

April 2006

**Nokia & Mobile Photography: A Snapshot**

Mobile camera devices provide a unique ability to spontaneously capture and share your experiences wherever, whenever. Whether you're hanging out with friends, at a concert, visiting somewhere amazing on holiday or simply looking for inspiration in your working life, your camera phone allows you to capture the moment and instantly share it. Full size, uncompressed photos can be shared directly from the handset or stored to edit and print later.

Last year, Nokia sold more than 100 million camera phones, and Nokia's substantial share of this market makes it the world's largest manufacturer of digital camera devices.

As mobile photography functionality develops at such a rapid pace, camera phones are now able to meet the expectations of even the more demanding picture taker.

**A Guide to Mobile Photography**

Whatever your photography needs or wants may be, there is a Nokia camera phone for you. But camera phones are not simply about capturing a moment. All Nokia camera devices offer a range of options to also view, edit, share, store and print the photographs you take.

**1. Capture**

Nokia has an extensive range of megapixel camera devices which allow you to take print-quality photographs. In addition to Carl Zeiss optics on the Nokia N73 and Nokia N93, the Nokia Nseries portfolio features a range of different settings to capture the best quality image:



- Zoom – get a little closer to the target. The Nokia N93 features 3x continuous optical zoom and all other Nokia Nseries devices feature 20x digital zoom.
- Autofocus – the high-performance autofocus feature on the Nokia N73, Nokia N90 and Nokia N93 makes taking beautiful, sharp photographs simple. Pressing the shutter key halfway focuses in on the target, after which pressing the key all the way captures the image. Furthermore, the advanced autofocus on the Nokia N73 renders crisper detail in the photographs thanks to reduced movement distortion.
- Macro mode – allows you to get sharp pictures even within very short distances. With a normal focus range, this is not possible.
- Active camera toolbar – provides intuitive and fast control of key camera functions on the Nokia N73 and Nokia N93.
- Flash – take pictures in even the darkest locations with a built-in flash featuring on Nokia N70, Nokia N71, Nokia N72, Nokia N73, Nokia N80, Nokia N90, Nokia N92 and Nokia N93.
- Sequence mode – when selected, the camera will take 6 images in two seconds with one press of the capture key.



*Photograph taken with the Nokia N90 using macro mode.*

April 2006

## 2. View

See your photographs in thousands of colors with Nokia's high-resolution screen displays. The Nokia N93, for example, features a 262,144 color 2.4" QVGA display (240 x 320 pixels) with a super-wide 160 degree viewing angle. The Nokia N80 features a high definition display (352 x 416 pixels) which incorporates 90% more pixels than QVGA displays commonly found on smartphones and PDAs.



## 3. Edit

With in-built photo editing capabilities on most Nokia camera phones, you can make sure your photos are exactly the way you like them. You can crop images, make them lighter or brighter, frame them or even add text and different effects.

## 4. Share

Share your photos and videos with family, friends and colleagues quickly and easily via blogging, email or Bluetooth wireless technology while retaining full image quality. Depending on network operator or service provider, Nokia Nseries users can also make video calls or share images and video clips via video sharing. Or impress your friends by showing a slideshow directly on your TV with the Nokia N93, complete with your own soundtrack.



If you want to upload your uncompressed, full-size images and share them online, you might like a site like flickr.com. Flickr is a community-driven online photo-sharing site that easily allows you to share your photos with friends, family, and the world. Once uploaded, your photos can be sent to your blog, edited, organized, tagged, shared and much more.

## 5. Store

All new photos and video clips on Nokia photography devices can be either manually or automatically transferred to a compatible PC for management and organization. Furthermore, for example with the Nokia N73's 42 MB internal memory and a separately available 2 GB miniSD card, you can store up to 2400 high-resolution (2048 x 1536 pixels) photographs.

Nokia Lifeblog 2.0 also provides a unique collection and storage solution for personal multimedia content, enabling you to maintain a photo album with a minimum of effort.

## 6. Print

With most Nokia Nseries devices you can print images using three methods:

- **PictBridge** – where the handset is connected directly to a compatible printer with a USB cable
- **Bluetooth** – where you can send photos wirelessly to compatible printers
- **Memory card** – simply insert your memory card into a compatible printer or photo kiosk



For information about the video capabilities of Nokia Nseries devices, please see the separate Nokia Mobile Video Backgrounder.

April 2006

## Nokia's Photography Partners

To provide customers with the best mobile photography experience possible, Nokia has joined forces with leading players in this field:

Nokia and Adobe Systems Incorporated teamed up to respond to the growing demand to store and organize content captured with mobile multimedia devices. As a result of the collaboration, users of Nokia imaging devices will be able to better manage the images and videos taken with their camera phone, and edit them on a computer. Thanks to the cooperation, Adobe Photoshop Album Starter Edition has been made available free of charge to the standard sales pack of Nokia's imaging-optimized devices.



Since February 2003, Nokia and HP have collaborated to provide easy connectivity between printers and mobile devices. HP's expertise in printing technology has played a significant role in making the printing experience effortless in numerous Nokia imaging devices. Consumers can turn their favorite photos into prints with a few clicks of a button using Bluetooth- or PictBridge-enabled printers. Alternatively, printing is possible by inserting the MMC card into compatible printers. These printing capabilities extend beyond photos to other types of content, including multimedia message service (MMS) messages, email, text messages, notepad files, contacts and calendar items.



Nokia and Kodak, a major participant in infoimaging globally, offer people solutions to conveniently upload, store, share and order prints of pictures taken with their mobile device. By using the Kodak Mobile application, available in the standard sales pack of Nokia's imaging devices, consumers are able to store the images in an online album on the web and share them with friends or family, and order prints on the go. Alternatively, camera phone pictures can be turned into prints by using one of Kodak's 55,000 printing kiosks around the world, some of which are also located in Nokia retail locations.



Nokia and Carl Zeiss, the world's leading optics company, joined forces to set a new quality standard for mobile imaging by incorporating Carl Zeiss optics in Nokia's highest-end camera phones. The expertise of Carl Zeiss is used to develop superior lens modules for Nokia devices. As a result of this collaboration, consumers will be able to capture, share, store and print better quality images with Nokia's flagship imaging devices. The first device including Carl Zeiss optics was the Nokia N90 and the latest devices are the new Nokia N73 and Nokia N93.



Nokia and Flickr are making it easy for mobile photographers to upload and add comments to photos to their online Flickr accounts directly from their Nokia Nseries multimedia computers – without the need to download or install any additional applications. Consumers can upload their full size photos to Flickr directly from the camera or image Gallery application on their Nokia Nseries device, either one at a time or in groups of six. Another supported feature is the ability to add comments to the photos that are uploaded from the Nokia Nseries device. The Nokia N93, Nokia N73 and Nokia N72 are the first Nokia Nseries devices to support Flickr.

