

## Nokia Siemens Networks GSM/EDGE BSS, rel. RG10(BSS), operating documentation, issue 03

Reference

**Software Compatibility of UltraSite EDGE BTS** 

DN04195938

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#### Important Notice on Product Safety

Elevated voltages are inevitably present at specific points in this electrical equipment. Some of the parts may also have elevated operating temperatures.

Non-observance of these conditions and the safety instructions can result in personal injury or in property damage.

Therefore, only trained and qualified personnel may install and maintain the system.

The system complies with the standard EN 60950 / IEC 60950. All equipment connected has to comply with the applicable safety standards.

The same text in German:

Wichtiger Hinweis zur Produktsicherheit

In elektrischen Anlagen stehen zwangsläufig bestimmte Teile der Geräte unter Spannung. Einige Teile können auch eine hohe Betriebstemperatur aufweisen.

Eine Nichtbeachtung dieser Situation und der Warnungshinweise kann zu Körperverletzungen und Sachschäden führen.

Deshalb wird vorausgesetzt, dass nur geschultes und qualifiziertes Personal die Anlagen installiert und wartet.

Das System entspricht den Anforderungen der EN 60950 / IEC 60950. Angeschlossene Geräte müssen die zutreffenden Sicherheitsbestimmungen erfüllen.

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### 1 Summary of changes

This document provides information on 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), SiteWizard Software, EasyWizard Software, NetAct Software (OSS), 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 Issue 6-1 and 6-2

The table Compatibility between HW and SW in UltraSite EDGE BTS has been updated.

#### Summary of documentation changes between Issue 6-0 and 6-1

This version contains the following updates:

- · The OSS 5.2 compatibility information has been removed.
- A minor note has been added to the table in *Compatibility between new operating* and application SW of BTS SW CX7 and other network elements.

#### Summary of documentation changes between CX7 and CX6

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.
  - CX7
  - BSS14
  - OSS4.2 CD 1
  - · SiteWizard 7
  - EasyWizard 3 CD2.0
  - · EasyWizard 4
- The BSS14-level operating and application SW features have been updated to Compatibility between new operating and application SW of BTS SW CX7 and other network elements.

#### **Technical Notes**

Issue 6-2

This document contains the relevant information from the following Technical Notes:

Technical Note ID	Description
TN_2GBTSu_SW_2006_89	BTS SW CX5 CD1.0 and CX5 CD2.0
TN_2GBTSu_HW_2007_90	New version of TSxB units
TN_2GBTSu_HW_2007_91	Change in mechanical dimensions of M2xA unit

Technical Note ID	Description
TN_2GBTSu_SW_2007_93	The release of BTS SW CX4.1 CD2.2 to support Ultra Site Mini BTS cabinet
TN_2GBTSu_SW_2007_94	The release of BTS SW CX5
TN_2GBTSu_GEN_2007_95	FC E1/T1 unit in EDGE applications
TN_2GBTSu_GEN_2007_98	Availability of SW support for Transmission SW releases ITN C1.0 and C1.2
TN_2GBTSu_HW_2007_99	MHA power cables cross connected in UltraSite MINI cabinet
TN_2GBTSu_SW_2007_100	Availability of SW Support for CX4.0 Release
TN_2GBTSu_SW_2007_101	ITN C2.0 and C2.1 SW Phase Out
TN_2GBTSu_GEN_2007_104	New UltraSite EDGE BTS, Transmission SW and SiteWizard Releases

#### **Change Notices**

This document contains the relevant information from the following Change Notices:

Change Notice ID	Description
BE13270, BE12796, BE12795, BE13755	TSXB RF Units
BE13065_v2	PWSx Power Supples PWSA, PWSB, and PWSC

#### Summary of documentation changes between CX6 and CX5

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.
  - CX6
  - **BSS13**
  - OSS4.2
  - · SiteWizard 6
  - EasyWizard 2 CD3.0
- The BSS14-level operating and application SW features have been updated to Compatibility between new operating and application SW of BTS SW CX6 and other network elements.

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## 2 Compatibility between HW and SW

This section provides information on the compatibility between 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 UltraSite EDGE BTS.

			BTS SW	
Unit	Unit code	Unit version	CX6	CX7
ACFU	468755A	.101, .203, .204, .205	Y	Y
ACFE (with terminal cover)	470225A	.101, .102	Y	Y
ADUA	CS71506.02		Y	Υ
ATCA	468686A	.101, .102, .1033, 4, 5, 6, 7	Y	Y
BATA	CS71505.02		Y	Υ
BBAG	CS70403.00		Υ	Υ
BB2A	467869A	.103, .104, .105, .106, .107	Y	Y
BB2E	468131A	.101, .202	Υ	Υ
BB2F	469643A	.101, .102, .103	Y	Y
BOIA	467868A	.101, .102, .103, .104, .105, .106, .108	Y	Y
BPDN (GSM 800- 1900)	CS72994.01		Y	Y
BPDV (GSM 1800/1900 W/VSWR)	CS72994.03		Y	Y
BPGV (GSM 800/900 W/VSWR)	CS72994.02		Y	Y
CCUA	CS71508.02		Υ	Υ
CRMA	467851A	.101, .102, .103, .204, .205, .206, .207, .208, .3093, 4, 5	Y	Y
CRMB	468080A	.101, .102, .103	Y	Y

Table 1 Compatibility between HW and SW in UltraSite EDGE BTS

			BTS SW		BTS SW	
Unit	Unit code	Unit version	CX6	CX7		
CRMC	468126A	.101, .102, .203 <sup>6, 7</sup>	Υ	Y		
DU2A	467812A	.101, .102	With restrictions1	With restrictions1		
DVDA (GSM 1800)	468219A	.101, .102, .103, .104, .105, .106	Y	Y		
DVDB (GSM 1800)	468220A	.101, .102, .103, .104, .105, .106	Y	Y		
DVDC (GSM 1800)	468619A	.101, .102, .103, .104	Y	Y		
DVGA (GSM 900)	468216A	.101, .102, .103, .104	Y	Y		
DVHA (GSM 900)	468217A	.101, .102, .103, .104	Y	Y		
DVJA (GSM 900)	468218A	.101, .102, .103, .104	Y	Y		
DVPA (GSM 1900)	468221A	.101, .102, .103, .104, .105	Y	Y		
DVTB (EDGE 800)	468133A	.101, .102, .103,	With restrictions1	With restrictions <sup>1</sup>		
DVTC (EDGE 800)	468877A	.101, .102	With restrictions <sup>1</sup>	With restrictions <sup>1</sup>		
DVTD (EDGE 800)	469644A	.101, .102, .103, .104	With restrictions <sup>1</sup>	With restrictions <sup>1</sup>		
НЕТА	467937A	.101, .102, .103	Y	Υ		
	467937X	.301	Υ	Υ		
HETM	471422A	.101	Υ	Υ		
IAKA	467852A	.101, .102, .203, .204, .205, .206 <sup>5</sup>	Y	Y		
IAKC	468792A	.101, .102, .103 <sup>6</sup>	Υ	Y		
IDCA	469725A	.101, .202, .203 <sup>5</sup>	Y	Y		
IDCB	470089A	.10x,	Υ	Υ		
IDCC	470263A	.101, .1026	Υ	Υ		

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

			BTS SW	
Unit	Unit code	Unit version	CX6	CX7
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	468532A	.101, .102,	Υ	Υ
(GSM 1800/1900 2- Way)		.103, .104, .105, .106, .107, .108, .109		
M2LA (GSM 800/900 2-Way)	468530A	.101, .102, .103, .104, .105, .106, .107, .108, .109	Y	Y
М6НА	468533A	.101, .102,	Υ	Υ
(GSM 1800/1900 6- Way)		.103, .104, .105, .106		
M6LA	468531A	.101, .102,	Υ	Υ
(GSM 800/900 6-Way)		.103, .104, .105, .106		
MDTA	CS7299112		Υ	Υ
MDGA	CS7299111		Υ	Υ
MDDA	CS7299220		Υ	Υ
MDPA	CS7299320		Υ	Υ
MNGA	CS72991.01		Υ	Υ
(GSM 900)				
MNTB (EDGE 800 R)	CS72991.02		With restrictions1	With restrictions <sup>1</sup>
MNTC	CS72991.03		With	With
(EDGE 800)			restrictions1	restrictions1
MNTB	CS72991.04		With	With
(EDGE 800 M)			restrictions1	restrictions1
MNDA	CS72992.01		Υ	Υ
(GSM 1800)				
Ultra MHA	CS72992.02		Υ	Υ
(GSM 1800 high band)				

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

			BTS SW	
Unit	Unit code	Unit version	CX6	CX7
Ultra MHA (GSM 1800 low band)	CS72992.03		Y	Y
MNPA (GSM 1900)	CS72993.01		Υ	Y
MNPB (GSM 1900)	CS72993.02		Y	Y
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 <sup>3, 4</sup>	Y	Y
OAKA Kit	CS71503.03		Υ	Y
OAKB	469095A	.101 .202, .203, .204, .205, .206 <sup>2</sup>	Y	Y
OAKC	469152A	.101, .102 <sup>7</sup> , .103	Y	Y
OCTU	469881A	.1012	Υ	Y
ODCA	469873A	.101, .202, .203, .204 <sup>3</sup>	Y	Y
ODCC	470264A	.101, .102, .103, .104 <sup>7</sup>	Y	Y
ODCF	471010A	.101, .102, .103 <sup>4</sup>	Y	Y
ODCM	471421A	.101, .102, .103	Y	Y

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

			BTS SW	
Unit	Unit code	Unit version	CX6	CX7
PWSA (AC)	467865A	.101, .102, .103, .104, .105, .206	Y	Y
PWSB (DC -48 V)	467866A	.101, .102, .103, .104, .105, .207, .208, .209, .210	Y	Y
PWSC (DC +24 V)	468664A	.101, .102, .104, .205, .206	Y	Y
RTDA (GSM 1800)	467858A	.102, .103, .104	Y	Y
RTDB (GSM 1800)	467859A	.102, .103, .104	Y	Y
RTDC (GSM 1800)	468721A	.101, .102, .103	With restrictions <sup>1</sup>	With restrictions <sup>1</sup>
RTGA (GSM 900)	467857A	.102, .103, .104	Y	Y
RTHA (GSM 900)	467861A	.101, .102	With restrictions1	With restrictions <sup>1</sup>
RTJA (GSM 900)	467862A	.101, .102, .103, .104	With restrictions <sup>1</sup>	With restrictions <sup>1</sup>
RTPA (GSM 1900)	467860A	.102, .103, .104	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
TSGB (EDGE 900)	468704A	.101, .102, .103, .104, .105, .206, .207, .209, .413	Y	Y

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

			BTS SW	
Unit	Unit code	Unit version	CX6	CX7
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 restrictions1	With restrictions1
VXEA (FC E1/T1)	467201A	.101, .102	With restrictions <sup>1</sup>	With restrictions <sup>1</sup>
		.103, .104, .105	Υ	Υ
VXOA (FXC STM-1)	T36140.01	A1, B0, B1, C0	Υ	Υ
VXOB (FXC Bridge)	T36145.01	A1, B0,B1,C0	Y	Υ
VXOC (FC STM-1)	00002795	03, A0	Υ	Υ
VXRB (FXC RRI)	467610A	.101, .102, .103, .104, .105, .106, .107	Y	Y
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	Υ	Y
WCGA (GSM 800/900)	467833A	.101, .102, .103	Υ	Υ
WCDT (GSM 1800)	470328A	.101	Υ	Υ
WCPT (GSM 1900)	470329A	.101	Υ	Y

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

	BTS SW				
Unit	Unit code	Unit version	CX6	CX7	
WCGT	470327A	.101	Υ	Υ	
(GSM 800/900)					
WCPA	467835A	.101, .102,	Υ	Υ	
(GSM 1900)		.103			
Y = Compatible			•		
N = Not compatib	le				
There are no compatibility is not full		ns detected. How	vever, the com-		
	<sup>2</sup> OCTU Kit is used with ODCA cabinet. CRMA+OAKB was replaced by ODCA+OCTU.				
<sup>3</sup> ODCA supercedes CRMA, OAKA, and ATCA non-RoHS cabinet kit. ODCA replaced non-ROHS cabinet kit CRMA, OAKA, OEKA and ATCA.					
<sup>4</sup> ODCF supercedes CRMA, OAKA, OEFA, OEKA, and ATCA non-RoHS cabinet kit. ODCF replaced non-ROHS cabinet kit CRMA, OAKA, OEFA and ATCA.					
5 IDCA supercede IDCA replaced no					
6 IDCC supercedes CRMC, IAKC, and ATCA non-RoHS cabinet kit. IDCC replaced non-ROHS cabinet kit CRMC, IAKC and ATCA.					
ODCC superced cabinet kit. ODCC OEKA and ATCA	replaced non-R	,			

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

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

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

- UltraSite EDGE Base Station Software (BTS SW)
- SiteWizard Software (SiteWizard SW)
- EasyWizard Software (EasyWizard SW)
- Base Station Controller Software (BSC SW)
- NetAct Software (NetAct SW)
- 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.

BTS SW1	Sitewizard	EasyWizard SW	BSC SW1		
	SW		S12	S13	S14
CX6	6	2 CD3.0	Υ	Υ	Υ
		3 CD2.0 <sup>2,3</sup>			
CX7	7	4	N	Υ	Υ

Y = Compatible

N = Not compatible

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

BTS SW	NetAct SW				
	OSS4.1	OSS4.2 CD1	OSS5.1 CD2		
CX6	N	Υ	Υ		
CX7	N	Υ	Υ		

Y = Compatible

N = Not compatible

Table 3 Compatibility between BTS and NetAct

<sup>&</sup>lt;sup>1</sup> Feature support is limited if a CX release is not used with its corresponding S release.

<sup>&</sup>lt;sup>2</sup> CX6 release is compatible with all EW 3 releases.

<sup>&</sup>lt;sup>3</sup> CX6 CD x.x releases are compatible with EW 3 CD2.0 or EW release for the CX6 CD release.

BTS SW	LMU SW		LMUB SW				
	SW4.3	SW4.4	SW 1.0	SW1.0 CD1	SW1.0 CD2	SW1.0 CD3	
CX6	N	Υ	Υ	Υ	Υ	Υ	
CX7	N	Υ	Υ	Υ	Υ	Υ	
Y = Compatible							
N = Not compatible							

Table 4 Compatibility between BTS , LMU SW and LMUB SW

BTS SW1	ITN SW1						
	C1.0	C2.1-2	C2.2	C3	C3 CD1	C3 CD2	C3 CD3.0
CX6	Υ	Υ	Υ	Υ	Y	Υ	Υ
CX7	Υ	Υ	Υ	Υ	Υ	Υ	Υ

Y = Compatible

Table 5 Tested compatibility between BTS SW and ITN SW

N = Not compatible

<sup>&</sup>lt;sup>1</sup> Restrictions in ITN and BTS SW compatibility will be communicated by using Technical Notes.

## Compatibility between new operating and application SW of BTS SW CX7 and other network elements

The table below shows the compatibility between the new operating and application SW of BTS SW CX7 and the SW of other network elements.

New BSS14 operating and application SW in BTS	BSC SW	NetAct SW	MSC	MGW
A5/3 ciphering	_	OSS 5.1	M14.1	-
Energy saving mode for BCCH TRX		CD2.0	-	-
WB-AMR with MGW			M14	U4.11
AMR TFO with MGW			M14	U4.1
PS and SDCCH on DFCA TRX			-	-
WB-AMR with TCSM3i			M14	-
1 Requires CD6T3 or later.				

Table 6 Compatibility between new operating and application SW of BTS SW CX7 and other network elements