

# **NOKIA**

## **Nokia MetroSite EDGE Base Station**

## **Guide to Documentation**

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FCC	<p>FCC §15.21 - Information to user - This product is used as an intentional radiated equipment and any changes or modifications on the equipment without any approval by Nokia could void the user's authority to operate the equipment.</p> <p>FCC §15.105 - Information to user - This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:</p> <ul style="list-style-type: none"><li>• Reorient or relocate the receiving antenna.</li><li>• Increase the separation between the equipment and receiver.</li><li>• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.</li><li>• Consult the dealer or an experienced radio/TV technician for help.</li></ul>



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## Summary of Changes

Version 1, 12<sup>th</sup> November 1999.

Version 2, 2<sup>nd</sup> June 2000

- changed title
- added CE marking
- added references about BBU UM, Field Upgrade and System Overview
- added Accessories and Alarms Descriptions references to Chapter 2.2
- rearranged order of documents listed in Chapter 2.2

Version 3, 30<sup>th</sup> June 2001:

- updated for EDGE document set





# 1 About this document

This document describes the scope, structure, and use of the Nokia MetroSite EDGE Base Station (BTS) User Manual which is also a subset of Nokia MetroSite solution documentation.

This document describes the generic customer documents which are produced by the Nokia MetroSite EDGE Base Station manufacturer. Customer-specific documents are not described here.

This document is a source for the following information:

- navigation aid for finding the desired information
- general contents of each document
- ordering the User Manual
- delivery media
- conventions used in this manual
- how to give feedback

## Readership

This manual is for the application planning, installation and commissioning personnel of the Nokia MetroSite EDGE Base Station. The reader is assumed to have a basic knowledge of base station equipment and systems.

## 1.1 Other related documentation

The following documentation is related to this User Manual, but not included in it:

- Nokia MetroSite EDGE Base Station System Overview
- Nokia MetroSite EDGE GSM Base Station Product Overview
- Nokia CX 3.0 Software Release Binder

- Nokia MetroHub Transmission Node User Manual
- Nokia MetroHopper with FXC RRI User Manual
- Nokia FlexiHopper with FXC RRI User Manual
- Nokia MetroSite Battery Backup User Manual

# 2

## Guide to Nokia MetroSite EDGE Base Station User Manual

### 2.1 Navigation aid

This section helps you find the documents that you need in order to accomplish a certain task. The tasks are sorted in alphabetical order.

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#### Note

Detailed information on the contents and functionality of the BTS software and alarm information can be found in the Software Release Binder.

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#### Note

Detailed instructions on how to use Nokia MetroSite BTS Manager are given in the Nokia MetroSite BTS Manager on-line Help.

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Table 1. Navigation aid for the User Manual documents

Information on	Is found in
Cables and connectors	Product Description (connectors on the units)
Commissioning Nokia MetroSite EDGE Base Station	Commissioning Nokia MetroSite BTS Manager on-line Help
Features of the Nokia MetroSite EDGE Base Station	Product Description
Installing the Nokia MetroSite EDGE Base Station	Requirements for Installation and Operation Installation

Table 1. Navigation aid for the User Manual documents (Continued)

Information on	Is found in
Maintaining the Nokia MetroSite EDGE Base Station	Maintenance Nokia MetroSite BTS Manager on-line Help
Managing the Nokia MetroSite EDGE Base Station locally	Product Description (brief overview on Nokia MetroSite BTS Manager) Commissioning (how to get started with the Nokia MetroSite BTS Manager) Nokia MetroSite BTS Manager on-line Help
Planning the application/installation	Warnings and Cautions Product Description Requirements for Installation and Operation
Standards	Product Description (all standards) Requirements for Installation and Operation (environmental standards)
Technical specifications	Product Description
Terminology	Glossary
Tools (used in installation and maintenance)	Requirements for Installation and Operation Installation
Upgrading the Nokia MetroSite EDGE Base Station	Maintenance Field Upgrade
How to locate information on procedures, main tasks, features, terms, operation, units of the BTS, and the BTS in general.	Index

## 2.2 Contents by documents

This section describes the general contents of individual documents in this user manual. The user manual also contains an appendix; Nokia MetroSite System - Accessories.

### Warnings and Cautions

- definition of a warning and a caution
- warnings and cautions concerning handling and using Nokia MetroSite EDGE Base Stations
- safety distance calculations

**Glossary**

- technical abbreviations and acronyms used in this manual
- other technical key terms used in this manual

**Product Description**

- description of features
- description of BTS applications
- description of software
- description of construction, plug-in units and their functionality
- technical specifications and standards

**Requirements for Installation and Operation**

- environmental specifications
- general requirements for the site
- space requirements and mounting locations
- requirements for grounding and site power supply
- site power consumption
- list of tools needed for the installation

**Installation**

- contents of the delivery
- unpacking instructions
- installation equipment
- wall mounting instructions
- pole mounting instructions
- cabinet cabling instructions

**Field Upgrade**

- upgrade types and required parts
- power precautions when working on the BTS
- unit removal procedures
- unit installation procedures

**Commissioning**

- commissioning software overview
- getting started with Nokia MetroSite BTS Manager
- manual commissioning with Commissioning Wizard
- Traffic Manager
- line interface and synchronization settings
- Radio Wizard
- cross-connections
- troubleshooting and fault reporting

**Alarms Descriptions**

- handling BTS alarms
- alarm examples
- list of alarm descriptions
- fault reporting
- troubleshooting for faults

**Maintenance**

- periodic maintenance measures
- LED indicator descriptions
- 13 MHz clock adjustment
- instructions for replacing units
- instructions for expanding the BTS's capacity
- troubleshooting for faults

**Accessories**

- lists Nokia MetroSite supporting accessories
- descriptions and specifications of accessories
- assembly and installation instructions

**Index**

- A retrieval aid for locating information on procedures, main tasks, features, terms, operation, units of the BTS, and the BTS in general.

## 2.3 Ordering documents

You can order Nokia MetroSite EDGE Base Station documents in electronic and/or paper format. The documents are always delivered in the NED (Nokia Electronic Documentation) package or in User Manual binders. The NED package of Nokia MetroSite contains, in electronic format, the user manuals for all Nokia MetroSite products. To order the documents, contact your local Nokia representative.

## 2.4 Delivery media

### 2.4.1 Electronic documents

The NED viewer provides electronic access to Nokia documentation.

Each NED package includes the necessary software and documentation:

- Nokia Documentation CD ROM, containing document sets and the NED Viewer
- NED User Guide
- NED Quick Reference Card

For more information about NED, refer to the NED User Guide.

### 2.4.2 Paper documents

Paper documents are delivered in binders:

- Each binder contains a *content list*, helping you to locate the required document.
- The *binder label* gives the product's name and code.

## 2.5 Conventions used in documents

### 2.5.1 User manual identification

For identification and version management purposes, the user manual and all documents in it are coded according to specific principles. The code and the version of the user manual can be found on the binder label. The NED code can be found on the back cover of the CD ROM package.

## 2.5.2 Document identification

All documents are identified by number, version, and language. These elements combined form a document identifier.

Example of a document identifier:

*DN98123 issue 1-0 en*

- *DN98123* is the document number.
- *1* is the issue number, which increases when the contents of the document are changed; *0* is the editorial number, which increases when the document format is corrected without changes being made to documents.
- *en* is the language code, taken from the ISO 639 standard.

In paper documents, the document identifier is in the lower left-hand corner of the page. In electronic documents, the document identifier can be viewed by clicking the icon in the upper right-hand corner at the beginning of each document. When the document is printed, the document identifier and name appear on each page.

## 2.5.3 Typographic conventions

Icons and different fonts are used to emphasise special elements of the document. The icons are located in the left-hand side of text.

### Warnings

Warnings alert the reader to dangers which may cause loss of life, physical injury, or ill health.



### **WARNING**

**This is a warning!**

---

### Cautions

Cautions are used to indicate possible damage to equipment but not danger to personnel.



### Caution

This is a caution!

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**Notes**

Notes are used to call attention to a certain piece of information.

**Note**

This is a note.

**Task sequences/procedures**

The task sequence/procedure symbol is used to indicate the beginning of a task sequence.



**Task sequence/procedure:**

1. Step 1.
2. Step 2.
3. Step 3.

**Text conventions**

Table 2 lists the text conventions used in the documentation.

Table 2. Text type conventions in the User Manual documents

Convention	Description
<i>italic font</i>	Used when mentioning the title of a manual, chapter or section. For example: Refer to <i>Test Call Handling, Command Reference Manual</i> .
Courier font	Used in MML (Man Machine Language) for names of user interface windows, such as: the <i>BTS Properties</i> window.
	Used in MML (Man Machine Language) coding examples, such as: <code>Run:Test case;</code>

Table 2. Text type conventions in the User Manual documents (Continued)

Convention	Description
CAPS	Used in MML (Man Machine Language) commands, such as: click FILE   EXIT; or click the CANCEL button.
SMALL CAPS	keyboard short-cuts, such as CTRL+F7
<b>bold</b>	Used to emphasise text parts in electronic documents.

**Index conventions**

Index entries consist of the entry word, the name of the document in which information related to the entry can be found and the page number.

The following is an example of an index entry:

**cable diameters** *Requirements for Installation and Operation* **31, 34**

## 2.6 How to give feedback

We appreciate your feedback. Your comments are a valuable source of information for continuous improvement of our documentation. To provide feedback, please return the attached *feedback form* (Appendix A) to your local Nokia representative.

If you find any problems with our documentation, please contact your local Nokia representative.

**Appendix A. Feedback Form**

Table 3. Document feedback form

<b>Document</b>	Name:
	Document identifier:
	Document category:
<b>Product</b>	Name and version:
<b>Sender</b>	Your name:
	Job Title:
	Company:
	Address:
<b>Your comments</b>	



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