-of-memory situations, it is a good idea to

regularly close unused applications by pressing the key.

9 Earpiece

10 Switch key enables switching between different views in an application.

11 Zoom key. When applicable, makes the zoom option available, In Telephone enables switching between *Portrait mode* and *Landscape mode* dialling.

The function of and keys depends on the application and the current view. During a call, press to open the audio settings and press or to increase or decrease the volume level, respectively. These two buttons are also used for playing games.

Base and right side

Fig. 2 Base and right side

1 Charger connector

2 Pop-Port™ connector for headsets, connectivity cable, and loopset.

3 Stylus holder.

4 Power key. Press and hold to switch the smartphone on or off. Press briefly to change a profile.

Back

Fig. 3 Camera lens and loudspeaker

Installing the SIM card and 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 another vendor.

- The SIM card and its contacts can be easily damaged by scratching or bending, so be careful when handling, inserting, or removing the card.
- Before removing the back cover, always switch off the power, and disconnect the charger and any other enhancements from the smartphone. Always store and use the smartphone with the back cover attached.

1 To remove the back cover, with the back of the smartphone facing you, press the back cover release button and lift off the back cover (See fig. 4).

Fig. 4 Removing the back cover

2 If the battery is installed in the smartphone, lift the battery out of the smartphone. (See fig 5).
Always switch the smartphone off, and disconnect the charger before removing the battery.

Fig. 5 Removing the battery

3 Open the SIM card slot latch (See fig. 6) and slide the SIM card sideways into the SIM card slot (See fig. 7). Make sure that the bevelled corner of the SIM card is pointing inwards into the slot and that the golden contact area on the card is facing downwards.

Fig. 6 Opening the SIM card slot latch

Fig. 7 Inserting the SIM card and the memory card

4 Close the SIM card slot latch (See fig. 8).

Fig. 8 Closing the SIM slot latch

5 To insert the battery, align the golden contacts of the battery with the corresponding connectors on the battery compartment. Press down on the opposite end of the battery until it snaps into place (See fig. 9).

Fig. 9 Inserting the battery

6 Press the cover into place. (See fig. 10)

Fig. 10 Replacing the back cover

Removing and installing the memory card

Your smartphone comes with a ready-to-use memory card (MMC). The card may contain some pre-installed files and applications. You can use this memory card to manage your files, applications, back-ups, and so on, in the same way as corresponding items on the smartphone.

Important: Do not remove the card in the middle of an operation. Removing the card in the middle of an operation may damage the memory card as well as the smartphone, and data stored on the card may be corrupted.

Keep all memory cards out of the reach of small children.

To remove the memory card, remove the back cover with the back of the smartphone facing you, by pressing the back cover release button and lifting off the back cover (See fig. 4). Remove the memory card by gently pulling it out of the slot. Be careful not to scratch the golden contacts of the card.

To install the memory card, remove the back cover with the back of the smartphone facing you, by pressing the back cover release button and lifting off the back cover (See fig. 4). Gently push the memory card into place (See fig. 7). Make sure that the gold contacts of the card are facing down.

Note: Use only compatible MultiMedia Cards (MMC) with this smartphone. Other memory cards, such as Secure Digital (SD) cards, do not fit in the MMC card slot and are not compatible with this smartphone. Using an incompatible memory card may damage the memory card as well as the smartphone, and data stored on the incompatible card may be corrupted.

Charging the battery

While charging, do not use features such as Web browser or RealOne player, which consume a lot of power. Too many power-consuming activities may prevent the battery from charging properly.

1 Connect the charger connector to the base of the smartphone (See fig.2 on page 14).

2 Connect the charger to a wall outlet. The battery indicator bar starts scrolling in the status indicator area. The smartphone can be used while charging. If the battery is completely discharged, it may take up to a few minutes before the charging indicator is shown.

3 When the battery is fully charged, the bar stops scrolling. Disconnect the charger from the smartphone, then from the outlet.

See also "Battery information" on page 156 and "Enhancements, batteries, and chargers" on page 12.

Switching on the smartphone

🔋 **WARNING:** To use any features in this smartphone, other than active alarms, the smartphone must be switched on. Do not switch the smartphone on when wireless phone use may cause interference or danger.

🖙 **To switch the smartphone on or off**, press and hold the power key 🔘 . This smartphone can be used without the phone functions when the Flight profile is selected. For more information, see "Profiles" on page 45.

🖙 **If the smartphone requests a PIN code**, enter the code (displayed as ****), and tap **OK**. The PIN code protects your SIM card against unauthorised use and is usually supplied with the SIM card. After three consecutive incorrect PIN code entries, the PIN code is blocked, and you must unblock it with a PUK code

before you can use the SIM card again. If the codes are not supplied with the SIM card, contact the operator whose SIM card is in your smartphone.

🖙 **If the smartphone requests a lock code**, enter the code (displayed as *****) and tap **OK**. The lock code protects your smartphone against unauthorised use. The factory setting for the lock code is 12345. Change the code, and keep the new code secret and in a safe place separate from your smartphone. The lock code can be from 5 to 10 digits.

🔻 **Note:** Your smartphone has an internal antenna. As with any other radio transmitting smartphone, do not touch the antenna unnecessarily when the smartphone is switched on. Contact with the antenna affects call quality and may cause the smartphone to operate at a higher power level than otherwise needed. Avoiding contact with the antenna area when operating the smartphone optimises the antenna performance and the battery life.

The picture shows how you should hold your smartphone when talking on the phone. The antenna area is shown in grey.

First start-up

When you start up your smartphone for the first time, you are asked to calibrate the touch screen and define certain settings. Based on the type of SIM card you use your smartphone may be able to automatically add the correct settting for Web browsing and MMS.

All the settings can later be modified in the Control Panel application or in relevant applications.

1 Upon start-up the smartphone performs a self-test. After the self-test is complete, you are asked to calibrate the touch screen. Follow the instructions on the screen.
2 If the smartphone requests a PIN code,enter the code (displayed as ****), and tap **OK**. A welcome screen appears.
3 To have the time and date set automatically, select the *Auto-update:* check box. Tap *Finish*. If you select the *Auto-update* option and the service is available, the smartphone needs to be restarted. If auto-update is selected by default and the service is available, *Settings* (see step 6 below) dialog is displayed. Note that some network operators may not support the *Auto-update* feature.
4 If Auto-update is not active or available, specify a home city for the smartphone.
5 If Auto-update is not active set the time and date. If you do not want to continue with the setup, tap **Finish**.
6 You can edit a variety of optional settings, such as e-mail account settings or your personal details. Select from the list the setting you want to edit, and tap **Open**. If you do not want to edit the settings now, tap **Finish** to complete the setup.

Copying from a SIM card to the smartphone memory

If you have stored names and phone numbers on a SIM card, you can copy them to the smartphone memory.

⇨**To transfer all the contacts**, open the Contacts application, press ⌑, and select *Tools* > *Copy SIM directory to Contacts...*. Tap **Copy**. **To transfer individual contacts**, open the Contacts application, press ⌑, and select *Tools* > *SIM directory...*. Select the contact and tap **Copy to Contacts**.

Display elements

Fig. 11 Desk

1 Title area. Displays the application name and group name or other details about the status of the application. Tap to access the menus or press ⌑.
2 Status indicator area. For status icons, see "Status indicators" on page 23.
3 Toolbar. Contains either shortcuts to often used applications or, in an application, a shortcut to useful tools. In Desk, also displays the current time. Tap to

show the current date. To hide the toolbar, press ☰, and select *Display*. Clear the *Toolbar*.

4 Scroll bar. Tap or drag to scroll the screen.

Your smartphone has a screen saver. If there are no actions for a specified time period, the screen saver becomes visible. To deactivate the screen saver, tap the screen or press any key. Note that you cannot change the look of the screen saver. For more information, see "Display" on page 113.

Navigating and selecting items

In most cases there are two ways to control the smartphone: by pressing the scroll key and other buttons on the smartphone or by tapping the screen with the included stylus. You can mix these two methods to find the way that best suits you. To locate the stylus, see Fig."2" on page 14.

> **Important:** Use only a stylus approved by Nokia for use with this smartphone. Using any other stylus may invalidate any warranty applying to the smartphone and may damage the screen. Avoid scratching the screen. Never use an actual pen or pencil or other sharp object to write on the screen.

⇨ **To open applications**, double-tap on an application icon in Desk, or scroll to the application, and press the centre of the scroll key. **To open folders, files, or attachments**, double-tap the item, or scroll to it, and press the centre of the scroll key.

The expression 'double-tap' is used here to describe the process of first tapping with the stylus on an item to select it and then tapping on the item again to open it.

☀ **Tip:** If the touch screen is not responding correctly, you may need to calibrate it. Use the scroll key to open the Control Panel application, select *Screen calibration*, and follow the instructions.

⇨ **To exit applications and return to Desk**, press 🔲 on the left side of the screen, or tap 🔗 on the status indicator area. To view its exact location on the screen, see fig. "11" on page 19. Desk is your workspace where you can access all applications and create shortcuts to different items such as documents, images, or contact cards. For more information, see "Desk" on page 32.

⇨ **To select menu commands in applications**, press ☰, scroll to the command and press the centre of the scroll key to select the command. Alternatively, tap the title area (see "Display elements" on page 19) of the window to open the menu, tap the menu, and tap the command.

In most of the applications, some of the most useful menu commands are also available on the command buttons on the right side of the screen.

➢**Tip:** The menu commands and command buttons change according to what is selected on the screen. Scroll to an item or tap it ; then select the appropriate menu command or command button.

➢**To select individual list items or files**, tap it, press ⊟ , and select *Edit* > *Mark/Unmark* > *Mark*. Now you can tap to mark the rest of the items. A check mark is placed next to the selected items. **To select all items in a list**, press ⊟ and select *Edit* > *Mark/Unmark* > *Mark all*. **To select consecutive items**, drag the stylus over the files.

➢**To show or hide the command buttons or toolbar**, press ⊟ , and select *Display* > *Command bar* or *Toolbar*. When a command button is dimmed, it cannot be used.

The command buttons on the right side, the toolbar at the bottom, and the status indicators on the top right corner of the display change according to the application and current situation.

➢**To activate parts of a dialog**, tap them. Try tapping dialog fields like text boxes, window frames, and other parts of the display.

➢**Tip:** If you write a phone number, e-mail address, or web address in a text box or document, you can use it as a hyperlink. Tap on the number or address, or move the cursor inside it with the scroll key; it becomes a link with a small icon. Tap the icon to call the phone number, to open the e-mail editor, or to access the web site if you have an active Internet connection.

➢**To drag an item**, tap it and keep the stylus in contact with the screen for about a second and move the item to its new location. Try this with the Desk applications.

Basic use of your smartphone

➢**To make a call**, press the ⟍ key on the top side of the smartphone to open the Dialler view. You can also open the Dialler by double-tapping the Telephone application in Desk, or tapping the telephone icon on the toolbar, if available. Enter the telephone number using the screen keypad of the Dialler view, and tap **Call**. If you make a mistake when entering numbers, tap ⟨⬚⟩ to clear numbers. The microphone and earpiece are on the front side of the smartphone (See fig "1" on page 13). **To end a call**, tap **End**, or press ⟍.

➢**To answer a call**, tap **Answer**, or press ⟍ on the top side of the smartphone. To locate the microphone and the earpiece see fig."1" on page 13. **To reject a call**, tap **Reject**, or press ⟍. For more information, see "Telephone" on page 38.

➢**To turn off the sounds of the smartphone**, select the Silent profile. To select the profile, either open the Profiles application, or press the power key ⓘ and select *Silent* from the list.

⇨ **To write text**, tap the text field or box where you want to enter text. The on-screen keyboard or handwriting recognition window opens. Start typing by tapping the characters in the keyboard or writing letters in the text input field. For more information, see "Writing text" on page 34.

⇨ **To take a picture or record video**, open the Camera application. The camera lens is at the back of the camera above the back cover (see fig. "2" on page 14). **To switch between camera and camcorder mode**, tap a corresponding picture on the left side of the screen. Aim at the target using the display as a viewfinder; press the centre of the scroll key, or tap **Capture** to take the picture. To record video, press **Record**. The image or video is saved to a folder shown in the title bar area. If you do not want to keep the picture, tap **Delete**. For more information, see "Images" on page 79.

⇨ **To listen to the radio**, connect a compatible headset to the smartphone. The lead of the headset functions as the antenna of the radio, so let it hang freely. Open the Visual Radio application, press ⌐≡ , and select *Tools* > *Speaker in use* > *Headset*. Press ⚬ to start listening to the radio. You can use Visual Radio both for listening to ordinary FM radio broadcasts and special broadcasts with simultaneous visual content, if available. For more information, see "Visual Radio" on page 94.

⇨ **To search through all the applications and files in the smartphone** for specific text strings or file types, open the Find application, and tap **Find**. Write the text in the search field, and tap **Find**. **To make the search more accurate**, tap **Advanced search**, write the text in the search field, specify the location and the date range of the search, and tap **OK**. Tap the found item to open it.

☀ **Tip:** You can also search for text strings within applications, if this function is available as a menu command. Press ⌐≡ ,and select *Edit* > *Find...*.

⇨ **To create folders**, open the File manager application. Press ⌐≡ and select *File* > *New folder...*. Give the new folder a name, and select a location. In some of the applications you can create a new folder if you first select the *Change folder* menu command in the menu.

Common actions in applications

You can find the following actions in several applications:

⇨ **To add a shortcut to an item**, select an item in the File manager application or another application that handles files, press ⌐≡ , and select *Add to Desk...* menu command, if available. In Images, for example, select *Tools* > *Add to Desk...*. Select the Desk group to which you want to add the shortcut, and tap **OK**.

⇨ **To send items**, select an item, press ⌐≡ , and select *File* >*Send* command, if available. Select the appropriate method of sending.

⇨**To cut and paste an item**, select an item, press ▤, and select *Edit* > *Cut*. Select the location where you want to add the item, press ▤, and select *Edit* > *Paste*.

⇨**To copy and paste an item**, select an item, press ▤, and select *Edit* > *Copy*. Select the location where you want to add the item, press ▤, and select *Edit* > *Paste*.

⋙**Tip:** Some dialogs have an arrow icon ▽ in the top left corner. Tap the icon to cut or copy the selected text, or to paste text into the selected field.

⇨**To delete an item**, select an item, press ▤, and select *File* > *Delete*.

⇨**To zoom in or zoom out on the display**, press ▤, and select *Display* > *Zoom in* or *Zoom out*.

Status indicators

You can open applications or dialogs by tapping some of the status icons. For example, tap ✉ to open Inbox where you can read the message you have received. Here are some of the status icons as they appear when using the default theme:

✉ You have one or more unread messages in your Inbox.

☎ You have received one or several voice messages. Tap the icon to call your voice mailbox. If you have two phone lines, a number indicates the phone line.

📞 A voice call is in progress. Tap to open the call handling view.

✖ The microphone is in mute mode.

🔊 Volume control. Tap during a call to open volume adjustment window.

🔒 The touch screen and keys of the smartphone are locked. See "Touch screen and keypad lock" on page 26.

✖ You are using the Silent profile. The phone will not ring to notify you of an incoming call or message. Tap to open the profile selection dialog.

🔔 The alarm clock is active.

📞➔ All your calls are diverted to another number. If you have two phone lines, a number indicates the line to which the call is diverted. 📞 indicates that all calls are diverted to a voice mailbox. Tap the icon to modify call diverting settings.

📞 If you have two phone lines, the number indicates the selected phone line. Tap the icon to switch between the phone lines.

🎧 or 🔁 Headset or loopset is connected to the smartphone.

🔌 Your smartphone is connected to a PC using a connectivity cable.

Battery level

🔋 The battery is almost empty. Recharge it.

🔋 The battery is charged. When the bar stops scrolling and all four bars are displayed, the battery is fully charged.

Signal strength

 The smartphone is connected to a wireless network. When all four bars are shown, the wireless signal reception is good. If the signal is weak, you can try to improve the reception by moving the smartphone slightly or by using it in the handsfree mode.

 The smartphone is switched on, but it is outside network coverage.

 The phone functions of the smartphone are switched off. You cannot make or receive calls, and you cannot receive messages with any of the communications applications (SMS, data, or e-mail).

Data connection indicators

 Bluetooth connection. Tap to open a dialog where you can switch off Bluetooth connection. For more information on the Bluetooth technology, see "Bluetooth connection" on page 143.

 Data call is in progress. Tap to open the call handling view.

 HSCSD data call is in progress. Tap to open the call handling view.

 The GPRS connection is active. The GPRS symbol is shown when the GPRS connection is suspended (on hold), for example, if you have received or made a call during a GPRS connection. Tap the icon to open the **Connection manager** dialog.

General information

Stickers in the sales package

The stickers included in the sales package contain important information for service and customer support purposes. The sales package also includes instructions on how you should use these stickers.

Access codes

Explanations for the different security codes that may be needed:

- **Lock code** (5 to 10 digits): The lock code protects your smartphone against unauthorised use, and is supplied with the smartphone. The preset code is 12345. Change the code, and keep the new code secret and in a safe place separate from your smartphone.
- **PIN code and PIN2 code** (4 to 8 digits): The PIN (Personal Identification Number) code protects your SIM card against unauthorised use. The PIN code is usually supplied with the SIM card. After three consecutive incorrect PIN code entries, the PIN code is blocked and you need to unblock it before you can use the SIM card again.
  The PIN2 code may be supplied with some SIM cards, and is required to access some functions, such as fixed dialling number.

- **PUK and PUK2 codes** (8 digits): The PUK (Personal Unblocking Key) code is required to change a blocked PIN code. The PUK2 code is required to change a blocked PIN2 code. If the codes are not supplied with the SIM card, contact the operator whose SIM card is in your smartphone.
- **Barring password** (4 digits): The barring password is needed when using the Call barring service. You can obtain the password from your service provider.
  The Internet applications of the smartphone use passwords and user names to protect against unauthorised use of the Internet and its services. These passwords are changed in the settings of the Internet applications.

Memory management

Many features of the smartphone consume memory as they store data. These features include videos, music files, games, contacts, messages, images and ringing tones, calendar and to-do notes, documents and downloaded applications. The amount of free memory available depends on how much data is already saved in the smartphone memory.

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You can use a memory card as extra storage space. If the smartphone memory is getting low, you can move data to a memory card. Memory cards are re-writable, so you can repeatedly save data on a memory card, and delete data from it as necessary.

▼**Note:** Some cards are read-only. They contain pre-installed data that cannot be uninstalled from the card or overwritten.

⇨**To view memory consumption**, go to the Control Panel application and open *Memory*. You can see what kind of data you have both in the smartphone memory and in the memory card, and how much memory the different data groups consume.

Freeing memory

Installing many games or saving many images, music files or video clips can use a large amount of the available memory. The smartphone will notify you that the memory is getting low. In this case, additional data may not be saved until you delete some of the games, images, or other entries to free memory. To avoid memory getting low, you should regularly delete, or transfer data to a memory card.

You can delete contact information, calendar notes, games, messages, e-mail messages, or any other data. Go to the respective application to remove the data.

Touch screen and keypad lock

You can lock the touch screen and keys to prevent them from being pressed accidentally.

⇨**To lock the touch screen and keys**, press 📧 and then 🔳. When the touch screen and keys are locked, 🔒 appears in the status indicator area. Another way to activate the keyguard is to press the power key ⏻ and select *Lock touch screen and keys*. **To unlock**, press 📧 and then 🔳.

⇨**To answer a call when the keyguard is on**, press 📞. During a call, the phone can be operated normally. When you end or reject the call, the touch screen and keys will automatically be locked again.

⇨**To turn the automatic keyguard on**, go to the Control panel application and open *Display*. Select the *Screen saver locks display & keys:* check box and tap **OK**. The touch screen and keys are locked automatically after the screen saver is activated.

Volume control

⇨**To adjust the volume level** during a call, press ▪ to open the audio settings. Press ▪ or ▪, or press ⊙ and ⊙ on the scroll key to increase or decrease the volume level, respectively. You can also select to use the loudspeaker or mute the smartphone.

⇨**To adjust the volume level when using a headset or loudspeaker**, press ⊙ and ⊙ on the scroll key.

❗ **WARNING:** Listen to music at a moderate level. Continuous exposure to high volume may damage your hearing.

Loudspeaker

Your smartphone has a built-in loudspeaker for handsfree use (See fig. 3 on page 14). The loudspeaker allows you to speak and listen to the smartphone from a short distance without having to hold the smartphone to your ear, for example, you could leave it on a table nearby. The loudspeaker can be used during a call, with sound applications, and when viewing multimedia messages.

⇨**To turn the loudspeaker on during an active call**, press ⟨◄ⅈⅈ⟩. The loudspeaker needs to be activated separately each time for phone calls, but sound applications such as Music player use the loudspeaker by default. **To turn off the loudspeaker** and switch back to using the earpiece, press ⟨◄ⅈⅈ⟩.

❗ **WARNING:** Do not hold the smartphone near to your ear when the loudspeaker is in use, because the volume may be extremely loud.

Headset

You can listen to the radio and music player in your smartphone with the supplied headset HS-3.

⇨**To connect the headset to the smartphone**, insert the end of the headset cable into the Pop-Port™ connector on the bottom of the smartphone. (See fig 2 on page 14) The headset's lead functions as the antenna for the radio, so let it hang freely.

⇨**To answer a call when using the headset**, press the remote control button, which is located in the microphone part of the headset. To end the call, press the same button again.

❗ **WARNING:** When using the stereo headset your ability to hear outside sounds may be affected. Do not use the stereo headset where it can endanger your safety.

Installing applications and software

You can install two types of applications and software to your smartphone:

- Applications and software specifically intended for the Nokia 7710 or suitable for the Symbian operating system. These installation files have the extension .SIS. See "Installing software" on page 28.
- J2Micro Edition™ Java applications suitable for the Symbian operating system. These files have the extension .JAD or .JAR. Do not download PersonalJava™ applications to your smartphone as they cannot be installed. See "Installing Java™ applications" on page 28.

Installation files may be transferred to your smartphone from a compatible computer, downloaded during browsing, or sent to you in a multimedia message, as an e-mail attachment, or via Bluetooth.

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

During installation, the smartphone checks the integrity of the package to be installed. The smartphone shows information about the checks being carried out, and you are given options whether to continue or cancel the installation.

For information on digital signatures and certificates, see "Certificate manager" on page 111.

Installing software

If you install a file that contains an update or repair to an existing application, you can only restore the original application if you have the original installation file or a full back-up copy of the removed software package. To restore the original application, first remove the application and then install the application again from the original installation file or the back-up copy.

To install software, search the smartphone memory or the memory card for the installation file, and double-tap the file to start the installation. For example, if you have received the installation file as an e-mail attachment, go to your mailbox, open the e-mail and double-tap an installation file to start the installation.

To remove software, see "Application manager" on page 109.

Tip: For more information on software installations, see "Application manager" on page 109.

Installing Java™ applications

1 Search the smartphone memory or the memory card for the installation file, select the file and double-tap it to start the installation. For example, if you have received the installation file as an e-mail attachment, go to your mailbox, open the e-mail and double-tap an installation file to start the installation.

2 Confirm the installation. The .JAR file is required for installation. If it is missing, the smartphone may ask you to download it. If there is no access point defined, you will be asked to select one. When you are downloading the .JAR file, you may need to enter a user name and password to access the server. You can obtain these from the supplier or manufacturer of the application. The smartphone informs you when installation is complete.

☀️**Tip:** When you are browsing, you can download an installation file and install it immediately. Note, however, that the connection is left running in the background during installation.

Data transmission

This smartphone employs the data transmission capabilities of the GSM network to send multimedia messages, short messages and e-mail, and to establish connections with remote computers.

Wireless data connections can be made from most locations where your smartphone operates. However, it is recommended that you move the smartphone to a location where the strongest possible wireless signal can be obtained. When the signal is strong, data transmission is efficient. In general, you should not expect the same performance from wireless data communications as from landline communications, due to the inherent characteristics of the wireless environment.

The following factors may impair wireless connections in the form of noise, low or lost signal, erroneous function of the smartphone, or distorted display:

Noise - Radio interference from electronic appliances and equipment, as well as from other phones will affect the quality of wireless data transmission.

Roaming - As the smartphone user moves from one network cell to another, the signal strength of the channel drops and the wireless telephone exchange may hand the user over to a different cell and frequency, where the signal is stronger. A cell handover may also occur when the user is stationary, due to varying network traffic loads. Such handovers may cause slight delays in transmission.

Electrostatic discharge - A discharge of static electricity from a finger or a conductor may cause erroneous functions in electrical devices. The discharge may result in distorted display and unstable software operation. Wireless connections may become unreliable, data may become corrupted, and transmission halted. In this case you need to end the existing call (if any), switch off the smartphone (if on) and remove the battery. Then replace the battery and establish a new wireless connection.

Dead spots and dropouts - Dead spots are areas where radio signals cannot be received. Dropouts occur when the smartphone user passes through an area where the radio signal is blocked or reduced by geographical features or large structures.

Signal impairment - Distance and obstacles can cause signals to become out-of-phase. They can also cause reflected signals. Both situations result in a loss of signal strength.

Low signal strength - Due to either distance or obstacles, the radio signal strength from a cell site may not be strong enough or stable enough to provide a reliable data connection for communication. Therefore, to ensure the best possible communication, remember the following points:

• The data connection works best when the smartphone is in a stationary position. Attempting wireless data communication while in a moving vehicle is not recommended.
• Do not place the smartphone on a metal surface.
• Check that the signal strength on the smartphone display is sufficient. Moving the smartphone within a room, especially towards a window, may result in a stronger signal. If a signal is not strong enough to support a voice call, data connection should not be attempted until you can find a location with better signal reception.

Data connections

GSM data calls

A GSM data call enables data transmission rates of up to 14.4 Kbps. For availability and subscription to data services, contact your network operator or service provider.

High-speed data calls (High Speed Circuit Switched Data, HSCSD)

HSCSD enables data transmission rates of up to 43.2 Kbps, which is four times faster than standard data rates of the GSM network. HSCSD is comparable to the speed of many computer modems that communicate with fixed telephone networks.

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

▼**Note:** Sending data in HSCSD mode may drain the smartphone's battery faster than normal voice or data calls, as the smartphone may send data more frequently to the network.

Packet data (General Packet Radio Service, GPRS)

GPRS enables wireless access for mobile phones to data networks (network service). GPRS uses packet data technology where information is sent in short bursts of data over the mobile network. The benefit of sending data in packets is that the network is occupied only when sending or receiving data. As GPRS uses the network efficiently, it allows for quick data connection set up and fast data transmission speeds.

You need to subscribe to the GPRS service. For availability and subscription to GPRS, contact your network operator or service provider.

(E)GPRS (Enhanced GPRS) is similar to GPRS but the enables faster connection. For more information on the availability of (E)GPRS and data transfer speed, contact your network operator or service provider. Note that when you have selected GPRS as a data bearer, the smartphone uses (E)GPRS instead of GPRS if this is available on the network.

Pricing for GPRS and applications

Any data transfers via GPRS and (E)GPRS are subject to applicable operator data transfer fees. For more information on fees, contact your network operator or service provider.

Access points

A data connection connects your smartphone to the Internet via an access point. Your smartphone supports three kinds of data connections:

- GSM data call ( )
- GSM high-speed data call, or HSCSD ( )
- packet data (GPRS) connection ( )

You need to set access point settings, if you want to, for example, send and receive multimedia messages or e-mail, browse pages, download Java™ applications, or use your smartphone as a modem.

Check with your service provider what kind of access point is needed for the service you wish to access. For availability and subscription to GSM data call, GSM high-speed data call and GPRS connection services, contact your network operator or service provider.

Desk

Press ⑤, or tap ❤ on the status bar to open Desk.

☀️**Tip:** A long press opens a list of recently used applications that you can switch to.

Desk is your workspace where you can access all applications and create shortcuts to items such as documents, images, applications, or contact cards.

When you exit an application by pressing ⑤ and switch to another application, the smartphone saves data by default.

Fig. 12: Desk

⇨**To open an application**, double-tap the icon. Tap and drag the scrollbar on the right to move up and down on the screen.

⇨**To remove an application**, go to **Control panel** > **App. manager**, select the software package you want to remove and tap **Remove**. A dialog appears asking for your confirmation. Press **Remove**.

⇨**To add a shortcut to an item**, go to the application whose item you want to add to Desk, and select the item. Press 🗐, and look for the *Add to Desk...* menu command. For example, in the Images application, select *Tools* > *Add to Desk...*. Select the Desk groups to which you want to add the shortcut, and tap **OK**.

⇨**To delete a shortcut or application icon**, select the icon, press 🗐, and select *Edit* > *Delete*. Note that application icons cannot be removed from the group *All*.

⇨**To change the order of icons**, tap on an icon by holding the stylus down for about a second and drag the icon with the stylus to its new location on the display.

⇨**To increase or decrease the size of icons**, press ⁝ or press 🗐, and select *Display* > *Zoom in* or *Zoom out*.

⇨**To add a background image**, press , and select *Display* > *Set background image...*. Select the image and tap **Insert**. **To further personalise the display**, see "Themes" on page 123.

Managing groups

You can divide the applications and shortcuts that are displayed in Desk into separate groups. Having different groups makes it easier to manage numerous applications and shortcuts. You can have the same application or shortcut in several groups.

↪ **To create a new group**, press `☰`, select *Group* > *New...*, and name the new group.

↪ **To switch between different groups**, press `☰`, select *View group*, and select a group.

↪ **To add the selected application or shortcut to a group**, press `☰`, select *Group* > *Add to group...*, and select the groups where you want to add the item.

↪ **To add or remove items in a group**, press `☰`, and select *Group* > *Edit...*. Note that this option is not available for the group *All*. Select the application or shortcut in the list on the left to add it to the group. Tap **Add**. To remove an application or shortcut, select it on the list on the right, and tap **Remove**.

↪ **To rename a group**, press `☰`, select *Group* > *Manage groups...*. Select the group that you want to rename, and tap **Rename**.

↪ **To delete a group**, press `☰`, select *Group* > *Manage groups...*. Select the group that you want to delete, and tap **Delete**. You cannot rename or delete the group *All*.

Active standby

To open the active standby view, press `☜`, or tap `⌾` in Desk.

This view contains four application icons that you can customise, the default status bar, profile indicator, date, and time.

↪ **To change a background image**, press `☰`, and select *Display* > *Set background image...*. Select the image, and tap **Set**.

↪ **To select the applications for active standby**, press `☰`, and select *Tools* > *Settings*. Tap `▽`, and select each application from the list.

Writing text

You have two options for entering letters, numbers, and special characters. **Handwriting recognition** enables you to write characters directly onto the screen using the stylus. You can also use the **on-screen keyboard** to tap in the characters you want to enter.

Other input methods may become available from application providers. The smartphone is able to use such input method applications only if installed to the smartphone memory. If installed to the memory card, the smartphone will not support such applications.

⇨**To write text**, tap the area on the screen where you want to write. Either the handwriting recognition window or the on-screen keyboard opens up. **To change from handwriting recognition to on-screen keyboard**, tap ✍. To change to handwriting recognition, tap ✍. Start writing.

Important: Use only a stylus approved by Nokia for use with this smartphone. Using other stylus may invalidate any warranty applying to the smartphone and may damage the screen. Avoid scratching the screen. Never use an actual pen or pencil or other sharp objects to write on the screen.

⇨**To move the input window**, tap and drag ✥.

⇨**To hide the input window**, tap ✕.

⇨**To change the input language**, tap 🌐 and select the language from the list.

Handwriting recognition

☀**Tip:** Tap 🔲 on the handwriting window to open the help function. Help offers detailed information on how to enter characters and contains other useful tips.

Fig. 13 Handwriting recognition window

⇨**To use the handwriting recognition**, draw the characters on the handwriting window one by one with the stylus.

☀**Tip:** Note that the part of the window where you write affects recognition. Use the thin baseline to guide your handwriting.

➪**To switch between auto-capitalisation, uppercase and lowercase**, tap ⌨. At the beginning of a word you can choose between capitalisation and lowercase. In the middle of a word you can choose between uppercase and lowercase. All the sentences following the characters **! ? ¿ ¡** and **.** are capitalised automatically, unless you have disabled this option in Control Panel Pen Input settings.

Note that the case of the letter depends on the alphabet mode you have selected, not on how you write the letter on the screen. You can write uppercase letters to produce lowercase letters if the system recognises uppercase writing more easily. Note also that you cannot select the AB mode at the beginning of an auto-capitalised word.

※**Tip:** See "Pen input settings" on page 36 for more auto-capitalisation settings.

➪**To write numbers, special characters or handwriting gestures**, tap 12 for numbers and #§ for special characters. See figure 14 on how to enter spaces, backspaces, etc.

Fig. 14 Handwriting gestures: 1 - space, 2- backspace, 3- enter, 4 - tab

➪**To delete text**, select the text by dragging the stylus over the text. Draw the backspace gesture. See fig. 14.

➪**To teach the system your individual writing style**, select the Control panel application and **Pen Input Settings**, then tap **Training**. Double-tap on a character set (lowercase or uppercase letters, numbers, or special characters) and select the individual character to be trained. Tap **Train**. Draw the character in your own way and tap **OK**. **To change the writing style you have taught the system**, open the **Draw character** dialog again, and tap **Clear** to remove the existing style. Draw the new character and tap **OK**.

Train only the characters that the system has difficulty recognising. If you try to train the system to recognize all the characters, your smartphone may run out of memory.

On-screen keyboard

➪**To use the on-screen keyboard**, tap on the keys of the keyboard with the stylus.

Fig. 15 On-screen keyboard

1 Input display. Displays the characters you are writing.
2 Backspace. Deletes the character to the left of the cursor.
3 Enter. Starts a new line or adds new rows.
4 Tab key. Adds a tab space or moves the cursor to the next field.
5 Caps lock. Switches on uppercase mode.
6 Shift. Allows you to enter an uppercase letter when you are writing in lowercase mode.
7 Space. Inserts a space.

↪**To switch between uppercase and lowercase**, tap
🔲 . To switch on the caps lock tap 🔲 . All the sentences following the characters **! ? ¿ ¡ .** are capitalised automatically, unless you have disabled this option in Control Panel Pen Input settings.

↪**To write numbers or special characters**, tap 12. Tap
🔲 to see more special characters.

※**Tip:** To write accented letters, if the keyboard has keys with only accents in them, first tap the accent and then the letter. To select accented letters, you can also tap
az , if available.

↪**To delete text**, select the text by dragging the stylus over the text. Tap on the backspace icon.

Pen input settings

↪**To configure text input settings**, select **Control panel** > **Pen Input Settings**. Define the following:

Input language: - This setting defines which language-specific characters, in your handwriting, are recognised and how your on-screen keyboard is laid out.

Character recognition : - Adjust the speed at which handwriting is recognised.

Line width: - Change the thickness of the trail of the stylus.

Keyboard size: - Select the size for the virtual keyboard.

Input method: - By default, your smartphone has two text input methods: on-screen keyboard and handwriting recognition. You do not need this setting unless additional input methods are installed on your smartphone.

Capitalise: – To capitalise words following the characters . **! ? ¿ ¡** with space, select *After '.', '?' or '!' with space*. To capitalize them without space, select *After '.', '?' or '!'* . To turn off the capitalisation select *No*.

☀️**Tip:** Use the *After '.', '?' or '!'* setting with text messages to fit in more text.

Telephone

Go to **Desk** > **Telephone**.

The microphone and earpiece are on the front side of the smartphone (See fig."1" on page 13).

Calling

⇨**To make a call using the numeric keypad**, open the Telephone application, input the number by tapping the keypad, and tap **Call**. **To delete tapped numbers**, tap ⬜ . **To switch between views, press** ⬜ .

⇨**To change the orientation of the dialler or speed dialling view**, press ⬚ , and select *View* > *Landscape mode*/*Portrait mode*.

💡**Tip:** You can also press ⬜ to change the orientation.

For international calls, add the international prefix **+** (double-tap * and select + from the pop-up list) and then enter the country code, the area code, and the phone number.

If the SIM card has been removed or is corrupted you can make only emergency calls. Some networks may require that a valid SIM card is properly inserted in the smartphone to make any calls.

If making an emergency call the normal way is not possible, you may be able to enter an emergency number

preprogrammed in your smartphone in the code query field and tap **Call**.

⇨**To call a number in your directory**:

- In landscape mode, tap **Contacts** in the dialler window, select a contact in the directory, and tap **Call**. If the contact has more than one phone number, a list opens with all the contact's phone numbers. Select a number from the list, and tap **OK**.
- In portrait mode, Start writing the name of the contact in the input field. When you see a matching contact in the list above the input field, tap it and **Call**. If the contact has more than one phone number, phone numbers are listed as separate contacts. **To switch between letters and numbers**, press and hold the # key.

💡**Tip:** You can use a phone number in a text box or document as a hyperlink. Tap the number or move the cursor inside it with the scroll key; it becomes a link with a small icon. Tap the icon to call the phone number.

⇨**To add the number from the number field to your Contacts**, tap **Add to Contacts**, select a contact or create a new contact and fill in the contact information. For more information, see "Contacts" on page 62.

⇨**To call a number in a recent calls list**, tap **Recent calls** in the Dialler window. Select a number from one of the lists and tap **Call**. **To add a number to your Contacts**, select a number and tap **Add to contacts**.

⇨**To use speed dialling**, press ⏚, select *View* > *Speed dialling* and tap the name or number you want to call. Speed dialling is a quick way to call frequently used numbers.

Telephone ▽ Speed dialling		
⊚⊚ Voice mailbox	2	3
4	5	6
7	8	9

Fig. 16: Speed dialling

⇨**To add speed dial numbers**, open the speed dialling view (press ⏚, select *View* > *Speed dialling*). Tap on an empty speed dial number, then tap **Assign** in the dialog that opens. Select the contact for which you want to assign the speed dial number, and tap **Select**. If there are several phone numbers to choose from, pick one, and tap **OK**.

⇨**To switch between the Dialler and Speed dialling views**, press ⏗.

⇨**To call your voice mailbox**, contact your network operator for a voice mailbox number (network service). In the Speed dial view, number 1 is reserved for calls to your default voice mailbox. For more information, see "Voice mailbox settings" on page 42.

⇨**To adjust the sound level during a call**, tap **Audio settings**. Move the slider to adjust the sound level. Select *Loudspeaker:* to use the handsfree speaker and microphone or *Mute:* to silence the microphone.

☀️**Tip:** During a call, press ⏗ to open the audio settings. Press ⏗ and ⏗, or press ⏚ and ⏚ on the scroll key to decrease or increase the volume level, respectively.

⇨**To make a new call during a call**, tap **Dialler**. To switch between the calls tap **Unhold** or **Hold**. **To connect the other two participants and remove yourself from the call**, press ⏚, select *Options* > *Transfer*. **To talk to both participants simultaneously**, tap **Conference**. A conference call can have up to 5 participants. When in conference call, tap **Conf. options** to drop participants or speak to them privately. A conference call and call transfer are network services.

☀️**Tip:** For information on monitoring missed, received, and dialled calls, and on call duration, see "Log" on page 138.

Answering

⇨**To answer a call**, tap **Answer** or press ⌣. **To reject a call**, tap **Reject** or press ⌢. **To end a call** press ⌢. **To mute the ringing tone**, tap **Silence**. To mute the tone and reply with a default message, see "Other settings" on page 42

Voice dialling

You can make a phone call by saying a voice tag that has been added to a contact card. Any spoken word(s) can be a voice tag.

Before using voice tags, note that:

- 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.
- When recording and saying the voice tags, speak up. If you speak too softly, the system may not recognise the voice tag properly.
- Voice tags are sensitive to background noise. Record voice tags and use them in a quiet environment.
- 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 dialling in all circumstances.

⇨**To add voice tags**, see "Voice tags" on page 64.

⇨**To use voice dialling**, press and hold 🔲 or the headset button until you hear a start tone or see a note on the display. Say the voice tag for the number you want to dial. To try again if the voice tag was not recognised, press and hold down the 🔲 key a few seconds. To return to normal dialling, briefly press the 🔲 key or headset button, and press the ESC key.

Telephone settings

Call diverting (network service)

Call diverting allows you to direct your incoming voice calls to another phone number. This is also known as call forwarding.

1 Press 📋 , and select *Tools* > *Settings* > *Call divert...*. A dialog opens.
2 Go to the *Voice calls* page.
3 Define the following:
   Divert all calls: - When activated, all incoming calls are diverted.
   Divert if busy: - When activated, incoming calls are diverted when you are engaged in another call.
   Divert if not answered: - When activated, incoming calls are diverted if you do not answer them within a certain time period.
   Divert if out of reach: - When activated, incoming calls are diverted when the smartphone is switched off or outside the network service area.

Divert if not available: - In a single action, this option turns on *Divert if busy:*, *Divert if out of reach:*, and *Divert if not answered:*.

The options available are:

Activate – Opens a dialog where you type the number to which you want to divert the calls and - if available - choose the time period after which the call is diverted, if it is not answered. Tap ▽ to select

your voice mailbox number or other default numbers, if available. Tap **Select contact** to search for a phone number in the Contacts application.

Cancel - Turns off the divert.

Check status - Checks whether the divert is activated or not.

➭ **To cancel all call diverts**, tap **Cancel all diverts**.

Diverting data & fax calls (network service)

1 Press ⋮☰ , and select *Tools* > *Settings* > *Call divert...*.
2 Go to the Data & Fax calls page and select one of the following options to divert all data calls or all fax calls:

Activate – Opens a dialog where you type the number to which you want to divert the calls, and choose the time period after which the call is diverted, if it is not answered. You can tap the box to select previously added numbers, if available.

Cancel - Turns off the divert.

Check status - Checks whether the divert is active or not.

Call barring (network service)

Call barring allows you to restrict the making and receiving of calls with your smartphone. For this function, you need the barring password from your service provider.

1 Press ⋮☰ , and select *Tools* > *Settings* > *Call barring...*. A dialog opens.
2 Define the following:

All incoming calls: - When activated, calls cannot be received.

Incoming calls when abroad: - When activated, calls cannot be received when you are outside your home country.

All outgoing calls: - When activated, calls cannot be made.

International calls: - When activated, calls cannot be made to other countries or regions.

Int. calls except to home country: - If you have enabled international roaming with your network operator, you cannot make international calls abroad, except to your home country.

The options available are:

Activate - Turns on the barring.

Cancel - Turns off the barring.

Check status - Checks whether call barring is activated or not.

3 Enter the barring password, and tap **OK** to activate the service.

If your SIM card supports the alternate line service, voice call barring applies only to the selected line.

⇨**To cancel all call barrings**, tap **Cancel all barrings**.

For information on barring data calls, see "Data call barring" on page 112.

Call barring and call diverting cannot be active at the same time. When calls are barred, calls still may be possible to certain official emergency number programmed into your smartphone.

Voice mailbox settings

For information on calling a voice mailbox (network service), see "Calling" on page 38.

1 Press ⌗, and select *Tools* > *Settings* > *Voice mailbox...*.
2 Define the voice mailbox number, and if you wish to do so, the DTMF tone (voice mailbox password):
Number: - Write the voice mailbox number obtained from your service provider.
DTMF: - Define DTMF tones for a voice mailbox. For more information on DTMF tones, see "Sending DTMF tones" on page 43.

If your SIM card supports the alternate line service, you can define the voice mailbox settings for both lines.

Other settings

Press ⌗, and select *Tools* > *Settings* > *Other settings...*. Define the following:

Call page

Call waiting: (network service)- If you have activated the call waiting service, the network will notify you of a new incoming call while you have a call in progress. The option *Check status* checks whether call waiting is activated or not.

Send my caller ID: (network service) - Determines whether your number is hidden or presented to the person you are calling. The value may be set by your network operator or service provider when you make a subscription (*Set by network*).

Summary after call: - If you select the option *On*, the approximate duration of a call will be displayed after the call.

Automatic redial: - If you select the option *On*, and you call a number that is busy or does not answer, the smartphone attempts to call the number automatically. The maximum number of attempts is 10.

Reject with message: - If you select the option *On*, a text box opens, where you can write a message that you can to send to a caller as a reply, whenever you mute an incoming phone call. To modify the message afterwards, select the option *Edit message*.

Line in use: (network service)- If your SIM card supports the alternate line service, select the line you want to use.

Block line change: (network service) - If your SIM card supports the alternate line service, and you select this option, you cannot change the line in use. If you want to change this setting, you must enter your PIN2 code.

Network page

Operator selection: - Allows you to change the way a network is selected, and also to register to another network. In automatic network selection, the smartphone selects the most appropriate network. In manual network selection, the smartphone searches for available networks and presents you with a list of networks found. You can then select which network to use. Note that the possibility to change a network depends on your network operator.

Cell info display: - Select *On* to indicate that the smartphone is used within a Micro Cellular Network. An indicator of the MCN cell is shown in the phone number field. The indicator is not shown during a call.

Security page

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

Closed user group: -Specify a group of people to whom you can call and who can call you. Select *Default* to activate the group agreed on with the network operator. Select *On* to activate this network service. You must enter the group number that you have obtained from the network.

Fixed dialling: - If your SIM card supports this service, you can restrict your calls to a limited set of numbers stored in the SIM card. When the fixed dialling service is active, the SIM phone book list shows only numbers in the fixed dialling list. You still have access to the Contacts directory, but you cannot call those numbers.

If you want to change the settings or view the fixed numbers, you are required to enter your PIN2 code. Select *Contacts* to add, modify, or delete numbers.

You are required to enter names and numbers into the fixed dialling list.

▼**Note:** Fixed dialling also affects service requests (also known as SS and USSD commands), such as activation commands for network services.

Sending DTMF tones

DTMF (Dual Tone Multi-Frequency) tones are the tones you hear when you tap the number keys on the numeric keypad of the Telephone application. For example, DTMF tones allow you to communicate with voice mailboxes and computerised telephony systems.

You can send DTMF tones to the network to, for example, access automated phone services, voice mailboxes, or banking systems.

You can send DTMF tones automatically if you have added a DTMF tone to the *DTMF* field in a contact card in Contacts application. You can also send DTMF tones manually in the Dialler view of Telephone. The manual method of transmitting DTMF tones is recommended when the DTMF tone string is short.

➪**To send DTMF tone strings automatically during a call**, press , and select *Options* > *Send DTMF...*. If there is a DTMF string for the currently active call in Contacts, the **Send DTMF** dialog opens. Tap **Send** to send the DTMF tone automatically, or **Enter manually** to use the Dialler view. The Dialler view opens automatically if there is no DTMF string for the call in Contacts.

➪**To enter DTMF tones manually during a call**, tap **Dialler** or press . Enter the DTMF string.

☼**Tip:** There are 2 special characters that you can use by double-tapping * on the keypad:

• p (pause) - Causes a three-second pause between the digits in a DTMF tone string. All digits that follow the pause are treated as DTMF tones.

• w (wait) - Pauses the sending of DTMF digits until you tap **Send**. The rest of the string is sent to the network. All digits that follow the wait are treated as DTMF tones.

You can add DTMF tones to the *DTMF* field in a contact card.

Tips for efficient use of Telephone

• The silent indicator is displayed in the status indicator area when you have set the Silent profile to active. Tapping this indicator will open a dialog where you can change the profile. The indicator is removed from the status indicator area when you activate a profile other than 'Silent'.
• In the call handling view, press during a call to put the current call on hold or to activate a held call. When you are not on a call, press to bring up the last dialled calls list.
• In the speed dial view, you can drag the assigned speed dial buttons with the stylus to reorganise them. The fixed voice mail button cannot be moved.

Profiles

Go to **Desk** > **Profiles**.

Profiles define the tones and sound level of your smartphone for different operating environments, events, and caller groups.

⇨ **To change a profile**, select the profile from the list and tap **Activate**.

⇨ **To delete a profile**, select the profile from the list, press ⊑ , and select *Profile* > *Delete*. Note that the default profiles cannot be deleted.

☀ **Tip:** You can also change profiles by briefly pressing the power key.

⇨ **To create a new profile**, press ⊑ , and select *Profile* > *New...*. For more information on the settings, see "Editing profiles" on page 46.

⇨ **To define the time when the selected profile expires**, tap **Set time**. Tap ⏰, and then use the arrows to change the time. When the end time is reached the previously used profile is taken back into use. Note that due to safety reasons the Flight profile cannot be timed.

⇨ **To add a caller group to a selected profile**, tap **Personalise** and **Alert for**. Select the group or groups, and tap **OK**. The smartphone plays the chosen ringing or alert tone only when a group member calls or sends a message to you (if the caller's telephone number is sent with the call and your smartphone recognises it). Other callers are handled using the Silent profile.

⇨ **To use your smartphone without connecting to the GSM wireless network**, select the Flight profile, and tap **Activate**. GSM wireless phone and FM radio signals to or from the smartphone and Bluetooth connections are prevented, but you can still do tasks which do not require the use of the wireless network. For example, you can still listen to sound clips or write messages.

❗ **WARNING:** With Flight profile you cannot make (or receive) any calls, including emergency calls, or use other features that require network coverage. To make calls, first activate the phone function by changing the profile. If the smartphone has been locked, enter the lock code.If you need to make an emergency call while the smartphone is locked and in flight profile, you may be also be able to enter an emergency number preprogrammed in your smartphone at the lock code field and tap **Call**. The smartphone will confirm that you are about to exit flight profile to start an emergency call.

❗ **WARNING:** Do not switch the device on when wireless smartphone use is prohibited or when it may cause interference or danger.

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Editing profiles

⇨ **To edit a profile**, select the profile from the list, and tap **Personalise**. Note that not all settings can be changed for all profiles. Define the following:

Profile name: - Rename the profile.

Ringing tone: - Tap 🔽 to select a sound file to be used as a ringing tone for voice calls. **To listen to the selected tone**, tap **Play tone**. Similarly you can select a sound file for different message types.

Incoming call alert: - When *Ascending* is selected, the ringing volume starts from level one and increases level by level to the set volume level.

Ringing volume: - Set the volume level by pressing 🔄 or 🔲. The same volume level is used for incoming voice calls, messages, and alarms.

Vibrating alert: - Set the smartphone to vibrate at incoming voice calls, messages, and alarms.

Message alerts: - Select to turn on message alerts.

Text msg. alert tone: - Tap 🔽 to select the alert tone for incoming text messages. If *Message alerts:* is not selected, this option is not available.

Multimedia alert tone: - Tap 🔽 to select the alert tone for incoming multimedia messages. If *Message alerts:* is not selected, this option is not available.

E-mail alert tone - Tap 🔽 to select the alert tone for incoming e-mail messages. If *Message alerts:*is not selected, this option is not available.

Key tones: - Set the volume level of the key clicks.

Touch screen tones: - Set the volume level of the display taps.

Warning tones: - The smartphone gives a notification tone, for example, when the battery is running out of power.

To close the dialog and discard all the changes you have made, press ◀.

Messaging

Go to **Desk** > **Messaging**.

In the Messaging application you can create, send, receive, view, edit, and organise various types of messages: text messages, multimedia messages, e-mail messages, and smart messages that are special text messages containing data. You can also receive messages and data via Bluetooth, and receive WAP service messages, cell broadcast messages, as well as send service commands.

Fig. 17: Messaging

▼ **Note:** Only devices that offer compatible multimedia message or e-mail features can receive and display multimedia messages.

☀ **Tip:** To be able to send and receive e-mail and multimedia messages, you need to configure Internet access point settings. See "Setting up an Internet access point" on page 114. Based on the type of the SIM card you use your smartphone may be able to automatically add the correct settings for WWW browsing and MMS.

☀ **Tip:** You can start to create a message from any application that has the option **Send** (or menu command *Send*). Select a file (an image, text) to be added to the message and tap **Send**.

☀ **Tip:** To send a message in the message edit view, when a valid address in the *To:* field, press ☎ to send a message.

⇨ **To customise the command buttons in the main window**, press ⌨ , select *Display* > *Command bar buttons...*, select the appropriate command for each button and tap **OK**.

⇨ **To sort the messages**, press ⌨ , select *Display* > *Sort...*. Select the appropriate sorting method and order, and tap **OK**.

Inbox

The icons indicate the message type, priority, and possible attachments. You may see some of the following icons:

🖼️ New e-mail in remote mailbox

📧 New text message

🖼️ New multimedia message

🗓️ New calendar invitation

📧@ Unread e-mail

📩@ High priority e-mail

🖼️ Low priority e-mail in remote mailbox

📨 Attachment

Outbox statuses

E-mail and text messages can have the following statuses in Outbox:

Sending - The message is currently being sent.

On request - The e-mail or text message will be sent only if you specifically tap **Send** in the Outbox view.

Waiting - A text message is queuing and will be sent as soon as possible. For example, a message can be lining up when the smartphone is switched on, while waiting for the signal strength to become adequate, or while waiting for the previous phone call to end. In the case of e-mail

messages, *Waiting* shows that the message will be sent the next time you connect to your remote mailbox.

Failed - The message could not be sent.

Deferred –You have suspended the sending of the message. You can resume the sending of a message by Tapping **Send** in the Outbox view.

Folders

When you open Messaging, you can see the content of the folder last opened.

➯**To change to another folder**, press 🔳 and select *Folders*. The list of folders contains:

Inbox - Contains received messages, except cell broadcast messages.

Outbox - A temporary storage place for messages waiting to be sent. For example, messages are placed in Outbox when your smartphone is outside network coverage. You can also schedule e-mail messages to be sent the next time you connect to your remote mailbox. Tap **Defer sending** to keep the message on hold while in Outbox.

Drafts - Contains draft messages that have not been sent.

Sent - Stores messages that have been sent. Note that messages or data that have been sent via Bluetooth connection are not saved in the Sent folder.

Remote mailbox - When you open this folder, you can either connect to your remote mailbox to retrieve your new e-mail messages or view your previously retrieved e-mail messages offline. See "E-mail messages" on page 49.

➪**To add a new folder**, press ⸬ and select *Tools* > *Manage folders...*. Tap **New**, and give the new folder a name. You can organise your messages into these folders.

➪**To rename or delete folders**, press ⸬ and select *Tools* > *Manage folders...*. Note that you cannot delete default folders.

E-mail messages

To be able to receive and send e-mail, you need to set up a remote mailbox service. This service may be offered by an Internet service provider, a network service provider, or the company you work for.

Setting up a remote mailbox

1 Press ⸬ in the main view of the Messaging application and select *Tools* > *New mailbox...*. Tap **Next**.
2 Define the following settings on the pages of the mailbox setup wizard:

Mailbox name: - Write a descriptive name for the remote mailbox.
Mailbox type: - Select the e-mail protocol your remote mailbox service provider recommends. Note that this setting can be selected only once and cannot be changed if you have saved the settings or exited from the mailbox settings. Tap **Next**.
Name: - Write your name.
User name: - Write your user name, given to you by your service provider.
Password: - Write your password. If you leave this field blank, you will be prompted for a password when you try to connect to your remote mailbox.
My e-mail address: - Write the e-mail address given to you by your service provider. The address must contain the '@' character. Replies to your messages are sent to this address. Tap **Next**.
Incoming server (POP3): or *Incoming server (IMAP4):* - The IP address or host name of the computer that receives your e-mail.
Outgoing server (SMTP): - The IP address or host name of the computer that sends your e-mail. Tap **Next**.
3 After you have defined these options, tap **Finish** to return to the Messaging application, or tap **Advanced** to define optional advanced e-mail settings. For more information, see "Advanced e-mail settings" on page 50.

➪ **To edit remote mailbox settings**, press ▣ and select *Tools* > *Message settings* > *E-mail...*. Select the mailbox you want to edit, tap **Edit** and make the changes as previously explained. Note that you cannot edit mailbox settings when the connection to a remote mailbox is open.

➪ **To set a mailbox as the default mailbox**, press ▣ and select *Tools* > *Message settings* > *E-mail...*. Select the mailbox you want to set as default and tap **Set as default**.

Advanced e-mail settings

When you have finished setting up or editing your remote mailbox settings in the Mailbox setup wizard (go to the Messaging application, press ▣ , select *Tools* > *Message settings* > *E-mail...*), you can continue by configuring advanced mailbox settings.

Retrieval page

Retrieve: – Specifies what will be retrieved from the remote mailbox when the connection is established. The *Messages* option is only available if the mailbox type is IMAP4.

E-mail size limit: – Define the maximum size of a message that is retrieved when you select *E-mail* > *Retrieve and send* menu command. The minimum is 1 KB and maximum 1000 KB. If the limit is exceeded, only the header of the message will be retrieved.

No. of e-mails to retrieve: – Define the number of new message headers you want to display in Inbox. If you retrieve new headers and the total amount of headers in Inbox exceeds this limit, the older headers will be removed. This option is only available if the mailbox type is IMAP4.

Password authentication: – Used with POP3 protocol to encrypt the sending of passwords to a remote mail server.

Retrieve e-mails to inbox: – Select to receive messages from this account to your Inbox. If not selected, the messages are received to separate mailbox folders outside your Inbox.

Sending page

Default e-mail format: – The type of mail that you can write and send from your smartphone.

Send e-mail: – How mail is sent from your smartphone.

Include original in reply: – Select to include the original message when replying to a message.

Request read report: – If you select this option, you will receive a notification when the recipient has opened your mail. You can only receive a notification if the recipient's e-mail application supports this feature.

Outgoing server (SMTP) page

Authentication required: – Select this if the SMTP (Simple Mail Transfer Protocol) server requires authentication.

Some servers require that the user is authenticated before e-mail can be sent.

User name: - Write your user name for the SMTP server.

Password: - Write your password for the SMTP server.

Other page

Security - Define the server security protocol.

Incoming e-mail port: - Enter the port number of the incoming mail server. Normally you do not have to change the default value.

Outgoing e-mail port: - Enter the port number of the outgoing mail server. Normally you do not have to change the default value.

Access point in use: - Select whether you want to connect using any available access point or choose the access point you want to use when connecting.

Set as default mailbox: - If you select this check box, this mailbox will be the default mailbox.

Retrieving e-mail from the mailbox

Tip: Delete or move e-mail regularly from your smartphone to free up memory space.

E-mail sent to you is not automatically received by your smartphone, but by your remote mailbox. To read your e-mail, you must first connect to the remote mailbox and then select the messages you wish to retrieve into your smartphone. Connection to a remote mailbox is established via a data call.

You receive all messages in your remote mailbox folders unless you specify to receive messages to your Inbox.

Tip: For information on specifying e-mail retrieval options, see "Advanced e-mail settings" on page 50.

To retrieve e-mail from a remote mailbox, press and select *E-mail* > *Retrieve and send*. Select the appropriate command to get e-mail either from all mailboxes or from a selected mailbox. Note that if you have e-mail in Outbox, these messages will be sent simultaneously.

Tip: If you have not specified a password in remote mailbox settings, you will be prompted for a password when initially connecting to the remote mailbox. In the dialog that opens, write the password and tap **OK**.

To retrieve the contents of a selected message, press , and select *E-mail* > *Retrieve e-mail contents*.

To disconnect from a mailbox, press and select *E-mail* > *Disconnect from Internet*. The data call ends.

Tip: To retrieve the contents of a selected e-mail message, tap the message. The content of the message is retrieved into your smartphone, and if there were any new messages in the remote mailbox, the list of messages is updated simultaneously.

Reading and replying to e-mail

⇨ **To open your Inbox or any other folder**, press ▤ and select *Folders* > *Inbox*|*Outbox*|*Drafts*|*Sent* or the name of a remote mailbox, if defined.

⇨ **To preview a message**, tap it once.

⇨ **To open a message**, double-tap it. If there is a Web link in the message, you can open it by tapping the link.

⇨ **To turn message preview on or off**, press ▤ , and select *Display* > *Preview mode*.

☀ **Tip:** You can create a new contact card for the sender of an e-mail. Press ▤ and select *Tools* > *Add to Contacts...*.

⇨ **To open an attachment in a message**, double-tap the attachment. Note that attachments may contain viruses or other harmful content. Always make sure that you can trust the sender. **To save the attachment**, select it and tap **Save**.

⇨ **To reply to a message** after reading it, tap **Reply**. **To reply to all the recipients**, not just the sender of the e-mail message, press ▤ and select *Message* > *Reply to all*.

When replying to an e-mail message, HTML messages are included as attachments.

☀ **Tip:** For information on specifying e-mail sending options, see "Advanced e-mail settings" on page 50.

⇨ **To forward an e-mail message**, press ▤ and select *Message* > *Forward*.

⇨ **To delete a message from Inbox or remote mailbox**, tap **Delete**. If required, specify whether you want to delete the message just from your smartphone, or from both the smartphone and the e-mail server.

Sending e-mail

1 Press ▤ and select *Message* > *Create* > *E-mail* in the main view of the Messaging application.
2 Write the e-mail address in the *To:* field. Add a semicolon (;) to separate each recipient.
   If the recipient is in your Contacts, tap 🖾. Select the recipient from the list and tap **Add**. Tap **Done** when you have selected all recipients.
3 Fill in the subject and write the message. Tap **Send**.

☀ **Tip:** You can use an e-mail address in a text box or document as a hyperlink. Tap the address, or move the cursor inside it with the scroll key; it becomes a link with a small icon. Tap the icon to open the e-mail editor.

If the name you have entered matches more than one name, or if the person has more than one e-mail address, select the correct name or e-mail address from the list and tap **OK**.

☀ **Tip:** You can select more than one contact at a time. See "Common actions in applications" on page 22.

➪ **To show or hide Cc: and Bcc: fields** in the mail editor, press ☰ and select *Display* > *Cc field* or *Bcc field*. If you add a recipient to the *Cc:* field, a copy of the message is sent to the recipient, and the recipient's name is visible to other recipients of the message. If you add a recipient to the *Bcc:* field, a copy of the message is sent to the recipient, but the recipient's name is not visible to other recipients of the message.

➪ **To save, but not send** an e-mail you have just written, tap **Close**. The message is saved in the *Drafts* folder. The saved message replaces the previously saved version of the same message.

➪ **To delete all sent messages automatically**, open the *Sent* folder, press ☰ , and select *Tools* > *Delete sent messages*. Define the the maximum number of messages allowed in Sent folder or the number of days after which the messages are deleted.

➪ **To specify sending options for the current e-mail**, tap **Sending options**. Note that any changes you make in this dialog affect only the current e-mail you are about to send, and affects the format of the message when it is opened by the recipient. For example, the format may affect the legibility of the characters. Define the following:

Priority: - The importance level of the message.

E-mail format: - The format style of the message. Select *Formatted text (HTML)* to be able to use enhanced text formatting options. Select *Plain text* to use the regular internet format, or *Plain text (no MIME)*, if you know that the receiving mail system cannot display mail sent in the regular Internet format.

Request read report: - Select this if you want to receive a note when the recipient has opened your message.

Mailbox in use: - The remote mailbox that is used for sending this message.

Send e-mail: - Define when the message will be sent. *Immediately* means that the message will be sent as soon as possible if you are connected to your remote mailbox. If you are not connected, an attempt is made to establish the connection. The option *When connection available* means that the e-mail is sent when you connect to the remote mailbox the next time. The option *On request* means that the message is saved in Outbox when you tap **Send**. The message is sent when you select the message in Outbox and tap **Send**.

Style of e-mail

Text and paragraph formatting is only possible when the *E-mail format:* sending option for the current e-mail is set to *Formatted text (HTML)*.

➪ **To format selected text**, press ☰ and select *Format* > *Font...*. The toolbar at the bottom of the screen also contains text editing tools. If the toolbar is not visible, press ☰ and select *Display* > *Toolbar*.

➪ **To align selected paragraphs**, press ☰ and select *Format* > *Alignment* > *Left*, *Right*, or *Centred*.

Scheduling

You can define when and how often your smartphone tries to connect your remote mailbox to send and receive e-mail.

↪**To define e-mail scheduling**, press ⋮ , select *E-mail* > *Auto-retrieve and send...* and tap **Edit**. Define the start time, end time and interval of sending and receiving as follows: Tap ⏰ and tap △ and ▽ to change the time. Tap the am/pm field as necessary, if you are using the 12-hour clock format. In the *Days:* field, highlight the days of the week, when you want the connection to be made. Tap **OK**.

↪**To enable or disable scheduling**, press ⋮ , select *E-mail* > *Auto-retrieve and send...* and select or clear a connection to enable or disable the scheduling for it.

▼**Note:** Do not leave this option activated, if not needed. Charges may apply every time the smartphone connects.

E-mail attachments

You can send most documents and messages you create in the other applications of your smartphone as e-mail attachments.

Important: E-mail messages 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.

↪**To add e-mail attachments**, press ⋮ in the e-mail editor and select *Attachment* > *Attach file*. Search and select the file you want to attach to the e-mail.

☆**Tip:** To add your contact card as an attachment, press ⋮ and select *Attachment* > *Attach 'My contact card'*.

↪**To view attachments**, open a received or sent e-mail message containing attachments and double-tap the attachment icon at the bottom of the message. If the attachment file format is not recognised by the system, a question mark icon is displayed.

↪**To save attachments**, open the e-mail message containing attachments, select the attachment at the bottom of the message and tap **Save**.

↪**To delete an attachment while creating an e-mail message**, select the attachment at the bottom of the message, press ⋮ and select *Attachment* > *Remove*.

Signatures

↪**To define an e-mail account signature**, press ⋮ , select *E-mail* > *Signatures...*, tap **Edit** and write the signature. Select the *Attach 'My contact card':* to add your contact card to any e-mail message you send.

↪**To enable or disable an e-mail account signature**, press ⋮ , select *E-mail* > *Signatures...* and select or clear the signatures to enable or disable them. The signature must be defined to be enabled.

Text messages

The Short Message Service (SMS) enables you to send and receive text messages over the digital wireless network.

Sending text messages

1 Tap **New text message** in the main view of the Messaging application.
2 Write the phone number in the *To:* field. Add a semicolon (;) to separate each recipient.
   If the recipient is in your Contacts, tap ![icon]. Select the recipient from the list, the phone number you want to use, and tap **Add**. Tap **Done** when you have selected all recipients. You can also select a contact group as a recipient.
3 Write the message and tap **Send**. Note that a text message can only contain unformatted, plain text.

Tip: When sending a text message that contains special or accented characters, note that not necessarily all phones support special characters.

Your smartphone 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.

Character counter at the bottom of the text message window shows the number of characters used in the message in real time. If the number of characters exceeds 160 characters, then also the number of messages required to transmit the message is displayed.

If there are special characters in your message, the indicator may not show the message length correctly. Non-Latin characters in some language areas or special (Unicode) characters such as ë, â, á, ì takes up more space.

Note also that sending a message in several parts or to a contact group may be more expensive than sending just one message.

▷ **To delete all sent messages automatically**, open the *Sent* folder, press ![icon], and select *Tools* > *Delete sent messages*. Define the the maximum number of messages allowed in Inbox or the number of days after which the messages are deleted.

▷ **To specify sending options for the current message**, tap **Sending options**. Note that any changes you make in this dialog affect only the current message you are about to send. Define the following:

General Page

Message centre in use: - Select which message centre is used for delivering text messages.

Receive report: (network service) - If you select this, you can view the status of the sent message in the Log application. If you do not select this check box, only the status *Sent* is shown in Log.

Send message: - Define when you want the message to be sent. The option *On request* means that the message is saved in Outbox when you tap **Send**. The message is sent when you select the message in Outbox and tap **Send**.

Advance Page

Message validity: (network service) - If the recipient of a message cannot be reached within the validity period, the message is removed from the text message centre. Note that the network must support this feature. *Maximum time* is the maximum amount of time allowed by the network.

Reply via same centre: (network service) - Select this if you want the reply message to be sent using the same message centre number.

Message sent as: - Change this option only if you are sure that your message centre is able to convert text messages into other formats. Contact your network operator.

Receiving text messages

Text messages are received automatically, provided that this service is available and that the smartphone is on and within network coverage.

When a new text message arrives, a tone will sound - unless the smartphone is using a silent profile - and a dialog opens on the display.

To preview a message, tap it once.

To open a message, double-tap it.

Tip: To create a contact card for the sender of a text message, press ⌐≡ and select *Tools* > *Add to Contacts....*

To reply to text messages, open the original message and press **Reply**. Select the reply method, write your reply and tap **Send**. The original message is included in the reply if you have the *Include original in reply:* check box selected in text message settings.

To move, copy, or delete messages from the SIM card, press ⌐≡ and select *Message* > *SIM messages....* Select the messages and tap the corresponding button.

Text message settings

Any changes you make to text message settings affect the way in which your text messages are sent and received.

Press ⌐≡ in the main view of Messaging and select *Tools* > *Message settings* > *Text message....* Define the following:

General page

Message centre in use: - Select which message centre is used for delivering text messages.

Receive report: (network service) - If you select this, you can view the status of the sent message in the Log application. If you do not select this check box, only the status *Sent* is shown in Log.

Send message: - Define when you want the message to be sent. The option *On request* means that the message is saved in Outbox when you tap **Send** in the message editor view. The message is sent when you select the message in Outbox and tap **Send**.

Advanced page

Message validity: – If the recipient of a message cannot be reached within the validity period, the message is removed from the text message centre. Note that the network must support this feature. *Maximum time* is the maximum amount of time allowed by the network.

Reply via same centre: (network service) – Select this if you want the reply message to be sent using the same text message centre number.

Include original in reply: – Specifies whether text in the received text message is copied to your reply.

Preferred connection: – You can send text messages via normal GSM network or via GPRS, if supported by the network.

➪ **To add a new message centre**, press , and select *Tools* > *Message settings* > *Text message...*. Tap **Msg. centres**, then **New**. Write a name and number for the text message centre. You receive the number from your service provider. Select the *Set as default centre:* check box if you always want to use this message centre for sending text messages.

About text message services

Text messages can be sent or received even during voice or data calls. Messages can be read in any mobile phone that has this capability. If the phone receiving the message is switched off at the time of sending, the message centre

continues to attempt to send the message until the validity period allowed by the network expires.

If you want to send text you have written or edited in another application as a text message, all embedded objects or any rich text formatting will be lost. You cannot send attachments as text messages, either.

Multimedia messages

A multimedia message can contain text, images, video clips, and/or sound clips.

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

Creating multimedia messages

1 Press , and select *Message* > *Create* > *Multimedia message*.
2 Write the recipient's telephone number in the *To:* field. Add a semicolon (;) to separate each recipient.
  If the recipient is in your Contacts, tap . Select the recipient from the list and tap **Add**. Tap **Done** when you have selected all recipients.
3 Write the message and add a media object. Use the toolbar, or the menu command *Insert* to add images, sound, or video to your message. See below for details. If the toolbar is not visible, press , and select *Display* > *Toolbar*.
4 When the message is ready, tap **Send**.

Fig. 18: Sending a multimedia message

☀**Tip:** A multimedia message may contain several pages. To add pages, tap the toolbar icon 🏱, or press ⊡, and select *Insert* > *Page break*. If the cursor is in the *To:*, *Cc:* or *Subject:* field when you add a page, the new page will become the first page of the message. Otherwise, the new page is added after the page where the cursor is. Note that each page can contain only one video or one sound clip. You can, however, have in one message several pages that contain a video or a sound clip. The maximum size of a multimedia message supported by your smartphone is 100 kB. To limit the content of your messages, see MMS settings, "General page" on page 61.

⇨**To insert an existing image, sound, or video to your message**, use the toolbar, or press ⊡, and select *Insert* > *Image*, *Track* or *Media clip*. Browse for the item, and tap **Insert** to add it to the message. Note that

wireless network may limit the size of MMS messages. If the inserted picture exceeds this limit, the smartphone may make it smaller so that it can be sent by MMS.

⇨**To create a new picture, drawing or voice clip for your message**, use the toolbar, or press ⊡, and select *Insert* > *New image/media clip*, *New sketch* or *Sound clip*. The corresponding application opens. See "Taking pictures" on page 75, "Editing images" on page 81, or "Voice recorder" on page 97 for details. Tap **Insert** to add the item to message.

Note that if some of the menu items under *Tools* menu are not available or you get an error message when trying to insert a multimedia item, your settings may be too restricted. See MMS settings, "General page" on page 61 for details.

⇨**To change the position of text** in relation to an image or video, select the text field, press ⊡, and select *Tools* > *Page layout* > *Place text on right* or *Place text on left*. (Not available in *Restricted mode:*)

⇨**To format text**, select the text by dragging the stylus over it, press ⊡, and select *Tools* > *Format text...*. You can also select the formatting first and then start writing. (Not available in *Restricted mode:*)

⇨**To change the background colour of a message**, press ⊡, and select *Tools* > *Set background colour...*. Tap the colour square and choose a new colour. (Not available in *Restricted mode:*)

To add effects to multimedia objects, select the object, press ⌐≡, and select *Tools* > *Transition settings...*. You can specify how long an object is displayed and how a new object is opened (Not available in *Restricted mode:*).

The appearance of a multimedia message may vary depending on the receiving smartphone.

To delete a multimedia object from a message, select the object, press ⌐≡, and select *Edit* > *Delete*. Select the appropriate command.

⊰☀⊱**Tip:** To add new pages to a multimedia message, press ⌐≡ and select *Insert* > *Page break*. If the cursor is in the *To:*; *Cc:*; or *Subject:* field when you add a page, the new page becomes the first page of the message. Otherwise, the new page is added after the page where the cursor is located.

To delete a page, go to the page, press ⌐≡, and select *Edit* > *Delete* > *Page*.

To specify sending options for the current message, press ⌐≡ and select *Tools* > *Sending options...*. Note that any changes you make in this dialog affect only the current message you are about to send. Define the following:

Receive report: – (network service) Select this, if you want to receive a notification when the message has been delivered to the multimedia messaging centre.

Message validity: – (network service) If the recipient of a message cannot be reached within the validity period, the message is removed from the multimedia messaging centre. Note that the network must support this feature. *Maximum time* is the maximum amount of time allowed by the network.

To preview the message before sending, press ⌐≡, and select *Message* > *Preview*.

Toolbar

If toolbar is not visible press ⌐≡, and select Display > Toolbar.

```
1  2  3  4  5  6  7
```

1 Take a picture or record video.
2 Record a sound clip or insert an existing sound clip.
3 Create a sketch image.
4 Insert an image.
5 Insert a music clip.
6 Insert a video clip.
7 Inser a page break.

Receiving multimedia messages

Multimedia messages are received in your Inbox and you can open, reply to, or forward them just like other messages.

You may be able to receive multimedia messages containing objects unsupported by your smartphone, but you cannot view them. You may be able to, however, forward these messages to another device.

> **Important:** 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.

⇨ **To save a selected multimedia object**, press 〓 , and select *Tools* > *Save object...*.

⇨ **To view details of an object**, double-tap it.

⇨ **To view a list of all the objects** in a message, press 〓 , and select *Tools* > *View objects...*. **To save an object** select it and tap **Save**. **To play an object**, select it, and tap **Open**.

Multimedia message settings

Any changes you make to multimedia message settings affect the way in which your messages are sent and received. You may receive these settings as a special message from your service provider.

Press 〓 in the main view of Messaging, and select *Tools* > *Message settings* > *Multimedia message...*. Define the following:

Sending page

Access point in use: - Choose the Internet access point (IAP) connection you want to use for sending messages. To create an IAP, see "Setting up an Internet access point" on page 114.

Homepage: - Write the address of the multimedia messaging centre.

Receive report: - Select this, if you want to receive a notification when the message has been delivered to the intended destination. Receiving a delivery report of a multimedia message that has been sent to an e-mail address may not be possible.

Send message: - You can select when you want the message to be sent.

Message validity: - (network service) If the recipient of a message cannot be reached within the validity period, the message is removed from the multimedia messaging centre. Note that the network must support this feature. *Maximum time* is the maximum amount of time allowed by the network.

Retrieval page

On receiving messages: - Select *Retrieve immediately* if you want to receive multimedia messages. Select *Defer retrieval* if you want the multimedia messaging centre to save the messages to be retrieved later. To retrieve the messages later, set this setting to *Retrieve immediately*. Select *Reject message* if you want to reject multimedia messages. The multimedia messaging centre will delete the messages. Select *Only in home network*, if you do not want to receive multimedia messages when roaming outside your home network. In that case the messages stay in the server and can be retrieved later.

Receive advertisements: - Select this, if you want to allow the reception of messages defined as advertisements.

Allow anonymous messages: - Select this, if you want to allow reception of messages from unknown senders..

⇨ **To define your Internet access point**, press ☰ , and select *Tools* > *Message settings* > *Multimedia message...*. Tap **Internet setup** and **Next**. See "Setting up an Internet access point" on page 114 for details.

General page

Multimedia mode - Select *Restricted mode:* to limit the MMS message features and make the message more compatible with other phones. Text formatting and multimedia options are restricted. Select *Guided mode:* to allow more options with warnings when basic options are exceeded. Select *Free mode:* to use a full set of features in MMS messages.

Smart messages

Your smartphone can receive many kinds of smart messages, text messages that contain data, also called Over-The-Air (OTA) messages. Examples of these are picture messages, business cards, ringing tones, or calendar entries.

You can also receive a text message service number, voice mailbox number, profile settings for remote synchronisation, access point settings for the browser, multimedia messaging or e-mail, access point login script settings, or e-mail settings as OTA messages.

Service messages

Service messages are notifications of, for example, news headlines and may contain a text message or a link. For availability and subscription, contact your service provider.

Contacts

Go to **Desk** > **Contacts**.

You can use Contacts to create, edit, and manage all contact information, such as phone numbers and addresses.

For information on synchronising your contacts with compatible PC applications, see the Nokia PC Suite Guide on the sales package CDROM.

Viewing and searching for contacts

➪**To view a contact card**, tap a name in the list of contacts. Double-tapping opens the contact card for editing.

➤**Tip:** Double-tap the phone number in the right pane to call the contact. Similarly, you can send e-mail by double-tapping an e-mail address.

➪**To search for a contact card**, tap the letters in the bottom row corresponding to the name on the card you want to see. For example, tap once to see contacts beginning with the letter M, twice for contacts beginning with the letter N, and three times for contacts beginning with the letter O. Alternatively, press ⌸ , and select *Display* > *Search field* to display a

search field. Start writing the name of the contact in the search field. The list of contacts changes to show the matching contacts as you write.

Fig. 19: Contacts main window with find field.

➪**To change the sorting order of contacts**, press ⌸ , select *Display* > *Sort by*, and select the appropriate order.

Creating and editing contacts

➪**To make a new contact card**, tap **New contact**, tap on an empty field and enter the information. See also "Contact card fields" on page 63.

➪**To edit a contact card**, double-tap a contact in the list to open it, edit the card as necessary, and tap **Done**.

➪**To delete a contact card**, select the contact, press
 , and select *Contact* > *Delete*. Note that you cannot
 delete your own card.

➪**To add a speed dial to a contact**, open the contact by
 double-tapping it, and tap on the phone number field
 where you want to add the speed dial. Press , select
 Tools > *Assign speed dial...*, select a speed dial number,
 and tap **Assign**.

➪**To set a specific ringing tone for a contact**, open the
 contact by double-tapping it. If the *Ringing tone* field is
 not on the card, tap **Add field**, select the appropriate
 field from the list, and tap **OK**. Double-tap the *Ringing
 tone* field. Select a ringing tone. Tap **Play** to listen to the
 tone.

➪**To insert a picture**, open the contact by double-
 tapping it, and double-tap the picture place holder on
 the top right. Select a picture, and tap **Add** to add it
 without editing or **Edit** to open the picture in an image
 editor where you can modify it. Use the stylus or the
 scroll key to select the area of the image to be inserted.
 Use the toolbar to zoom, flip or rotate the image, or to
 add a coloured border to it. When you are happy with
 the picture, tap **Add** to add the picture to the contact
 card. **To remove a picture**, press , and select *Image*
 > *Remove*.

➪**To show the correct address format of your home
 country or region**, press , select *Tools* > *Address
 format...*, and select your country or region from the list.
 The new setting applies to all cards if defined from the
 main view or just the current card if defined while
 editing a card.

➪**To create or edit SIM contact cards**, press , and
 select *Tools* > *SIM directory...*. Tap **New** or select a
 contact, and tap **Edit**. SIM contact cards are cards that
 are saved only in your SIM card, not in the smartphone
 memory.

The length of the name and phone number you can enter
is defined by the SIM card. For example, some SIM cards
allow a maximum of only fourteen characters.

Contact card fields

➪**To add more fields to a contact card**, open the
 contact card, and tap **Add field**. Select the appropriate
 field from the list. **To remove a selected field**, press
  , and select *Contact* > *Remove field*. These changes
 will only affect the card you are currently modifying.

➪**To rename a field**, select a field, press , and select
 Contact > *Rename field...*. Write the new name. If the
 Rename field... menu command is dimmed, it means that
 you cannot edit that field.

⇨**To modify the contact card template**, press 🗐 , and select *Tools* > *Card template...*. Tap **Add field** to add a new field, or select a field, and tap **Remove field** to delete it. Note that not all fields can be removed. These changes affect all contact cards, except for the SIM contact cards.

Transferring contacts

Note that contact information can only be sent to or received from compatible devices.

⇨**To send a contact card**, press 🗐 , and select *Contact* > *Send*. Select the method of sending. **To send your own contact card**, select your card, and tap **Send**. Select the message type. Your contact card is sent as a business card in vCard format. For more information on sending options, see "Messaging" on page 47 and "Sending data via Bluetooth" on page 144.

⇨**To copy a contact to a SIM card**, press 🗐 , and select *Contact* > *Copy to SIM directory...*

⇨**To copy individual SIM card contacts to Contacts**, press 🗐 , and select *Tools* > *SIM directory...*. Select the contact, and tap **Copy to Contacts**. **To copy all the contacts of a SIM card to Contacts**, press 🗐 , and select *Tools* > *Copy SIM directory to Contacts...*. Tap **Copy**.

Voice tags

When you attach a voice tag to a contact card, you can call the contact with the tag by activating voice dialling and saying the voice tag you have recorded. For more information, see "Voice dialling" on page 40.

⇨**To set a voice tag for a contact**, open the contact by double-tapping it. Press 🗐 , and select *Tools* > *Add voice tag...*. Select the phone number to which you want to add the voice tag, and tap **OK**. Tap **Start**. After the tone, speak clearly into the microphone the word(s) you want to record as a voice tag. After recording, the smartphone plays the recorded tag and saves it.

⇨**To view a list of voice tags**, press 🗐 , and select *Tools* > *Voice tags...*. The list shows all the contacts that have a voice tag attached. You can add voice tags to up to 50 phone numbers.

⇨**To edit or delete a voice tag**, press 🗐 , and select *Tools* > *Voice tags...*. Tap **Change** or **Delete**.

Contact groups

You can organise your contacts into groups, and add a ringing tone for a group.

⇨**To create a new group**, press , and select *Group* > *New...*. Write a name for the group.

⇨**To switch between groups**, press , and select *View group*. Select the group you want to view.

⇨**To add a contact to a group**, select a contact, and press . Select *Group* > *Add to group...*, select the group by marking the check box, and tap **OK**.

⇨**To rename or delete a group**, press , select *Group* > *Manage groups...*, select a group, and select the corresponding command. Note that you cannot rename or delete the group *All contacts*.

⇨**To add or remove group members**, select the group you want to modify, press , and select *Group* > *Edit group...*. Select a contact from the list on the left to add it to the group. Tap **Add**. To remove a group member, select a contact from the list on the right and tap **Remove**.

⇨**To add a ringing tone for a group**, open the Profiles application. Select the profile you want to assign for the group, and tap **Personalise**, then **Alert for**. Select the group, and tap **OK**. When a group member calls or sends a message to you, the smartphone plays the chosen ringing or alert tone (if the caller's telephone number is sent with the call and your smartphone recognises it). Other callers will be handled using the Silent profile. For more information on profiles, see "Profiles" on page 45.

Calendar

Go to **Desk** > **Calendar**.

In the Calendar application you can create and check your scheduled events and appointments. You can also set alarms for all of the calendar entries.

You can synchronise your calendar with Microsoft Outlook 98/2000/2002/2003, Microsoft Outlook Express, Lotus Notes 5.0/6.0, or Lotus Organizer 5.0/6.0, if you connect your smartphone to a compatible PC. For information on synchronisation, see the Nokia PC Suite Guide on the CDROM.

Day view

Fig. 20: Day view

If you are using the default theme, today's date is framed, dates that have scheduled events are marked in bold, and the currently selected date is highlighted with brown.

The events of the currently selected date are shown in the frame on the right.

⇨ **To go to a date visible in the left frame**, tap it. To move to the previous or next year, tap ◁ or ▷ next to the year at the top of the left frame. Similarly, to move to the previous or next month, tap the arrows next to the name of the month at the bottom of the left frame.

⇨ **To go to a specific date**, tap **Go to date**, and specify the day, month, and year.

⇨ **To go to the current date**, tap **Go to today**.

Managing entries

⇨ **To create a new calendar entry**, select the date in the day view, and tap **New entry**. If the event entry is related to the whole day, select the *All-day entry:* check box and specify the start and end date for the entry.

If it is not related to the whole day, specify the start and end time for the entry. **To set a reminder for an entry**, select the *Alarm:* check box. Specify the day and time when the alarm will go off. **To repeat an entry**, tap **Repeat**. Define the repeat frequency and the possible end date. **To make the entry private**, so that the details are not shown to others when your calendar is synchronised with a networked PC calendar, select *Synchronisation:Private*. When you have specified all the required details, tap **Done**.

↪**To edit an entry**, double-tap it, and make the changes. Then tap **Done**.

↪**To send a calendar entry**, press ⌐≡, and select *Entry* > *Send*. Select the sending method.

↪**To make an entry tentative**, press ⌐≡, and select *Entry* > *Mark as tentative*. A tentative entry is marked as dimmed in the list of entries.

↪**To make an entry private** so that the details will not be shown to others when your calendar is synchronised with a networked PC calendar, press ⌐≡, and select *Entry* > *Mark as private*.

↪**To delete an entry**, press ⌐≡, and select *Edit* > *Delete*. **To delete a range of entries**, press ⌐≡, and select *Tools* > *Delete entries...*. Define the time scope of the entries to be removed.

↪**To define the default entry settings**, press ⌐≡, and select *Tools* > *Entry template...*. Define the type of an entry you would most commonly use.

↪**To view to-do notes**, press ⌐≡, and select *Display* > *To-do notes*.

↪**To search for an entry**, press ⌐≡, and select *Edit* > *Find...*. Write the text in the search field. You can tap **Options** and specify a search period. Tap **Find** to start the search.

Week view

Fig. 21: Week view

The week view shows the reserved hours for the selected week with bars. The currently selected time box is framed.

↪**To open the week view**, press ⌐≡, and select *View* > *Week*, or press ●.

↪**To select a time box**, tap it. Double-tap a time box to add a new entry. To move to the previous or next week, tap the arrows at the top corners of the week view.

If a time box contains an entry, the area at the bottom of the screen shows the details of the entry. If there is more than one entry in a single time box, the numbers in the right-hand corner indicate the number of entries in the time box. For example, 1/3 means that there are three entries in that time box and you are viewing the details of the first of the three entries.

➪ **To view all the entries of a time box** containing more than one entry, tap ⬚, or tap the number of the entry on the bottom right-hand corner.

Icons

The following symbols are used in the Calendar application:

🔔 - Entry with an alarm

⬚ - All-day event

⬚ - Repeated entry

⬚ - Entry with a note

To-do

Go to **Desk** > **To-do**.

With the To-do application you can create and manage task lists.

↪**To create a new task**, tap **New to-do note**. Fill in the fields. **To set a reminder for the note**, select *Due date:* and *Alarm:* and specify the day and time when the alarm will go off. **To make the task private**, so that the details are not shown to others when your calendar is synchronised with a networked PC calendar, select *Synchronisation:Private*. **To repeat the task**, tap **Repeat**. Define the repeat frequency, and the possible end date.

↪**To edit a note**, double-tap it, and make the changes.

↪**To mark the selected task as complete**, press , and select *To-do note* > *Mark as completed*.

↪**To delete a to-do note**, select the note, and tap **Delete**. **To delete a range of notes**, press , and select *Tools* > *Delete to-do notes...*. Define the time scope of the entries to be removed.

↪**To define the default note settings**, press , and select *Tools* > *To-do note template...*. Define the type of a note you would most typically use.

Grouping to-do notes

↪**To add a note to a group**, select a to-do note, and press . Select *Group* > *Add to group...*, select the group, and tap **OK**.

↪**To create a new group**, press , and select *Group* > *New...*. Write a name for the group.

↪**To switch between groups**, press , and select *View group*. Select the group you want to view.

↪**To rename or delete a group**, press , select *Group* > *Manage groups...*, select a group, and select the corresponding command.

Icons

The following symbols are used in the To-do application:

 - To-do note

 - To-do note with high importance

 - To-do note with low importance

 - To-do note with an alarm

 - Repeated to-do note

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Web

To connect to the World Wide Web:
- The wireless network you use must support data calls or GPRS.
- The data service must be activated for your SIM card.
- You must configure Internet access point and Internet connection settings. For more information, see "Internet setup" on page 114.

Fig. 22: Web

Plug and play mobile services

Your smartphone supports plug and play mobile services, which, for example, allow you to subscribe to data services and receive the required settings. Note that to be able to use this feature, your network operator must support it. In some networks this feature may be available without a data services subscription.

When you try to connect to the World Wide Web and have not subscribed to a data service, or your Internet access point or Internet connection settings are invalid, your smartphone asks if you want to subscribe to a service or create settings yourself.

If you choose to subscribe, you are directed to the service home page, from where you can order settings (MMS, WAP/GPRS, e-mail and Internet) by following given instructions.

Based on the type of the SIM card you use, your device may be able to automatically add the correct settings for WWW browsing and MMS.

Using the web browser

➯**To open a web page**, write the address of the page into the address field at the bottom of the display, and tap ⌖ or press the centre of the scroll key. If you have specified a home page, tap 🏠 to go to that web page. If you have a bookmark of the page you want to visit, tap 📑, select a bookmark, and tap it to go to that web page.

☀️**Tip:** As you write, the previous matching web addresses, if any, are shown in a list above the address field. Tap an address in the list to select it.

If you have selected the *Ask before connecting:* check box when setting up the Internet connection, a dialog opens asking you to confirm the connection or to change the access point. You can choose not to be shown this dialog when the connection is made. See "Internet connection settings" on page 117.

Duration for establishing an Internet connection may vary depending on the network configuration and load.

Some web content such as animations or videos may use up the available device memory and affect the operation of the device. For problem situations, see "Troubleshooting" on page 153

If the web page and its components are encrypted by a security protocol, the security icon 🔒 appears on the address bar.

➯**To have the web page fill the entire screen**, press ☰ , and select *Display* > *Full screen* or tap ⬀. To return to a normal screen size, press ◀ or tap ⬙ .

➯**To enable or disable flash animations**, press ☰ , and select or clear *Display* > *Enable flash*. Disabling flash animations may speed up browsing.

➯**To adjust the volume**, press ☰ , and select *Tools* > *Volume...*.

☀️**Tip:** Press ● to use the zoom function.

➯**To save a web page on your smartphone**, press ☰ and select *File* > *Save web page...*. You can then view the web page without connecting to the Internet.

➯**To open a new window**, press ☰ , and select *File* > *New window*. The number of open windows depends on, and is limited by, the memory available.

➯**To switch between open windows**, press ● , or press ☰ , select *View*, and choose the window you want to open.

➯**To close extra windows**, press ☰ , and select *File* > *Close* > *Current window* or *All windows*.

➯**To disconnect from the Internet**, press ☰ , and select *File* > *Disconnect*.

➯**To view local downloaded web pages without accessing the web**, press ☰ , and select *File* > *Browse offline*.

Navigating

☼**Tip:** Tap and hold the stylus on a Web page to open menu for showing or hiding images, enabling or disabling flash animations, navigating, and other functions.The content of this menu varies.

⇨**To browse the web**, tap the buttons and underlined links on the display, tap ⇦ or ⇨ to browse recently visited pages, 🔄 to reload the current page, or ⊗ to stop loading the current page. Alternatively, use the commands in the *Navigate* menu.

☼**Tip:** You can use a web address in a text box or document as a hyperlink. Tap on the address, or move the cursor inside it with the scroll key; it becomes a link with a small icon. Tap the icon to access the web site if you have an active Internet connection.

☼**Tip:** You have more icons visible on the address bar when the command buttons are hidden: press 🔳, select *Display*, and make sure *Command bar* is not selected.

⇨**To return to your home page**, tap 🏠 or press 🔳, and select *Navigate* > *Home page*.

⇨**To set a new home page**, press 🔳, and select *Edit* > *Set home page...*.

⇨**To add a bookmark to the current web page**, press 🔳, and select *Edit* > *Add bookmark*. For more information on bookmarks, see "Bookmarks" on page 72.

⇨**To go to a search page**, press 🔳, and select *Navigate* > *Search page*. **To define a search page** see "Address page" on page 74.

⇨**To display the images of a web page**, press 🔳, and select *Display* > *Show images*.

▼**Note:** Text characters may not be displayed correctly on web pages with different languages. You may be able to make a web page more readable by choosing another character encoding. Press 🔳, and select *Tools* > *Character encoding*. Select the language type that best matches the language of the web page you are viewing.

Bookmarks

The Bookmarks view lists links to web pages in related folders. You can open a web page by double-tapping a bookmark in the list.

Your smartphone 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.

⇨**To view all bookmarks**, tap 🗒 on the address bar, or press 🔳, and select *View* > *Bookmarks*.

⇨**To edit the name or address of a bookmark**, select the bookmark, press 🔳, and select *Bookmark* > *Edit...*.

⇨**To add a bookmark**, tap **Add Bookmark**. Write a name for the bookmark, and specify the web address or file location.

☀️**Tip:** If the command bar buttons are not visible, press , and select *Display* > *Command bar*.

⇨**To move to the previous folder in the folder hierarchy**, tap **Up one level**.

⇨T**o create a new folder or rename a folder**, press , and select *Bookmark* > *New folder...* or *Rename folder....*

Viewing page, cache, plug-in, history, and download details

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. The information or service you have accessed is stored in the cache.

⇨**To empty the cache**, press , select *Tools* > *Cache details*, and tap **Clear**.

⇨**To view information about the current page**, press , and select *Tools* > *Page details*.

⇨**To view information about pages you have visited**, press , and select *Navigate* > *History list....* You can go to the web page by pressing **Open**. **To empty the history list**, tap **Clear all**.

⇨**To view information about the cache memory**, press , select *Tools* > *Cache details*. Cache memory is a temporary storage of the pages you visit. **To empty the cache**, tap **Clear**.

⇨**To view the add-on software for the web browser that has been installed**, press , and select *Tools* > *Plug-in details*. Plug-ins can display documents that the web browser itself cannot show, such as multimedia clips. You can download plug-ins from the web.

⇨**To view details on downloads in progress**, press , and select *Navigate* > *Downloads....*

Web browser settings

⇨**To change the web browser settings**, press , and select *Tools* > *Settings....* A dialog with four pages opens. Define the following:

Web

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General page

Maximum cache size (kB): - Define the amount of internal memory that you want to use as disk cache to speed up browsing.

Show frames: - Some web pages are split into several frames, which makes reading difficult. Clear to disable frames. Note that many pages do not work properly, if you disable frames.

Default character encoding: - Choose the default character set.

Address page

Web address suffixes: - If you write here the URL suffixes (for example: .com, .org, .net) of the web addresses that you view most often, you can leave them out when writing the address in the URL address field.

Home page location: - The address of the home page you use.

Search page location: - The address of the search page you use.

New window content: - The web page that opens when you press , and select *File* > *New window*.

Plug-ins page

Enable plug-ins - Select to expand browsers functionality with plug-ins.

Enable JavaScript - JavaScript functionality is used on many web sites. To show these pages correctly, select this option.

Privacy page

Allow automatic redirection: - Select this to enable automatic redirection to a new web page address, if you try to open an old page with a redirection command.

Enable pop-up windows: - Select this to make all unrequested popup windows open automatically.

Accept cookies: - Some web pages store data on your smartphone in files called 'cookies'. Use this setting to determine whether to accept cookies, and if you accept them, whether you wish to be prompted each time a cookie is stored or accept them always.

As cookies accumulate with time, they may eventually take up a large amount of memory space. You can free memory space by deleting the cookies stored in the memory. **To delete cookies**, press , and select *Tools* > *Clear cookies*. Tap **Clear**.

Camera

You can take pictures and videos with Camera. You can view and modify pictures with Images, and send your images as multimedia messages. Videos can be viewed and sent as multimedia messages with the RealPlayer application.

➯ **To switch between camera and camcorder mode**, tap a corresponding picture on the left side of the screen.

➯ **To open the Camera application**, double-tap **Camera** in Desk, or tap **Go to Camera** in the Images application.

➯ **To open the Images application**, tap **Go to Images** in the camera mode or double-tap Images in Desk.

➯ **To open the RealPlayer**, tap **Go to RealPlayer** in the camcorder mode.

➯ **To open Camera in the RealPlayer**, tap **Go to Camera**.

Camera mode

The camera lens is located on the back of the smartphone. The display works as a viewfinder.

The Nokia 7710 multimedia smartphone supports an image capture of Megapixel (1152 x 864 pixels) and video size of QCIF (176 x 144 pixels). The image resolution in these materials may appear different.

Taking pictures

➯ **To take a picture**, aim at your subject, and press the centre of the scroll key, or tap **Capture**. If the Preview setting is on, you can view the picture to decide whether to keep it. **To save the picture**, tap **Save**. Images are saved in the folder displayed in the title area of the screen. **To send the picture** as an e-mail message attachment, multimedia message, or using Bluetooth connection, tap **Send**. **To discard the picture** without saving it, tap *Delete*

Fig. 23: Taking a picture

☀️**Tip:** In the top-right hand corner of the viewfinder you can see the number of pictures you can still take with the memory available. The stars indicate the picture quality level. Tap the area to open Camera settings.

⇨**To show less or more of the subject** before taking a picture, tap **Zoom in** or **Zoom out**, or press 🔘 and 🔘 on the scroll key.

Camcorder mode

⇨**To switch to Camcorder mode**, tap the icons on the left side of the screen..

⇨**To record the video**, aim at your subject, and press the centre of the scroll key, or tap **Record**. **To stop**, tap **Stop**.

The maximum recording time is one hour per clip.

☀**Tip:** In the top-right hand corner of the viewfinder you can see the selected quality level of the video and how long you can still record with the memory available. Tap the area to open Camera settings.

Camera settings

⇨**To edit the camera settings**, press 🔲 , and select *Tools* > *Settings…*. Define the following:

General page

Theses settings affect both picture taking and video recording.

Contrast: - Adjust the contrast of the picture or video as appropriate. This affects both the viewfinder image and the picture taken.

Brightness: - Adjust the brightness of the picture or video as appropriate. This affects both the viewfinder image and the picture taken.

Memory in use: - Select internal memory or memory card as the storage location of the pictures and videos.

Image page

Image quality: - Indicated by stars in the corner of the viewfinder. The better the video quality, the more memory the picture consumes.

Default image name: - Set a name for the pictures taken. By default, the pictures are named in the format 'Image'. For example, if you set 'Beach' as the default name, Camera will name the pictures you take 'Beach', 'Beach(01)', 'Beach(02)', and so on, until you change the setting again.

Preview before saving: - If you select this option, you can view a picture you have taken and decide whether to keep it or not. If this option is not selected, all the pictures that you take are saved automatically without a chance to preview them.

Video page

Quality: - Indicated by stars in the corner of the viewfinder. The better the video quality, the more memory the picture consumes.

Default video name: - Set a name for the video taken. By default, the video is named 'newvideo'. For example, if you set 'Beach' as the default name, the following videos are named 'Beach(01)', 'Beach(02)', and so on, until you change the setting again.

Tips on taking good photographs

Here are some tips on how to get the most out of your smartphone's camera.

Picture quality

Use the appropriate picture quality. The camera has three picture quality modes (*Basic*, *Normal*, and *High*). Use the *High* setting to make sure that the camera produces the best picture quality available. Note however, that better picture quality requires more storage space. For MMS and e-mail attachments it may be necessary to use *Normal*, or *Basic* setting. You can define the quality in *Tools* > *Settings...* and the quality level is indicated in the top right hand corner of the viewfinder.

Background

Use a simple background. For portraits and other pictures with people, avoid having your subject in front of a cluttered, complex background that may distract attention from the subject. Move the camera, or the subject, when these conditions cannot be met.

Depth

When shooting landscapes and sceneries, you can add depth to your pictures by placing objects into the foreground. Note however, that if the foreground object is too close to camera, it may be blurred.

Lighting conditions

Changing the source, amount and direction of light can change photographs dramatically. Here are some typical lighting conditions:

- **Light source behind the subject.** Try to avoid placing your subject in front of a strong light source. If the light source is behind the subject or visible in the display, the resulting picture may have weak contrast, may be too dark, and may contain unwanted light effects.
- **Sidelit subject.** Strong side light gives dramatic effect but may be too harsh resulting in too much contrast.

- **Light source in front of the subject.** This is generally quite usable except that a harsh sunlight may cause the subjects to screw up their eyes. The contrast may also be too high.
- **Optimal lighting** is found in situations, where there is plenty of diffused, soft light available like for example, on a bright, partially cloudy day or on a sunny day in the shadow of trees.

Images

Use Images to view and modify images. You can take pictures with Camera, view and modify them with Images, and send your images as multimedia messages. You can also edit pictures taken with the camera, or create new sketch drawings, which can contain text and geometrical shapes.

↪**To open the Images application**, double-tap **Images** in Desk, or tap **Go to Images** in the Camera application.

↪**To open the Camera application**, tap **Go to Camera** in the Images application.

The Images application supports the following file formats: JPEG, GIF 87a/89a, animated GIF, TIFF/F, PNG, BMP, and WBMP. The Images application does not necessarily support all variations of a file format.

The Images application is divided into three different views, each with different commands:

- In the **list** view you can copy, move, delete, and send images stored in your smartphone. You can also create a new sketch image. The images can be displayed either as thumbnails or in a file name list. Press to switch between the thumbnails and the list.
- In the **viewer** view, which opens when you double-tap an image in the list view, you can view images.

- In the **editor** view, which opens when you press and select *Image* > *Open for editing* in the viewer view, you can modify and transform images.

Viewing images

↪**To open an image for viewing**, double-tap it in the list view. The image opens in viewer view.

↪**To open the next or previous image for viewing**, press , and select *Image* > *Next* or *Previous*, or press the scroll key on the right or left.

↪**To enlarge the viewed image or make it smaller**, press , and select *Display* > *Zoom ratio*. Select the appropriate zoom level.

Managing images and folders

↪**To view detailed information about an image**, select an image, press and select *Tools* > *Details*. The following information is displayed:

Name: - Name of the image. You can change the default base name in the Camera application: press and select *Tools* > *Settings...*. Edit the name in the *Default image name:* field.

Type: - The format of the image file. If the format is not supported *Unknown* is displayed.

Size: - the size of the file in bytes (B).

Date: and *Time:* - When the image was last modified.

Width: and *Height:* - The resolution of the image in pixels.

☀ **Tip:** Resolution is a measure for the sharpness and clarity of an image. Resolution refers to the number of dots (pixels) in an image or a display. The more pixels there are, the more detailed the picture is. Resolution is usually measured in pixels, for example, 640x480=300 kilopixels (kpix)=0.3 megapixels (Mpix).

Protected: - Indicates if the image is protected by technical protection means.

Read-only: - If you select this check box, the image cannot be modified.

➪**To send an image**, tap **Send**, and select the appropriate sending method.

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

➪**To add an image to a contact card**, press ▤ , select *Tools* > *Add to contact....* In the view that opens, use the stylus or the scroll key to select the area of the image to be inserted. Use the toolbar to zoom, flip, or rotate the image, or to add a border to it. When you are happy with the picture, tap **Add**, and select the contact card to which the image is added.

➪**To set an image as a wallpaper**, press ▤ , and select *Tools* > *Set image*. Crop the image with the stylus, if necessary.

➪**To change the file format**, press ▤ in the editor view, and select *Options* > *Convert format....* Select a new file format and other options, if available.

➪**To rename an image**, press ▤ , and select *Image* > *Rename....* Write a new name for the image.

➪**To remove an image**, press ▤ , and select *Image* > *Delete*.

The following commands are only available in the list view:

➪**To move an image to another folder**, press ▤ , and select *Edit* > *Move to folder....* Browse for the target folder or tap **New** to create a new one.

➪**To make a copy of an image**, press ▤ , and select *Edit* >*Duplicate*. Note that you should always make a copy of the image you are going to edit and edit the copy to ensure that the original stays intact.

➪**To view the contents of another folder**, press ▤ , and select *Image* > *Change folder....* Browse for the target folder or tap **New** to create a new one.

➪**To view images as lists or as thumbnails**, press ▣ , or press ▤ , select *Display* > *View* > *Thumbnail* or *List*.

See "Common actions in applications" on page 22 for further information on how to select images, create folders, and add shortcuts to Desk.

Image settings

⇨ **To define settings**, press 🔳 , and select *Tools* > *Settings...*. Define the following:

Open images in full screen mode: – If you select this, every image you open is displayed in full screen mode. To return to normal view, tap on the screen.

Default sketch name: – Write the name to be used as a basis for sketch file names. For example, if you write 'Drawing', the default names of the following sketches will be Drawing01, Drawing02, Drawing03, and so on, until you change the setting again.

Special features of some image formats

⇨ **To change the page of a multipage TIFF/F image**, press 🔳 and select *Tools* > *Page* > *Next*/*Previous*. Multipage TIFF/F images cannot be edited.

⇨ **To view animated GIFs**, you can let the animation run in a continuous loop until you close the Images application or move to a different image. You cannot edit the image but you can zoom it or view it in full screen mode.

Editing images

You can edit images that are in JPEG, GIF, BMP, TIFF/F, PNG, or WBMP format , or create new drawings. Note that you cannot edit multipage TIFF/F images.

Fig. 24: Editing an image

⇨ **To edit an image you are viewing**, press 🔳 and select *Image* > *Open for editing*. For detailed information on modifying images, see "Drawing tools" on page 82 and "Transformations" on page 82.

⇨ **To create a new sketch**, press 🔳 , and select *Image* > *Create sketch*. This command is not available when viewing an image. Start drawing in the blank area. Select drawing tools from the toolbar. **To save the sketch**, tap **Done**. Saved sketches are listed in the list view of the Images application.

Drawing tools

The toolbar provides shortcuts to the most important drawing tools. The same tools are also available as menu commands: press , and select *Tools* > *Sketch tools*.

⇨ **To show or hide the toolbar**, press , and select *Display* > *Toolbar*.

Toolbar icons:

 - Draw freehand lines.

 - Draw straight lines.

 - Erase.

 - Select an area. All the transformations will affect only the selected area. To erase a selected area, tap .

 - Draw a rectangle.

 - Draw an ellipse or circle.

 - Insert text. To format the text, tap **Font**.

 - Select tool line width and colour.

⇨ **To draw a filled rectangle**, press , and select *Tools* > *Sketch tools* > *Filled rectangle*.

⇨ **To draw a filled ellipse or circle**, press , and select *Tools* > *Sketch tools* > *Filled oval*.

⇨ **To undo changes**, tap **Undo**; or press , and select *Edit* > *Undo* / *Undo all*.

Transformations

⇨ **To make the background of a selection transparent**, press , and select *Options* > *Make transparent*.

⇨ **To rotate the image**, press , and select *Options* > *Rotate* > *Right* or *Left*. The image will be rotated by 90 degrees in the chosen direction.

⇨ **To flip the image**, press , and select *Options* > *Flip* > *Horizontally* or *Vertically*.

⇨ **To resize the image**, press , and select *Options* > *Resize...*. Select one of the sizes available, or select a custom option to define the size yourself.

⇨ **To make the canvas bigger**, press , and select *Options* > *Increase image area...*. Select the location of the white space in the new canvas, and define the amount of enlargement in pixels.

⇨ **To crop the image**, press , and select *Options* > *Crop*. The image is cropped automatically by removing all the extra white space around the image. If there is no white space around the image, the command is disabled.

RealPlayer

Go to **Desk** > **RealPlayer** or tap **Go to RealPlayer** in Camera (Camcorder mode).

Fig. 25: RealPlayer

With the RealPlayer application you can watch video clips recorded with the smartphone camcorder or transferred to your smartphone via compatible PC, Web, e-mail, or memory card. You can also watch a video stream from the Internet or listen to audio stream.

When using video streaming and other features that use the GPRS network, please note that any data transfers using GPRS are subject to applicable operator data transfer fees.

RealPlayer supports the following file formats: .RAM, .RM, .3GP, and .MP4.

RealPlayer does not necessarily support all the variations of a file format. RealPlayer only opens rtsp links, not http links.

Playing videos

⇨**To start playing a video you have just recorded with smartphone camcorder**, tap **Go to RealPlayer** in Camera , select the video that you have just recorded and tap **Open**.

⇨**To start playing a video clip**, open RealPlayer, select a file from the list, and tap **Open**.

Note that low quality video clips may cause unwanted viewing effects when played on the smartphone.

☀**Tip:** You can start watching videos in several ways:

• Double-tap a video file in the File Manager application or in the list view.
• Double-tap a shortcut to a video file that you have created in Desk.
• Open a video attachment sent by e-mail or multimedia message.
• Tap a streaming video link in the web browser.

⇨**To stop playing a video**, tap .

RealPlayer

➪**To start playing a streaming video**, click on a streaming link in the Web browser or, from the RealPlayer, open a .RAM file containing the link to start streaming. Before playing streaming video or audio, make sure that the settings are correct. For details, see "RealPlayer settings" on page 120.

☼**Tip:** You can also control RealPlayer from the menu. Press , select *Options* and an appropriate menu command.

➪**To adjust the volume**, tap and drag the volume bar at the top right of the screen, or press and on the scroll key.

➪**To mute the sound**, tap the speaker icon next to the volume bar.

➪**To fast forward or rewind the current video clip**, tap and drag .

➪**To pause a video**, tap . Tap again to resume playback.

Note that if you open the menu while watching a video, the video is paused.

➪**To watch a video in full screen**, tap on the screen. To return to normal screen size, tap the screen again.

➪**To always open videos in full screen mode**, press , select *Tools* > *Settings...*, and select *Open clips in full screen mode*.

➪**To save a link to the current streaming video or audio**, press , and select *Media clip* > *Save link...*.

Managing videos

The list view of RealPlayer shows a list of all saved videos and streaming links. The name of the folder is shown in the title area. For example, in this view you can view the videos in the smartphone, open a video to play, rename a video, and organise videos into folders.

➪**To move a video to a different folder**, press , and select *Edit* > *Move to folder...*. Browse for the target folder.

➪**To open another folder**, press , and select *Media clip* > *Change folder...*, or *Recent folders* to open one of the last six folders that you have used.

➪**To delete a selected video from the smartphone**, press , and select *Edit* > *Delete*.

➪**To delete several videos from the smartphone**, press , and select *Edit* > *Mark/Unmark* > *Mark*. Tap the videos to be deleted to mark them, press , and select *Edit* > *Delete*.

➪**To sort videos**, press ▐≡ , select *Display* > *Sort*. You can sort the files by their name, date, or file size.

➪**To view detailed information on a video**, press ▐≡ , and select *Tools* > *Details*.

➪**To send videos**, tap **Send**, and select the method of sending.

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

RealPlayer

Nokia Audio Manager

Nokia Audio Manager is part of Nokia PC Suite. With Nokia PC Suite you can edit, store, and synchronise your smartphone data with a Microsoft Windows based PC system. For more information on PC Suite and installation instructions, see the Nokia PC Suite User Guide provided on the CD-ROM supplied with your smartphone, "Nokia PC Suite" on page 146, and Nokia PC Suite online help.

With Nokia Audio Manager, you can create and organise digital music files on a compatible PC and transfer them to a compatible phone.

With Nokia Audio Manager you can also do the following:
• Play CD audio.
• Save CD music tracks to .aac format.
• Play .aac, .mp3, and .mp4 music tracks.
• Create, edit, and play .m3u playlists.
• Organise music tracks and playlists in the Nokia Audio Manager Music Studio.
• Transfer .aac, mp3, and .mp4 tracks from the Music Studio to a compatible Nokia phone.
• Transfer playlists from Music Studio to a compatible Nokia phone.
• In the Small Player mode, play the tracks in the current Music Studio or CD Player window.

Nokia Audio Manager is organised around a Music Studio, a desktop workspace from which you can organise and copy tracks to your phone. Music can be placed in the studio from any Windows folder.

The CD Player allows you to save CD audio files in .aac digital format, which you then add to the Music Studio and transfer to a compatible Nokia phone.

You can make Nokia Audio Manager the default music player for all supported file types.

For information on other features of Nokia Audio Manager, see Nokia PC Suite online help.

▼ **Note:** Do not connect the smartphone to your PC before you install the Nokia PC Suite software from the CD-ROM supplied with your smartphone.

Opening Nokia Audio Manager

You can open Nokia PC Suite applications from the PC Suite main window by clicking the icons.

1 To open the PC Suite window, do one of the following:
   • On the Windows taskbar, click the Nokia PC Suite icon.
   • On your computer desktop, double-click the Nokia PC Suite icon.
   • In the Windows Start menu, click *Programs* > *Nokia PC Suite*.
2 Click the *Transfer music* icon.

Tip: You can access the Nokia PC Suite help from the main window Help menu. The Help menu item *Order Settings* takes you to a web page where you can order settings for your Nokia smartphone messaging and browsing features, such as WAP/GPRS, multimedia messaging, and Internet settings.

Transferring tracks to your smartphone

With Nokia Audio Manager you can transfer music tracks to your smartphone from a CD. First save music from a CD on the PC, then transfer the tracks from Audio Manager to the smartphone.

Tip: With a USB cable (DKU-2) connection, you can transfer large files such as music files between your smartphone and the PC more quickly than with Bluetooth connection.

To transfer music from a CD to a compatible PC:

1 Insert a music CD in the CD drive of your PC.
2 In the Nokia PC Suite main window, click *Transfer Music* to open Nokia Audio Manager.
3 Click *CD Player*, and select the tracks you want to transfer to your smartphone.
4 Click *Save tracks*. The files are saved to your PC in .aac file format.

To transfer music from a compatible PC to your smartphone:

1 Click *Music Studio* to view the saved tracks.
2 If no tracks are visible, click *File* > *Search*. Click *Browse* and *Start search*. See "Finding tracks on the hard disk" on page 88 for details.
3 Select a track, and click *Edit* > *Track* or *Playlist* to change the track and artist names.
4 Connect your smartphone to the PC. Nokia Audio Manager automatically detects the smartphone, and the Mobile Phone pane shows the music tracks stored earlier on this smartphone.
5 In the Mobile Phone pane, right-click the phone or memory card folder to which you want to transfer the music, and select *Create Folder*. Name the folder (for example, Music).
6 Select the phone folder to which you want to transfer music.
7 In *Music Studio*, select the tracks you want to transfer to the smartphone, and click *Transfer to phone*. When the transfer is complete, the files appear in the list. The music tracks are now saved in your smartphone, and you can listen to them on your smartphone.

Tip: If you have a memory card in your smartphone, save the music on the memory card to save space in the smartphone memory.

Nokia Audio Manager

Editing CD track information

You can edit track titles in the CD Player window. The new titles are used as file names whenever you save the tracks. If you have already saved the track, add this track to the Music Studio, and edit the title there.

⇨**To change the title of a CD track**, do one of the following:

• Double-click a track title, and enter the new title name.
• Right-click a track title, and select *Modify title* from the pop-up menu.

Finding tracks on the hard disk

You can scan your hard disks and CD drives for supported music files and import them into the Music Studio.

1 Click *File* > *Search*. The *Search disks for music* dialog box appears.
2 Click *Browse...* to select a drive and folder you want to scan for tracks.
3 Select the file type to search for: .mp3, .mp4, or .aac audio files or .m3u playlist files.
4 Click *Start search*. Tracks are automatically added to the *Music Studio* window.
5 Click *Cancel* or search another drive or folder.

Adding tracks to the Music Studio

You must add tracks to the *Music Studio* window before you can work with them. Adding a music track to the *Music Studio* does not automatically add it to a playlist.

⇨**To add music tracks to the Music Studio**, do one of the following:

• In the *Music Studio* window, click *Add*. Browse your Windows folders for music files supported by Nokia Audio Manager. Double-click a file or highlight files, and select *Open*.
• Click *File* > *Search*. Set the search criteria, and select *Start search*. Tracks and playlists are automatically added to the *Music Studio*.
• From Windows Explorer, drag Nokia Audio Manager supported files onto the *Music Studio* window.

Nokia Audio Manager automatically loads music tracks to the Music Studio window after you save the tracks from a CD into a folder on the PC. If you want to deselect this option, select *Options* > *Preferences* > *Miscellaneous,* and clear *Add saved tracks to Music Studio automatically*.

Editing track information

The track record for each track contains general information, including track title, artist name, duration, size, and type. You can only edit the track title and artist name.

1 Right-click a track name, and select *Edit...* from the pop-up menu.
2 In the *Edit Track* dialog, enter or edit the track information.
3 Click *Save*.

Playlists

Creating a playlist

Nokia Audio Manager allows you to organise music tracks as a playlist. You can create and work with playlists in the Music Studio window.

1 Select the tracks in the *Music Studio* that you want to add to a new playlist.
2 Click *Edit* > *Create New Playlist*.
3 In the *Save as* dialog box, select the Windows folder in which the playlist is saved, and enter the playlist name.

Adding tracks to a playlist

⇨ **To add tracks to a playlist**, do one of the following:

- Select tracks in the *Music Studio* window, and create a new playlist.
- Copy or cut tracks to the clipboard, and paste them into an existing playlist.
- Drag-and-drop tracks into an open playlist in the *Music Studio* window.
- Drag-and-drop tracks from Windows Explorer into an open *Music Studio* playlist.

⇨ **To copy tracks into a playlist**, in the *Music Studio* window, do the following:

1 Select and right-click the tracks you want to add to the playlist.
2 From the pop-up menu, select *Copy*.
3 Right-click the playlist to which you want to add tracks, and select *Paste*.

Adding playlists to the Music Studio

You can group tracks and save them as a playlist. When you load a playlist into the Music Studio, you can play, edit, save, or remove it.

⇨ **To add playlists to the Music Studio**, do one of the following:

- Click *Edit* > *Create New Playlist*. If tracks are highlighted in *Music Studio*, they are automatically added to the new playlist. Select the Windows folder to which you want to save the new playlist, enter the playlist name, and click *Save*.

• In the *Music Studio* window, click *Add*. Browse through your Windows folders for playlist files supported by Nokia Audio Manager. Double-click a file or highlight files, and click *Open*.

For more information on Nokia Audio Manager, see PC Suite online help.

Editing playlist information

Each playlist contains a playlist title. You can edit this information and save it. In the Music Studio window, right-click the playlist name, and select *Edit...*

1 In the *Edit Playlist* dialog, enter or edit the playlist title.
2 Click *Save*.

Finding playlists on the hard disk

You can scan your hard disks and CD drives for supported playlists and import them into the Music Studio.

1 Click *File* > *Search*. The *Search disks for music* dialog box appears.
2 Click the *Browse...* button to select a drive and folder you want to scan for playlists.
3 Select the file type to search for (*.m3u playlist files).
4 Select *Start search*. Playlists are automatically added to the Music Studio window.
5 Select *Cancel*, or search another drive or folder.

Removing music tracks and playlists from the phone

⇨ **To remove music files and playlists from the phone**:

1 Connect your phone to the PC. If Nokia Audio Manager is already running, it automatically detects the phone connection.
2 In the *Mobile phone* window, you can see the type of phone connected and the music content currently stored on this phone.
3 Highlight phone tracks and playlists. Click *Remove* at the bottom of the Mobile phone window. Or, right-click a track or a playlist, and select *Remove*. To remove all tracks from the phone, right-click a track in the Mobile phone window, and select *Remove All*.

⇨ **To remove tracks from an open playlist**:

1 To open the playlist in the Music Studio window, click the plus sign [+] next to the playlist name.
2 Select the tracks you want to delete from the playlist.
3 Right-click the selected tracks, and select *Remove* from the pop-up menu.
   You can also drag-and-drop the tracks from the playlist into the Music Studio tracks list.

Music player

Go to **Desk** > **Music player**.

With the Music player application you can listen to the music and other audio files stored on your smartphone or memory card. Music player supports following file formats: MP3, WAV, MIDI, AAC, AMR, AU, RMF and M3U. Music player does not necessarily support all the variations of a file format. You can create and edit track lists with MusicPlayer of Nokia Audio Manager. Nokia Audio Manager is part of Nokia PC Suite.

Fig. 26: Music player

For information on transferring music tracks to the smartphone and managing tracks and track lists, see "Nokia Audio Manager" on page 86.

You can listen to music using the internal loudspeaker or a compatible headset, and continue listening while using other applications on your smartphone.

Music is copyright protected in international treaties and national copyright laws. It may be necessary to obtain permission or a license to reproduce or copy music. In some countries national law prohibits private copying of copyrighted material. Please check the national legislation of the applicable country concerning the use of such material.

Music player controls

 - Tap to play a selected track.

 - Tap to stop playing a track.

 - Tap to pause and resume playing a track.

 - Tap and drag to adjust volume.

 - Tap and drag the slider to find a specific part of the current track. The time indicator above the slider changes accordingly.

Tip: You can also control Music player from the menu. Press   , select *Options* and an appropriate menu command.

Playing tracks

⇨**To play a track**, double-tap it, or select it, and tap ▶.

☀**Tip:** You can also open Music player by double-tapping a compatible sound file in the File manager or Messaging application, or by opening a shortcut in Desk.

⇨**To play one track after another**, press ⌗, and select *Options* > *Play options* > *Normal*. Select a track, and tap ▶ to start playing.

⇨**To play tracks in random order**, press ⌗, and select *Options* > *Play options* > *Random*.

⇨**To play one track at a time**, press ⌗, and select *Options* > *Play options* > *Play selected track*. **To repeat the track**, press ⌗, and select *Options* > *Play options* > *Repeat*. The track is repeated until you clear the *Repeat* menu command. **To move to the next track**, press ⌗, and select *Options* > *Next track*.

⇨**To adjust the volume**, tap and drag the volume bar at the top right of the screen, or press 📻 and 📻 on the scroll key.

⚠ **WARNING:** Listen to music at a moderate level. Continuous exposure to high volume may damage your hearing.

⇨**To mute the sound**, tap the speaker icon next to the volume bar.

Managing tracks

⇨**To add a track to a track list**, press ⌗, and select *Track*> *Add to track list...*.

⇨**To remove a track from a track list**, press ⌗, and select *Track*> *Remove from track list*.

⇨**To move a track to a different folder**, press ⌗, and select *Edit* > *Move to folder...*. Browse for the target folder.

☀**Tip:** To select several tracks, tap on a track to select it, press ⌗, and select *Edit* > *Mark/Unmark* > *Mark*. Tap to mark the rest of the items you want to select.

⇨**To add a track shortcut to Desk**, press ⌗, and select *Tools* > *Add to Desk...*.

⇨**To delete a track from the smartphone**, press ⌗, and select *Track* > *Delete track*.

⇨**To sort the tracks**, press ⌗, and select *Display* > *Sort*. You can sort the files by their name, date, or file size.

⇨**To view detailed information on a track**, press ⌗, and select *Tools* > *Details*.

⇨**To send a track**, press ⌗, and select *Track* > *Send*, and select the method of sending.

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

↳**To set a track as a ringing tone**, select a track, press ▤ , and select *Tools* > *Set as ringing tone*.

↳**To save a track that is an attachment in a multimedia message**, open the attachment in Messaging, press ▤ , and tap **Save**.

Track lists

↳**To create a new track list**, press ▤ , and select *Track* > *New track list...*.

↳**To open a track list**, press ▤ , and select *Track* > *Change track list...*, or *Recent track lists* to open one of the last six track lists that you used.

Track list view

↳**To rename a track list**, press ▤ , and select *Track list* > *Rename...*.

↳**To add tracks to a track list**, press ▤ , and select *Track list* > *Add to track list...*. Open the location of the tracks, select the tracks, and tap **Add**.

↳**To delete the track list**, press ▤ , and select *Track list* > *Delete track list*.

Visual Radio

Go to **Desk** > **Visual Radio**.

You can use the Visual Radio™ application as a traditional FM radio with automatic tuning and preset channels, or with parallel visual information on the display, if you tune in to stations that offer Visual Radio service. The Visual Radio service uses GPRS (network service). You can listen to the FM radio while using other smartphone applications.

Fig. 27: Visual Radio

To use the Visual Radio service, the following conditions are required:

- The station you listen to and the network operator you use must support this service.
- The smartphone must be switched on.
- The smartphone must have a valid SIM card fitted.
- Your Internet access point must be defined for access to the operator's visual radio server.
- The preset radio channel must have the correct Visual Radio service ID defined and have Visual Radio service enabled. See "Preset channels" on page 95 for details.

If you do not have access to the Visual Radio service, the operators and radio stations in your area may not support Visual Radio. The Visual Radio service may not be available in all areas and countries.

The radio uses the wire of the headset as an antenna. A compatible headset needs to be attached to the smartphone for the radio to function properly.

You can normally make a call or answer an incoming call while listening to the radio. The radio is turned off when there is an active call. When the call is finished, you may need to turn the radio back on manually.

Listening to radio

Note that the quality of the radio broadcast depends on the coverage of the radio station.

➭**To switch the radio on or off**, connect a compatible headset to the smartphone and tap ⭘ in Visual Radio.

☀️**Tip:** You can also control the radio from the menu. Press 🗐 , select *Radio* and an appropriate menu command.

➭**To listen to the radio through the headset or loudspeaker**, make sure that the headset is connected to the smartphone, press 🗐 , and select *Tools* > *Speaker in use* > *Headset* or *Loudspeaker*. The lead of the headset functions as the radio antenna, so let it hang freely.

➭**To adjust the volume**, tap and drag ◀◉▦▦▷ , or press ◉ and ◉.

➭**To tune radio channels manually**, tap ⬜ or ⬜.

➭**To search for channels automatically**, tap ⬜ or ⬜. Searching stops when a channel is found.

➭**To view available channels based on location**, press 🗐 , and select *Tools* > *Channel directory...*. Select a location and radio station. Visual Radio tunes to that station automatically. **To save the channel to a list of preset channels**, tap **Save**. See "Preset channels" on page 95 for details. **To view station details**, such as the visual service ID, tap **Details**.

➭**To switch to stereo or mono output mode**, press 🗐 and select *Tools* > *Sound* > *Stereo* or *Mono*.

Viewing content

➭**To view available visual content**, select the preset channel, and tap 🔀 . **To stop viewing visual content**, tap ⏹ . Note that you must have the correct visual service ID defined and have Visual Radio service enabled. See "Preset channels" below for details.

Preset channels

You can save up to 20 radio channels to Visual Radio.

➭**To save a channel**, tap ⬜ and ⬜ to tune in to a station. Press 🗐 , and select *Channel* > *Save...*. Select a channel slot and write a name for the preset channel. Change the frequency, if necessary. **If the station provides visual content**, add the Visual Radio service ID, and select the *Enable visual service:* check box to allow for visual content.

☀️**Tip:** To find the visual service ID of a channel, press 🗐 , and select *Tools* > *Channel directory...*. Select the radio station, and tap **Details**.

➭**To listen to a preset channel**, tap on a channel in the list view.

➭**To edit a preset channel**, press 🗐 , and select *Channel* > *Edit...*.

↪**To reorder preset channels**, select a channel, press ⒠ , and select *Channel* > *Reorder...*. Select a channel slot in the list. Press the centre of the scroll key to confirm the move.

↪**To remove a preset channel**, press ⒠ , and select *Channel* > *Delete*.

☀**Tip:** When using a compatible headset, press the headset key to scroll to the next radio channel or next preset channel, if a preset list is selected.

Visual Radio settings

↪**To modify the settings**, press ⒠ , and select *Tools* > *Settings...*. Define the following:

Auto-start visual service: - When this option is selected, the Visual Radio service is started automatically when you tap a preset channel that offers visual service.

Access point: - Select the access point used for a data connection. For more information, see "Setting up an Internet access point" on page 114. Note that you do not need this access point to use Visual Radio as an ordinary FM radio.

Voice recorder

Go to **Desk** > **Voice recorder**.

The Voice recorder application allows you to record voice memos. You can also listen to your own recordings and other sound files or insert voice clips to multimedia messages.

The maximum length of a recording depends on the memory available.

You can open files that have been stored in the following file formats: WAV, AMR.

Recording and playing

➪**To start recording**, tap ⬤. The number display starts to show the elapsed time. **To stop recording**, tap ⬛.

☀**Tip:** Press 📞)) quickly to start and stop recording.

➪**To play a selected sound clip**, tap ▷.

➪**To pause playing a sound clip**, tap ⏸. Tap again to resume playback.

➪**To adjust the volume**, tap and drag the volume bar at the top right of the screen, or press ◉ and ◉ on the scroll key.

➪**To fast forward or rewind the current sound clip**, tap and drag ⬛⬛⬛.

➪**To stop playing**, tap ⬛.

☀**Tip:** You can also control the Voice recorder from the menu. Press ☰, select *Options* and an appropriate menu command.

Managing sound clips

➪**To send a voice clip**, press ☰, and select *Sound clip* > *Send*, and select the method of sending.

➪**To sort the sound clip list**, press ☰, and select *Display* > *Sort*. You can sort the sound files by their name, date, or file size.

➪**To rename or delete a selected sound clip**, press ☰, select *Sound clip*, and the corresponding command.

➪**To open another folder**, press ☰, and select *Sound clip* > *Change folder...*.

➪**To add a sound clip shortcut to Desk**, press ☰, and select *Tools* > *Add to Desk...*.

➪**To view detailed information on a sound clip**, press ☰, and select *Tools* > *Details*.

Voice recorder settings

⇨ **To edit the Voice recorder settings**, press ▣ , and select *Tools* > *Settings...*. Define the following:

Clip name: – Write the name to be used as a basis for the sound clips. For example, if you write "Sound", the default names of the following sound clips will be Sound(01), Sound(02), Sound(03), and so on.

Clip format: – Select the file format in which the sound clips are saved by default.

Documents

Go to **Desk** > **Documents**.

You can use the Documents application to write new and edit existing text documents. You can insert and view images and other files in the documents. You can also send and receive documents as a short message, MMS, e-mail attachment, or via Bluetooth technology.

You can open, edit, and save documents created with Microsoft Word for Windows version 97 or later. Note that not all features and formatting of the original documents will be supported. The original document must not be password-protected. Documents made with other versions of Microsoft Word may only be viewed.

Working with documents

⇨**To create, open or rename a document**, press `▤` and select the approriate command in the *Document* menu.

⇨**To insert special characters**, press `▤` and select *Insert* > *Special character...*. Select the character or symbol you want to insert and tap **OK**.

⇨**To insert a date into a document**, press `▤` and select *Insert* > *Date*.

⇨**To undo mistakes**, press `▤` and select *Edit* > *Undo*.

⇨**To show or hide text markers**, press `▤` and select *Tools* > *Formatting marks...*. Select the markers you want to make visible in the document and tap **OK**.

⇨**To count words**, press `▤` and select *Tools* > *Word count...*.

⇨**To protect a document from editing**, press `▤` in the list view and select *Tools* > *Details*. Select the *Read-only:* check box and tap **OK**. The document can now be viewed but not edited.

⇨**To send a document**, tap **Send**, select the sending method and tap **OK**.

⇨**To view the structure of a document**, press `▤` and select *Display* > *Outline view...*.

⋇**Tip:** If you write a phone number, e-mail address, or web address in a document, you can use it as a hyperlink. Tap on the number or address, or move the cursor inside it with the scroll key; it becomes a link with a small icon. Tap the icon to call the phone number, to open the e-mail editor, or to access the web site if you have an active Internet connection.

Editing paragraph styles

Paragraph style is a set of formatting characteristics with which you can quickly change the appearance of your text.

1 Press ⌐≡ and tap *Format* > *Style…*.
2 Select the style you want to edit and tap **Edit**. Tap **New** to create a new style.
3 Give the new style a name and select the outline level. Level 0 means that the text with this style is not shown in the outline view.
4 Tap **Format**, select what you want to edit, and tap **Format** again to start editing. You can change the following values:

   Font – You can change the font type, size and colour. You can also add bold, italic, underline, and strikethrough formatting. You can raise or lower the text by selecting superscript or subscript formatting. To see the effect of the changes, tap **Preview**.

   Paragraph – You can change the appearance of the edges of paragraphs by aligning them differently. You can change the space between lines of text, indent paragraphs, and add tab stops to set the position of text on a page.

   Borders – You can add a border to any side of a page and choose a style and colour for it.

   Bullets – You can choose from four bullet styles, and define the size, colour, and indentation of the bullets.
5 Tap **OK** when you have finished editing a style value.
6 Tap **Close** to exit the dialog.

Sheet

Go to **Desk** > **Sheet**.

In the Sheet application you can work and store your data in a file that is called a workbook. Each workbook contains at least one worksheet. A workbook can also contain charts; a chartsheet is a sheet containing a chart that is based on data from a worksheet.

The Sheet application can open documents created with Microsoft Excel 97 for Windows or later. Note that not all features and formatting of the original documents will be supported. The maximum number of characters in a single cell is 256, and cells containing more characters will have the contents truncated when the file format is converted.

Workbooks

↪**To protect a workbook from editing**, press `≡` in the list view and select *Tools* > *Details*. Select the *Read-only:* check box and tap **OK**. The workbook can now be viewed but not edited.

↪**To create, open or rename a workbook**, press `≡` and select the approriate command in the *Workbook* menu.

Working with worksheets

↪**To create a duplicate of a worksheet**, tap **Worksheets / Charts**. Select the sheet and tap **Duplicate**.

↪**To rename a worksheet**, tap **Worksheets / Charts**. Select the sheet and tap **Rename**. Write the new name and tap **OK**.

↪**To select a cell you have named**, press `≡` and select *Edit* > *Mark/Unmark*. Select *Named area* for the range and choose from the list the cell you want, then tap **OK**.

↪**To keep rows visible when scrolling**, select the row below the area that you want to remain visible. **To keep columns visible**, select the column to the right of the area that you want to remain visible. Then tap `▦` on the toolbar, or press `≡` and select *Display* > *Freeze panes*.

↪**To go to a particular cell or named area**, tap **Go To**. Specify the cell or named area where you want to go and tap **OK**.

Sheet

Tip: You can insert a sum for a range of cells automatically by using the toolbar icon ∑. Select the cell where you want to add the sum and tap ∑. The suggested formula is shown in the formula field on top of the worksheet. You can change the suggested formula by editing it in the formula field, or accept it by exiting the cell.

Formatting worksheets

First select the cell or cells you want to format.

➡**To format fonts**, press ☰ and select *Format* > *Font*. You can change the font type, size, and colour. You can also add bold, italic, underline, and strikethrough formatting. You can raise or lower the text by selecting superscript or subscript formatting. To see the effect of the changes, tap **Preview**.

➡**To change number format**, press ☰ and select *Format* > *Numbers*. For example, you can specify how the date, time, or currency is displayed.

➡**To align cell contents**, press ☰ and select *Format* > *Alignment*. If you select *Wrap text to cell:*, the row height of the selected cell will be adjusted to display the entire content of the cell.

➡**To adjust the row height or column width**, drag the boundary below the row heading or on the right side of the column heading until the row/column is the size you want. **To specify the height or width more precisely**, press ☰ and select *Format* > *Row height* or *Column width*. Specify the height or width and tap **OK**.

➡**To format cell borders**, press ☰ and select *Format* > *Borders*. You can add a border to any side of a cell. Choose a style and colour for the border and tap **OK**.

➡**To change the background colour of a cell**, press ☰ and select *Format* > *Background colour*. Choose a colour and tap **OK**.

➡**To show or hide gridlines, zero values, and headers**, press ☰ and select *Tools* > *Settings*. Select the items you want to make visible in the worksheet and tap **OK**.

Chartsheets

➡**To format a chart in detail**, press ☰ and select *Format*. Select the object you want to edit. The selection of settings varies depending on the type of the chart.

Tip: You can access some of the setting dialogs by tapping the relevant item in the chart. For example, the **X-axis settings** dialog opens when you double-tap the X-axis in the chart.

Font – You can change the font type, size and colour. You can also add bold, italic, underline, and strikethrough formatting. You can raise or lower the text by selecting superscript or subscript formatting. To see the effect of the changes, tap **Preview**.

Chart – You can select the chart type, make the chart three-dimensional, and change the colour of the background and axis. You can also change the title shown in the chart, and the title of the X- and Y-axis.

X-axis – You can select the label type and write the data range for it, display or hide the axis line, and add tick marks. You can also enter the category number where the other axis crosses, and change the number of minor tick marks per category.

Y-axis – You can define whether the values are shown in the chart or not, specify the highest and lowest value displayed, and determine the location where the axes cross. You can also use the logarithmic scale, change the interval at which major tick marks appear, and change the number format.

Legend – You can add a box where the colours used in a chart are explained, and specify the position of the box.

Gridlines – You can select whether the major and minor axes have gridlines.

Series – You can add new data series to a chart or edit the existing series. You can define whether the series is shown in the chart or not, change the data range of the series, select the label type and enter the data range for it. You can also specify the colour with which to display the series on the chart. Note that pie charts can have only one data series.

➪**To create a duplicate of a chartsheet**, tap **Worksheets / Charts**. Select the chart and tap **Duplicate**.

➪**To rename a chartsheet**, tap **Worksheets / Charts**. Select the chart and tap **Rename**. Write the new name and tap **OK**.

Presentations

Go to **Desk** > **Presentations**.

You can open and view presentations created with Microsoft PowerPoint 97 or later. Note that not all features and formatting of the original documents will be supported. You can send and receive these presentations via e-mail or Bluetooth technology.

The list view shows a list of all presentations in the selected folder. The name of the folder is shown in the title area. In this view you can manage presentations without opening the actual files. For example, using the menu bar commands you can move or copy presentations.

☀ **Tip:** For more information on available commands, see "Common actions in applications" on page 22.

⇨ **To open a presentation**, double-tap the presentation in the list. If the file is located in another folder, press ⌷ and select *Presentation* > *Change folder...*. Select the folder where the presentation is saved. Note that you can have only one presentation open at a time.

⇨ **To move between slides**, use the **Next** and **Previous** buttons. To move directly to a specific slide, press ⌷ and select *Presentation* > *Go to slide*. Select the slide from the list and tap **OK**.

⇨ **To view slides in full screen mode**, press ⌷ and select *Display* > *Full screen*. To return to the standard view, press ⌷ and select *Display*, then clear the *Full screen* option.

⇨ **To view additional notes in a presentation**, press ⌷ and select *View* > *Notes*. To return to the standard slide view, press ⌷ and select *View* > *Slide*.

⇨ **To get an overview of the whole presentation**, press ⌷ and select *View* > *Outline*. To open a selected slide in the standard slide view, tap **Slide view** or double-tap the title of the slide.

⇨ **To copy text from the current slide**, press ⌷ and select *Edit* > *Copy text*. The text is copied to the clipboard. In the Notes view the content of the notes is copied, too. **To copy all text in a presentation**, press ⌷ and select *View* > *Outline*. Then press ⌷ again and select *Edit* > *Copy all text*. All the text on the slides and notes is copied to the clipboard. To copy all the text on the slides, select *Copy all slide text*, and to copy all the text in the notes, select *Copy all note text*. Note that some of the formatting may be lost.

Clock

Go to **Desk** > **Clock**.

⇨ **To set the current date and time**, tap **Date and time**. Select the *Auto-update of date & time:* check box if you want the network to update the date and time automatically to your smartphone. Note that this is a network service. Otherwise, tap 🕐 and tap the arrows to change the time. Tap 🎛 to set the date. To use daylight saving time, select the *Apply daylight-saving:* check box.

See also "Regional settings" on page 120.

⇨ **To change between an analogue and digital clock type**, tap the face of the clock.

⇨ **To display only the home city in the Time view**, press ☰ and select *Display*. Clear the option *Destination city*.

⇨ **To switch between the Time and Alarm view**, press ☰ and select *View* > *Alarm* or *Time*.

Fig. 28: Clock

Alarms

⇨ **To set an alarm**, tap **Set alarm**. Write the text that is displayed when the alarm goes off. Tap 🕐, then tap △ and ▽ to set the alarm time. Tap **OK**. Define how often the alarm repeats, and tap **OK**.

If the alarm time is reached while the smartphone is switched off, the smartphone switches itself on and starts sounding the alarm tone.

⇨**To turn off and remove a sounding alarm**, tap **Stop**. If the smartphone was switched off when the alarm sounded, it asks whether you want to activate the smartphone. Press **Cancel** to switch off the smartphone or **Switch on** to switch it on. Do not press **Switch on** when wireless phone use may cause interference or danger.

⇨**To snooze a sounding alarm for ten minutes**, tap **Snooze**. If the smartphone was switched off when the alarm sounded, it will switch itself off again and back on after 10 minutes.

⇨**To mute a sounding alarm**, tap **Mute**. The alarm is silenced, but the notification remains on the screen.

⇨**To delete an alarm**, press and tap *View* > *Alarm*. Select the alarm you want to remove and tap **Remove alarm**.

⇨**To edit an alarm**, press and tap *View* > *Alarm*. Double-tap the alarm you want to edit.

⇨**To deactivate or activate an alarm**, press and tap *View* > *Alarm*. Select the alarm you want to deactivate or activate and tap **Activate/ Deactivate**.

Cities and countries

⇨**To change cities in the Time view**, select the left frame to change the current city or the right frame to change the destination city. Tap **Change city**, drag the scroll bar to browse the list, or enter the name of the city in the search box below the list. The list changes to show possible matches as you enter more characters in the search field. Select the city and tap **OK**. If the city is not included on the list, tap **New city** to add it to the list.

⇨**To add a new city, country, or region**, press and select *City* or *Country/Region* > *New...*.

⇨**To edit the currently selected city, country, or region**, press and select *City* or *Country/Region* > *Edit...*.

⇨**To copy the dialling code of a selected city**, press and tap *Tools*> *Copy dialling code*.

Calculator

This smartphone has a calculator application for basic calculations.

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

Fig. 29: Calculator

↪**To perform calculations**, tap the buttons on the display.

The calculator performs operations in the order in which they are written, despite the hierarchical difference between operator types. You cannot use parentheses to change the performance order of operations.

☀**Tip:** To use the percentage symbol, x% equals x/100.

↪**To delete numbers** in the input field, tap ⬅.

You cannot remove an entered operation symbol from the input field. If you enter two operator symbols in sequence, the latter one replaces the former symbol. Otherwise you can use backspace to remove the last value character in the input field when editing a calculation.

↪**To switch between the normal calculator view and till roll calculator view**, press ☰ and select *View*> *Normal* or *Till roll*. The till roll calculator shows all previous input.

↪**To clear the entire till roll**, press ☰ and select *Edit* > *Clear till roll*.

↪**To flip the position of buttons and input field**, press ☰ and select *Display* > *Flip layout*.

Using calculator memory

It is possible to store one number value at a time in the memory of the calculator and then recall it, and add or substract a value to/from this value in the memory. When any number value besides zero (0) is saved in the memory, the letter M appears at the upper left side of the input field. If zero (0) is saved, it means the same as clearing the memory.

Calculator

These are the memory commands:

MR - Recalls the value in memory to the input field.

M+ - Adds the value in the input field to the value in the memory.

M- - Subtracts the value in the input field from the value in the memory.

MS - Saves the current value in memory.

Constant function

The constant function can be used to store temporarily a value that is added, subtracted, multiplied, or divided constantly.

⇨ **To use a constant**, enter the value you want to use as a constant and tap on an operator symbol twice. The letter K is displayed in the calculation line when the constant value has been stored. Enter a new value and tap on the equals symbol (=) to perform the calculation.

For example: Enter the value 2 in the calculator. Tap twice on the plus symbol (+). The constant value 2 is saved. Enter the value 5 and tap on the equals symbol (=). The sum (7) is displayed. Enter the value 10,2 and tap =. The sum (12,2) is displayed.

Control panel

Go to **Desk** > **Control panel**.

In Control panel you can define and modify various settings of your smartphone. Modifying these settings affects the operation of your smartphone across several applications.

↪ **To restore the original factory settings**, press ⌗ , and select *Restore original settings*. Tap **Restore** to confirm.

Application manager

Go to **Desk** > **Control panel** > **App. manager**.

With the Application manager application you can view the details of installed applications or remove them from your smartphone. You can also specify installation settings.

You cannot install applications in Application manager. For information about installing software, see "Installing software" on page 28.

When you open Application manager, the *Installed applications* page lists all of the software packages that have been installed, with their name, version number, type, and size.

Fig. 30 Application Manager

↪ **To display the details of an installed software package**, tap **Details**.

↪ **To remove an installed software package from your smartphone**, select the software package you want to remove and tap **Remove**. A dialog appears asking for your confirmation. Press **Remove**.

Some software packages update existing software and after the installation you may only be able to remove the whole software package, not the update.

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If you remove software, you can only reinstall it by having the original software package file, or by restoring a full back-up that contains the removed software package. If you remove a software package, you may no longer be able to open documents created with that software. If another software package depends on the software package that you removed, the other software package may stop working. Refer to the documentation of the installed software package for details.

⇨ **To view the list of software installations and removals that have taken place**, go to the *Installation log* page. This list shows what software has been installed and removed, and when that happened. If you encounter problems with the smartphone after installing a software package, you can use this list to find out which software package may be the cause of the problem. The information on this list may also help to pinpoint problems that are caused by software packages that are incompatible with each other.

⇨ **To configure installation settings**, go to the *Options* page. Here you can select options related to software installation. Define the following:

Delete files after installation: – If selected, the software package installation file will be deleted from the smartphone after installation. If you download software packages using the web browser, this may be helpful in reducing the amount of storage space required. If you want to store the software package file for possible reinstallation later on, either set this option to No, or make sure that you have a copy of the software package file stored on a compatible PC or on a CDROM.

Default installation language: – If the software package contains several different language versions of the software, the language version specified here will be installed.

Software installation: – Define what kind of SIS installations are allowed. Select *On* to allow all installations, *Signed only* to only allow installations of SIS files with valid signature or certificate, or *Off* to prohibit all SIS installations.

Bluetooth

Go to **Desk** > **Control panel** > **Bluetooth**.

See "Bluetooth connection" on page 143.

Certificate manager

With the Certificate manager application you can manage digital certificates which you use when connecting to web sites, mail servers, and when installing software. Digital certificates may be used for:

- connecting to an online bank or another site or remote server for actions that involve transferring confidential information
- reducing the risk of viruses or other malicious software and checking the authenticity of software when downloading and installing it

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 smartphone 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.

Fig. 31: Certificate manager

➡️ **To view certificate details**, double-tap a certificate. **To delete a certificate**, tap **Delete**.

➡️ **To define the usage of the certificate**, double-tap a certificate and tap **Trust settings**. Define the following:

SIS installation: - Select this check box, if you want this certificate to be able to certify the origin of a new SIS software.

Application installation: - Select this check box, if you want this certificate to be able to certify the origin of a new java software.

Web and e-mail: - Select this check box, if you want this certificate to be able to certify web sites and mail-servers.

Checking the authenticity of a certificate

1 Select the certificate and tap **Details**. A view of certificate details opens.
2 The *Issued to:* field identifies the owner of this certificate. Make sure that this is the name of the party to whom you think that this certificate belongs.
3 Scroll the dialog until you see the *Fingerprint:* field, which uniquely identifies the certificate. Contact the help desk or customer service of the owner of the certificate (see step 2 above) and ask for the MD5 fingerprint of the certificate. Compare the fingerprint with the one shown in the dialog. If they match, the certificate should be authentic.

Use this authentication procedure to check all new certificates.

Data call barring

Go to **Desk** > **Control panel** > **Data call barring**.

You can prevent or allow the following data call types:

All incoming calls: - When activated, data calls cannot be received.

Incoming calls when abroad: - When activated, data calls cannot be received when you are outside your home country.

All outgoing calls: - When activated, data calls cannot be made.

International calls: - When activated, data calls cannot be made to other countries or regions.

International calls except to home country: - If you have enabled international roaming with your network operator, you cannot make international data calls abroad, except to your home country.

The options available are:

Activate - Turns on the barring.

Cancel - Turns off the barring.

Check status - Checks whether data call barring is activated or not.

To modify these settings, you need the barring password from your service provider.

⇨**To cancel all data call barrings**, tap **Cancel all barrings**.

Date and time

Go to **Desk** > **Control panel** > **Date and time**.

⇨**To set the current time and date**, write the time and date directly into the respective fields, or tap 🕗 and 📅. Tap the small arrows to change the time and date.

➪**To let the network automatically update the time and date** in your smartphone, select *Auto-update of date & time:*. This is a network service. Note that this may cause some alarms to expire, if the alarm has been set between the old and the updated time.

➪**To use daylight saving time**, select *Apply daylight-saving:*.

Display

Go to **Desk** > **Control panel** > **Display**.

Fig. 32: Display

➪**To change the brightness of the display**, tap 🔳 or 🔲

➪**To define how soon the display brightness will go down to save power** if the screen is left untouched, select the appropriate brightness period.

☀️**Tip:** Selecting a low brightness level and a short time period saves the battery and increases the operation time of the smartphone.

➪**To define how soon a screen saver starts** if the screen is left untouched, select the appropriate time limit for the *Screen saver time-out:* option. Note that you cannot change the look of the screen saver.

➪**To set an automatic touch screen and keypad lock on**, select the *Screen saver locks display & keys:* check box. The touch screen and keypad are locked automatically when the screen saver is activated. For more information, see "Touch screen and keypad lock" on page 26.

Enhancements

Go to **Desk** > **Control panel** > **Enhancements**.

Here you can define some of the settings of the headset and loopset used with the smartphone.

➪**To modify the enhancement properties**, tap **Edit** and define the following:

Default profile: - Choose the profile that will be activated, when you attach a headset or loopset to your smartphone.

Automatic answer: - Define whether you want the smartphone to answer an incoming call automatically after five seconds time when a headset or loopset is attached to the smartphone.

Internet setup

Go to **Desk** > **Control panel** > **Internet setup**.

To connect to the Internet:
- the wireless network you use must support data calls or GPRS
- the data service must be activated for your SIM card
- you must have obtained an Internet access point from your Internet service provider (ISP)
- you must have configured the proper Internet settings

Setting up an Internet access point

Based on the type of the SIM card you use your smartphone may be able to automatically add the correct settings for WWW browsing and MMS. Some Internet service providers may offer you the possibility to configure your Internet access point settings by sending you a message. This might reduce the number of settings you need to enter yourself, or eliminate the need altogether. For more information , see "Plug and play mobile services" on page 70.

The exact values for the settings are usually provided by your service provider. Follow the instructions given to you by your service provider very carefully.

Note that any data transfers via GPRS are subject to applicable operator data transfer fees.

⇨ **To set up Internet access point**, tap **New access pt.**. To edit an existing Internet access point, tap **Access pts.**. Define the following fields on the pages of the Internet setup wizard:

Connection name: - Give a descriptive name for the connection.

Data bearer: - Choose the data connection type. For more information on data connection types, see "Data connections" on page 30.

Depending on which data connection you select, some of setting fields will be available on the following pages of the wizard.

GSM Data call details

Dial-up number: - The modem telephone number of the access point.

GPRS details

Network type: - Choose which version of the Internet protocol you want to use.

Auto-retrieve access point: - If your network operator supports this feature, the access point name can be retrieved automatically from the network. The access point is needed to establish a connection to the GPRS network.

Access point name: – If you do not use the *Auto-retrieve access point*; define a name for the access point. You can obtain the access point name from your network operator or service provider.

Login details

Prompt password at every login: – Select this if you must write a new password every time you log onto a server, or if you do not want to save your password to the smartphone.

User name: – Write a user name if required by the service provider. The user name may be needed to make a data connection, and is usually provided by the service provider. The user name is often case-sensitive.

Password: – A password may be needed to make a data connection, and is usually provided by the service provider. The password is often case-sensitive.

VPN details

Note that you must have at least one internet access point and you must have installed at least one VPN policy before you can define a VPN access point. For more information on installing VPN policies, see "Managing VPN policies" on page 125

Internet access point: – Select the access point used for your VPN access.

VPN policy: – Select the VPN policy to use for your VPN access.

Advanced Internet settings

When you have finished setting up or editing Internet access settings in the Internet setup wizard (*Control panel* > *Internet setup* > **New access pt.**), you can continue by configuring advanced settings. The pages and options available depend on whether you have chosen a packet data (GPRS), GSM data call or VPN connection.

Data call page

Call type: – Define the GSM data call type. The options are *Normal* and *High speed data (GSM only)*.

To be able to use *High speed data (GSM only)*, the network service provider must support this feature, and if necessary, activate it for your SIM card.

Modem type: – *Analogue*, *ISDN V.110*, or *ISDN V.120* defines whether the smartphone uses an analogue or digital connection. This setting depends on both your GSM network operator and Internet service provider, because some GSM networks do not support certain types of ISDN connections. For details, contact your Internet service provider. If ISDN connections are available, they establish connections more quickly than analog methods.

Maximum data speed: – This option allows you to limit the maximum connection speed when high-speed data is used. Higher data rates may cost more, depending on the network service provider.

The speed represents the maximum speed at which your connection will operate. During the connection, the operating speed may be less, depending on network conditions.

Modem initialisation: - You can control your smartphone using modem AT commands. If required, enter characters specified by your GSM network service provider or Internet service provider.

Proxies page

You may want to use a proxy to quicken access to the Internet. Note also that some Internet service providers require the use of web proxies. Contact your Internet service provider to determine proxy details.

If you have made an Internet connection to your company's intranet, and are unable to retrieve web pages from the general Internet, you may need to setup a proxy server to retrieve web pages outside your company's intranet.

Protocol: - Select the protocol type of the proxy. You can set different proxy settings for each protocol.

Use proxy: - To use the proxy server, select this option.

Proxy server address: - The IP address of the proxy server, or the domain name. Example domain names are: company.com and organisation.org.

Port number: - The number of the proxy port. The port number is related to the protocol. Common values are 8000 and 8080, but vary with every proxy server.

Do not use proxy for: - Define here the domains for which the HTTP or HTTPS proxy is not needed. In a list, separate domain names with semicolons.

IP addresses page

Note that the two protocols (IPv4 and IPv6) require slightly different settings.

Auto-retrieve IP address: - If you select this, the IP address is obtained automatically from the server. This setting is also called 'dynamic IP address'.

IP address: - The IP address of the smartphone. If the IP address is obtained automatically, then you are not required to enter details here.

DNS address: - If you select the option *Auto-retrieve* for the IPv4 protocol, the DNS (Domain Name Server) address is obtained automatically from the server. The respective value for the IPv6 protocol is *Use well-known*. DNS is an Internet service that translates domain names such as www.nokia.com into IPv4 addresses like 192.100.124.195, or IPv6 addresses like 3ffe:2650:a640:1c2:341:c39:14.

Primary DNS address: - The IP address of the primary DNS server. If the IP address is obtained automatically, then you are not required to enter details here.

Secondary DNS address: - The IP address of the secondary DNS server.

Login scripts page

Use login script: – If you select this, you can write or import a login script in plain text format. You can edit the script in the field at the bottom of the screen.

Display post-dial terminal: – If you select this, the terminal window is shown on the screen when a data connection is being established.

Tip: Your Internet service provider may be able to provide you with a script.

Note: Scripts are not usually required when you establish a connection. To find out if you need a script, contact your Internet service provider.

Other page

Allow plain text login: – If you select this option, the password at connection may be sent as plain text. For optimum security, clear this option. Some Internet service providers require that this option is selected.

Use PPP compression: – Selecting this speeds up the data transfer, if it is supported by the remote PPP server. If you have problems with establishing a connection, try not selecting this check box. Contact your Internet service provider for guidance.

Callback type: – Ask your Internet service provider for the correct setting to use. The setting depends on the service provider's configuration.

Callback number: – Type in your smartphone's data phone number which the dial back server uses. Usually, this number is the data call phone number of your smartphone.

Internet connection settings

⇨ **To configure Internet connection settings**, define the following fields:

General

Preferred access point: – Choose the access point to connect to the Internet.

Ask before connecting: – If you select this, a dialog appears every time you connect to the Internet, asking you to confirm the connection or to change the access point.

Data call

Disconnect when idle for: – Select the time period after which the data call is ended automatically if the connection is not used.

Some Internet connections may appear inactive, but they may still be sending and receiving data in the background. These connections may delay the start of the inactivity period specified here, and therefore postpone the closing of the connection.

The data call settings affect all access points using a data call and high-speed data call. For more information on data connections, see "Data connections" on page 30.

GPRS

Disconnect when idle for: - Select the time period after which the GPRS connection is set to standby mode, if the connection is not used.

GPRS connection: - Select *When available* to keep the GPRS connection in alert mode and to switch the packet data transfer on quickly when needed. If you select *When needed*, the smartphone will use a GPRS connection only if you start an application or action that needs it. Note that if there is no GPRS coverage and you have chosen the *When available* option, the smartphone will periodically try to establish a GPRS connection.

The GPRS settings affect all access points using a GPRS connection.

Memory

Go to **Desk** > **Control panel** > **Memory**.

Here you can view the amount of free memory and the memory consumption of different items on your smartphone and memory card.

☀️**Tip:** To avoid smartphone memory getting low, you should regularly delete or transfer data to a memory card or PC.

For more information, see "Memory management" on page 25.

My view settings

Go to **Desk** > **Control panel** > **My view settings**.

Normally you tap the 🔄 key or tap 🔗 icon to return to Desk. With My view settings you can set your smartphone so that alternate taps of 🔄 open either Desk or your favourite application

⇨**To select the application that opens when you press the Desk key in Desk**, tap ▽ , and select the application from the list.

Pen input settings

Go to **Desk** > **Control panel** > **Pen input settings**.

See "Pen input settings" on page 36.

Positioning settings

Go to **Desk** > **Control panel** > **Positioning settings**.

Some networks allow others to request the position of your smartphone (network service). You can only use this service and settings if you install applications that support this service.

Define the following:

Priority

On the priority page you can define the priority of different positioning methods

⇨**To change the priority of a location method**, tap ▽ and select the method you want to place in that position.

Details

On the *Details* page, you can view a method properties and modify its cost.

You can view the following properties:

Method: - Select the appropriate positioning method.

Average positioning time: - The average time that the positioning process takes.

Rate: - The estimated cost rate of the method.

Battery use: - The estimated power consumption of the method.

Accuracy: - Horizontal accuracy of the method.

⇨**To modify the cost of a method**, tap **Edit** and tap ▽ to select a method.

Privacy settings

Go to **Desk** > **Control panel** > **Privacy settings**.

General

The settings on this page override all individual settings. Define the following:

Position request rule: - Define the global privacy setting. Select *Use individual req. rules* to use the settings that you define for each contact and service on the *Individual* page. Select *Confirm first* to be prompted for the acceptance of all location requests regardless of the setting on the *Individual* page. Select *Always accept* or *Always reject* to accept or reject location requests regardless of the settings on the Individual page.

Valid until: - Define the time limit for the acceptance or rejection, if defined. When the time limit has been reached, the privacy level switches to *Use individual req. rules*.

Notify when position sent: - Define the global notification setting. This option is only available, if you have set the verification policy to *Always accept*.

Individual

On the *Individual* page, you can define the privacy settings for a specific contact or service.

The page consists of a list of contacts and services that have specific privacy settings. When a contact or service has requested a location, it may be added to the privacy list. You can only add contacts to the list within this dialog.

⇨ **To add a contact**, tap **Add**, tap a contact in the list and tap **Close**. Define the individual privacy settings. The options are similar to ones defined on the Global page. Tap **Close** to proceed.

⇨ **To edit a contact**, tap **Edit**, and modify the individual privacy settings. The options are similar to ones defined on the Global page. Tap **Close** to proceed.

For more information on selecting contacts, see "Viewing and searching for contacts" on page 62.

RealPlayer settings

Go to **Desk** > **Control panel** > **RealPlayer settings**.

Define the following:

Network

Data speed: - Select the connection speed. Note that the options *Very fast* and *Slow* may affect the video quality.

Connection time-out: - Select the time period in seconds after which the connection closes, if the connection is not successful.

Server time-out: - If the server is not able to send enough data and a lot of buffering takes place, you may need to define a server time-out.

Port range: - The range of port numbers used for the connection. The default values are the same as those for Internet settings.

Default access point: - The connection that you want to use as a default connection. The default value is the same as that for Internet settings.

Proxy

Use proxy: - To use the proxy server, select this option.

Server address: - The IP address of the server, or the domain name. Example domain names are: company.com and organisation.org.

Port number: - The number of the proxy port. The port number is related to the protocol. The default port is 1091.

Regional settings

Go to **Desk** > **Control panel** > **Regional settings**.

On the following pages you can define the format for the local time, date, numbering, and currency expressions.

Time

Time format: - Choose the 24-hour or 12-hour clock system.

Am/pm format: - If you chose 12-hour clock in the previous field, choose the location and appearance of the indicators.

Separator: - Select the separator used between hours and minutes.

Date

Date format: – Choose the order of date items.

Separator: – Choose the separator used between date items.

Week starts on: – Choose the first day of the week.

Working days: – Select the working days of the week.

Numbers

Decimal separator: – Choose the sign used as decimal point.

Thousands separation: – Select this check box if you want to use separation between thousands and hundreds.

Thousands separator: – Choose the thousands separator.

Measurement unit: – Choose the local length measurement unit.

Currency

Currency symbol: – Enter the symbol used for local currency.

Decimal places: – Tap **–** or **+** to choose the amount of decimal places used in currency numbers.

Symbol position: – Choose the position of the currency symbol in relation to the number.

Negative value format: – Choose the way that a negative currency value is displayed.

Security

Go to **Desk** > **Control panel** > **Security**.

Here you can define the phone security level of your smartphone.

Codes are shown as asterisks. If you are changing a code, you will be prompted for the current code and then the new code twice. For more information on access codes, see "Access codes" on page 25.

Avoid using codes that are similar to emergency numbers, such as 112, to prevent accidental dialling of the emergency number.

Device lock

Autolock period: – You can set an autolock period, a time-out after which the smartphone is automatically locked and can be used only if the correct lock code is entered.

▼ **Note:** When the device is locked, calls still may be possible to the official emergency number programmed into your device.

Lock code: – The lock code must be from five to ten digits long. The factory setting for the lock code is **12345**. To avoid unauthorised use of your smartphone, change the lock code. Keep the new code secret and in a safe place separate from your smartphone.

Lock if SIM card changed: - You can set the smartphone to ask for the lock code when an unknown, new SIM card is inserted into your smartphone. The smartphone maintains a list of SIM cards that are recognised as the owner's cards.

PIN codes

PIN code request: - When active, the code is requested each time the smartphone is switched on. Deactivating the PIN code request may not be allowed by some SIM cards. If you enter the PIN code incorrectly three times in succession, you will need a PUK (PIN Unblocking Key) code to unblock the SIM card. When the SIM card is blocked, you can only make calls to preprogrammed emergency numbers. Otherwise, you cannot use the smartphone before you enter the appropriate codes.

Note that this setting cannot be changed, if the phone is switched off or if there is no valid SIM card inserted. Note also that some SIM cards do not allow you to turn the PIN code request off.

Confirm SIM services: (network service) - To set the smartphone to display confirmation messages when you are using a SIM card service.

PIN code: - The PIN code must be from 4 to 8 digits long.

PIN2 code: - The PIN2 code must be from 4 to 8 digits long. The PIN2 code is required to access some functions, such as the call cost settings, which must be supported by your SIM card. If you enter an incorrect PIN2 code three times in succession, you will need a PUK2 code to unblock the PIN2 code. The new PIN2 code must be from 4 to 8 digits long.

Call barring

Barring password: - Tap **Change** to change the barring password. The barring password must be four digits long. If you enter an incorrect password three times in succession, the password is blocked and you must ask the network service provider for a new password.

Screen calibration

Go to **Desk** > **Control panel** > **Screen calibration**.

If the touch sensitive area of the screen responds inaccurately, it may need calibration. Follow the instructions on the screen.

Themes

Go to **Desk** > **Control panel** > **Themes**.

Themes are special files that contain formatting information, images, and sounds. With themes you can change the look and sound of your smartphone. The default themes cannot be deleted.

➪**To change the look or sound of your smartphone**, tap **Themes**. Select a theme from the list and tap **Apply**. **To preview a selected theme**, tap **Test**, then **Preview**. Tap **Sounds** to listen to the sounds of the theme, if available.

Device language

Go to **Desk** > **Control panel** > **Device language**.

➪**To change the language of your smartphone**, tap **Device language:**. Changing the language also affects some regional settings, such as currency symbols and measurement units.

Service commands

Go to **Desk** > **Control panel** > **Service commands**.

You can send service requests, such as activation commands for network services to your service provider. For more information, contact your service provider.

➪**To send a request**, write it in the field, and tap **Send**.

Virtual private networking

With **virtual private networking** (VPN), you can create encrypted connections to information you need while away from the office. You are in touch and in control with encrypted access to your enterprise network for email, database applications, and intranet.

Remote network traffic needs to be protected. Your company might use a VPN to tunnel network traffic and apply appropriate security policies. A VPN helps provide network transactions with privacy and integrity and allows users to be authenticated and authorized for access to networks and network services.

To create a VPN, a gateway and the smartphone authenticate each other and negotiate encryption and authentication algorithms to help protect the privacy and integrity of the information that you access.

▼ **Note:** The VPN system of the Nokia 7710 smartphone currently supports the following gateways: Nokia IP VPN Gateway, Cisco VPN 3000 Concentrator Series and Nokia IP Security Platform. Search www.nokia-asia.com for up-to-date information on other supported gateways.

Managing virtual private networking

To use VPN connections, you first create VPN access points, and then select VPN access points when you use applications to connect to the enterprise. A VPN connection is created to the enterprise network over another type of Internet access point connection. The connection is created and encrypted according to a VPN policy that is loaded when you connect to a VPN access point.

✑ **To use virtual private networking**

1 Go to **Desk** > **Control panel** > **VPN management**..
2 Specify a connection to a VPN policy server.
  You can specify settings for a VPN policy server in *VPN management* or install the settings from a **Symbian installation system** (SIS) file.
  For more information, see "Connecting to VPN policy servers" on page 128.

▼ **Note:** If you install VPN policies from SIS files, you do not have to create connections to VPN policy servers.

3 Install VPN policies from the VPN policy server.
For more information, see "Installing VPN policies from VPN policy servers" on page 125.

4 Create VPN access points.
VPN access points specify an Internet access point and a VPN policy. For more information about creating access points, see "Setting up an Internet access point" on page 114.

▼**Note:** VPN access points combine VPN policies with Internet access points. When you synchronise a VPN policy server for the first time, matching VPN access points are created for each policy that you install on the smartphone.

5 Select a VPN access point when you use applications to connect to the enterprise network.
For more information, see "Using VPN with applications" on page 132.
A VPN connection is created on top of the Internet access point connection.

Managing VPN policies

VPN policies define the method that VPN client and a VPN gateway use to authenticate each other and the encryption algorithms that they use to help protect the confidentiality of the data. Administrators create VPN policies and store them on VPN policy servers or deliver them to you as SIS files. You install VPN policies from a VPN policy server in *VPN management*.

Installing VPN policies from VPN policy servers

In *VPN management*, you can install VPN policies from a VPN policy server.

☀**Tip:** VPN policy servers are servers on the enterprise network that contain VPN policies.

⇨**To install VPN policies**

1 Go to *Control panel* > *VPN management*.
2 Tap *Yes* when *VPN management* prompts you to install VPN policies.
3 Tap *Yes* again to add VPN policy servers.
4 Specify settings for connecting to a VPN policy server and tap *Done*.
For more information, see "Connecting to VPN policy servers" on page 128.
5 Tap *Yes* to synchronise the VPN policy server.
6 Create a key store password and tap *OK*.

☀**Tip:** A key store password helps protect private keys in VPN policies and VPN policy server connections from unauthorized use.

For more information, see "Creating or changing a key store password" on page 132.
The smartphone connects to the VPN policy server.
7 Verify the identity code of the VPN policy server and enter the missing characters to establish trust between the smartphone and the VPN policy server and tap *OK*.

You can skip this step if you install the settings for the VPN policy server from a SIS file.

☀**Tip:** A VPN policy server identity code is the fingerprint of the VPN policy server certificate, which identifies the certificate.

For more information, see "Adding VPN policy servers" on page 129.

8 Enter authentication information to access the VPN policy server and tap *OK*.
Administrators tell you what information to enter.

VPN policies are installed on the smartphone.

▼**Note:** If you tap *Cancel*, VPN policies are not installed. Select *Install* to install VPN policies from a VPN policy server.

Installing VPN policies from SIS files

Administrators can deliver VPN policies to you as SIS files. If you install VPN policies from SIS files, you do not have to define connections to VPN policy servers. After you install VPN policies, you can create VPN access points and associate them to applications.

If the VPN policies contain private keys and corresponding certificates, administrators define **key import passwords** to help protect the private keys. Administrators should use a secure method to deliver the key import password to you.

☀**Tip:** A key import password helps protect the private keys in a VPN policy file.

⇨**To install VPN policies from SIS files,** write the key import password in *Key import pass.:* and tap *OK*. Then write the key store password in *Key store password* and tap *OK*.

Viewing VPN policies

In *VPN management*, you can view, update, and delete the VPN policies that you install on a smartphone.

⇨**To view VPN policy details,** select a VPN policy and tap *Open* to view more information.

Scroll to view the following information about each VPN policy:

- *Description:* shows additional information about the VPN policy. The description is read from the VPN policy. Administrators define the description when they create the VPN policy.
- *Policy status:* indicates whether the VPN policy is ready to use or not or whether it is already in use.
- *Certificate status:* indicates whether valid user certificates are available in the smartphone.
- *Policy name:* shows the name of the VPN policy. Administrators define the name when they create the VPN policy.

- *Policy server:* shows the name of the VPN policy server from where you installed the VPN policy. You give names to VPN policy servers when you define connections to VPN policy servers. This field is hidden if you installed the VPN policy from a SIS file.
- *Updated:* shows the date when the VPN policy was last updated from the VPN policy server. This field is hidden if you installed the VPN policy from a SIS file.

Checking policy status

Policy status: can have the following values:

In use – you created a connection to a VPN access point that is associated with the VPN policy. When you create a connection, the VPN policy is activated.

Associated with VPN access point – you associated the VPN policy with one or several VPN access points. You can select any of the VPN access points to activate the VPN policy.

Not associated with VPN access point – you must associate the VPN policy with a VPN access point to activate the VPN policy.

▼**Note:** The VPN policy details view is not refreshed if the policy status changes while the view is open.

Checking certificate status

Certificate status: can have the following values:

Unknown – VPN client cannot determine the status of the certificates.

OK – at least one valid certificate is available in the smartphone or you do not use certificates to authenticate to VPN gateways.

Expired – lifetime of one or more certificates has ended. If you cannot create a VPN connection, update the VPN policy to enroll new certificates.

No certificate – One or more of the required certificates cannot be found on the smartphone. If you cannot create a VPN connection, try to update the VPN policy to enroll new certificates.

Not yet valid – one or more certificates are for future use. This value might also mean that the date and time on the smartphone are set in the past, time zones are not set correctly, or the daylight-saving setting is turned on.

⇨**To delete the VPN policy,** tap *Delete*.

⇨**To close the VPN policy details,** tap *Close*.

Updating VPN policies

When you create a connection to a VPN access point, VPN client checks the status of the VPN policy that is associated with the VPN access point from the VPN policy server. If administrators created a new version of the VPN policy, the new version is installed on the smartphone. If administrators deleted the VPN policy from the VPN policy server, the VPN policy is removed from the smartphone.

Changes become effective the next time you create a connection to the VPN access point, so they do not affect the current VPN connection.

You can also update a VPN policy in *VPN management*.

➪**To update a VPN policy,** select a VPN policy and tap *Update*. VPN client checks the status of the VPN policy from the VPN policy server.

Deleting VPN policies

VPN policies are deleted automatically after administrators delete them from the VPN policy server when you update a VPN policy or synchronise the VPN policy server.

If you delete a VPN policy in *VPN management* that still exists on the VPN policy server, the VPN policy is installed again when you synchronise VPN policies from the VPN policy server.

➪**To delete a VPN policy,** select the VPN policy, and tap *Delete*.

You cannot use a VPN access point if you delete the VPN policy that is associated with it.

Managing VPN policy servers

In *Policy servers*, you can install VPN policies from VPN policy servers. When you create a connection to a VPN access point, the smartphone connects to the VPN policy server to automatically update the VPN policy that is associated with the VPN access point. To update all VPN policies, synchronise VPN policy servers with the smartphone.

Connecting to VPN policy servers

When you install VPN policies from a VPN policy server, you create a trust relationship between the smartphone and the VPN policy server. To create the trust relationship, you must authenticate the VPN policy server and the VPN policy server must authenticate you.

After the VPN policy server authenticates you, VPN client generates a private key and enrolls a corresponding certificate for you. The private key and certificate are stored in a key store on the smartphone. The certificate authenticates you to the VPN policy server.

☀**Tip:** Administrators can deliver to you a SIS file that contains settings that specify a connection to a VPN policy server or you can add the VPN policy server in *VPN management*.

Installing settings from SIS files

You can install VPN policy server settings on the VPN policy server from a SIS file. You install the settings on a smartphone in the same way that you install other software.

The settings consist of the address and server certificate of the VPN policy server. The server certificate makes the smartphone trust the VPN policy server, so you only need to present a user name and password to prove your identity.

The SIS file does not contain settings for the Internet access point to connect to the VPN policy server. To specify the Internet access point, edit VPN policy server settings. You can also select the Internet access point when you connect to the VPN policy server.

If administrators do not sign the SIS file, a security warning is displayed when you install the SIS file. You can ignore the warning if you can be sure that you received the SIS file from administrators.

You must exit *VPN management* before you install the settings from a SIS file or installation fails.

Adding VPN policy servers

In *Policy servers*, you can specify settings for a VPN policy server if you do not install the settings from a SIS file.

When you connect to the VPN policy server address for the first time, the smartphone does not trust the VPN policy server, so you must authenticate the VPN policy server. You receive a VPN policy server identity code from administrators. You check and complete the VPN policy server identity code and VPN client verifies it.

After successful authentication, VPN client enrolls a certificate from the VPN policy server for subsequent authentication to the VPN policy server.

⇨**To add a VPN policy server,** tap *New*. Enter the following settings:

- *Server name:* – you can choose any name, but it must be unique in *Policy servers*.
  If you leave this field empty, *Server address:* is inserted in this field.
  The policy server name appears in the VPN policy server list.
- *Server address:* – host name or IP address of the VPN policy server to install VPN policies from. You can also specify a port number, separated with a colon (:).
  You receive the policy server address from administrators.
- *Internet access point:* – Internet access point used to connect to this VPN policy server.
  Administrators tell you which access point to select.

⇨**To install VPN policies from the VPN policy server,** tap *Yes* when *VPN management* prompts you to sychronise the VPN policy server.

⋇**Tip:** Synchronising means that VPN client connects to a VPN policy server to check for new, updated, or removed VPN policies and installs the VPN policies on the smartphone.

When you connect to the VPN policy server address for the first time, the VPN policy server is not trusted, so you must authenticate the VPN policy server. You receive a VPN policy server identity code from administrators.

↪ **To verify the identity of the VPN policy server,** carefully compare the VPN policy server identity code in the *VPN policy server identity code* dialog with the code that you receive from administrators, enter the missing characters in *Missing chars.*; and tap *OK*.

▼ **Note:** If you install VPN policy server settings from a SIS file, you do not have to verify VPN server identity and this view never appears.

↪ **To authenticate to the VPN policy server,** enter your user name in *User name:* and password in *Password:* and tap *OK* in the *VPN policy server authentication* dialog.

Administrators tell you the user name and password to enter.

⁖ **Tip:** A policy server user name and password help protect the VPN policy server from unauthorized access.

VPN client enrolls a certificate for subsequent authentication to the VPN policy server and installs VPN policies on the smartphone.

⁖ **Tip:** Enrolling a certificate means sending a certification request to a certification authority and receiving a certificate.

You can now create VPN access points and associate them with applications.

Editing VPN policy servers

In *Policy servers***, you can view, edit, synchronise, and delete** VPN policy servers.

↪ **To view or change the settings for a VPN policy server,** select the VPN policy server and tap *Edit* to change:

- *Server name:* - name for the policy server. *Policy servers* shows the new name.
- *Internet access point:* - Internet access point used to connect to this VPN policy server.
  If you deleted the access point that is associated with the VPN policy server, *Internet access point:* shows the text *Not selected*. If you deleted all access points, *VPN management* cannot save the settings.

You cannot change *Server address:* after you install VPN policies from the VPN policy server, because the VPN policy server sends the address to VPN management during the first connection.

↪ **To delete a VPN policy server,** tap *Delete*.

↪ **To save the settings,** tap *Done*.

⁖ **Tip:** To close the view without saving your changes, press Esc key ◁.

Synchronising VPN policy servers

⇨**To install and update policies from the VPN policy server,** select a VPN policy server and tap *Synchronise*. VPN client connects to the VPN policy server to check whether administrators added, updated, or deleted VPN policies.

If the VPN policy server contains new VPN policies or new versions of VPN policies, the VPN policies are installed on the smartphone. If administrators deleted VPN policies from the VPN policy server, the VPN policies are removed from the smartphone.

▼**Note:** When you synchronise a VPN policy server for the first time, matching VPN access points are created for each policy that you install on the smartphone. VPN access points combine VPN policies with Internet access points. When you connect to a VPN policy server to install or update VPN policies, you might need to enroll VPN certificates from the VPN policy server.

Enrolling VPN certificates

VPN client creates a certification request for each required certificate and sends the request to the VPN policy server. The VPN policy server enrolls each requested certificate from a **certification authority** and returns it to VPN client.

The certification request and the corresponding certificate contain the identity of the user. Depending on the VPN policy server configuration, the VPN policy server user identity might be used as the user identity in VPN certificates. If this is not possible, *VPN management* asks the user identity from you for a particular domain. Administrators tell you what information to enter.

⇨**To create certification requests,** in the *VPN user identity* dialog, enter your certificate user identity for the specified domain in *User identity:* and tap *OK*.

Viewing the VPN log

The VPN log contains log messages that are recorded when you update and synchronise VPN policies and use VPN access points to create VPN connections to VPN gateways.

In *Log*, you can view and clear log messages. You can view the message write, the time when each message is recorded, and the beginning of the log message.

● indicates error, ▌ warning, and ▌ information.

⇨**To view the complete log message,** tap *Open*.

Log sorts log messages by the time and date when they are recorded, most recent messages first. You can view messages up to the time when you opened *Log*.

Virtual private networking

▷To view the most recent log messages, tap *Reload*.

Log messages can contain error, status, and reason codes. Report the codes to administrators when you report errors.

▷To delete all log messages from the log, tap *Clear log*.

Log messages are recorded to a circular buffer. When the log size reaches 20 kilobytes, new log messages are written on top of the oldest log messages.

Key store passwords

In *Key store password*, you can create or change a key store password. A key store password helps protect private keys in the smartphone and VPN policy server connections from unauthorized use.

Creating or changing a key store password

You create a key store password when you install the first VPN policy. Create key store passwords that are long and difficult enough to help protect the information in the smartphone. If the key store password is broken, the enterprise network might be exposed to unauthorised access.

☀Tip: A key store password must be at least six characters long and can contain letters, numbers, and special characters.

▷To change the key store password, tap *Set*.

Enter a password that is easy for you to remember but difficult for anyone else to guess in *New password:*. To avoid typing errors, enter the password again in *Verify password:* and tap *OK*.

Entering key store passwords

You must enter the key store password when you:
- Install new or updated VPN policies from VPN policy servers.
- Use applications to connect to VPN access points that require certificate authentication.

Using VPN with applications

When you use an application to create a connection to a VPN access point, the smartphone:
- Connects to the Internet access point that is associated with the VPN access point.
- Loads the VPN policy that is associated with the VPN access point.
- Connects to a VPN gateway to create a VPN connection.

Authenticating to VPN gateways

You need to prove your identity when you log on to the enterprise VPN. The VPN policy determines the authentication method that you use:

- Certificate-based authentication - you must have a certificate that a trusted certification authority signs. You use online certificate enrollment to obtain the certificate or you install certificates when you install the VPN policy from a SIS file.
- Legacy authentication - you use user names and passwords or passcodes to authenticate. Administrators create the user names and passwords or give you SecurID tokens to generate the passcodes.

⇨**If you use certificates for authentication,** enter the key store password.

⇨**If you use legacy authentication,** enter VPN authentication information when you use applications to connect to VPN access points and the smartphone negotiates encrypted connections with the VPN gateway.

⇨**To use usernames and passwords to authenticate to a VPN gateway,** enter your VPN user name in *VPN user name:* and VPN password in *VPN password:*. Tap *OK*

⇨**To use usernames and passcodes to authenticate to a VPN gateway,** enter your VPN user name in *VPN user name:*. Generate a SecurID passcode and enter it in *VPN passcode:*. Tap *OK*

If the SecurID token has become out of synchronisation with the time clock of the ACE/Server, you are prompted for the next passcode that the ACE/Server uses as a new reference for the time base of the token. Enter your VPN user name in *VPN user name:*. Generate and enter a new passcode in *Next passcode:* and tap *OK*. If this fails, contact administrators.

Troubleshooting

This section lists error messages in alphabetical order, describes the possible causes of the errors, and suggests actions to recover from the errors.

Authentication failed. Check user name and password.

- You enter an incorrect user name or password when you authenticate to a VPN policy server or log on to a VPN.
- You enter the wrong passcode when you are prompted for the Next passcode.

Try the following solutions:

- Check your user name and password and try again.
- Generate and enter a passcode.

Unable to log on to policy server. Enter policy server user name and password.

The certificate that authenticates you to the VPN policy server expires or administrators revoke the certificate.

Report this error to administrators, who give you a one-time password for logon. Enter the user name and one-time password to authenticate to the VPN policy server. VPN client enrolls a new certificate for you.

Unable to log on to policy server. See VPN log for details.

The validity period of the certificate that authenticates you to the VPN policy server has not begun yet.

Check the date and time settings or wait until the validity period of the certificate begins.

Unable to use VPN client. Cryptographic library is too weak.

If the cryptographic library that is installed on the smartphone is too weak, you cannot use VPN connections.

Contact administrators.

Incorrect password

You enter an incorrect key store password or key import password.

Check the password and try again.

You receive the key import password from administrators. You create the key store password yourself.

Policy server is currently in use. Unable to delete.

You cannot delete a VPN policy server while you update VPN policies from the server. If you use an application that creates a connection to a VPN access point, VPN policies are automatically updated.

Wait until VPN policy update finishes and try again.

Unable to log on to policy server. Delete server and redefine details.

The server certificate of the VPN policy server expires.

⇨ **To delete the VPN policy server,** select the VPN policy server in *Policy servers* and tap *Delete*.

⇨ **To add the VPN policy server again,** tap *New*, or ask the administrator for a SIS file that contains new settings for the VPN policy server.

Unable to update policy. See VPN log for details.

Unable to synchronise. See VPN log for details.

An error occurs while VPN policies are downloaded from the VPN policy server or installed on the smartphone.

⇨ **To update a VPN policy,** select a VPN policy in *Policies* and tap *Update*.

⇨ **To install policies from the VPN policy server,** select a VPN policy server in *Policy servers* and tap *Synchronise*.

Incorrect server identity code

You enter an incorrect string when you are prompted to enter the VPN policy server identity code.

Check the VPN policy server identity code carefully against the code that you receive from administrators and enter the missing characters again.

Unable to activate VPN connection. See VPN log for details.

Legacy authentication failed or the certificate that you use to authenticate to the VPN gateway is missing, expired, or its validity period has not begun yet.

Check the date and time settings on the smartphone.

⇥**To update a VPN policy,** select a VPN policy in *Policies* and tap *Update*.

VPN policy deleted. Try redefining VPN access point.

The VPN policy that was associated with the VPN access point became obsolete and was deleted automatically.

To associate another VPN policy with the VPN access point, in Control Panel > Internet Setup, select the VPN connection again and associate a valid policy to it.

File manager

In the File manager application you can move, copy, rename and open files and folders.

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

Tip: Use the File manager application together with a memory card to remove files and folders from the internal memory and in that way free memory. See "Managing memory cards" on page 137.

Fig. 33: File manager

➪**To open a file or folder**, double-tap it.

➪**To reopen a recently opened file**, press ▤ and select *File* > *Recent files*. Select the file you want to open.

➪**To view the details of a file or folder**, press ▤ and select *Tools* > *Details*. If you select the *Read-only:* check box, the file cannot be modified.

Managing files

➪**To find a file**, tap **Find**. Enter the name or part of the name of the file that you are looking for. You can also search according to file types. To make the search more accurate, tap **Options** and define the search location and the date interval of searched files. Tap **Find** to start the search.

➪**To create a new file**, press ▤ and select *File* > *New file...*. Define the type of file and the location where the new file is saved.

➪**To change the sorting order of the files**, press ▤ and select *Display* > *Sort...*. Select both the category according to which to sort the files, and the sorting order.

Managing folders

⇨ **To close a folder and move up in the folder hierarchy**, tap **Up one level**.

⇨ **To create a new folder**, press `≣` and select *File* > *New folder...*. Give the new folder a name and select a location.

⇨ **To rename a selected file or a folder**, press `≣` and select *File* > *Rename...*.

Managing memory cards

⇨ **To change from internal drive to memory card**, press `≣` and select *Browse* > *Memory* > *Memory card*.

⇨ **To rename a memory card**, press `≣` and select *Memory card* > *Rename...*.

⇨ **To format a memory card**, press `≣` and select *Memory card* > *Format*. **All memory card data will be permanently deleted!** Tap **Format** to proceed with the formatting. Formatting also removes the password protection of the card.

⇨ **To back up information to a memory card**, press `≣`, select *Tools* > *Backup/Restore...* and tap **Backup**. Select, whether you want to back up all data or only specified file types. Tap **OK** to start copying. It is advisable to take back-ups of your smartphone data regularly.

⇨ **To restore information from a memory card**, press `≣`, select *Tools* > *Backup/Restore...* and tap **Restore**.

⇨ **To set a password for a memory card**, press `≣`, select *Tools* > *Set password...*, and enter the password in both fields. To edit the password, press `≣`, and select *Tools* > *Edit password...*.

For more information on memory cards, see "Removing and installing the memory card" on page 17.

Note also that you with Nokia PC Suite you can back up data to your PC. For more information on the back-up options available with Nokia PC Suite, see the Nokia PC Suite guide on the CDROM.

Log

Go to **Desk** > **Log**.

With the Log application you can monitor phone calls, messages, and data connections registered by the smartphone. You can filter the log to view just one type of event and create contact cards based on the log information.

⇨ **To select the type of events you want to view**, press and select *View group* > *All communication* / *Voice calls* / *Messages* / *GPRS connections* / *Data calls*. Note that certain events, such as a text message sent in more than one part and GPRS connections, are logged as one communication event.

⇨ **To sort the event list**, tap **Sort** and select the order in which you want to sort the list.

⇨ **To view details of an event**, select the log event and tap **Details**. For example, you can see the sender or recipient name, phone number, name of the service provider, or access point. **To copy the phone number displayed in a log event**, tap **Copy number**.

⇨ **To clear the contents of the entire log**, press and select *Edit* > *Clear log*. The recent calls list is also cleared. **To clear a single event from the log**, select the event, press and select *Edit* > *Delete communication detail*.

⇨ **To specify the log duration**, press and select *Tools* > *Log duration...*. Tap the and to set the number of days. The log events remain in the smartphone memory for a set number of days after which they are automatically erased to free memory. Note that if you select zero (0) for the value, logging is disabled and all the log contents, Recent calls register, and Messaging delivery reports are permanently deleted. Note also that the maximum number of registered log events is 300, after which the events are deleted, starting from the oldest events.

⇨ **To call a phone number displayed in the log**, select the log event and tap **Call**. **To send a message to the number**, press and select *Options* > *Create text message...*.

⇨ **To add the phone number to contacts**, press and select *Options* > *Add to Contacts...*.

Recent calls

In the **Recent calls** dialog you can view dialled, received and missed calls. You can also select a phone number and call that number or add it to Contacts.

⇨ **To monitor the phone numbers of dialled, received, and missed calls**, press 🔳 and select *Options* > *Recent calls*. The smartphone registers missed and received calls only if the network supports these functions, and the smartphone is switched on and within the network's service area.

⇨ **To erase the recent calls list**, press 🔳 in the main view of Log and select *Edit* > *Clear log*. The content of both the recent calls list and the entire event log is cleared.

Call duration and GPRS data counter

⇨ **To monitor the duration of calls**, press 🔳 and select *Tools* > *Call duration*. The list shows the approximate duration of your incoming and outgoing calls. **To clear the call duration timers**, tap **Clear timers**. For this you need the lock code.

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

⇨ **To view the GPRS data counter**, press 🔳 and select *Tools* > *GPRS data counter*. The list shows the amount of data sent and received during packet data (GPRS) connections. For example, you may be charged for your GPRS connections by the amount of data sent and received. **To clear the GPRS data counters**, tap **Clear counters**. For this you need the lock code.

Converter

You can use the Converter to convert units of measurement and currencies.

▼ **Note:** The converter has limited accuracy and rounding errors may occur.

⇨ **To convert a unit**, select the unit type in the left column, select the unit to convert from in the upper field of the right column, and the unit to convert to in the lower field. Enter the value to convert in the upper *Amount:*field. Tap the right column to refresh the display, if necessary.

Converting currency

⇨ **To set the base currency**, press ⋮ , and select *Set base currency*. Select the default currency from the list.

⇨ **To set the exchange rate before converting**, press ⋮ , and select *Edit currencies...*. Select the currency to edit, tap **Edit**, and enter the current exchange rate.

⇨ **To add a new currency**, press ⋮ , and select *Edit currencies...*. Tap **New**, and enter the required information.

⇨ **To delete a currency**, press ⋮ , and select *Edit currencies...*. Select the currency, and tap **Delete**. Tap **Delete** again to confirm.

Cell broadcast

Go to **Desk** > **Cell broadcast**.

In areas where Cell Broadcast Service (CBS) is available, you can receive messages on various topics such as, for example, weather or traffic conditions, from your service provider. For available topics and relevant topic numbers, contact your service provider.

Cell broadcast is a network service. Check with your service provider to see whether CBS is available.

Note that a packet data (GPRS) connection may prevent cell broadcast reception. Contact your network operator for the correct GPRS settings.

Reading and managing messages

⇨**To read a message**, tap **Read**.

⇨**To save a message** you are reading, press ⚏ and select *Edit* > *Save message*.

⇨**To delete a message** you are reading, press ⚏ and select *Edit* > *Delete message*.

⇨**To lock a message** you are reading, press ⚏ and select *Edit* > *Lock message*. You can lock a message to make sure that it won't be deleted, if new messages of the same topic are received.

⇨To **go to the next or previous message**, tap **Next** or **Previous**.

⇨**To start or stop receiving CBS messages**, tap **Reception on** or **Reception off**.

Managing topics

☀**Tip:** You can search for different topics. Enter a topic name in the search field.

⇨**To be notified of a specific new topic**, press ⚏ and select *Topic* > *Hotmark*. The hot topic is marked with an exclamation mark "!".

⇨**To edit or remove topics when the reception is off**, press ⚏ and select *Topic* > *More options* > *Edit topic...* or *Delete topic(s)*. Note that you cannot edit topics in the All list view.

⇨**To subscribe**, scroll to a topic and press **Subscribe**. A check mark is displayed in the box on the left-hand side of the topic. **To unsubscribe**, tap **Unsubscribe**.

⇨**To create a new topic list**, press ⚏ and select *Lists* > *Manage lists...*. Tap **New** and enter a name for the new list.

➪ **To change the name of a topic list**, press ⊡ and select *Lists* > *Manage lists...*. Select the list you want to rename and tap **Rename**. Note that the reception must be turned off.

➪ **To open a different topic list**, press ⊡, select *Lists* and select the topic list you want to open.

In different topic lists, you can still subscribe to and unsubscribe from topics and set them as hot topics.

Cell broadcast settings

➪ **To modify the settings**, press ⊡ and select *Tools* > *Settings...*. Define the following:

Add new topics to list: – If you select this option, all new topics are added automatically to your current list of topics. If you do not select this option, you will receive only the messages concerning subscribed or hot topics that you already have in your topic list.

Language: – Select the language of the topics you want to receive. Select *All* to receive topic messages in all languages.

☀ **Tip:** Create a new empty topic list, select the *Add new topics to list:* option and all languages in the setting above to receive a complete list of topics available in that area.

Reception on: – Select this to allow for automatic reception.

Reception on' time: – Tap 🕰 to define the time when automatic reception starts.

Reception off' time: – Tap 🕰 to define the time when automatic reception ends.

Message deletion interval (hours): – Define the time period after which all the read messages will be removed.

Connectivity

Bluetooth connection

Go to **Desk** > **Control panel** > **Bluetooth**.

This smartphone is compliant with Bluetooth Specification 1.1, which supports the following profiles: Dial-Up Networking Profile, Object Push profile, File Transfer Profile, and Handsfree Profile. 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.

Bluetooth technology enables wireless connections for sending images, texts, business cards, calendar notes, or to connect wirelessly to compatible devices with Bluetooth wireless technology, for example, computers.

Since devices with Bluetooth technology communicate using radio waves, your smartphone and the other device do not need to be in direct line-of-sight. The two devices only need to be within a maximum of 10 metres of each other, although the connection can be subject to interference from obstructions such as walls or from other electronic devices.

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, increase the demand on battery power and reduce the battery's life.

Activating Bluetooth application for the first time

1 Open the Control panel application and select *Bluetooth*.
2 Give a Bluetooth name to your smartphone. Write a name (max. 82 characters) or use the default name. If you send data via Bluetooth before you have given an individual Bluetooth name to your smartphone, the default name will be used.
3 Select the *Switch Bluetooth on:* check box to enable Bluetooth. If you clear the check box, all active Bluetooth connections are ended, and Bluetooth cannot be used for sending or receiving data.
4 Select the *Visible to all:* check box so that your smartphone and the name you chose for it can be seen by other Bluetooth device users. If you clear the check box, your smartphone cannot be found by other devices during the device search.
5 Tap **OK** to save the settings and close the dialog.

➭ **To deactivate the Bluetooth application**, tap ❸ on the status indicator area and select **Switch off**. Bluetooth cannot be used for sending or receiving data until you select the *Switch Bluetooth on:* check box again. Note that a Bluetooth connection is normally disconnected automatically after sending or receiving data. Only with some accessories like headsets the connection may be maintained even if it is not actively used.

Sending data via Bluetooth

You can only send data to one device at a time.

1 Open an application where the item you wish to send is stored. For example, to send a photo to another device, open the Images application.
2 Select the item you want to send and tap **Send**, or press ☰ and look for the *Send* > *Via Bluetooth* command.
3 If you have searched for Bluetooth devices earlier, a list of the devices that were found previously is shown first. You can see a device icon and the device's Bluetooth name.
4 To start a new search, tap **New search**.
5 Select the device you want to connect with and tap **Send**.
6 If the other device requires pairing before data can be transmitted, you are asked to enter a passcode. Create your own passcode (1-16 characters long, numeric) and agree with the owner of the other Bluetooth device to use the same code. This passcode is used only once and

you do not have to memorise it. Devices that do not have a user interface have a factory-set passcode. When the connection has been successfully established, the note *Sending* is shown.

Data received via Bluetooth can be found in the Inbox folder in Messaging. For more information, see "Folders" on page 48.

Note that if sending fails, the message or data will be deleted. The Drafts folder in Messaging does not store messages sent via Bluetooth.

Receiving data via Bluetooth

To be able to receive data via Bluetooth, make sure you have set Bluetooth as active and selected the *Visible to all:* check box in the **Bluetooth** dialog.

When you receive data via Bluetooth from a device that is not authorised, you are first asked if you want to accept the Bluetooth message. If you accept, the item is placed in the Inbox folder in the Messaging application.

Paired devices

Pairing means authentication. Pairing with a device makes device searches quicker and easier.

The users of the Bluetooth-enabled devices should agree together what the passcode is, and use the same passcode for both devices in order to pair them.

Pairing with a device

1 Open the Control panel application and select *Bluetooth*. You can also pair devices before transmitting data.

2 Tap **Paired devices**. Paired devices are shown in the list.

3 Tap **Search** to open the *Search for devices* dialog. If you have searched for Bluetooth devices earlier, a list of the devices that were found previously is shown first.

4 Tap **Start** to update the found devices list, if necessary, select the device you want to pair with, and tap **Pair**.

5 Write the passcode and tap **OK**.

▷ **To assign short names for paired devices**, open the Control panel application, select *Bluetooth*, then tap **Paired devices**. Select the device whose name you want to change and tap **Edit**. You can define a short name (nickname, alias) to help you recognise a certain device. This name is stored in the device memory and cannot be seen by other Bluetooth device users.

☼ **Tip:** Choose a name that is easy to remember and recognise. Later when you are searching for devices or a device is requesting a connection, the name you have chosen will be used to identify the device.

▷ **To cancel pairing**, open the Control panel application, select *Bluetooth*, then tap **Paired devices**. Select the device whose pairing you want to cancel and tap **Delete**. If you are currently connected to a device and delete the pairing with that device, pairing is removed immediately and the connection will be ended.

▷ **To authorise paired devices**, open the Control panel application, select *Bluetooth*, then tap **Paired devices**. Select the paired device you want to authorise and tap **Edit**. Clear the *Confirm connection requests:* check box. Connections between your smartphone and the other device can be made without your knowledge. No separate acceptance or authorisation is needed. Use this status for your own devices, for example, your own PC, or devices that belong to someone you trust. The icon is added next to authorised devices in the list of devices. **To set paired devices to be unauthorised**, select the *Confirm connection requests:* check box. Connection requests from this device need to be accepted separately every time.

Connecting your smartphone to a compatible computer

You can connect your smartphone to a compatible PC with the supplied DKU-2 connectivity cable. For further information on how to make a connection to a compatible computer via Bluetooth, and on how to install the Nokia PC Suite, see the Nokia PC Suite guide on the CD-ROM. For further information on how to use the Nokia PC Suite, see the Nokia PC suite online help.

End phone calls, close documents, and stop all other active processes on the smartphone before connecting your smartphone to a PC with the connectivity cable.

Using the CDROM

The sales package CDROM is compatible with Windows 2000/XP. The CDROM should launch itself after you have inserted it into the CDROM drive of your compatible PC. If not, proceed as follows:

1 Click the Windows **Start** button and select Programs > Accessories > Windows Explorer.
2 On the CDROM drive, locate a file called Nokia7710.exe and double-click it. The CDROM interface opens.
3 You can find the Nokia PC Suite in the "Install Software" section of the CDROM. Double-click "Nokia PC Suite". The installation wizard will guide you through the installation process.

Using your smartphone as a modem

Note that you cannot make phone calls when you are using your smartphone as a modem.

For information about connecting your smartphone 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.

Nokia PC Suite

The Nokia PC Suite software is supplied on the CDROM that comes with your smartphone. For example, with the Nokia PC Suite software you can synchronise phone book contents and calendar notes between your smartphone and the PC, back up data to your PC, and manage photos captured with the device's camera.

For more information on the applications available with the Nokia PC Suite, see the Nokia PC Suite guide on the CDROM and the online help for each application.

To use the Nokia PC Suite, install it on a compatible PC and connect the smartphone to the PC via Bluetooth connection or use the USB cable DKU-2.

Copying data from compatible devices

You can copy information from many different Nokia phones or from a compatible PC to your smartphone by using the Nokia PC Suite. For details, please see the Nokia PC Suite Guide on the sales package CDROM. The sales package CDROM is compatible with Windows 2000/XP.

System requirements for Nokia PC Suite

- A PC with the Windows 2000 or Windows XP operating system
- At least 250 MB of free disk space and additional space for music tracks
- Either a USB port for cable connection or Bluetooth wireless technology equipment and software for wireless Bluetooh connection

- Bluetooth wireless technology equipment should come with one of the following Bluetooth stacks: Microsoft Windows XP Bluetooth (included in XP SP2), WIDCOMM BTW 1.4 and BTW 3.0, Toshiba Bluetooth Stack for Windows XP/2000, VT BlueSoleil Bluetooth stack for Windows XP/2000. To check what Bluetooth stack your PC has installed: in the Windows Start menu, click *Control Panel* > *System* > *Hardware* > *Device Manager*, or in the Nokia PC Suite main window, click *Help* > *About* > *System Information*.
- To install drivers for the DKU-2 cable, you need Windows 2000 with Service Pack 3 or later, or Windows XP with Service Pack 1 or later.

Installing Nokia PC Suite

Install Nokia PC Suite from the CD-ROM, or from the Nokia PC Suite Web-page at www.nokia.com/pcsuite.

To establish a connection between your smartphone and the PC, you also need drivers on your PC. Drivers for DKU-2 USB connection and Bluetooth connection are installed automatically when you install PC Suite or when you connect your smartphone to the PC with the Get Connected wizard.

Before installation

If you have an earlier version of Nokia PC Suite (5.x or 6.x) installed on your PC, the earlier version is automatically replaced during the installation. If you need to uninstall

the older version manually, the installation program will ask you to do so.

If you want to use a Bluetooth connection, you must install Bluetooth wireless technology software on your PC. For more information on Bluetooth software you can use with Nokia PC Suite, see "System requirements for Nokia PC Suite" on page 146.

If you are upgrading (for example, from PC Suite 6.41 or earlier to PC Suite 6.6), synchronise your smartphone with existing PC Suite before upgrading, to avoid duplicate calendar appointments. When you have installed PC Suite 6.6, rerun synchronisation.

Installing PC Suite 6.6 from a CD-ROM

1 Insert the CD-ROM into the CD-ROM drive of your PC, and click the installation option to start installing Nokia PC Suite 6.6.
2 Select the language, and click *OK*. The installation program starts.
3 Follow the instructions on the screen. You must read and accept the licence agreement before continuing. If you have an older version of Nokia PC Suite installed on your PC, you are informed that it will be uninstalled. You may be asked to restart your computer during the installation.
4 When the installation is complete, the *Get Connected* wizard opens automatically, and you can select the connection types you want to use.

Installing PC Suite 6.6 from the Web

1 Open a web browser, and go to www.nokia.com/pcsuite > Download. The Download Assistant opens.
2 Select Nokia 7710 from the list, and click *Continue*. If there are two versions available for your smartphone, you are asked to select your PC operating system.
3 Select the language to download in the drop-down list, and click *Download*.
4 Save the file on your PC. Click *Continue*, and follow the instructions on the last screen of the Download Assistant.
5 Browse to the downloaded file *Nokia_PC_Suite_66_xx.exe* (where xx stands for the language), and click it. The installation program starts.
6 Follow the instructions on the screen. You must read and accept the licence agreement before continuing.If you have an older version of Nokia PC Suite installed on your PC, you are informed that it will be uninstalled. You may be asked to restart your computer during the installation.
7 When the installation is complete, the *Get Connected* wizard opens automatically, and you can set up the connection types you want to use.

Connecting your smartphone and a PC

Selecting a connection type

When you have installed Nokia PC Suite, the *Get Connected* wizard opens automatically and guides you in configuring the connection type you want to use.

You can connect your smartphone and a PC with a USB cable or Bluetooth wireless technology.

Connection type details

DKU-2 USB cable is a fast and reliable data transfer method between a smartphone and a PC.

Bluetooth wireless technology connects your smartphone wirelessly to your PC within a short range. The smartphone and the PC must be within a 10 metre (about 30 feet) radius of each other.

If you did not receive a cable with your smartphone, you can buy one from your Nokia retailer.

Connection status

You can see the connection status at the bottom of the Nokia PC Suite main window.

If the smartphone gets disconnected, you can reconnect your smartphone to the PC in *Get Connected*. Open *Get Connected* from the bottom of the PC Suite main window.

Connecting your smartphone to a PC with a cable

1 In *Get Connected*, select *Cable connection* as the connection type.
2 Connect the cable to the PC when *Get Connected* prompts you to do so, then connect the other end of the cable to the smartphone.
3 The first time you use a cable connection, you must wait until Get Connected finishes installing the required drivers.

Connecting your smartphone to a PC using Bluetooth

1 Make your smartphone discoverable to other Bluetooth devices, and activate the Bluetooth connection of your smartphone. For instructions, see your smartphone user guide.
2 When you activate Bluetooth for the first time, you are asked to give a name to your smartphone. The name is used whenever you pair your smartphone and a PC.
3 If you use a Bluetooth adapter, ensure it is plugged into the PC.
4 In *Get Connected*, select the Bluetooth stack you want to use from the list of supported Bluetooth stacks.
5 In *Get Connected*, follow the instructions to pair your smartphone with the PC.

Pairing devices for Bluetooth connection

To use Bluetooth as the connection type, you must pair your smartphone and the PC. Pairing means to associate two devices so that they can communicate with each other. You only need to pair the devices once, before you use the connection for the first time. Follow the instructions in *Get Connected*.

When you are prompted to enter the passcode, enter the passcode generated by *Get Connected*. Or, enter a passcode of your choice (1-16 characters, numeric) on the PC, and enter it again on the smartphone. This passcode is used only once, and you do not need to memorise it.

You must authorise the connection between your Nokia smartphone and your PC. Select *Yes* when you see a connection request on the smartphone display.

You can set your PC as authorised, so that individual connections between your smartphone and your PC do not need separate authorisation. Open the *Paired devices* view on your smartphone, select your PC, and edit the PC to be authorised or trusted, depending on the term used in your smartphone.

Remote configuration (network service)

Go to **Desk** > **Device manager**.

The Device manager application helps you configure your smartphone's connection settings, for example, e-mail, multimedia messaging, or Internet settings. The remote configuration connection is usually started by the server when device settings need to be updated.

Remote configuration takes place over a GSM data call or GPRS connection.

The Remote configuration application uses SyncML Device Management version 1.1.1 technology. For information on Remote Configuration compatibility, please contact the supplier of configuration solution you want to manage your smartphone settings with.

➪ **To start a configuration session**, open the Device manager application. Select a profile from the list, press ⌐≣ and select *Configuration* > *Start*.

➪ **To view configuration log**, tap **Log** when the configuration session has ended. The log file shows the configuration status of the selected profile.

➪ **To disable configuration**, press ⌐≣ and select *Configuration* > *Disable all*. You cannot receive configuration settings from any of the configuration servers for which you have a profile. Clear this command to allow the reception of configuration settings from those servers for which you have a profile and have allowed configuration.

Creating a new configuration server profile

Configuration server profile is the settings for the remote server. You can create several profiles if you need to access multiple servers.

You may receive the configuration server profile settings as a special message from your service provider.

1 Open the Device manager application and press ⌐≣. Select *Profile* > *New...*. Choose whether you want to copy the values from an existing profile to be used as the basis for the new profile.

2 The Profile Wizard opens. Define the following:
Server name: – Write a name for the configuration server.
Server ID: – Write the unique ID to identify the configuration server. Contact your service provider or system administrator for the correct value.
Password: – Write a password to identify your device to the server. Confirm the password.
Access point: – Select the access point you want to use for the data connection to the server.
Host address: – Write the URL address of the server. Contact your service provider or system administrator for the correct value.
Port: – Write the port number of the server. Contact your service provider or system administrator for the correct value.
User name: – Write your user name for the server.
Password: – Write your password for the server and then confirm it.
Allow configuration: – Select this to allow the server to initiate a configuration session.
Auto-accept sync requests: – Select this if you do not want the server to ask for your confirmation when it initiates a configuration session.

3 Tap **OK** to save the settings.

⇨**To edit configuration profile settings**, select a profile and tap **Settings**.

Data transfer

Go to **Desk** > **Data transfer**.

The Data transfer application enables you to synchronise or copy your calendar or contacts data between your smartphone and another Bluetooth-enabled mobile phone.

⇨**To start data transfer wizard**, tap **New** and follow the instructions. You can define the type and direction of transfer and select what to transfer.

Synchronisation

Go to **Desk** > **Sync**.

The Sync application enables you to synchronise your calendar or contacts with various calendar and address book applications on a compatible computer or on the Internet. Remote synchronisation takes place over a GSM data call or GPRS connection, local synchronisation takes place via a Bluetooth and USB connection.

The Sync application uses SyncML technology (version 1.1.1) for remote synchronisation. For information on SyncML compatibility, please contact the supplier of the calendar or address book application you want to synchronise with your smartphone.

⇨**To synchronise data**, open the Sync application, select a profile from the list and tap **Synchronise**. You are notified when the synchronisation has been completed.

⇨**To view the synchronisation log**, tap **View** when synchronisation is complete. The log file shows the synchronisation status of the selected profile, and how many calendar or contact entries have been added, updated, deleted, or discarded (not synchronised) in the smartphone or on the server.

Creating a new synchronisation profile

The synchronisation profile is the settings for the remote server. You can create several profiles if you need to synchronise your data with multiple servers or applications.

You may receive the synchronisation settings as a special message from your service provider.

1 Open the Sync application and press ⋮ . Select *Profile* > *New...*. Choose whether you want to copy the values from an existing profile to be used as the basis for the new profile.
2 The Profile Wizard opens. Define the following:
   Name: - Write a descriptive name for the profile.
   Data bearer: - Specify whether you want to synchronise via the Internet or by using local connections.
   Access point: - Select the access point you want to use for the data connection.
   Host address: - Contact your service provider or system administrator for the correct value.

Port: - Contact your service provider or system administrator for the correct value.

User name: - Your user ID for the synchronisation server. Contact your service provider or system administrator for your correct ID.

Password: - Write your password and then confirm it. Contact your service provider or system administrator for the correct value.

3 Select what you want to synchronise: contacts or calendar entries.

4 If necessary, enter the correct path to local calendar or contacts database. Enter also the correct path to the remote calendar or address book on the server. Also specify, the type of synchronisation you want (*Normal*, *To device only*, *To server only*).

5 Tap **Finish** to save the settings.

➪ **To edit synchronisation profile settings**, select a profile and tap **Settings**. In addition to the settings that were defined during a profile creation, you can specify the following:

Allow sync requests: - If you select this, a synchronisation session can be started automatically by the server.

Auto-accept sync requests: - Select this if you do not want the server to ask you for your confirmation when it initiates a synchronisation session.

Troubleshooting

Troubleshooting

- **The smartphone does not start.**
  - Make sure that the battery is properly installed and charged.
  - Make sure that the contacts on the battery are clean.
  - Try to switch on the smartphone by pressing the power key ⊙ for several seconds.
  - Remove the battery, wait for at least ten seconds, and replace the battery.
- **The screen or phone keys flash when I try to charge the battery.**
  - Make sure that the battery is properly installed.
- **The battery does not recharge properly.**
  - Make sure that the connector is firmly in place and the power outlet that you are using is working.
  - Your battery may be at the end of its life cycle or faulty. Contact your local Nokia dealer.
  - While charging, do not use features such as Web browser or RealOne player, which consume a lot of power. Too many power-consuming activities may prevent the battery from charging properly.
- **Missing, discoloured, or bright dots appear on the screen every time I turn on the smartphone.**
  - This is normal characteristic of this type of screen.

- **The touch screen feels inaccurate.**
  - Calibrate the screen. Use the scroll key to open the Control Panel application, select *Screen calibration* and follow the instructions.
- **The smartphone stops responding to some or all commands.**
  - Wait for a while. Some processes may take long to complete. If the device still does not respond, an application may be taking up too much memory. Press ◀ for at least 5 seconds to close all applications except the currently used one. If this does not help, switch off the smartphone, and switch it back on. If there is still no response, switch the phone off, remove the battery, wait for at least ten seconds, and replace the battery. To avoid problems with Web animations, disable plug-ins: In the Web browser, press ☰ and select *Tools* > *Settings...*. Open the Plugins page, and clear the *Enable plug-ins* check box. Disabling plug-ins restricts the functionality of your Web browser.
- **The applications and power key do not respond.**
  - Remove the battery, wait for at least ten seconds and replace the battery.
  - Try charging the smartphone.
  If the procedures described above do not help, as a last resort before contacting your local dealer you can try formatting the internal memory of the smartphone.

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Note that formatting the memory removes all items except the standard applications that have been factory pre-installed in ROM memory!

If you have made a back-up to a memory card, see "Managing memory cards" on page 137.

When you format the internal memory, all the settings, documents, and other data in the internal memory that you have created or modified will be permanently destroyed. To format the internal memory, proceed as follows:

1 Disconnect the charger and remove the battery.
2 Wait for at least ten seconds and insert the battery to start the smartphone.
3 When you see the Nokia Welcome screen, immediately press and hold down the ⌐≣ + ⟲ + ⌐ keys. The ⌐ key should be pressed last.
4 Confirm that you want to format. Formatting starts.

• **I cannot make or receive calls.**
  - Check to see if you have the Flight profile selected. When this profile is active, you cannot make or receive calls.
  - If you can only open Telephone to make emergency calls, your SIM card is not inserted.
  - Check the status of your call barrings and diverts. Open the Telephone application, press ⌐≣ and select *Tools* > *Settings* > *Call barring...* or *Call divert...*.
  - The smartphone may be busy: data is being sent or received, or the smartphone is being used as a modem. Wait for data transmission to end, or end the data call.

• **The call quality is poor.**
  - Your location may not allow better call quality. Move to a location where the radio signal reception is better. Reception is usually better above ground level, outdoors and while stationary. Sometimes even moving the smartphone slightly will improve reception.

• **I cannot divert or bar voice or data calls.**
  - You may have not subscribed to the service in question, or it may not be supported by the network.
  - Make sure that the message centre number and the number to which you want to divert your calls are not missing or incorrect.

• **I cannot send or receive messages or e-mail.**
  - You may have not subscribed to the service in question, or it may not be supported by the network.
  - Make sure you have configured the relevant settings.
  - The smartphone may be low on memory.
  - The number format you use may be invalid.
  - The smartphone may be busy: data is being sent or received, or the smartphone is being used as a modem. Wait for the data transmission to end, or drop the data call.

• **I cannot send multimedia messages.**
  - You may have not subscribed to the service in question, or it may not be supported by the network.
  - Make sure you have configured the relevant settings.
  - The smartphone may be low on memory.

- If you get an error message when inserting a media clip to a message, check that the *Multimedia mode* setting in Multimedia message settings, General page is not set to *Restricted mode:*.

- **I cannot end a Bluetooth connection.**
  - If another device is pairing with your smartphone and leaves the connection open without sending any data, disconnect by deactivating the Bluetooth link altogether. Open the Control panel application and select *Bluetooth*. Clear the *Switch Bluetooth on:* check box.

- **I cannot find another Bluetooth-enabled device.**
  - Check that both devices have activated Bluetooth.
  - Check that the distance between the two devices is not over 10 metres or that there are no walls or other obstructions between the devices.
  - Check that the other device is not in "hidden" mode.

- **The smartphone is running low on memory.**
  - Check if you have received a lot of e-mail or you have saved large images or other items that use a lot of memory. To free up device memory, remove unnecessary data, move large items to a memory card or, if possible, transfer them to a compatible PC. To check the memory consumption, open the Control panel application and select *Memory*.

- **I have PC connectivity problems.**
  - Make sure that Nokia PC Suite for Nokia 7710 is installed and running on your PC. See the Nokia PC Suite Guide for more information.

- If you use a cable connection, check that the cable is properly attached at both ends.
If you use a Bluetooth connection, check that the PC is Bluetooth compatible and has installed and activated Bluetooth drivers.
- For all other Nokia PC Suite problems, see the Nokia PC Suite Guide and the Nokia PC Suite online help.

- **I don't know what my access codes are.**
  - The default lock code for your smartphone is **12345**. If you forget or lose the lock code contact your smartphone dealer.
  - If you forget or lose the PIN or PUK code, or if you have not received such a code, contact your network service provider.

Battery 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 15°C and 25°C (59°F and 77°F). 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.

Nokia battery authentication guidelines

Always use original Nokia batteries for your safety. To check that you are getting an original Nokia battery, purchase it from an authorized Nokia dealer, look for the Nokia Original Enhancements logo on the packaging, and inspect the hologram label using the following steps:

Successful completion of the four steps is not a total assurance of the authenticity of the battery. If you have any reason to believe that your battery is not an authentic original Nokia battery, you should refrain from using it, and take it to the nearest authorized Nokia service point or dealer for assistance. Your authorized Nokia service point or dealer will inspect the battery for authenticity. If authenticity cannot be verified, return the battery to the place of purchase.

Authenticate hologram

1 When looking at the hologram on the label, you should see the Nokia connecting hands symbol from one angle and the Nokia Original Enhancements logo when looking from another angle.

2 When you angle the hologram left, right, down, and up, you should see 1, 2, 3, and 4 dots on each side respectively.

3 Scratch the side of the label to reveal a 20-digit code, for example, 12345678919876543210. Turn the battery so that the numbers are facing upwards. The 20-digit code reads starting from the number at the top row followed by the bottom row.

4 Confirm that the 20-digit code is valid by following the instructions at www.nokia.com/batterycheck.

To create a text message enter the 20-digit code, for example, 12345678919876543210, and send to +44 7786 200276.

- For countries in Asia Pacific excluding India: Key in the 20-digit code, for example 12345678919876543210, and send to +61 427151515.
- For India only: Key in 'Battery' followed by the 20-digit battery code, for example Battery 12345678919876543210, and send to 5555.

National and international operator charges will apply.

You should receive a message indicating whether the code can be authenticated.

What if your battery is not authentic?

If you cannot confirm that your Nokia battery with the hologram on the label is an authentic Nokia battery, please do not use the battery. Take it to the nearest authorized Nokia service point or dealer for assistance. The use of a battery that is not approved by the manufacturer may be dangerous and may result in poor performance and damage to your device and its enhancements. It may also invalidate any approval or warranty applying to the device.

To find out more about original Nokia batteries, visit www.nokiaoriginals.com/check.

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Nokia original enhancements

A new extensive range of enhancements is available for your phone. Select the enhancements which accommodate your specific communication needs. Some of the enhancements are described in detail below.

List of compatible enhancements:

Audio

Fashion Stereo Headset	HS-3
Headset	HS-5
Stereo Headset	HDS-3
Boom Headset	HDB-4
Wireless Headset	HDW-3
Wireless Clip-on Headset	HS-3W
Wireless Boom Headset	HS-4W
Inductive Loopset	LPS-4

Car

Headrest Handsfree	BHF-3
Plug-in Car Handsfree	HF-3
Mobile Charger	LCH-12
Advanced Car Kit	CK-7W

Covers

Changeable covers	

Data

Connectivity Cable	DKU-2
Memory Card	DTS-64
Wireless GPS Module	LD-1W

Imaging

Nokia Remote Camera	PT-6
Image Album	PD-1

Power

Battery	BP-5L
Compact Charger	AC-1A
Travel Charger	ACP-12

Some of the enhancements are described in detail below.

For availability of the enhancements, please check with your local dealer. A few practical rules for enhancements operation:

- Keep the enhancements out of small children's reach.
- When you disconnect the powercord of any accessory, grasp and pull the plug, not the cord.
- Check regularly that all mobilephone equipment in a vehicle is mounted and operating properly.

Use only batteries, chargers and enhancements approved by the phone manufacturer. The use of any other types may invalidate any approval or warranty applying to the phone, and may be dangerous.

Battery

Type	Tech	Talktime#	Standby#
BP-5L	Li-polymer	up to 3.5 hours to 12 hours	up to 175 hours (7 days) to 220 hours (9 days)

Variation in operation times may occur depending on SIM card, network and usage settings, usage style and environments.

Wireless Clip-on Headset HS-3W

Easy-to-wear wireless headset with a clip-on main body and earpiece for both business and pleasure.

The headset uses Bluetooth wireless technology between the main body and a compatible phone. Basic call handling from headset and LED indicating active wireless connection.

Boom Headset HDB-4

This small and lightweight headset has a beautiful and distinctive Nokia design. Gives you excellent audio quality and you can answer or end calls by pressing the button on the microphone part of the headset.

Nokia Advanced Car Kit CK-7W

The Nokia Advanced Car Kit CK-7W offers user-friendly handsfree communication and works with both wireless and wired connections

This kit includes:

- Handsfree Unit HF-5
- Remote Control CU-7
- External HF Speaker HFS-12
- Microphone HFM-8
- Data Cable CA-27
- Mounting Plate MK-2
- Power Cable PCU-4
- User/Installation Guide

Travel Charger ACP-12

A fast and efficient way to charge your phone battery. Suitable for active travelers. Powerful multivoltage charger.

Note: Plug types vary according to different markets.

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.

- Keep the device 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 antennas, modifications, or attachments could damage the device and may violate regulations governing radio devices.
- Use chargers indoors.
- Always create a backup of data you want to keep, such as contacts and calendar notes, before sending your device to a service facility.

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. This device meets RF exposure guidelines when used either in the normal use position against the ear or when positioned at least 2.2 centimeters (0.9 inches) away from the body. When a carry case, belt clip or holder is used for body-worn operation, it should not contain metal and should position the device the above-stated distance from your body.

In order to transmit data files or messages, this device requires a good quality connection to the network. In some cases, transmission of data files or messages may be delayed until such a connection is available. Ensure the above separation distance instructions are followed until the transmission is completed.

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. 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 device 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 15.3 centimeters (6 inches) be maintained between a wireless phone and a pacemaker to avoid potential interference with the pacemaker. These recommendations are consistent with the independent research by and recommendations of Wireless Technology Research. Persons with pacemakers should do the following:

- Always keep the device more than 15.3 centimeters (6 inches) from the pacemaker
- 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 suspect interference, switch off your device, and move the device away.

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

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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, and 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 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.

Using your device while flying in aircraft is prohibited. Switch off your device before boarding an aircraft. The use of wireless teledevices in an aircraft may be dangerous to the operation of the aircraft, disrupt the wireless telephone network, and may be illegal.

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.

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 device 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 device.
2 Press and hold ☎ to show the phone keypad on the screen.
3 Enter the official emergency number for your present location. Emergency numbers vary by location.
4 Press the ☎ key.

WARNING: With Flight profile you cannot make or receive any calls, including emergency calls, or use other features that require network coverage. To make calls, first activate the phone function by changing the profile. If the device has been locked, enter the lock code.

If certain features are in use, you may first need to turn those features off before you can make an emergency call. If the device is in the offline or flight mode, you must change the profile to activate the phone function before you can make an emergency call. Consult this guide or your service provider for more information.

When making an emergency call, give all the necessary information as accurately as possible. Your wireless device 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 DEVICE MEETS INTERNATIONAL GUIDELINES FOR EXPOSURE TO RADIO WAVES

Your mobile device is a radio transmitter and receiver. It is designed and manufactured not to exceed the limits for exposure to radio frequency (RF) recommended by international guidelines (ICNIRP). These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The guidelines include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for mobile devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit stated in the international guidelines is 2.0 watts/kilogram (W/kg)*. Tests for SAR are conducted using standard operating positions with the device 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 of the device while operating can be well below the maximum value. This is because the device 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 base station, the lower the power output of the device.

The highest SAR value for this device when tested for use at the ear is 0.53 W/kg.

SAR values may vary depending on national reporting and testing requirements and the network band. Use of device accessories and enhancements may result in different SAR values. Additional SAR information may be provided under product information at www.nokia.com.

* The SAR limit for mobile devices used by the public is 2.0 W/kg averaged over 10 grams of body tissue. The guidelines incorporate 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.

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