



471223A

**Nokia UltraSite EDGE BTS, Rel. CX5, Product
Documentation, v.1**

Software compatibility of UltraSite EDGE BTS



The information in this document is subject to change without notice and describes only the product defined in the introduction of this documentation. This document is intended for the use of Nokia's customers only for the purposes of the agreement under which the document is submitted, and no part of it may be reproduced or transmitted in any form or means without the prior written permission of Nokia. The document has been prepared to be used by professional and properly trained personnel, and the customer assumes full responsibility when using it. Nokia welcomes customer comments as part of the process of continuous development and improvement of the documentation.

The information or statements given in this document concerning the suitability, capacity, or performance of the mentioned hardware or software products cannot be considered binding but shall be defined in the agreement made between Nokia and the customer. However, Nokia has made all reasonable efforts to ensure that the instructions contained in the document are adequate and free of material errors and omissions. Nokia will, if necessary, explain issues which may not be covered by the document.

Nokia's liability for any errors in the document is limited to the documentary correction of errors. NOKIA WILL NOT BE RESPONSIBLE IN ANY EVENT FOR ERRORS IN THIS DOCUMENT OR FOR ANY DAMAGES, INCIDENTAL OR CONSEQUENTIAL (INCLUDING MONETARY LOSSES), that might arise from the use of this document or the information in it.

This document and the product it describes are considered protected by copyright according to the applicable laws.

NOKIA logo is a registered trademark of Nokia Corporation.

Other product names mentioned in this document may be trademarks of their respective companies, and they are mentioned for identification purposes only.

Copyright © Nokia Corporation 2007. All rights reserved.



Hereby, Nokia Corporation declares that this Nokia Base Station is in compliance with the essential requirements and other relevant provisions of Directive: 1999/5/EC. The product is marked with the CE marking and Notified Body number according to the Directive 1999/5/EC.

Contents

	Contents	3
1	Summary of changes	5
2	Compatibility between HW and SW	7
3	Compatibility between BTS, BSC, NetAct, SiteWizard, EasyWizard, LMU, and ITN SW	17
4	Compatibility between new operating and application SW of BTS SW CX5 and other network elements	21

1

Summary of changes

This document provides information on Nokia UltraSite EDGE Base Station Software (BTS SW) compatibility. The document covers the following elements:

- Compatibility between BTS SW versions and unit hardware versions.
- Compatibility towards Base Station Controller Software (BSC SW), Nokia SiteWizard Software, Nokia EasyWizard Software, Nokia NetAct Software (OSS), Nokia Location Measurement Unit Software (LMU and LMUB SW), and Integrated Transmission Node Software (ITN SW).
- Compatibility between new operating and application software of BTS SW and other network elements.

Summary of documentation changes between CX5 and CX4.1

This version contains the following additions and updates:

- New HW units have been added to the table in *Compatibility between HW and SW*. See *Technical Notes* and *Change Notices* below for more details.
- Information about the following supported SW versions has been added to the tables in *Compatibility between BTS, BSC, NetAct, SiteWizard, EasyWizard, LMU and ITN SW*.
 - CX4.1 CD1.0, CX4.1 CD2.0, CX4.1 CD3.0 and CX5
 - BSS12
 - OSS4.0 and OSS4.1
 - SiteWizard 4.15 CD2.0, 4.15 CD3.0 and 5
 - EasyWizard C1.0, C1.0 CD1, C1.0 CD2 and C2
 - LMUB SW 1.0 CD2 and LMU 4.4
- A new table about tested compatibility between CX and ITN has been added to *Compatibility between BTS, BSC, NetAct, SiteWizard, EasyWizard, LMU and ITN SW*. Also see *Technical Notes* below.
- The BSS12-level operating and application SW features have been updated to *Compatibility between new operating and application SW of BTS SW CX5 and other network elements*. The chapter also contains information about features that are included from previous releases.

The following SW versions are no longer supported and thus references to them have been removed throughout the document:

- CX3.x and CX4.0 (-1, -2, -3, -4, -5) level BTS SW (also see *Technical Notes* below).
- S10 and S10.5 level BSS support.
- SW4.1 level LMU support.
- OSS3.x level NetAct support.

Technical Notes

This document contains the following Technical Notes:

Technical Note ID	Description
TN_2GBTSu_SW_2006_70	Availability of SW Support for Nokia UltraSite CX3.0 and CX3.3 Releases
TN_2GBTSu_HW_2006_72_v2	New Triple Wideband Combiner
TN_2GBTSu_GEN_2006_74	Nokia LMUB
TN_2GBTSu_HW_2006_75	New IDCC MIDI cabinet
TN_2GBTSu_HW_2006_76	New ODCC MIDI cabinet
TN_2GBTSu_SW_2006_77	CX/ITN SW compatibility
TN_2GBTSu_SW_2006_79	EasyWizard C1.0 CD1
TN_2GBTSu_HW_2006_80	New ODCF extreme cabinet
TN_2GBTSu_HW_2006_85_v2	New ODCA cabinet version 202
TN_2GBTSu_GEN_2006_88	LMUB SW 1.0 CD2

Change Notices

This document contains the following Change Notices:

Change Notice ID	Description
BE11863, BE11848	IDCA 469725A
BE11916	ODCA 469873A
BE14106	OCTU 469881A

2 Compatibility between HW and SW

This section provides information on the compatibility between Nokia UltraSite EDGE GSM 800/900/1800/1900 Base Station Software (BTS SW) release and unit hardware (HW).

The table below shows the compatibility between HW and SW in Nokia UltraSite EDGE BTS.

Table 1. Compatibility between HW and SW in Nokia UltraSite EDGE BTS

Unit	Unit code	Unit version	BTS SW	
			CX4.1 (CD1.0, CD2.0, CD3.0)	CX5
ACFU	468755A	.101, .203, .204, .205	Y	Y
ACFE (with terminal cover)	470225A	.101	Y	Y
ADUA	CS71506.02		Y	Y
ATCA	468686A	.101, .102, .103 ³ , 4, 5, 6, 7	Y	Y
BATA	CS71505.02		Y	Y
BBAG	CS70403.00		Y	Y
BB2A	467869A	.103, .104, .105, .106, .107	Y	Y
BB2E	468131A	.101, .202	Y	Y
BB2F	469643A	.101, .102, .103	Y	Y
BOIA	467868A	.101, .102, .103, .104, .105, .106, .108	Y	Y

Table 1. Compatibility between HW and SW in Nokia UltraSite EDGE BTS (cont.)

Unit	Unit code	Unit version	BTS SW	
			CX4.1 (CD1.0, CD2.0, CD3.0)	CX5
BPDN (GSM 800-1900)	CS72994.01		Y	Y
BPDV (GSM 1800/ 1900 W/VSUR)	CS72994.03		Y	Y
BPGV (GSM 800/900 W/VSUR)	CS72994.02		Y	Y
CCUA	CS71508.02		Y	Y
CRMA	467851A	.101, .102, .103, .204, . 205, .206, .207, .208, .309 ^{3, 4, 5}	Y	Y
CRMB	468080A	.101, .102, .103	Y	Y
CRMC	468126A	.101, .102, .203 ^{6, 7}	Y	Y
DU2A	467812A	.101, .102	With restrictions	With restrictions ¹
DVDA (GSM 1800)	468219A	.101, .102, .103, .104, .105	Y	Y
DVDB (GSM 1800)	468220A	.101, .102, .103, .104, .105	Y	Y
DVDC (GSM 1800)	468619A	.101, .102, .103	Y	Y
DVGA (GSM 900)	468216A	.101, .102, .103	Y	Y
DVHA (GSM 900)	468217A	.101, .102, .103	Y	Y

Table 1. Compatibility between HW and SW in Nokia UltraSite EDGE BTS (cont.)

Unit	Unit code	Unit version	BTS SW	
			CX4.1 (CD1.0, CD2.0, CD3.0)	CX5
DVJA (GSM 900)	468218A	.101, .102, .103	Y	Y
DVPA (GSM 1900)	468221A	.101, .102, .103, .104	Y	Y
DVTB (EDGE 800)	468133A	.101, .102, .103	With restrictions	With restrictions ¹
DVTC (EDGE 800)	468877A	.101, .102	With restrictions	With restrictions ¹
DVTD (EDGE 800)	469644A	.101, .102, .103	With restrictions	With restrictions ¹
HETA	467937A	.101, .102	Y	Y
	467937X	.301	Y	Y
IAKA	467852A	.101, .102, .203, .204, .205, .206 ⁵	Y	Y
IAKC	468792A	.101, .102, .103 ⁶	Y	Y
IDCA	469725A	.101, .202 ⁵	Y	Y
IDCB	470089A	.10x	Y	Y
IDCC	470263A	.101 ⁶	Y	Y
LMU (GSM 800, 1900/1800)	469592A	.101	Y	Y
LMU (GSM 900, 1800/1900)	468765A	.102	Y	Y
LMUB (Plug-in unit)	470277A	.102	Y	Y
LMUB (Outdoor unit)	470172A	.102	Y	Y
M2HA (GSM 1800/ 1900 2-Way)	468532A	.101, .102, .103, .104, .105, .106, .107, .108	Y	Y

Table 1. Compatibility between HW and SW in Nokia UltraSite EDGE BTS (cont.)

Unit	Unit code	Unit version	BTS SW	
			CX4.1 (CD1.0, CD2.0, CD3.0)	CX5
M2LA (GSM 800/900 2-Way)	468530A	.101, .102, .103, .104, .105, .106, .107, .108	Y	Y
M6HA (GSM 1800/ 1900 6-Way)	468533A	.101, .102, .103, .104, .105, .106	Y	Y
M6LA (GSM 800/900 6-Way)	468531A	.101, .102, .103, .104, .105, .106	Y	Y
MNGA (GSM 900)	CS72991.01		Y	Y
MNTB (EDGE 800 R)	CS72991.02		With restrictions	With restrictions ¹
MNTC (EDGE 800)	CS72991.03		With restrictions	With restrictions ¹
MNTB (EDGE 800 M)	CS72991.04		With restrictions	With restrictions ¹
MNDA (GSM 1800)	CS72992.01		Y	Y
Ultra MHA (GSM 1800 high band)	CS72992.02		Y	Y
Ultra MHA (GSM 1800 low band)	CS72992.03		Y	Y
MNPA (GSM 1900)	CS72993.01		Y	Y
MNPB (GSM 1900)	CS72993.02		Y	Y

Table 1. Compatibility between HW and SW in Nokia UltraSite EDGE BTS (cont.)

Unit	Unit code	Unit version	BTS SW	
			CX4.1 (CD1.0, CD2.0, CD3.0)	CX5
MNPC (GSM 1900)	CS72993.03		Y	Y
Ultra MHA (DB bands)	CS72993.04		Y	Y
Ultra MHA (EFC bands)	CS72993.05		Y	Y
Ultra MHA (BEF bands)	CS72993.06		Y	Y
MNPF (GSM 1900)	CS72993.07		Y	Y
MNPF (GSM 1900 w/ by-pass)	CS72993.08		Y	Y
OAKA	467853A	.101, .102, .203, .304, .305, .306, .307, .308 ^{3, 4}	Y	Y
OAKA Kit	CS71503.03		Y	Y
OAKB	469095A	.101, .202, .203, .204, .205, .206	Y	Y
OAKC	469152A	.101, .102 ⁷ , .103	Y	Y
OCTU	469881A	.101 ²	Y	Y
ODCA	469873A	.101, .202 ³	Y	Y
ODCC	470264A	.101 ⁷	Y	Y
ODCF	471010A	.101 ⁴	Y	Y
PWSA (AC)	467865A	.101, .102, .103, .104, .105, .206	Y	Y
PWSB (DC -48 V)	467866A	.101, .102, .103, .104, .105, .207	Y	Y

Table 1. Compatibility between HW and SW in Nokia UltraSite EDGE BTS (cont.)

Unit	Unit code	Unit version	BTS SW	
			CX4.1 (CD1.0, CD2.0, CD3.0)	CX5
PWSC (DC +24 V)	468664A	.101, .102, .104, .205	Y	Y
RTDA (GSM 1800)	467858A	.102, 103	Y	Y
RTDB (GSM 1800)	467859A	.102, .103	Y	Y
RTDC (GSM 1800)	468721A	.101, .102	With restrictions	With restrictions ¹
RTGA (GSM 900)	467857A	.102, .103	Y	Y
RTHA (GSM 900)	467861A	.101, .102	With restrictions	With restrictions ¹
RTJA (GSM 900)	467862A	.101, .102, .103	With restrictions	With restrictions ¹
RTPA (GSM 1900)	467860A	.102, .103	Y	Y
TSDA (GSM 1800)	467828A	.101, .102, .104, .105, .105A, .106, .107, .108, .109, .110	Y	Y
TSDB (EDGE 1800)	469089A	.101, .102, .103, .104, .105, .206, .207, .209, .411	Y	Y
TSGA (GSM 900)	467800A	.101, .102, .104, .105, .106, .107, .108, .109	Y	Y

Table 1. Compatibility between HW and SW in Nokia UltraSite EDGE BTS (cont.)

Unit	Unit code	Unit version	BTS SW	
			CX4.1 (CD1.0, CD2.0, CD3.0)	CX5
TSGB (EDGE 900)	468704A	.101, .102, .103, .104, .105, .206, .207, .209, .413	Y	Y
TSPA (GSM 1900)	467829A	.101, .103, .104, .105, .106	Y	Y
TSPB (EDGE 1900)	468706A	.101, .102, .103, .104, .105, .106, .207, .210, .412	Y	Y
TSTB (EDGE 800)	469087A	.101, .102, .103, .104, .105, .106, .207, .208, .210, .412	With restrictions	With restrictions
UABA	469107A	.101, .103	Y	Y
VXEA (FC E1/T1)	467201A	.101, .102	With restrictions	With restrictions ¹
		.103, .104, .105	Y	Y
VXOA (FXC STM-1)	T36140.01	A1, B0, B1, C0	Y	Y
VXOB (FXC Bridge)	T36145.01	A1, B0, B1, C0	Y	Y
VXOC (FC STM-1)	00002795	03, A0	N	Y
VXRB (FXC RRI)	467610A	.101, .102, .103, .104, .105, .106, .107	Y	Y

Table 1. Compatibility between HW and SW in Nokia UltraSite EDGE BTS (cont.)

Unit	Unit code	Unit version	BTS SW	
			CX4.1 (CD1.0, CD2.0, CD3.0)	CX5
VXTA (FXC E1)	467612A	.101, .102, .103, .104, .105, .106, .107	Y	Y
VXTB (FXC E1/T1)	467611A	.101, .102, .103, .104, .105, .106, .107	Y	Y
WCDA (GSM 1800)	467834A	.101, .102, .103, .104	Y	Y
WCGA (GSM 800/900)	467833A	.101, .102, .103	Y	Y
WCDT (GSM 1800)	470328A	.101	Y	Y ⁸
WCPT (GSM 1900)	470329A	.101	Y	Y ⁸
WCGT (GSM 800/900)	470327A	.101	Y	Y ⁸
WCPA (GSM 1900)	467835A	.101, .102, .103	Y	Y
Y = Compatible				
N = Not compatible				

Table 1. Compatibility between HW and SW in Nokia UltraSite EDGE BTS (cont.)

Unit	Unit code	Unit version	BTS SW	
			CX4.1 (CD1.0, CD2.0, CD3.0)	CX5
¹ There are no compatibility problems detected. However, the compatibility is not fully tested.				
² OCTU Kit is used with ODCA cabinet.				
³ ODCA supercedes CRMA, OAKA, and ATCA non-RoHS cabinet kit.				
⁴ ODCF supercedes CRMA, OAKA, OEFA, OEKA, and ATCA non-RoHS cabinet kit.				
⁵ IDCA supercedes CRMA, IAKA and ATCA non-RoHS cabinet kit.				
⁶ IDCC supercedes CRMC, IAKC, and ATCA non-RoHS cabinet kit.				
⁷ ODCC supercedes CRMC, OAKC, OEKA, and ATCA non-RoHS cabinet kit.				
⁸ Starting with SiteWizard 5.0, the WCxT units are included in CX5 HW Configurator. With older SiteWizard versions, WCxT units must be defined as three separate WCxA units in HW Configurator.				

3

Compatibility between BTS, BSC, NetAct, SiteWizard, EasyWizard, LMU, and ITN SW

This section provides information on the compatibility between the following software:

- Nokia UltraSite EDGE Base Station Software (BTS SW)
- Nokia SiteWizard Software (SiteWizard SW)
- Nokia EasyWizard Software (EasyWizard SW)
- Base Station Controller Software (BSC SW)
- NetAct Software (NetAct SW)
- Nokia Location Measurement Unit Software (LMU SW)
- Integrated Transmission Node Software (ITN SW)

The tables below show the level of compatibility between the software versions. With ITN SW, only tested compatibility is shown.

Table 2. Compatibility between BTS, SiteWizard, EasyWizard and BSC SW

BTS SW ¹	SiteWizardSW	EasyWizard SW	BSC SW ¹		
			S11	S11.5	S12
CX4.1	4.1	C1.0	Y	Y	Y
CX4.1 CD1.0	4.15 CD1.0	C1.0 CD1			
CX4.1 CD2.0	4.15 CD2.0	C1.0 CD1			
CX4.1 CD3.0	4.15 CD3.0	C1.0 CD2			

Table 2. Compatibility between BTS, SiteWizard, EasyWizard and BSC SW (cont.)

BTS SW ¹	SiteWizardSW	EasyWizard SW	BSC SW ¹		
			S11	S11.5	S12
CX5	5	C2	N	Y	Y
Y = Compatible					
N = Not compatible					
¹ Feature support is limited if a CX release is not used with its corresponding S release.					
² SiteWizard 4.0.5 or later supports Windows XP.					

Table 3. Compatibility between BTS, SiteWizard, EasyWizard, NetAct, LMU and LMUB SW

BTS SW	SiteWizard SW	EasyWizard SW	NetAct SW		LMU SW		LMUB SW	
			OSS4.0	OSS4.1	SW4.3	SW4.4	SW1.0 SW1.0 CD1	SW1.0 CD2
CX4.1	4.1	C1.0	Y	Y	N	Y	N	Y
CX4.1 CD1.0	4.15 CD1.0	C1.0 CD1						
CX4.1 CD2.0	4.15 CD2.0	C1.0 CD1						
CX4.1 CD3.0	4.15 CD3.0	C1.0 CD2						
CX5	5	C2	Y	Y	N	Y	N	Y
Y = Compatible								
N = Not compatible								

Table 4. Tested compatibility between BTS SW and ITN SW

BTS SW ¹	ITN SW ¹			
	C2.0	C2.1	C2.2	C3
CX4.1	N	N	Y	Y
CX5	N	N	Y	Y
Y = Compatible N = Not compatible				
¹ This table shows how BTS SW compatibility has been tested against ITN SW. It does not state ITN/CX compatibility. Restrictions in ITN and BTS SW compatibility will be communicated by using Technical Notes.				

4

Compatibility between new operating and application SW of BTS SW CX5 and other network elements

The table below shows the compatibility between the new operating and application SW of BTS SW CX5 and the SW of other network elements.

Table 5. Compatibility between new operating and application SW of BTS SW CX5 and other network elements

New BSS12 operating and application SW in BTS	BSC SW	NetAct SW
Space-Time Interference Rejection Combining (STIRC)	S12	OSS4.1



Note

The RSSI enhancements feature of CX5 requires S11.5.



Note

The following features are included from CX4.1 CD1.0:

- Separate radio link timeout parameters for AMR and EFR
- Coding Schemes CS-3 and CS-4

In addition, the Modifiable T200 timeout parameter feature is included from CX4.1 CD2.0.