NOKIA

Nokia UltraSite EDGE Base Station

Generic Failure Report

BTS SW CX4.0-4 update 05/05

CE

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

1 About this document

This document describes the current unsolved problems in Nokia UltraSite EDGE Base Station Software (BTS SW) CX4.0-4, as well as the corrections made to the existing problems.

This report is issued on 27 May 2005.

2 Open problems

2.1 Problem description

In the problems below, the following information is displayed:

Heading row

The name of the problem.

Problem report:

The internal reference number of the problem. It is provided here to help identify any particular problem.

Exists in

This field lists the BTS SW in which the problem exists.

Target for solving

This is our latest and best estimation of the BTS SW release in which the problem will be corrected.

If the field is marked with '–', the problem has only minor effect on BTS operation and will not be corrected.

If the field is marked with 'TBD', the schedule for correcting the problem is still open.

Applies to

This field lists which frequency band or product type the problem applies to, in the following manner:

- Problem applying only to GSM BTS is marked with ‘GSM’
- Problem applying only to EDGE BTS is marked with ‘EDGE’
- When the field is empty, the problem applies equally to GSM and EDGE base stations

Problem description and workaround

These fields describe briefly the problem and the symptoms, and may give instructions on how to avoid or get around the problem.

System impact

This field describes the impact to the end-user and maintenance services. The impact is defined after the workaround and it gives more detailed information if it has an impact on certain configurations, HW types or features.

2.2 New reported problems

This section lists all the new problems reported since the previous issue of the Generic Failure Report.

2.2.1 TRX carrying no traffic

Problem report: 1-53729121, 1-53598688, 15609ES09P, 1-54505141

Exists in: CX4.0-4

Target for solving: CX4.0-5

Applies to:

Description:

When CX4.0-4 is activated, the incoming handovers fail with the BTS. 7738 ‘BTS WITH NO TRANSACTIONS’ alarm is seen at the BSC after a defined time. In addition, 7743 ‘MEAN HOLDING TIME BELOW DEFINED THRESHOLD’ and/or 7745 ‘CHANNEL FAILURE RATE ABOVE DEFINED THRESHOLD’ alarms are reported for the affected TRX.

The problem occurs with non-hopping and RF hopping.

The root cause for the problem has been identified to be in the implementation of the ‘Runtime Diagnostics and Recovery for 7606 TRX FAULTY alarms in UltraSite’, which was implemented in CX4.0-4. The 7606 TRX FAULTY

alarms that are checked by the diagnostics are not sent to the BSC. The alarm descriptions for the affected 7606 alarms can be found in the CX4.0-4 Generic Failure Report for the Runtime Diagnostics (ref 13225ES08P).

The Runtime Diagnostics was implemented in CX4.0-4, but because of the potential problems, it is removed from CX4.0-5.

Workaround:

A BCF lock/unlock clears the problem, but the problem may come back during normal operation.

System impact:

TRX units are carrying no traffic.

2.2.2 After BTS SW CX4.0-4 activation, TRXs stay in blocked state

Problem report: 1-52686128

Exists in: CX4.0-4

Target for solving: CX4.0-5

Applies to:

Description:

After the CX4.0-4 activation, some TRX units do not come into WO-state. A typical alarm seen is 7606 TRX FAULTY ‘Interface problems between O&M and DSP software'.

The alarm may be seen when BB-hopping and Antenna Hopping are in use.

In non-hopping and RF hopping, the alarm is not sent to the BSC because of the problem in the Runtime Diagnostics causing the TRX carrying no traffic.

The problem occurs because the Runtime Diagnostics (13225ES08P) flash memory write operation to BB2x board interrupts the downloading of EQDSP SW.

Workaround:

A BCF lock/unlock clears the problem, but the problem may come back during normal operation.

System impact:

Unnecessary 7606 TRX FAULTY alarms.

2.2.3 After BTS SW CX4.0-4 activation in BB-hopping or Antenna Hopping, TRX units stay in BL-RSL state

Problem report: 15888ES09P, 12655ES11P, 12654ES11P, 15850ES09P, 15849ES09P, 12552ES11P

Exists in: CX4.0-4

Target for solving: CX4.0-5

Applies to:

Description:

After the CX4.0-4 BTS SW activation in BB-hopping or Antenna Hopping, all TRX units may stay in BL_RSL state. Alarms 7705 LAPD FAILURE are seen at the BSC. An additional BCF lock/unlock is needed for recovery.

Workaround:

An extra BCF lock/unlock after the SW activation clears the problem.

System impact:

The BTS does not automatically recover to working state after the BTS SW activation.

2.2.4 GSM TRXs are reset again after coming to WO state when BCF is reset

Problem report: 5544ES05X, 5613ES05X

Exists in: CX4.0-3

Target for solving: CX4.1

Applies to: GSM

Description:

Sometimes after a BCF reset, sectors containing GSM TRXs are reset again automatically. The problem does not occur for sectors containing EDGE TRXs.

Workaround:

-

System impact:

An unnecessary reset for GSM sectors after a BCF reset.

2.2.5 In the TRX test report, the tested TRX (main or auxiliary) is not indicated

Problem report: 6248ES09P

Exists in: CX3.3-1

Target for solving: CX4.1

Applies to: EDGE

Description:

In the TRX test report when IDD configuration is used, the tested TRX (main or auxiliary) is not indicated.

Workaround:

-

System impact:

No effect on end-user services.

2.2.6 When a DVHA duplex unit is used, the TRX test will fail when the test is done with the BTS Manager

Problem report: 6115ES09P

Exists in: CX3.3-1

Target for solving: CX4.1

Applies to:

Description:

When a DVHA duplex unit is used, the TRX test fails when the test is done with the BTS Manager and the Abis is disconnected from the BSC.

Workaround:

Run the TRX test with a BSC connection.

System impact:

No effect on end-user services.

2.2.7 In a mixed configuration, EDGE capable mobiles fail to use GPRS and EGPRS if BCCH is in a non-EDGE TRX

Problem report: 1-51184871

Exists in: CX4.0

Target for solving: CX4.1 CD1.0

Applies to:

Description:

The BTS is configured with a mixed configuration of TSxA and TSxB units into the same sector.

BCCH is configured to the TSxA, and EGPRS is configured to the TSGB.

The non-EDGE capable mobiles can attach and use GPRS in the cell, but the EDGE capable mobiles cannot attach and use GPRS or EGPRS in the same cell.

Workaround:

The problem does not occur if the BCCH is configured to an EDGE capable TRX unit TSxB. It is also recommended to use the preferred BCCH in an EDGE capable TRX.

The problem does not occur if EGPRS is not activated at the BSC (EGENA = N).

System impact:

EDGE mobiles used in a network cannot access GPRS or EGPRS services in a mixed configuration BTS if the BCCH is not in an EDGE capable TRX.

2.2.8 Auxiliary TRX state is not reported correctly

Problem report: 5614ES05X

Exists in: CX4.0-4

Target for solving: CX4.1 CD1.0

Applies to: EDGE

Description:

When the main TRX is pulled out, the state of the auxiliary TRX remains Supervisory. Also the LED colour of the Auxiliary TRX remains green both on the unit and the BTS Manager.

Workaround:

-

System impact:

No effect on end-user services.

2.2.9 TRX cooling fan may stop when power supply is switched off and back on

Problem report: 14766ES09P

Exists in: CX4.0-4

Target for solving: CX4.1

Applies to:

Description:

Two TRX units connected to a single BB2x card are locked.

The power is switched off and back on from the PWSx power supplies.

After a few minutes, the fan unit for the locked TRX units will stop without any alarm. Unlocking the TRX units will start the fan again.

Workaround:

Lock/unlock the TRX or the sector.

System impact:

The TRX units will overheat, which shortens the unit lifetime.

2.2.10 LMU multicast SW activation fails occasionally

Problem report: 14559ES09P

Exists in: CX4.0

Target for solving: CX4.1 CD1.0

Applies to:

Description:

LMU SW is updated with a multicast download. After the LMU SW is downloaded, the LMU SW activation does not work.

Workaround:

Retry the LMU SW activation. If it does not work, the LMU SW can be activated with a local or remote LMU Manager connection.

System impact:

Occasionally, the LMU SW cannot be activated after a multicast download.

2.2.11 The BTS synchronisation is lost if the LMU Q1 cable is disconnected and a BCF reset given

Problem report: 14585ES09P

Exists in: CX4.0

Target for solving: CX5

Applies to:

Description:

The BTS is configured to use the LMU unit as a synchronisation source.

When a BCF reset is given to the Base Station when the LMU Q1 cable is disconnected, the Base Station synchronisation is lost. The TRX objects will remain in BL_RSL at the BSC, but no specific alarm is raised.

Workaround:

Connect the LMU Q1 cable and lock/unlock the BCF.

System impact:

The BTS is out of service if the BCF is reset when the LMU Q1 cable is disconnected.

2.2.12 Ongoing calls are dropped in other sectors when replacing TSxx units by hot insert

Problem report: 9096ES10P

Exists in: CX4.0-4

Target for solving: CX5

Applies to:

Description:

TSxx units are blocked at the BTS Manager and replaced with the BTS cabinet powered on.

When the replaced TRXs are unblocked from the BTS Manager, the ongoing calls in other sectors are dropped.

Workaround:

Lock/unlock the TRX at the BSC.

System impact:

Ongoing calls are dropped.

2.2.13 Problems during hot insert when the sector is blocked

Problem report: 9097ES10P

Exists in: CX4.0-4

Target for solving: CX5

Applies to:

Description:

A sector is blocked from the BTS Manager. The TSxx and BB2x units of a particular TRX are replaced.

In ANSI configuration, the particular BCCH TRX enters the ‘supervisory’ state and starts transmitting before the sector is unblocked.

In ETSI configuration, BCCH transmission does not start when the sector is blocked, but the TRX enters the ‘waiting for system information’ state and a TRX test cannot be executed.

Workaround:

Lock/unlock the sector at the BSC.

System impact:

No effect on end user services.

2.2.14 Replacing GSM units with EDGE units using hot insert is unsuccessful

Problem report: 9098ES10P

Exists in: CX4.0-4

Target for solving: CX5

Applies to:

Description:

When upgrading TSxx units from GSM HW to EDGE HW in a baseband hopping sector with hot insert, various alarms are raised and the upgraded sector fails to become operational.

A BCF lock/unlock is required to recover the upgraded BTS sector.

This problem also occurs when replacing BTS units by hot insert, if one or more GSM TSxA units are replaced with EDGE TSxB units.

Workaround:

Lock/unlock the BCF.

System impact:

The BTS may not be operational after a BTS upgrade.

2.2.15 Fans are running although their associated TSxx units are in intelligent shutdown mode

Problem report: 14999ES09P

Exists in: CX4.0-4

Target for solving: CX5

Applies to:

Description:

When intelligent shutdown is activated, alarm 7995 is reported at the BSC and the TRXs are shut down (BL-PWR).

However, the fans associated with the shutdown TRXs continue running. This is not the expected operation because the associated fans should power off to save power.

Workaround:

-

System impact:

No effect on end-user services. Fans are left running unnecessarily.

2.3 Open problems reported in previous GFR

This section lists all the existing problems reported from the previous issues of the Generic Failure Report.

2.3.1 Calls possible with TRX at the BSC showing BL-RST state

Problem report: 3-1670216, 1-47890841, 1-49628163, 1-51236841, 1-52094037

Exists in: PU1.0-

Target for solving: CX4.1

Applies to:

Description:

During the BTS HW upgrade, the ‘Update Abis Allocation’ command at the BTS Manager is being used. HW Configurator file is updated and uploaded to the BTS.

When OMU reset is done at the BSC to take the new HW configuration into use, all ongoing calls are dropped in non-hopping and RF-hopping modes.

After the OMU reset all objects BCF/BTS/TRX are in BL_RST state, but new calls are still possible. A BCF lock/unlock is required to recover from BL-RST.

Workaround:

Lock/unlock the BCF.

System impact:

Dropped calls.

2.3.2 Alarm 7602 BCF NOTIFICATION 'Power unit has lost connection to temperature sensor'

Problem report: 1-41445161, 1-47552001, 1-37242753, 1-47700858

Exists in: CX3.0

Target for solving: CX4.1

Applies to:

Description:

If PWSA power supplies are used, an unwanted alarm 7602 BCF NOTIFICATION 'Power unit has lost connection to temperature sensor' may be activated.

Workaround:

If only one PWSA unit is used, hot inserting and extracting another PWSA unit into the empty PWSA slot will cancel the alarm.

This workaround will only work until the next power reset occurs.

System impact:

The alarm is not service affecting, therefore the problem has minimal effect on the network operation.

2.3.3 Corrupted TRX IDs with alarms at BSC

Problem report: 1-49097865, 1-44917871, 5319ES09P, 1-18824630, 1-51791003, 1-51079271

Exists in: CX3.0

Target for solving: CX4.1

Applies to:

Description:

Sometimes the BTS alarm sent to the BSC contains an incorrect TRX ID number.

A typical example of this problem is the generation of a false alarm 7606 TRX FAULTY ‘TSxx temperature is dangerously high’ for TRX 236.

Also alarms 7729 RADIO NETWORK RECOVERY FAILED for the wrong TRX ID and 2843 ALARM DIFFERENCE BETWEEN BSC AND OMC may be activated.

Workaround:

Cancel the alarms manually at the BSC. See the BSC documentation for detailed instructions.

System impact:

This is a ghost alarm, which does not cancel at the BSC. It does not have any effect on the system operation.

2.3.4 Send BCCH command does not work correctly using BTS Manager

Problem report: 1-49628081 , 17405ES08P

Exists in: CX4.0

Target for solving: CX4.1

Applies to:

Description:

The Send BCCH command is used with the Abis disconnected at the BTS Manager. The frequency is selected and the command is successful, but the actual transmitted frequency is not the correct one when checked with the spectrum analyser.

Workaround:

-

System impact:

No effect on end user services, the test does not work properly.

2.3.5 Runtime diagnostics and recovery for 7606 TRX FAULTY alarms in UltraSite

Problem report: 13225ES08P

Exists in: CX3.0

Target for solving: CX4.1

Applies to:

Description:

The runtime diagnostics and recovery for 7606 TRX FAULTY alarms will be implemented into UltraSite EDGE BTS SW. This was implemented into MetroSite EDGE BTS SW CXM3.0-3.

The runtime diagnostics and recovery will be performed for the following 7606 TRX FAULTY fault conditions:

- Interface problems between O&M and DSP SW
- The transmitter output of TRX is overdriven
- The transmitter output power has dropped at least 3 dB
- The transmitter output power is too low
- Fault in RF module receiver interface
- Fault in RF module transmitter interface
- The RF transmitter synthesizer is not locked
- The RF transmitter frequency hopping synthesizer 1 is not locked
- The RF transmitter frequency hopping synthesizer 2 is not locked
- The RF receiver frequency hopping synthesizer 1 is not locked
- The RF receiver frequency hopping synthesizer 2 is not locked
- The RF receiver synthesizer is not locked
- RF module initialisation has failed
- Internal DSP and RF module communication failure in TRX

When the BTS has detected an alarm condition, it performs internal diagnostics. During that time, the TRX state at the BSC is shown as BL-DGN.

When the TRX enters the BL-DGN state, the ongoing calls are handed over to other TRXs by the BSC.

If the diagnostics cannot remove the alarm condition, the 7606 TRX FAULTY alarm is sent to the BSC.

The runtime diagnostics is performed only in non-hopping and RF-hopping modes.

This was implemented in CX4.0-4, but because of potential problems, it is removed from CX4.0-5. Further tests will be done for the CX4.1 release.

Workaround:

Lock/unlock the TRX or the sector.

System impact:

TSxx units may be sent to Hardware Repair Centre where no fault can be detected.

2.3.6 UltraSite BTS does not recover back to WO-state after power break

Problem report: 5609ES05X, 14653ES08P

Exists in: CX3.0

Target for solving: CX4.1

Applies to:

Description:

After a power supply break to the UltraSite BTS, unexpected 7606 TRX FAULTY alarms may randomly be generated.

Workaround:

Lock/unlock the BCF after a power supply recovery.

System impact:

Sometimes the base station does not recover normally after power breaks. This may happen when AC power supplies are being used or the batteries have run down.

2.3.7 Alarm 2993 'BTS and TC unsynchronization clear calls on Abis interface'

Problem report: 1-43110111,1-44226151, 1-30096301, 1-41866801, 1-44032911, 1-37246741, 11308ES11P

Exists in: CX4.0

Target for solving: CX4.1

Applies to:

Description:

Unwanted alarms 2993 ‘BTS and TC unsynchronization clear calls on Abis interface’ may be generated by the BSC.

The problem occurs mostly on timeslot 0, 6 or 7.

Nokia has previously issued enhancements to this problem:

- ITN SW C2.1-2 or later has to be used instead of ITN C2.0 or ITN C2.1 with ITN C1.2 transmission HW. See Technical Note No. 35 for details.
- Oven oscillator tuning changes implemented in BTS SW CX4.0. (See reference 1-22338592 in this document.)
- Use of additional SDCCH channel on timeslot 1 for non-BCCH TRX when EGPRS is activated. See problem reference 1-24123401 in this document for correction in CX4.0-3.

An issue of BTS frame synchronisation with BB2A will be corrected in CX4.1.

Workaround:

Lock the alarming timeslot at the BSC.

System impact:

Dropped calls for the affected timeslots.

2.3.8 UltraSite co-siting power-up problem

Problem report: 1-39156198

Exists in: CX3.0

Target for solving: CX4.1

Applies to:

Description:

When an UltraSite Master-Slave configuration is used with RTC and DVxx units in the cabinets, it may happen that during the power-up of the site, some TRXs raise a 7606 TRX FAULTY alarm with the fault reason ‘There is disturbance in the serial DL bus or bus is broken'.

Workaround:

Lock/Unlock the BCF.

System impact:

Temporary capacity degradation. Affects customers using UltraSite co-siting with RTC and DVxx units in the same cabinets.

2.3.9 3rd TRX in the IDD sector does not take calls with RF hopping

Problem report: 1-41055147

Exists in: CX3.0

Target for solving: CX4.1

Applies to: EDGE

Description:

When three TRX units are configured in one sector with IDD, the 3rd TRX in the sector is unable to take calls when RF hopping is used.

Workaround:

-

System impact:

Dropped call rate increased with large IDD configurations.

2.3.10 Unnecessary alarm 7602 may appear with IDD configuration

Problem report: 9576ES09P, 9571ES09P

Exists in: CX4.0

Target for solving: CX4.1

Applies to: EDGE

Description:

Commissioning the BTS to use IDD may raise an unnecessary alarm 7602 BCF NOTIFICATION with the fault reason ‘Mismatch between BSC/MMI configuration file and the actual configuration’ after a while.

Workaround:

-

System impact:

No effect on end-user services.

2.3.11 Alarm 8048 does not cancel after the LMU clock synchronisation has been restored

Problem report: 10140ES09P,10333ES09P, 10335ES09P

Exists in: CX4.0

Target for solving: CX4.1

Applies to:

Description:

UltraSite is synchronised by LMU (LMU is the synchronisation master). The LMU looses the GPS signal. Alarm 8048 is raised and UltraSite is forced to unsynchronised mode. The LMU restores the GPS connection but UltraSite does not return to synchronisation mode (LMU is the synchronisation master). Alarm 8048 does not cancel.

Workaround:

The synchronisation is recovered by a BCF reset or a short GPS signal break where a new 8048 alarm is raised and cancelled.

System impact:

No effect on end-user services.

2.3.12 TRX 'Shutdown' state is shown as an administrative state (not operational state) in BTS Manager

Problem report: 6156ES09P, 6081ES09P, 3527ES05X, 3568ES05X, 1-43049221

Exists in: CX4.0

Target for solving: CX4.1

Applies to:

Description:

In Intelligent Shutdown, the unit status display at the BTS Manager shows TRX 'Shutdown' state as an administrative rather than operational state.

This causes a number of issues:

- This is inconsistent with the BSC status display that shows 'BL-PWR' as an operational state.
- At the BTS Manager, the TRX operational state is still shown as supervisory. This causes for example that the BTS Manager believes the state to be operational and allows Abis loop tests, TRX tests, block, unblock, and reset commands to be performed.

The correct behaviour is to show 'Shutdown' as an operational state – such as Configuring, SW loading, Supervisory, instead of an administrative state such as locked/unlocked/blocked/unblocked.

Workaround:

-

System impact:

No effect on end-user services.

2.3.13 Unnecessary alarm on IDD auxiliary TRX after locking the IDD sector

Problem report: 2919ES05X

Exists in: CX3.3-1

Target for solving: CX4.1

Applies to: EDGE

Description:

When an IDD sector is locked, it may happen that the last IDD auxiliary TRX in the configuration is removed from the BTS Manager Equipment view and an alarm 7607 TRX OPERATION DEGRADED with a fault reason ‘There is disturbance in the serial DL bus or bus is broken' is raised.

Workaround:

-

System impact:

No effect on end-user services.

2.3.14 The corresponding LED colour for reported alarm severity of some 8000-group alarms is incorrect in BTS Manager

Problem report: 6132ES09P, 5783ES11P, 3439ES09P, 3453ES09P, 5749ES09P

Exists in: CX4.0

Target for solving: CX4.1

Applies to:

Description:

The BTS Manager SW reports the alarm severity incorrectly for some 8000-group transmission alarms. The transmission unit LED colour in the BTS Manager may be incorrect.

Workaround:

-

System impact:

No effect on end-user services. Incorrect LED colour in the BTS Manager.

2.3.15 Cancellation cannot be detected from commissioning report

Problem report: 3313ES05X

Exists in: CX4.0

Target for solving: CX4.1

Applies to:

Description:

The BTS commissioning report does not show if the commissioning was cancelled. The cancellation was done after the Abis timeslot allocation had been given.

Workaround:

-

System impact:

No effect on BTS services. Information is missing from the commissioning report.

2.3.16 Abis loop test repeated on commissioning report

Problem report: 3731ES09P

Exists in: CX3.0

Target for solving: CX4.1

Applies to:

Description:

The commissioning report shows that the Abis loop test is repeated several times on the same master EGPRS timeslot when EDAP timeslots are tested. Nevertheless, the tests on the EDAP timeslots are carried out correctly.

Workaround:

-

System impact:

No effect on end-user services. Extra loop tests are performed during commissioning.

2.3.17 It is possible to select an auxiliary TRX for the TRX test from the TRX dropdown box

Problem report: P637053, 3494ES09P, 1-34693707

Exists in: CX3.3-1

Target for solving: CX4.1

Applies to: EDGE

Description:

It is possible to select an auxiliary TRX for the TRX test from the TRX dropdown box. The TRX test will fail.

The correction for the problem is to disable the Start button on the TRX Test dialogue box in case of an IDD auxiliary TRX, even though the ARFN value is changed.

After the correction, the user will still be able to select the auxiliary TRX for the TRX test but because the Start button is disabled, the user cannot run it.

Workaround:

Select the main TRX first, after that select the AUX radio button and run the test.

System impact:

No effect on end-user services.

2.3.18 BCCH carrier still transmitted after blocking the BCF or sector at BTS Manager

Problem report: 11994ES08P, 1-45684133, 6233ES09P

Exists in: CX4.0

Target for solving: CX4.1

Applies to: EDGE

Description:

When the BCF or sector is blocked at the BTS Manager, the BCCH frequency is still transmitted on the Antenna Hopping or IDD sector.

Workaround:

Lock/Unlock the objects at the BSC.

System impact:

No effect on end-user services.

2.3.19 Transmission unit LED is shown incorrectly on BTS Manager

Problem report: 8582ES09P

Exists in: CX4.0 (BTS Manager 4.0)

Target for solving: CX4.1 (BTS Manager 4.1)

Applies to:

Description:

If the status of the transmission unit LED is changed to red, this is not reflected at the BTS Manager. The colour at the BTS Manager remains green.

Workaround:

-

System impact:

No effect on end-user services.

2.3.20 In IDD/4UD configuration, BTS Manager does not show the correct status of the auxiliary TRXs during Intelligent shutdown

Problem report: 6304ES09P

Exists in: CX4.0

Target for solving: CX4.1 (BTS Manager 4.1)

Applies to: EDGE

Description:

During the Intelligent Shutdown, when an IDD/4UD configuration is used, the BTS Manager does not show the correct status of the auxiliary TRXs. The operational state of the auxiliary TRX units is shown as ‘missing from configuration’ and the administrative state is shown as ‘unlocked’.

Workaround:

-

System impact:

No effect on end-user services.

2.3.21 In TRX loop test, AGC is always HIGH when more than one timeslot is active

Problem report: 7117ES09P

Exists in: CX3.3-1 (BTS Manager 3.3.3)

Target for solving: CX4.1 (BTS Manager 4.1)

Applies to:

Description:

In a TRX loop test, the AGC parameter is always HIGH when more than one timeslot is tested simultaneously.

Workaround:

When only one timeslot is tested at a time, both LOW and HIGH values can be selected for the AGC parameter in the TRX loop test window.

System impact:

No effect on end-user services.

2.3.22 In TRX loop test AGC does not work properly on timeslots 4-7

Problem report: 2230ES41

Exists in: CX4.0

Target for solving: CX4.1 (BTS Manager 4.1)

Applies to:

Description:

The BTS Manager does not send the AGC Main and Div settings of timeslots 4-7 correctly.

Irrespective of what has been selected (low/high gain), the BTS Manager always uses the high gain mode for timeslots 4-7. The timeslots 0-3 do not have this problem.

Workaround:

-

System impact:

No effect on end-user services. Testing capability is decreased.

2.3.23 BTS Manager's Traffic Trace window displays incorrectly 'TRX transmitting' during BCCH shutdown mode

Problem report: 6347ES09P

Exists in: CX4.0 (BTS Manager 4.0)

Target for solving: CX4.1 (BTS Manager 4.1)

Applies to:

Description:

During the Intelligent Shutdown, when in 'BCCH shutdown mode', the BTS Manager Traffic Trace window shows that non-BCCH TRXs, which are in a shutdown mode, are transmitting in the Timeslot traffic bar when a TRX traffic trace is requested for them. However, the non-BCCH TRXs are in BL-PWR state at the BSC and are not transmitting

The same problem has not been observed during 'None shutdown mode'.

Workaround:

-

System impact:

No effect on end-user services.

2.3.24 Remote BTS Manager problem with Windows 2000

Problem report: 7173ES08P, 4850ES05X

Exists in: CX3.3-1 (BTS Manager 3.3.1)

Target for solving: CX4.1 (BTS Manager 4.1)

Applies to:

Description:

A remote BTS Manager session on a PC using Windows 2000 is active on a BTS. A local BTS Manager connection on a site is established to the same BTS. The remote BTS Manager first disconnects but then gets jammed. The program needs to be terminated.

Workaround:

Terminate the program from the Windows Task Manager.

System impact:

No effect on end-user services.

2.3.25 Outdoor unit information missing from HW information

Problem report: 4317ES03

Exists in: CX4.0

Target for solving: CX4.1 (BTS Manager 4.1)

Applies to:

Description:

When FXC RRI boards are used, the Outdoor unit information is missing from the HW versions report.

Workaround:

-

System impact:

No effect on end-user services. Incorrect information is shown at the BTS Manager.

2.3.26 Wrong message displayed in the BTS Manager window when the TRX test is run with Antenna Hopping enabled

Problem report: 2560ES11P

Exists in: CX4.0

Target for solving: CX4.1 (BTS Manager 4.1)

Applies to:

Description:

The TRX tests with Antenna Hopping are not supported from the BTS Manager or the BSC. However, in these circumstances the message displayed by the BTS Manager is ‘TRX test failed, can't get response from BTS software’. The message should be more descriptive, for example ‘Invalid hopping mode’.

Workaround:

-

System impact:

No effect on end-user services.

2.3.27 Possible to define different TRX frequency versions to the same Dual Duplex Filter

Problem report: P2084216

Exists in: PU1.0-

Target for solving: CX4.1 (HW Configurator 4.1)

Applies to:

Description:

It is possible to connect different TRX versions (for example TSDA and TSGA) to the same Dual Duplex Filter in the HW Configurator, although that kind of configuration does not work in the BTS.

No SW correction will be implemented for this fault report. HW Configurator Online help file will be updated to describe the required checks to be made.

Workaround:

Check the configuration before sending it to the BTS.

System impact:

No effect on end-user services.

2.3.28 It is possible to define more than one antenna to a DVxx antenna port

Problem report: 1-39105611

Exists in: CX3.3-2

Target for solving: CX4.1 (HW Configurator 4.1)

Applies to:

Description:

It is possible to define more than one antenna to the DVxx antenna port using the Antenna Properties Window in the HW Configurator. If the antennas are configured like this, the VSWR monitoring for the antennas does not work properly.

Workaround:

Check the antenna connections in the HW Configurator before sending to the BTS.

System impact:

Unnecessary alarms are activated.

2.3.29 Floating units in HW Configurator

Problem report: 1-41023181

Exists in: CX4.0 (HW Configurator 4.0)

Target for solving: CX4.1 (HW Configurator 4.1)

Applies to:

Description:

When the Outdoor cabinet type is selected in the HW Configurator, the common rack units in the HW Configurator are incorrectly positioned in the Cabinet Units view.

Workaround:

-

System impact:

No effect on end-user services.

2.3.30 TSxC on HW Configurator version 4.0

Problem report: 1-45299295

Exists in: CX4.0 (HW Configurator 4.0)

Target for solving: CX4.1 (HW Configurator 4.1)

Applies to:

Description:

TSxC units can be seen as possible TSxx units in HW Configurator 4.0, although such units do not exist.

Workaround:

-

System impact:

No effect on end-user services.

2.3.31 TRX test for EDGE units fails when run from the BTS Manager with the modulation set to 8-PSK MCS5 or MCS9 and EDGE disabled at the BSC

Problem report: 1-41298211, 1-41298239

Exists in: CX4.0

Target for solving: CX4.1 CD1.0

Applies to: EDGE

Description:

When the 8-PSK (MCS 5 or MCS 9) TRX test is run on EDGE TRX from the BTS Manager, the test fails. The Abis is connected and the EGENA parameter is set to OFF at the BSC. This is the expected behaviour, but the error message to the user on the BTS Manager should be more informative.

The test passes with CX3.3-x SW, because the tests are run on GMSK mode.

Workaround:

When running the 8-PSK tests, EGENA has to be activated at the BSC.

System impact:

No effect on end-user services. An error message in these circumstances is misleading.

2.3.32 Unnecessary alarms 1254 'Unsolicited data link re-establishment'

Problem report: 1-11570932, 1-11570923

Exists in: CX3.0-3

Target for solving: CX4.1 CD1.0

Applies to:

Description:

During transmission breaks, an unnecessary alarm 1254 'Unsolicited data link re-establishment' may be raised. The unnecessary alarm does not affect the BTS operation.

Workaround:

-

System impact:

No effect on end-user services. Unnecessary alarms reported from the BTS to the BSC and OSS.

2.3.33 Calls drop when lock and unlock is done to BCCH TRX in Intelligent Underlay Overlay BB-hopping sector

Problem report: 1-15513701

Exists in: CX3.0-3

Target for solving: CX4.1 CD1.0

Applies to:

Description:

A sector where the underlay hopping is set up as Baseband hopping (BB) but the Intelligent Underlay Overlay (IUO) feature has not been activated. After a BCCH TRX lock and unlock, calls are dropped.

Workaround:

Activate the IUO.

System impact:

Increased drop call rate. After the workaround, no effect on end-user services.

2.3.34 Failure of both low gain MHAs in 2-way diversity configuration reports only the first failure

Problem report: 7512ES09P

Exists in: CX4.0

Target for solving: CX4.1 CD1.0

Applies to:

Description:

When low gain MHAs are used in a 2-way diversity configuration and both the main and the diversity path MHAs fail, only one alarm 7607 TRX OPERATION DEGRADED with a fault reason 'Fault in chain between power unit and MHA' is sent to the BSC.

Workaround:

-

System impact:

No effect on end-user services if the faulty MHAs are replaced promptly.

2.3.35 UltraSite CAFA cabinet fan speed control curve in the BTS SW does not match the actual fan rotation curve

Problem report: 3993ES03

Exists in: CX3.3-1

Target for solving: CX4.1 CD1.0

Applies to:

Description:

The UltraSite CAFA cabinet fan speed control curve in the BTS SW does not match the actual fan rotation curve. This may result in unnecessary '7602 BCF notification: Cabinet fan speed has reduced from the set speed' alarms.

Workaround:

-

System impact:

No effect on end-user services.

2.3.36 Active Q1 alarms disappear in reset when DMC radio is used

Problem report: 1-23377171

Exists in: CX3.3-1

Target for solving: CX5

Applies to:

Description:

External DMC Spectrum radio link equipment is connected to the UltraSite EDGE BTS using the Q1 bus. If there are active alarms for this equipment and an OMU/BCF reset is given to UltraSite, the alarms disappear from the BSC.

The new alarms after the reset are displayed correctly.

Workaround:

-

System impact:

Alarms are unnecessarily removed after an OMU/BCF reset.

2.3.37 Dynamic Abis mismatch does not raise alarm 7730

Problem report: 1-45511632

Exists in: CX3.3-1

Target for solving: CX5

Applies to: EDGE

Description:

If the size of the Dynamic Abis Pool is modified first at the BTS, alarm 7730 'Configuration of the BCF is failed' is not raised to inform about the Dynamic Abis Pool mismatch.

Workaround:

The Dynamic Abis Pool setup has to be the same at the BTS and BSC.

If the size of the pool is modified, the modification has to be done first at the BSC. This will then activate the 7730 ‘Configuration of BCF failed’ alarm to ensure that the user knows that the DAP needs to be modified also at the BTS.

System impact:

Manual checks are required at the BSC and BTS to ensure the correct setup.

2.3.38 LIF and synchronisation settings are missing from the UltraSite commissioning report

Problem report: 9332ES11P

Exists in: CX3.3-1

Target for solving: CX5 (ITN3.0 is also required)

Applies to:

Description:

Transmission unit LIF and synchronisation settings are missing from the UltraSite commissioning report.

Workaround:

-

System impact:

No effect on end-user services.

2.3.39 BER shows 0.0000% in TRX test when diversity not used

Problem report: P2442316

Exists in: PU1.0-3

Target for solving: CX5 (BTS Manager 5)

Applies to:

Description:

BER shows 0.0000% in the TRX test for the Diversity path when the DRIV of a sector is set to ‘N’ at the BSC (diversity is not used). The RX sensitivity for the Diversity path is empty, which is correct.

Workaround:

-

System impact:

No effect on end-user services.

3 Corrected problems

3.1 Problems corrected in BTS SW CX4.0-4

3.1.1 Degraded uplink and downlink quality

Problem report: 1-47803587, 1-47825731, 1-48351605, 1-50760831, 1-48321143

Exists in: CX4.0

Target for solving: CX4.0-4

Applies to: GSM

Description:

Degraded quality distribution compared to BTS SW CX3.3-2 for both uplink and downlink can be noticed with low signal levels.

The problem occurs with GSM TRX units when the uplink DTX is active.

Workaround:

Deactivate the uplink DTX.

System impact:

Unnecessary handovers and drop calls.

3.1.2 Slight increase in drop call rate

Problem report: 1-49122284, 1-47379814

Exists in: CX4.0

Target for solving: CX4.0-4

Applies to: GSM

Description:

A slight increase in the drop call rate (max 1 %) may be noticed. The problem occurs when the Uplink DTX is in use.

Workaround:

Deactivate the Uplink DTX.

System impact:

A slight increase in drop calls.

3.1.3 Degradation in retainability

Problem report: 1-47544241

Exists in: CX4.0

Target for solving: CX4.0-4

Applies to:

Description:

Degradation in retainability is seen.

An increase in counter 57044 is seen at the BSC. The counter is increased when the call is dropped after the Assignment Complete.

Workaround:

-

System impact:

A slight increase in drop calls.

3.1.4 Difference in reported Uplink RX-level between EDGE and GSM TRX

Problem report: 1-46764649, 1-49059591, 1-49505619

Exists in: CX3.3-1

Target for solving: CX4.0-4

Applies to:

Description:

When EDGE and GSM TRX units are used in a mixed configuration connected to the same BB2E/BB2F unit, the EDGE units may report up to 10 dB lower average RX level values in the mobile measurement reports to the BSC depending on the configuration.

The problem occurs in Baseband hopping.

Workaround:

Connect TRX units of the same type, either TSxA or TSxB, to a BB2x unit.

System impact:

May cause increased handovers.

3.1.5 Unintentional OMU resets when reading the UltraSite BCF Hardware block diagram from NetAct system

Problem report: 1-49494171, 6621ES10P

Exists in: CX3.3-1

Target for solving: CX4.0-4

Applies to:

Description:

When the base station receives a ‘BTS HW REQ' command from the NetAct system, it replies with ‘BTS HW REPORT’. The report is not correct if no Passive Unit Information has been set with the HW Configurator.

An unintentional OMU reset may occur at the base station. The resets are seen as 7700 – ‘BTS OMU INITIALISATION’ alarms at the BSC. The reading results in a decoding error at NetAct.

Workaround:

The problem occurs when the Passive Unit information is left empty in the HW Configurator.

Use the HW Configurator and type in at least the serial number and the product ID for the CRMA (core mechanics). This can be done using the remote BTS Manager connection.

System impact:

7700 – 'BTS OMU INITIALISATION' alarms are seen at the BSC. Although this alarm indicates an OMU reset, the ongoing calls may be dropped.

3.1.6 Cooling fan alarms generated at low temperatures

Problem report: 1-46812681, 1-47779801, 1-48288181, 1-49288173, 1-49110630, 1-48948074

Exists in: CX3.0

Target for solving: CX4.0-4

Applies to:

Description:

UltraSite BTS is operating at low ambient temperature. As the cooling of the cabinet is not required, the particular fans are stopped.

When the temperature inside the cabinet rises and the cooling would be required, it may happen that the fan does not start rotating again.

Alarms 7602 BCF NOTIFICATION 'Cooling fan is broken' are raised.

Workaround:

Lock/Unlock the BCF.

System impact:

Unnecessary cooling fan alarms.

3.1.7 Cooling fans start and stop continuously at low temperatures

Problem report: 8134ES11P

Exists in: CX3.0

Target for solving: CX4.0-4

Applies to:

Description:

When UltraSite BTS is operating at approximately +13°C ambient temperature, it may happen that the fan stops and starts continuously until the ambient temperature changes.

A hysteresis is added to the SW with different start and stop temperatures.

Workaround:

-

System impact:

Continuous starting and stopping the fan may shorten the fan lifetime.

3.1.8 Repeated TRX tests may cause a site reset

Problem report: 1-41298271

Exists in: CX4.0

Target for solving: CX4.0-4

Applies to:

Description:

Repeated TRX tests using the BTS Manager may cause the BTS Manager window to freeze followed by an unintentional BCF reset.

This may also happen if the TRX tests are done from the BSC, if the BTS Manager is connected to the BTS. Following the BCF reset, some TRXs may be left in a Configuring state. The problem does not occur if the BTS Manager is disconnected from the BTS.

Workaround:

Run the TRX tests from the BSC.

System impact:

Affects customers running TRX tests using the BTS Manager.

3.1.9 Switching between Manager applications may cause a site reset

Problem report: 1-47327821

Exists in: CX4.0

Target for solving: CX4.0-4

Applies to:

Description:

When the user switches between BTS Manager and UltraSite BTS Hub Manager or HW Configurator applications in SiteWizard, an unintentional site reset at the Base Station may occur.

Workaround:

-

System impact:

Unwanted site resets occur.

3.1.10 Unnecessary alarm 7606 TRX FAULTY 'The transmitter output of TRX is overdriven'

Problem report: 1-42564154, 1-43991249

Exists in: CX3.0

Target for solving: CX4.0-4

Applies to:

Description:

During BTS operation, an unnecessary alarm 7606 TRX FAULTY with a fault reason ‘The transmitter output of TRX is overdriven’ may be generated.

Workaround:

Lock/Unlock the TRX or the sector.

System impact:

TSxx units may be sent to Hardware Repair Centre where no fault can be detected.

3.1.11 Unnecessary alarm 7608 TRX NOTIFICATION 'TSxx has lost connection to temperature sensor'

Problem report: 1-14808801, P4048051, 11952ES08P

Exists in: CX3.0

Target for solving: CX4.0-4

Applies to:

Description:

It is possible that an unnecessary alarm 7608 TRX NOTIFICATION with a fault reason 'TSxx has lost connection to temperature sensor' is generated. This may happen when the TSxx units are not in Supervisory state.

Workaround:

Lock/Unlock the TRX or the sector.

System impact:

TSxx units may be sent to Hardware Repair Centre where no fault can be detected.

3.1.12 Unnecessary alarm 7606 TRX FAULTY ‘Fault in VSWR antenna monitoring’

Problem report: 11028ES09P

Exists in: CX3.0

Target for solving: CX4.0-4

Applies to:

Description:

After transmission disturbances in the Abis, an unnecessary alarm 7606 TRX FAULTY with a fault reason ’Fault in VSWR antenna monitoring’ may be generated.

Workaround:

Lock/Unlock the sector.

System impact:

TSxx units may be sent to Hardware Repair Centre where no fault can be detected.

3.1.13 During transmission disturbances, TSxx unit may become stuck in 'waiting for system information' state

Problem report: 1-42079397

Exists in: CX3.3

Target for solving: CX4.0-4

Applies to:

Description:

During transmission disturbances in the Abis, the TSxx unit may become stuck in a 'waiting for system information' state, where no calls are possible via that unit.

The TSxx unit is seen at the BTS Manager in the 'waiting for system information' state, but at the BSC, it is in a WO-state.

The root cause for the problem has been found and the problem will be corrected.

However, a new alarm 7606 TRX FAULTY 'TRX is stuck in waiting for system information state' is sent to the BSC in other possible sleeping TRX situations. If this alarm is raised, a lock/unlock at the BSC to the TRX or sector is always required for recovery.

Workaround:

Lock/Unlock the TRX or the sector.

System impact:

The TSxx is out of service. Alarms 7738 'BTS with no transactions' may be seen at the BSC and OSS.

3.1.14 Unnecessary 7606 TRX FAULTY alarms in BB-hopping and Antenna Hopping

Problem report: 12481ES08P, 1-45930121, 1-47552091

Exists in: CX3.0

Target for solving: CX4.0-4

Applies to:

Description:

Occurs when Baseband Hopping or Antenna Hopping is being used.

During transmission disturbances on the Abis, and occasionally during commissioning, the following 7606 TRX FAULTY alarms may be generated when no fault exists:

- 7606 TRX FAULTY ‘There is disturbance in the serial DL bus or bus is broken’
- 7606 TRX FAULTY ‘FBUS HW failure’

Also various RF TX/RX synthesizer alarms may be seen, such as:

- 7606 TRX FAULTY ’The RF transmitter frequency hopping synthesizer 1 is not locked’
- 7606 TRX FAULTY ’The RF transmitter frequency hopping synthesizer 2 is not locked’

Workaround:

Lock/Unlock the sector.

System impact:

TSxx units may be sent to Hardware Repair Centre where no fault can be detected.

The problem does not exist with non-hopping or RF-hopping.

3.1.15 Degradation in Downlink Quality

Problem report: 12844ES08P, 1-47388981

Exists in: CX3.0

Target for solving: CX4.0-4

Applies to:

Description:

Occurs when Baseband Hopping or Antenna Hopping is being used.

During Abis transmission disturbances when alarms 7705 LAPD FAILURE are seen at the BSC for a particular TRX unit, the sector may enter a state where downlink qualities are degraded.

Workaround:

Lock/Unlock the sector.

System impact:

Degraded downlink RxQual reports are seen for the affected sector.

The problem does not exist with non-hopping or RF-hopping.

3.1.16 Unnecessary 7606 TRX FAULTY alarms 'There is disturbance in the DL bus or the bus is broken' during an upgrade to EDGE HW

Problem report: 1-41261431

Exists in: CX4.0

Target for solving: CX4.0-4

Applies to: EDGE

Description:

When one sector equipped with GSM TSxA units is upgraded with EDGE TSxB units and another sector left with GSM TSxA units is blocked and unblocked with the BTS Manager, the GSM TSxA units are blocked with a 7606 TRX FAULTY alarm 'There is disturbance in the DL bus or the bus is broken'. The problem occurs when BB-hopping is used.

Workaround:

Lock/Unlock the sector at the BSC or perform a HW upgrade with the BTS power switched off.

System impact:

No effect on end-user services after the workaround. The problem can be seen with customers performing upgrades from GSM to EDGE and using BB-hopping.

3.1.17 Timeslot offset set at BSC is not configured to the LMU

Problem report: 13479ES08P

Exists in: CX4.0

Target for solving: CX4.0-4

Applies to:

Description:

A site is configured for BSS Synchronization at the BSC and the timeslot offset is configured at the BSC, but when the BTS configures the LMU, the timeslot offset is always '1'.

Workaround:

-

System impact:

If the BSC synchronization is activated, the SACCH performance will be poor, which leads to lost measurement reports and Power Control commands, and ultimately to degradation in the TCH/FR performance.

3.2 Problems corrected in BTS SW CX4.0-3

3.2.1 GPRS synchronisation lost during transmission breaks

Problem report: 7881ES09P, 1-44182214

Exists in: CX3.3-2

Target for solving: CX4.0-3

Applies to:

Description:

During continuous transmission breaks, GPRS timeslot may loose synchronisation which leads to GPRS degradation/outage. GPRS degradation/outage will clear after transmission breaks.

Workaround:

-

System impact:

Temporary GPRS degradation/outage.

3.2.2 Extended muting on mobile when transitioning from AMR FR to AMR HR

Problem report: 1-43139573

Exists in: CX3.3-2

Target for solving: CX4.0-3

Applies to:

Description:

Some mobiles may experience extended muting up to 8 seconds when transitioning from AMR full rate to AMR half rate. AMR Link adaptation must be activated on the cell. Only some mobile models are affected by the problem.

Workaround:

-

System impact:

End users using specific mobile phone models may experience extended mute.

3.2.3 TRX test or send BCCH carrier does not always work

Problem report: 1-15582994

Exists in: CX3.0

Target for solving: CX4.0-3

Applies to: GSM 800

Description:

The TRX test or send BCCH carrier does not always work. Sometimes the BTS Manager dislays the text ‘Cannot get response from the BTS software’.

The problem exists with GSM 800 band.

Workaround:

Try test/command again.

System impact:

No effect on end-user services.

3.2.4 EAC alarms are not correctly sent if all 24 alarms are activated simultaneously

Problem report: 3-2568516, 1-17610808, 6280ES09P

Exists in: CX3.0

Target for solving: CX4.0-3

Applies to:

Description:

EAC alarms are not correctly sent to the BSC if all 24 alarms are activated simultaneously. Some alarms are missing from the BSC/OSS. All the alarms can be seen on the BTS Manager.

Workaround:

-

System impact:

No effect on end-user services, some EAC alarms can be missing in the BSC/OSS.

3.2.5 Mixed TSGA/TSGB configuration under same BTS degrades UL and GPRS performance

Problem report: 1-42555401

Exists in: CX3.3-1

Target for solving: CX4.0-3

Applies to: EDGE

Description:

A mixed configuration where TSGA and TSGB (both 900 MHz) are used in the same BB-hopping sector with BB2F generates approximately a 3 dB level drop in the UL RX levels reported to the BSC.

Workaround:

The problem does not exist if TSGAs or TSGBs only (that is, not mixed) are used with BB2F in the same sector.

If TSGA and TSGB are used in the same sector with BB2F the problem does not exist, if BB hopping is not used either.

System impact:

The problem can cause additional handovers, degradation in GPRS performance and increased interference level (due to unwanted power control).

3.2.6 Mixed configuration TGSA/TGSB under the same BB2E/BB2F generates bad link balance statistics

Problem report: 1-38364521,1-38100171

Exists in: CX3.3-1

Target for solving: CX4.0-3

Applies to:

Description:

A mixed configuration, where one TSxA and one TSxB are connected to the same BB2E or BB2F unit, generates approximately a 3dB level drop in the RX levels reported to the BSC.

Workaround:

The problem does not exist if the same type of transceiver (TSxA or TSxB) is connected to a BB2E/BB2F unit.

System impact:

Increased handovers and/or increased interference when the level difference triggers unwanted power control.

3.2.7 GSM UL FER measurements

Problem report: 3933ES05X

Exists in: CX3.0

Target for solving: CX4.0-3

Applies to: GSM

Description:

The GSM UL FER calculation is incorrect when DTX is enabled in the Uplink. This results in too high FER reported to the BSC.

The problem exists when UL DTX is activated.

The problem affects customers having the FER Measurements feature activated at the BSC.

Workaround:

-

System impact:

Affects handovers and power control if the customers are using BB2A units and FER Measurement feature with UL DTX activated.

3.2.8 Increase in TCH_TR_FAIL with EDGE

Problem report: 1-24123401

Exists in: CX3.3-1

Target for solving: CX4.0-3

Applies to: EDGE

Description:

An additional SDCCH channel is configured to the non-BCCH TRX timeslot 1 and (E)GPRS is activated to the cell. When the voice call is established using the SDCCH from the non-BCCH TRX, the call is established, but when the call is terminated, the BTS loses synchronisation frames and does not resynchronise.

If another call is attempted using SDCCH from BCCH TRX, the call fails with the reason 'remote transcoder failure'.

Workaround:

The problem does not exist if the additional SDCCH is configured to the non-BCCH TRX timeslot 0 or (E)GPRS is not active on the cell.

System impact:

Drop call rate increases when EDGE units are used with specific SDCCH configuration and (E)GPRS is enabled.

3.2.9 TRX units go randomly into BL_TRX after a SW download when the base station is equipped with a RTC in one sector and DVDxx units in the other sectors

Problem report: 1-28922344

Exists in: CX3.3-2

Target for solving: CX4.0-3

Applies to:

Description:

When BB-hopping is in use, the TRX units in the DVDxx sectors go randomly into BL_TRX after a SW download when the base station is equipped with a RTC in one sector and DVDxx units in the other sectors. A BCF reset clears the problem.

Workaround:

-

System impact:

Decreased capacity.

3.2.10 GPRS attach fails after TRX test

Problem report: 1-31255302

Exists in: CX3.3-2

Target for solving: CX4.0-3

Applies to:

Description:

GPRS attach fails after a TRX test, when the test has been carried out on a site using the BTS Manager on a GPRS timeslot during a data file transfer.

The problem occurs if BB2A boards are used. A TRX reset is required to recover.

Workaround:

Block the TRX with the BTS Manager while running the TRX test on GPRS timeslots, or run the tests from the BSC.

System impact:

GPRS capacity degradation/outage.

3.2.11 Delay in site start-up if slave base station is powered on before master base station

Problem report: 6420ES08P

Exists in: CX4.0

Target for solving: CX4.0-3

If BSC SW S11 is being used, CD2.2 or later is required.

Applies to:

Description:

With a Multi BCF configuration (UltraSite - UltraSite), if the master base station cabinet (clock source) is not powered on when a slave base station cabinet is powered on, the alarm 7600 to indicate no synchronisation clock is delayed in reporting to the BSC and BTS Manager by 10 to 15 minutes. After which, the BCF at the BSC is reported as BL-BCF.

As a result of the above case, when the master base station cabinet is powered on, it takes another 10 to 15 minutes to get any other slave base station cabinet to a working state.

When a site reset is given with all the cabinets powered, the recovery is as expected.

The same delay in reporting of a synchronisation failure alarm occurs with a BSS Site Synchronisation configuration (LMU – UltraSite – UltraSite). The alarm is delayed for the 2nd slave base station cabinet.

Workaround:

First power on the master base station.

System impact:

Temporary capacity degradation, slow recovery.

3.2.12 The slave UltraSite BTS unexpectedly restarts when the master UltraSite BTS controlling LMU is restarted

Problem report: 6655ES09P

Exists in: CX4.0

Target for solving: CX4.0-3

Applies to:

Description:

In the LMU-UltraSite-UltraSite configuration, when the UltraSite cabinet next in the clock chain from the LMU is locked and unlocked, other slave UltraSite cabinets are unexpectedly restarted, although these cabinets should stay in a working state all the time.

Workaround:

-

System impact:

Temporary capacity degradation.

3.2.13 TSxx fan control is not changed to other TSxx in case of fan failure alarm

Problem report: 6667ES11P

Exists in: PU1.0

Target for solving: CX4.0-3

Applies to:

Description:

The TSxx unit fan is controlled by one of the two TSxx units physically located in front of the fan unit. Only one of the TSxx units has fan control at a time. In a SW version earlier than CX4.0-3, controlling the TSxx is only changed when the BTS configuration is changed (for example, TSxx removed or added) or the O&M SW has no connection to the TSxx unit.

A correction is made so that in case of fan failure, the TSxx fan control is always changed to another TSxx unit when possible.

Workaround:

-

System impact:

No effect on end-user services. The second TSxx unit might overheat due to a fan failure.

3.2.14 Antenna hopping failed after PCM outage

Problem report: 9563ES09P

Exists in: CX3.3-2

Target for solving: CX4.0-3

Applies to: EDGE

Description:

Under very severe, continuous unsynchronised PCM breaks, particularly in dual T1 PCM configurations, different kinds of TRX (FBUS, RF synthesizer) alarms may be activated incorrectly. For that reason, the TRXs may enter the BL-SYS state.

A sector reset is required for recovery.

Detailed investigation and lab verification testing has confirmed that this behaviour under these severe conditions occurs with BB-, RF- and Non-hopping configurations. It also exists in SW releases prior to S11 and CX4.0. Up to this date, these kinds of faults have not been reported by customers.

Because of the nature of the conditions required to provoke this behaviour, it is very unlikely to be noticed in the customer network.
Workaround:

-

System impact:

Unnecessary alarms can be activated.

3.3 Problems corrected in BTS SW CX4.0-2

3.3.1 Increased drop call rate

Problem report: 1-41294067, 1-41315381, 1-41315408, 1-41745231, 1-41869731, 1-42031741

Exists in: CX4.0

Target for solving: CX4.0-2

Applies to: GSM

Description:

Drop call rate increases when CX4.0 or CX4.0-1 is activated in the network.

This fault affects UltraSite GSM units (BB2A) only, therefore it does not affect EDGE units (BB2E/BB2F).

Workaround:

-

System impact:

Dropped call rate increased. Affects customers having BB2A units installed.

3.3.2 Increased number of 7608-alarms

Problem report: 8997ES09P, 1-41988778, 1-42036421, 1-42040241, 1-41601271, 1-41445771, 1-41130704, 1-41462871

Exists in: CX4.0

Target for solving: CX4.0-2

Applies to:

Description:

The number of occurrences of the 7608 TRX NOTIFICATION 'BB2 has lost connection to temperature sensor' alarm increases when CX4.0 or CX4.0-1 is activated into the network. In most cases these alarms are unnecessary and do not indicate a hardware failure. The alarm is not service affecting and does not negatively impact the operation of the network. Unit fans behind BB2 units will rotate even if all BB2 units encounter this alarm.

When CX4.0-2 SW is activated to the sites, the alarms may still remain active. A power reset may be required to cancel the alarm. This alarm does not require a separate site visit, that is a power reset can be done during next site visit. It should be noted that this condition does not affect other units' temperature control management.

Workaround:

-

System impact:

No effect on end-user services. Unnecessary alarms reported from the BTS to BSC/OSS.

3.3.3 Cell broadcast messages shown incorrectly

Problem report: 1-41586171, 1-41861431, 1-41860841

Exists in: CX4.0

Target for solving: CX4.0-2

Applies to: GSM

Description:

Cell broadcast messages may show incorrectly on mobile phones.

This fault affects UltraSite GSM units (BB2A) only, thus it does not affect EDGE units (BB2E/BB2F).

Workaround:

-

System impact:

Incorrect cell broadcast information is shown on the mobile phone. Affects customers having BB2A units installed.

3.3.4 EDGE UL FER measurements

Problem report: 1-23823405

Exists in: CX3.3-1

Target for solving: CX4.0-2

Applies to: EDGE

Description:

The EDGE UL FER calculation is incorrect when DTX is enabled in the Uplink. This results in too high FER reported to the BSC.

The problem exists when UL DTX is activated.

The problem affects customers having the FER Measurements feature activated at the BSC.

The problem is corrected for EDGE units (BB2E/BB2F) in CX4.0-2. For GSM units (BB2A), the correction is in CX4.0-3 BTS SW.

Workaround:

-

System impact:

Affects handovers and power control if customers are using BB2E/BB2F units and FER Measurement feature with UL DTX activated.

3.3.5 Non-SMCH timeslots get stuck in synchronisation state

Problem report: 9093ES09P

Exists in: CX3.3-1

Target for solving: CX4.0-2

Applies to: EDGE

Description:

Occasionally when EGPRS is used, the non-SMCH (Synchronisation Master Channel) timeslots may get stuck for a period of time. This results in periodic degradation in packet data service. The situation recovers automatically.

Workaround:

-

System Impact:

Temporary EGPRS service degradation.

3.4 Problems corrected in BTS SW CX4.0-1

3.4.1 CX(M)4.0 activation from OSS3.1 fails

Problem report: 1-41079951, 7622ES11P

Exists in: CX4.0

Target for solving: CX4.0-1

Applies to:

Description:

After the delivery of UltraSite EDGE BTS SW CX4.0 and MetroSite EDGE BTS SW CXM4.0, Nokia has noticed that both CX4.0 and CXM4.0 software have the same masterfile name and extension.

This will cause a SW creation problem from the OSS3.1/NetAct system if both CX4.0 and CXM4.0 are created at the same BSC.

The creation of the first SW is successful, but during the creation of the SW for the other product at the same BSC, NetAct checks all the existing masterfile and extensions at the BSC, and if the same combination already exists, the SW creation fails.**Workaround:**

When both CX4.0 and CXM4.0 BTS SW are created at the BSC, the problem does not exist, as at the BSC it is possible to create a unique SW name for each BTS package, which is different from the masterfile name and extension.

OSS3.1/NetAct can be used for CX(M)4.0 SW creation if only one SW, either UltraSite EDGE BTS SW CX4.0 or MetroSite EDGE BTS SW CXM4.0, will be used at the BSC.

System impact:

SW rollout is not possible from OSS for MetroSite and UltraSite.

3.4.2 Occasional GPRS outage after remote TRX test

Problem report: 7920ES09P

Exists in: CX3.3-2

Target for solving: CX4.0-1

Applies to: EDGE

Description:

If the TRX tests are performed on TRX GPRS timeslots remotely from the BSC or OSS3.1/NetAct, it is possible that, after the TRX test, the GPRS attach will fail in the cell.

Workaround:

A sector lock/unlock is required to recover the GPRS service.

System impact:

GPRS service degradation after a TRX test run for GPRS timeslots from the BSC.

3.5 Problems corrected in BTS SW CX4.0

3.5.1 Actual status of external alarms not used is shown incorrectly

Problem report: 1-16264401

Exists in: CX3.0

Target for solving: CX4.0 (BTS Manager 4.0)

Applies to:

Description:

On the BTS Manager, the actual status of the used external alarms is shown incorrectly.

The external alarms are set up at the BSC with polarity ‘active, when open’. The status of the alarms is checked via BTS Manager. The used external alarms with no active alarm appear to be in a ‘Closed’ state. The used external alarms with an active alarm appear to be in an ‘Open’ state. The unused alarms also show in an ‘Open’ state (although the push button is up, or inactive), which is misleading. These should show in ‘Not in use’ state.

Workaround:

-

3.5.2 Short transmission breaks may cause disturbances to the BTS oven oscillator tuning

Problem report: 1-22338592, 1-11299034. 1-20636905, 17026150 (P2610216), 20236150 (P2942816)

Exists in: CX3.0

Target for solving: CX4.0

Applies to:

Description:

Further improvements have also been made to BTS 13 MHz Oven oscillator tuning.

The Oven oscillator is tuned approximately every 20 minutes with reference to the incoming Abis.

- The 20-minute period is divided into 420 averaged samples and each of them is divided into 16 180 ms phase error measurement samples, which are also averaged. This is used for oven tuning.
- Also a reference oscillator in BOIA card is used to monitor the frequency of the incoming Abis. The measurement takes a sample every 4 seconds and calculates an average of 40 samples. This is used as a reference to stop/start the oven tuning.

Every 20 minutes, the maximum oven oscillator tuning can be 7 steps.

The functionality in CX3.3-2 or earlier SW:

- If there is a transmission disturbance during any of these 180 ms measurements, it may cause disturbances to the measurement. These are nevertheless averaged as described above, thus non-continuous line breaks are averaged away.
- If the measured frequency differs more than 5 Hz from the average, the oven tuning is stopped for 10 minutes. Internal timing is used during this period.

The functionality in CX4.0:

- The measurements that are more than ± 2 steps away from the expected value are filtered away from the average of 420 measurements.
- If the measured frequency differs more than 5 Hz from the average, four successive measurements have to differ more than that 5 Hz, and after that the oven tuning is stopped only for 1 minute.

Workaround:

-

3.5.3 Activation of background database at BSC causes alarm 7730 ‘Configuration of BCF failed’ in BB-hopping

Problem report: 1-27163614

Exists in: CX3.3-1

Target for solving: CX4.0

Applies to:

Description:

In BB-hopping, when BTS parameters are changed at the BSC and then background loaded to the BTS, the alarm 7730 ‘Configuration of BCF failed’ is raised.

Workaround:

Lock/unlock the BCF for recovery.

3.5.4 Active Q1 alarms disappear in reset

Problem report: 1-23377176, 5731115, 3-2881216

Exists in: CX3.3-1

Target for solving: CX4.0

Applies to:

Description:

External equipment (such as DMR Spectrum or Dynahopper radios) is connected to UltraSite EDGE BTS using the Q1 bus. If there are active alarms for this equipment and the Ultrasite is given an OMU or site reset, the alarms disappear from the BSC. Also, the alarms are not cancelled from the BSC.

New alarms after the reset are displayed correctly.

Workaround:

-

3.5.5 No external alarms are reported when all TRX units or sectors are blocked

Problem report: P1831616, 3-2512016, 1-37845801

Exists in: PU1.0

Target for solving: CX4.0

Applies to:

Description:

If all sectors or TRX units are ‘Blocked by user’ at the BSC, no external alarms will be reported to the BSC. Also, no active alarms will be cancelled, when the

alarm situation is over. On site, all alarms are reported correctly on the BTS-Manager.

Workaround:

-

3.5.6 Permanent DAC word is not the same as Current DAC word until a reset is given

Problem report: 1-33477401

Exists in: CX3.3-1

Target for solving: CX4.0

Applies to:

Description:

The Permanent DAC word in the flash memory is stored to be the same as the Current DAC word when the values differ by more than 9 steps. Also, when a BCF reset is given, the Permanent DAC is stored to be the same as the Current DAC word. The problem is that during a normal tuning operation, the Permanent DAC word for the BTS Manager is not updated. The Base Station itself uses the correct DAC word.

Workaround:

-

3.5.7 The bypass function does not work when a low gain MHA is used

Problem report: P2649016

Exists in: CX3.0

Target for solving: CX4.0

Applies to:

Description:

The bypass function does not work when a low gain MHA is used. Blocking alarms for the sector are generated.

The alarms have been made non-blocking for the low gain MHA. However, if the MHAs on both main and diversity branches generate the alarm, only one alarm is sent to the BSC. This problem will be corrected in a future BTS SW. (Reference for this fault is PR 7512ES09P in this document).

Workaround:

-

3.5.8 Handovers not possible to TRXs with TSC not equal to BCC

Problem report: P8497051, 5150ES09P

Exists in: CX3.0

Target for solving: CX4.0

Applies to:

Description:

Inter-cell handovers succeed to TRXs with TSC = BCC, but fail to those TRXs where the TSC is different from the BCC.

Workaround:

-

3.5.9 TRX transmitting during synchronisation recovery in UltraSite slave BTS

Problem report: 3-2584316, 1-10854892

Exists in: CX3.3-1

Target for solving: CX4.0

Applies to:

Description:

The slave UltraSite starts transmitting, even though the sector is blocked, when the master BTS is reset in a Talk-Ultra and Ultra-Ultra co-siting.

Workaround:

Lock/unlock the slave UltraSite again.

3.5.10 RSSI difference alarmed incorrectly

Problem report: 1-10944706, 1-12037105, 1-20504001

Exists in: CX3.3-1

Target for solving: CX4.0

Applies to:

Description:

Alarm 7604 BCF OPERATION DEGRADED with the fault reason 'RX levels differ too much between main and diversity antennas' may be generated unnecessarily when the difference is less than the set difference.

Workaround:

-

3.5.11 SRC feature is not working with RF hopping in larger configurations

Problem report: 1-37861551

Exists in: CX3.3-2

Target for solving: CX4.0

Applies to: EDGE

Description:

If IDD is used with RF hopping and there are more than 2 pairs (main and auxiliary) of IDD TRXs configured into the cabinet, all hopping TRXs in the cabinet will raise the alarm 7606 TRX FAULTY 'The RF transmitter frequency hopping synthesiser 1 is not locked'.

Workaround:

-

3.5.12 Incorrect clock synchronisation information shown in Nokia BTS Manager of Nokia UltraSite EDGE BTS

Problem report: 2897ES41, 1-16969543

Exists in: CX3.3-1

Target for solving: CX4.0 (BTS Manager 4.0)

Applies to:

Description:

A Talk-Family-UltraSite co-siting is being configured. The Talk BTS supplies a synchronisation clock for UltraSite via a cable connection. The Talk BTS acts as the master and UltraSite as the slave.

When the UltraSite BTS comes up to a working state, instead of the 'Clock Synchronisation: Slave' message the BTS events window shows incorrect messages.

Workaround:

-

3.5.13 Talk-Ultra co-site synchronisation problem

Problem report: 1-36777221

Exists in: CX3.3-1

Target for solving: CX4.0 and S11

Applies to:

Description:

A Multi-BCF configuration Talk/Ultra is used with segments, and the BCCH is in the Talk BTS. When the synchronisation cable is removed from the UltraSite BTS, the TRX units in the UltraSite BTS change to BL-SYS and all calls are moved to the Talk TRXs. When the UltraSite comes back to a WO state after a site reset, all the alarms relating to synchronisation are cleared, but the BTS Manager reports the synchronisation mode in the UltraSite as Independent. Once the UltraSite is in the WO state, the calls are handed over to the UltraSite, but as the UltraSite is in the Independent mode, the calls are not established.

The problem is corrected by upgrading the UltraSite BTS SW to CX4.0 and the BSC SW to S11. There is a new feature at the BSC S11 called the 'BTS Site Synchronisation Recovery', which sets up the synchronisation chain. This feature should be used. Once the UltraSite Slave drops out of synchronisation, the TRX units are blocked by BL-SYS. After the synchronisation has recovered, the BSC performs a BCF lock/unlock automatically and the calls are again enabled.

Please use BTS Manager 4.0 to check the synchronisation source in the UltraSite. See problem reference 2897ES41, 1-16969543 in this document.

Workaround:

-

3.5.14 BCCH transmission is not stopped when TRX signalling link is blocked

Problem report: 2975D04

Exists in: CX3.0-3

Target for solving: CX4.0

Applies to: EDGE

Description:

The BCCH transmission is not stopped when the TRX signalling link is blocked at BSC when IDD/4UD configuration is used.

Workaround:

-

3.5.15 TRX test from BTS Manager leaves TRX LED blinking in red

Problem report: 2231ES40, 2103D01, P1770216

Exists in: CX3.3

Target for solving: CX4.0

Applies to:

Description:

A TRX test from the BTS Manager leaves the TRX LED blinking in red if the timeslot where the test is done is already in use. The TRX test fails giving the correct reason and the blinking red led has no impact on the calls on the TRX, which can be done normally.

Workaround:

When the test is run again on the same TRX on a free timeslot, the LED turns again green.

3.5.16 EAC output shown incorrectly in EAC States dialog box

Problem report: P151053

Exists in: CX3.0

Target for solving: CX4.0 (BTS Manager 4.0)

Applies to:

Description:

With the EAC States dialog box open in the BTS Manager, the EAC output states are not updated when changed at the BSC. A second problem is that during commissioning, the EAC output states at the BSC are not reflected on the EAC Output window.

Workaround:

Click the EAC outputs tab in the EAC States dialog box to update the states. Do not set the EAC outputs at the BSC prior to commissioning the BTS.

3.5.17 In some cases, BTS Manager reports wrong information in the Equipment view

Problem report: P202053, P324073, 3-1489416, P5781051, P5800051, P544073

Exists in: PU1.0-

Target for solving: CX4.0 (BTS Manager 4.0)

Applies to:

Description:

The led colour for the Base Station Units in the BTS Manager Equipment view is not consistent with the alarms reported by the BTS Manager and the BSC.

Workaround:

N/A

3.5.18 BTS Manager loses connection to the base station

Problem report: P493073

Exists in: PU1E-

Target for solving: CX4.0 (BTS Manager 4.0)

Applies to:

Description:

During the BCF reset, the BTS Manager occasionally loses connection to the Base Station.

Workaround:

Restart the BTS Manager SW.

3.5.19 When RX diversity switched to on/off at the BSC, BTS Manager does not update the new state

Problem report: P726073, P4068051, 3017ES01

Exists in: CX3.0

Target for solving: CX4.0

Applies to:

Description:

When the RX diversity is switched to on/off at the BSC, the BTS Manager does not update the new state.

Workaround:

Restart the BTS Manager.

3.5.20 Incorrect DAC word value in BTS Manager

Problem report: P2385216

Exists in: PU1.0-4

Target for solving: CX4.0

Applies to:

Description:

Occasionally after commissioning an incorrect DAC word value, which is greater than the maximum value 4095 is shown in the BTS Manager as current DAC word value.

Workaround:

Enter and save a new DAC value (0 ... 4095).

3.5.21 HW Configurator mentions Multicouplers optional

Problem report: 3-2612416

Exists in: CX3.0

Target for solving: CX4.0 (HW Configurator 4.0)

Applies to:

Description:

The HW Configurator mentions Multicouplers optional, although Multicouplers are required in all configurations.

Workaround:

N/A

3.5.22 It is possible to configure 3 PWSAs with HW Configurator

Problem report: 3-2748616, 5256ES09P

Exists in: CX3.0

Target for solving: CX4.0 (HW Configurator 4.0)

Applies to:

Description:

It is possible to configure 3 PWSAs with the HW Configurator.

Workaround:

N/A

3.5.23 System data backup of BOIA unit does not work

Problem report: P4065051, P178372

Exists in: PU1.0-

Target for solving: CX4.0

Applies to:

Description:

The BOI unit is replaced with a non-commissioned BOI unit and the site is unlocked. The new BOI unit cannot get the system data backup from the BB2 units.

Workaround:

Use pre-commissioned BOI units in unit replacements.

3.5.24 Frequent use of RADIO NETWORK BACKGROUND DATA ACTIVATION causes 7606 TRX FAULTY 'FBUS HW failure' alarms for TRXs in the BB hopping sectors

Problem report: P6510051

Exists in: CX3.0

Target for solving: CX4.0

Applies to:

Description:

Frequent use of RADIO NETWORK BACKGROUND DATA ACTIVATION causes 7606 TRX FAULTY ‘FBUS HW failure’ alarms for TRXs in the BB hopping sectors.

Workaround:

Reset the BTS (sector) to clear the alarms.

3.5.25 BTS stays in BL-RST after reset when two RTC units are in one sector

Problem report: 1-21511901

Exists in: CX3.3-1

Target for solving: CX4.0

Applies to:

Description:

The BTS stays in BL-RST after a reset when two RTC units are configured into one sector and the BCCH is on the second RTC.

Workaround:

When the BCCH is on the first RTC, the system recovers normally.

3.5.26 Next Button option not available during commissioning

Problem report: P7576051, P7109051

Exists in: CX3.0

Target for solving: CX4.0 (BTS Manager 4.0)

Applies to:

Description:

While the site is being commissioned, it has been observed that sometimes when clicking the ‘start commissioning’ button the window hangs up and ‘next’ button is not available.

Workaround:

Press ‘Cancel’ button to proceed.

3.5.27 BTS Manager Alarm window Status bar not highlighted correctly

Problem report: 2575ES09P

Exists in: CX3.3-1 (BTS Manager 3.3.3)

Target for solving: CX4.0 (BTS Manager 4.0)

Applies to:

Description:

In the BTS Manager it is possible to filter the alarms displayed (Supervision > Filter Alarms > Sector, TRX, Critical, Major, Minor; Warning). The selection of alarm filters on the Alarm window Status bar is not always correctly reflected (that is, bold when on and normal when off). Also, some of the filters do not function correctly.

Workaround:

-

3.5.28 HW Configurator antenna setting differences

Problem report: 3-2579416

Exists in: CX3.3-1 (HW Configurator 3.3.1)

Target for solving: CX4.0 (HW Configurator 4.0)

Applies to:

Description:

When downloading the BTS HW Configurator file to the BTS, the HW Configurator compares the HW configuration antenna settings and reports that there is a difference between the BTS contents and the loaded file, although no such difference exists.

This has no effect on the BTS operation.

Workaround:

-

3.5.29 Transmission menu does not appear correctly when the FC E1/T1 transmission card is installed in the BTS

Problem report: P3944051

Exists in: CX3.0

Target for solving: CX4.0 (BTS Manager 4.0)

Applies to:

Description:

The BCF is in an operational state, when the transmission unit FC E1/T1 is removed from the BTS. After receiving the alarm ‘7609 TRE faulty’ and the transmission menu has disappeared from the menu bar, the same transmission unit is reinserted into the BTS. The alarm 7609 is cancelled, but the transmission menu does not appear at the BTS Manager menu bar.

Workaround:

Close and reopen the BTS Manager.

3.5.30 Confusing names for BTS Manager TRX loop tests

Problem report: 6022ES09P

Exists in: CX3.3-1 (BTS Manager 3.3.3)

Target for solving: CX4.0 (BTS Manager 4.0)

Applies to:

Description:

The TRX loop test names confuse the user. They will be changed to better describe the actual tests.

‘ABIS_AIR (AIR4_ABIS4)’ > ‘Loop test with external Abis and Air Device’

‘CHDSP_AIR (AIR4_ABIS1)’ > ‘Loop test with external Air Device’

Workaround:

-

3.5.31 When the TRX loop test is started from the BTS Manager with test type CHDSP_AIR (AIR4_ABIS1), the observed Bit Error Rate is too high

Problem report: 5380ES09P, 3940D04, 1-35993808

Exists in: CX3.3-1 (BTS Manager 3.3.3)

Target for solving: CX4.0 (BTS Manager 4.0)

Applies to:

Description:

When the TRX loop test is started from the BTS Manager with the test type CHDSP_AIR (AIR4_ABIS1), the observed Bit Error Rate is too high.

Workaround:

-

3.5.32 In the TRX loop test dialog for EDGE TRXs, the TX power level cannot be individually controlled for each TS

Problem report: 3249ES05X, 2867ES41, 1-35993806

Exists in: CX3.3-1 (BTS Manager 3.3.3)

Target for solving: CX4.0 (BTS Manager 4.0)

Applies to:

Description:

In the TRX loop test dialog for EDGE TRXs, the TX power level cannot be individually controlled for each TS. The transmitted power level is always 0.

Workaround:

-

3.6 Problems corrected in BTS SW CX3.3-2

3.6.1 FACCH handling with AMR DTX

Problem report: 2761ES09P

Exists in: CX3.3

Target for solving: CX3.3-2

Applies to:

Description:

Nokia informed earlier in Technical Note No. 28 ‘AMR with DL DTX’ the targets of implementing the CR 3GPP TS 26.093: Handling of FACCH and RATSCCH on AMR channels. For EDGE and non-EDGE, this has been implemented in CX3.3-2 BTS SW.

Workaround:

-

3.6.2 When a call is made from the mobile phone to PSTN, screeching audio can sometimes be heard with AMR

Problem report: P2937516

Exists in: CX3.0-2A

Target for solving: CX3.3-2

Applies to:

Description:

When a call is made from the mobile phone to PSTN, screeching audio can sometimes be heard with AMR. The correction is the same as for CR 3GPP TS 26.093: Handling of FACCH and RATSCCH on AMR channels. For EDGE and non-EDGE, this has been implemented in CX3.3-2 BTS SW.

Workaround:

-

3.6.3 AMR enhancements

Problem report: 3120ES09P, 2940ES09P, 2942ES09P

Exists in: CX3.3-1

Target for solving: CX3.3-2

Applies to:

Description:

The following enhancements have been made to Adaptive Multi Rate (AMR):

- Occasionally some AMR HR Sid update frames are missing during an UL DTX.

- Occassionally the AMR HR initial time alignment fails.
- During the UL DTX, the UL CMR is changed too slowly on the AMR special mode.

Workaround:

-

3.6.4 Ghost RACH/PRACH

Problem report: 2855ES09P, 3523ES09P

Exists in: CX3.3-1

Target for solving: CX3.3-2

Applies to:

Description:

Ghost RACH/PRACHs are seen on the abis interface although no mobiles attempt to access the site.

Workaround:

-

3.6.5 Diversity RACH performance

Problem report: 2867ES05P

Exists in: CX3.3-1

Target for solving: CX3.3-2

Applies to:

Description:

The two-way diversity combining for RACH channel is not working properly.

Workaround:

-

3.6.6 PTCCH not working with non-EDGE TRX

Problem report: 4566ES09P

Exists in: CX3.3-1

Target for solving: CX3.3-2

Applies to:

Description:

The PTCCH is not working with a non-EDGE TRX (BB2E with TsxA).

Workaround:

-

3.6.7 DL RX level statistics show worse RX level distribution with CX3.3-1 SW when AMR is activated

Problem report: 1-21793680

Exists in: CX3.3-1

Target for solving: CX3.3-2

Applies to:

Description:

The DL RX level statistics show worse RX level distribution with CX3.3-1 SW when the AMR is activated.

Workaround:

-

3.6.8 7725 alarms on GPRS TRX

Problem report: 1-15985517, 2462ES40, 1-17880114, 1-18602501, 1-13522307, 1-21028913, 1-19231901, 1-23989301

Exists in: CX3.3-1

Target for solving: CX3.3-2

Applies to:

Description:

Because of an error in the BTS-PCU synchronisation recovery mechanism, 7725 'Traffic channel activation failure' alarms may be seen on GPRS timeslots. The problem can be seen as a degradation in the GPRS data throughput.

Regarding this problem, corrections have also been made into BSC SW CDs for S10.5 and S10.5 ED. Please refer to the related BSC Release Documentation and Technical Notes for details.

Workaround:

Lock/unlock the TRX or the sector.

3.6.9 VSWR alarms do not work properly with BTS SW CX3.3-1

Problem report: 1-18790302

Exists in: CX3.3-1

Target for solving: CX3.3-2

Applies to:

Description:

VSWR alarms do not work correctly with BTS SW CX3.3-1 if the BTS has been commissioned with PUx.x BTS SW.

Workaround:

-

3.6.10 Error in antenna gain settings in HW Configurator

Problem report: P2051916

Exists in: PU1.0-

Target for solving: CX3.3-2

Applies to:

Description:

High gain MHAs are allocated and cable loss figures are entered, which automatically sets the correct attenuation value. The HW Configurator is then successfully sent to the BTS and the BCF is reset. After this procedure, the HW Configurator is restarted and the settings are fetched from the BTS, but the values for some sectors have changed from the original. However, if the antenna settings are checked on the BTS Manager Supervision menu, the correct settings are still displayed. This HW Configurator error does not have an impact on RF performance nor alarm handling.

Corrected in CX3.3-2 together with Pronto 1-18790302 ‘VSWR alarms do not work properly with BTS SW CX3.3-1’.

Workaround:

Check the Antenna gain setting at the BTS Manager Supervision menu.

3.6.11 7606 alarms on UltraSite BTS if there is only one TRX unit installed in the cabinet

Problem report: 1-17224201

Exists in: CX3.0

Target for solving: CX3.3-2

Applies to:

Description:

7606 alarms are issued on the UltraSite BTS, if there is only one TRX unit installed in the cabinet. The TRX does not come into WO state.

Workaround:

-

3.6.12 BTSManager.exe does not always terminate in the Windows 2000 Task Manager when BTS Manager is closed down

Problem report: 2063ES11P

Exists in: BTS Manager 3.3.1 (SiteWizard 3.1)

Target for solving: CX3.3-2 (BTS Manager 3.3.3)

Applies to: Windows 2000

Description:

The `BTSManager.exe` process thread in the Windows 2000 Task Manager does not always terminate when the BTS Manager is closed down. This causes the warning message ’Another copy of the BTS Manager is running on this machine... ‘ when the user tries to open the next BTS Manager session.

Workaround:

Terminate the BTS Manager sessions that are visible, then start the Windows Task Manager for the PC that the BTS Manager instances are running on. End any `BTSManager.exe` processes that are running before starting a new BTS Manager session.

3.6.13 Pressing cancel button when BTS Manager asks for password causes BTS Manager to crash

Problem report: 2081ES11P

Exists in: BTS Manager 3.3.1 (SiteWizard 3.1)

Target for solving: CX3.3-2 (BTS Manager 3.3.3)

Applies to:

Description:

Pressing the cancel button when the BTS Manager asks for a password causes the BTS Manager to crash.

Workaround:

The BTS Manager will terminate normally when entering the correct password has failed 3 times.

3.6.14 BTS Manager Alarms window does not refresh properly

Problem report: 2093ES11P

Exists in: BTS Manager 3.3.1 (SiteWizard 3.1)

Target for solving: CX3.3-2 (BTS Manager 3.3.3)

Applies to:

Description:

The BTS ManagerAlarms window does not refresh correctly. The Alarms view columns (Severity, Code, Time, Event, Description, Object and State) may disappear from the window during the commissioning and the Alarms window resizing.

Workaround:

-

3.6.15 BTS Manager Alarm History shows incorrect number of alarms on selecting different options

Problem report: 2301ES11P

Exists in: BTS Manager 3.3.1 (SiteWizard 3.1)

Target for solving: CX3.3-2 (BTS Manager 3.3.3)

Applies to:

Description:

The BTS Manager Alarm History shows incorrect number of alarms when the maximum alarm number is changed from the File - Options menu.

Workaround:

-

3.6.16 BTS Manager crashes when resetting an extra TRX from the Object Properties menu

Problem report: 2605ES05P

Exists in: BTS Manager 3.3.1 (SiteWizard 3.1)

Target for solving: CX3.3-2 (BTS Manager 3.3.3)

Applies to:

Description:

Resetting an extra TRX from the Object Properties menu crashes the BTS Manager. Adding extra TRXs to the UltraSite configurations (by physically installing an extra BB2E and an extra TRX into the cabinet) and resetting them from the Object Properties menu will cause the BTS Manager to crash

Workaround:

Disconnect and reconnect to the BTS before a reset command of the extra TRX.

3.6.17 BTS Manager active title bar is incorrect when Alarms window selected

Problem report: 3220ES09P

Exists in: BTS Manager 3.3.1 (SiteWizard 3.1)

Target for solving: CX3.3-2 (BTS Manager 3.3.3)

Applies to:

Description:

The BTS Manager active title bar is incorrect when the Alarms window is selected.

Workaround:

-

3.6.18 BTS Manager crashes when changing COM-port

Problem report: 3470ES08P

Exists in: BTS Manager 3.3.1 (SiteWizard 3.1)

Target for solving: CX3.3-2 (BTS Manager 3.3.3)

Applies to:

Description:

The BTS Manager crashes when the local connection COM port is changed.

Workaround:

-

3.6.19 BTS Manager shows multiple headings in Object Properties window

Problem report: 3622ES09P

Exists in: BTS Manager 3.3.1 (SiteWizard 3.1)

Target for solving: CX3.3-2 (BTS Manager 3.3.3)

Applies to:

Description:

The BTS Manager shows multiple column headings in the Object properties window.

Workaround:

-

3.6.20 BTS Manager occasionally locks up when connection to a BTS is lost

Problem report: 4192ES09P

Exists in: BTS Manager 3.3.1 (SiteWizard 3.1)

Target for solving: CX3.3-2 (BTS Manager 3.3.3)

Applies to:

Description:

The BTS Manager occasionally locks up when the connection to a BTS is lost because of a BCF reset or a break in the Abis connection.

Workaround:

-

3.6.21 BTS Manager states ‘Resetting sector failed’, although the sector resets successfully

Problem report: 5221ES09P

Exists in: BTS Manager 3.3.1 (SiteWizard 3.1)

Target for solving: CX3.3-2 (BTS Manager 3.3.3)

Applies to:

Description:

When the sector is reset locally with the BTS Manager when BB-hopping is used, the BTS Manager states ‘Resetting sector failed: Cannot get response from SW’, although the sector is reset successfully.

Workaround:

-

3.6.22 BTS Manager shows ‘sand clock’ instead of normal mouse pointer in a normal state

Problem report: 5038ES09P

Exists in: BTS Manager 3.3.1 (SiteWizard 3.1)

Target for solving: CX3.3-2 (BTS Manager 3.3.3)

Applies to:

Description:

The BTS Manager shows a ‘sand clock’ instead of the normal mouse pointer in a normal state.

Workaround:

-

3.7 Problems corrected in BTS SW CX3.3-1

3.7.1 HW Configurator / BTS Tab view shows ghost units after they were removed

Problem report: P2082716

Exists in: CX3.0

Target for solving: CX3.3-1

Applies to:

Description:

HW Configurator / BTS Tab view shows ghost units after they were removed from the configuration.

Workaround:

Send and activate an empty configuration (a configuration with no units). After that send and activate the modified new configuration.

3.7.2 HW Configurator file is not printed properly

Problem report: 2887ES09P

Exists in: CX3.0-3

Target for solving: CX3.3-1

Applies to:

Description:

The HW Configurator file is not printed properly using a PC with Windows 98.

Workaround:

Use Windows NT or Windows 2000 with SiteWizard 3.1.

3.7.3 Ghost and EDGE units not detected correctly in BTS HW report at NMS/2000

Problem report: P1979616, P1999116, P2104016, P3931051

Exists in: PU1.0-

Target for solving: CX3.3-1

Applies to:

Description:

Ghost and EDGE units are not detected correctly in the BTS HW report at the NMS/2000.

Workaround:

-

3.7.4 When creating a new configuration, an error dialog box is shown in HW Configurator

Problem report: P2051416

Exists in: CX3.0

Target for solving: CX3.3-1

Applies to:

Description:

When creating a new configuration, an error dialog box is shown in the HW Configurator.

Workaround:

To cancel the error message, press ‘Yes’ to continue.

3.7.5 Unnecessary errors during ‘Undo commissioning’ process using Windows 2000 o/s

Problem report: P918073, P992073, P2924316, P2594716

Exists in: CX3.0

Target for solving: CX3.3-1

Applies to:

Description:

Unnecessary errors occurred during an ‘Undo commissioning’ process, when using Windows 2000 operating system.

Workaround:

Restart the BTS Manager.

3.7.6 TRX status is WO, even though it is restarted while IUO feature is used

Problem report: P2442516, P2485816

Exists in: PU1.0-4

Target for solving: CX3.3-1

Applies to:

Description:

The TRX status is WO, even though it is restarted while the IUO feature is used.

Workaround:

N/A

3.7.7 Inaccuracy in UL quality reporting

Problem report: P2949116, P3165116

Exists in: CX3.0

Target for solving: CX3.3-1

Applies to:

Description:

Inaccuracy in UL quality reporting.

Workaround:

-

3.7.8 When the LMU is connected the synchronised BTS feature does not work

Problem report: 2406ES41, 2408ES41, P3043716, P2996116

Exists in: CX3.0

Target for solving: CX3.3-1

Applies to:

Description:

When the LMU is connected the synchronised BTS feature does not work.

Workaround:

If the LMU is connected to the UltraSite with the cabinet synchronization cable then the option "Auto detect Synchronization" for Sync use should not be used.

The correct set-up is as follows:

For the master cabinet select "LMU is Clock Master and is next to this BTS" and for the slave cabinet select "LMU is Clock Master and is NOT next to this BTS"

3.7.9 BEP calculation (Packet Data Measurement) is not accurate when 4UD feature is ON

Problem report: P9482051

Exists in: CX3.3

Target for solving: CX3.3-1

Applies to:

Description:

The BEP calculation (Packet Data Measurement) will not work properly, when the 4UD feature is ON.

Workaround:

N/A

3.7.10 BCCH reconfiguration with IDD in one sector causes reset of all the other sectors

Problem report: 2229ES40, 2091D01

Exists in: CX3.3

Target for solving: CX3.3-1

Applies to:

Description:

A BCCH reconfiguration in third sectors causes a reset of all the sectors.

Workaround:

-

3.7.11 TRXs restarted during a peak of traffic

Problem report: P3005716, P3041816, P3054716

Exists in: CX3.0-3

Target for solving: CX3.3-1

Applies to:

Description:

TRXs that restarted during a peak of traffic.

Workaround:

-

3.7.12 Half Rate voice quality bad with EDGE BTS HW

Problem report: P3063316

Exists in: CX3.3

Target for solving: CX3.3-1

Applies to:

Description:

The Half Rate voice quality is bad with EDGE BTS HW.

Workaround:

-

3.7.13 Unnecessary transmitter output power alarms

Problem report: P2997016, P3087516, P2874816, P2715416

Exists in: CX3.0-2

Target for solving: CX3.3-1

Applies to:

Description:

Unnecessary ‘7606 TRX FAULTY The transmitter output power is too low’, ‘7607 TRX OPERATION DEGRADED The transmitter output power has dropped at least 3dB or ‘7606 TRX FAULTY The transmitter output power has dropped at least 3 dB’ alarms can be seen occasionally on TSxx units when BB-hopping is in use.

Workaround:

Reset the sector

3.7.14 Unexpected VSWR alarm with PCM link failure

Problem report: P2848316

Exists in: CX3.0-3

Target for solving: CX3.3-1

Applies to:

Description:

An unexpected VSWR alarm with PCM link failure was detected.

Workaround:

-

3.7.15 TRXs stay in blocked state after PCM link disc

Problem report: P2923216

Exists in: CX3.0-3

Target for solving: CX3.3-1

Applies to:

Description:

TRXs stay in a blocked state after a PCM link disc.

Workaround:

-

3.7.16 Reconfiguration problems in BB-hopping

Problem report: P2481616, P245144, P3022916, 2170ES40, P2997216, P876073

Exists in: CX3.0-2A

Target for solving: CX3.3-1

Applies to:

Description:

Reconfiguration problems in BB-hopping. This has resulted in occasional drop calls and Uplink Quality degradation in BB-hopping.

Workaround:

-

3.7.17 TRX 1 stays in waiting LAPD with FC unit

Problem report: P3118316

Exists in: CX3.0-2A

Target for solving: CX3.3.-1

Applies to:

Description:

The TRX 1 stays in waiting LAPD with the FC unit.

Workaround:

-

3.7.18 Unable to measure TX power level

Problem report: P2959716, P3080116

Exists in: CX3.0-3

Target for solving: CX3.3-1

Applies to: EDGE

Description:

During TRX test, occasionally a message ‘Unable to measure the TX power level’ is seen.

Workaround:

-

3.7.19 BTS SW CX3.3 activation problems with FC board

Problem report: P3167916

Exists in: CX3.3

Target for solving: CX3.3-1

Applies to:

Description:

If a FC transmission board is used and in UltraHub Traffic Manager neither Normal nor Satellite Abis is selected, the BTS SW CX3.3 cannot be activated.

Workaround:

Select Normal or Satellite Abis in UltraHub Traffic Manager.

3.7.20 DL DTX causes increase in counter 1013

Problem report: 3198D04

Exists in: CX3.0-3

Target for solving: CX3.3-1

Applies to:

Description:

DL DTX causes increase in counter 1013.

Workaround:

-

3.7.21 BTS not processing any traffic after EDAP and CD 0.6

Problem report: 3248D04

Exists in: CX3.3

Target for solving: CX3.3-1

Applies to:

Description:

The BTS is not processing any traffic after EDAP and CD 0.6.

Workaround:

-

3.7.22 With RX Diversity on in BSC, the TRX test passes in BSC and BTS Manager even though the RX cable from the TRX is removed

Problem report: P16372, P7595051, 2499ES05P

Exists in: CX3.0

Target for solving: CX3.3-1

Applies to: EDGE

Description:

With RX Diversity on in the BSC, the TRX test passes in the BSC and BTS Manager, even though the RX cable from the TRX is removed.

Workaround:

N/A

3.8 Problems corrected in BTS SW CX3.3-A

3.8.1 BTS SW does not receive Packet Control Ack on RACH channel correctly on the Downlink assignment procedure

Problem report: 3028D04

Exists in: CX3.3

Target for solving: CX3.3-A

Applies to:

Description:

The BTS SW does not receive the Packet Control Ack on the RACH channel correctly on the Downlink assignment procedure.

Workaround:

-

3.9 Problems corrected in BTS SW CX3.3

3.9.1 TRX test fails in Talk-UltraSite co-siting case

Problem report: 63372

Exists in: CX3.0

Target for solving: CX3.3

Applies to:

Description:

The TRX test fails in a Talk-UltraSite co-siting case.

Workaround:

N/A

3.9.2 Bad DL quality seen with AMR handovers when DL DTX in use

Problem report: 70372

Exists in: CX3.0

Target for solving: CX3.3

Applies to:

Description:

Bad DL quality was detected with AMR handovers, when the DL DTX was in use.

Workaround:

N/A

3.9.3 Fault ‘Unable to measure TX power level’ received when 8PSK TRX test is run after GMSK TRX test from BTS Manager

Problem report: 559053

Exists in: CX3.0

Target for solving: CX3.3

Applies to:

Description:

Fault ‘Unable to measure TX power level’ is received when the 8PSK TRX test is run after a GMSK TRX test from the BTS Manager.

Workaround:

Run a TRX test on another TRX and repeat the 8PSK TRX test on the original TRX.

3.9.4 No alarm 7607 ‘TRX Operation Degraded’ reported when IDD auxiliary TRX antenna removed

Problem report: 610053

Exists in: CX3.0

Target for solving: CX3.3

Applies to: EDGE

Description:

No alarm 7607 ‘TRX Operation Degraded’ was reported when the IDD auxiliary TRX antenna was removed.

Workaround:

N/A

3.9.5 RX antenna monitoring - RSSI comparison values unreliable for IDD/4UD sector

Problem report: 631053

Exists in: CX3.0

Target for solving: CX3.3

Applies to: EDGE

Description:

The RX antenna monitoring - RSSI comparison values are unreliable for IDD/4UD sector.

Workaround:

RSSI comparison values for 2-way diversity can be used.

3.9.6 TSxB is not auto detected when replacing TSxA

Problem report: 683073

Exists in: CX3.0

Target for solving: CX3.3

Applies to: EDGE

Description:

The TSxB is not auto detected when replacing the TSxA.

Workaround:

Reset the BCF (site).

3.9.7 Removing and inserting an auxiliary TRX cause unexpected alarms and reconfiguration

Problem report: 805073, 808073

Exists in: CX3.0

Target for solving: CX3.3

Applies to: EDGE

Description:

Removing and inserting an auxiliary TRX cause unexpected alarms and reconfiguration.

Workaround:

N/A

3.9.8 Alarm 7602 'No connection to power unit' for PWSA position

Problem report: 2132816

Exists in: PU1.0-3

Target for solving: CX3.3

Applies to:

Description:

Alarm 7602 BCF NOTIFICATION with the fault reason 'No connection to power unit' is issued for PWSA position.

Workaround:

N/A

3.9.9 Occasionally BCCH TRX transmits even though BCF is not in WO state

Problem report: 2174616

Exists in: CX3.0

Target for solving: CX3.3

Applies to:

Description:

Occasionally the BCCH TRX transmits, even though the BCF is not in WO state.

Workaround:

N/A

3.9.10 With IDD feature on alarm 7607 TRX OPERATION DEGRADED 'Diversity branch runtime loop failure between CHDSP and EQDSP via Fbus' is generated and cancelled after TRX is locked at the BSC

Problem report: 7139051, 7179051

Exists in: CX3.0

Target for solving: CX3.3

Applies to: EDGE

Description:

With IDD feature on, alarm 7607 TRX OPERATION DEGRADED with a fault reason 'Diversity branch runtime loop failure between CHDSP and EQDSP via Fbus' is generated and cancelled after a TRX is locked at the BSC.

Workaround:

N/A

3.9.11 If TRX test is attempted on an illegal channel in GSM 800, TRX test is started in the last legal channel previously tested

Problem report: 7282051

Exists in: CX3.0

Target for solving: CX3.3

Applies to: EDGE

Description:

If the TRX test is attempted on an illegal channel in GSM 800, the TRX test is started in the last legal channel previously tested.

Workaround:

N/A

3.9.12 AMR downlink speech muting in handovers between different speech codec sets

Problem report: P1865205

Exists in: CX3.0

Target for solving: CX3.3

Applies to: G

Description:

AMR downlink speech muting in handovers between different speech codec sets.

Workaround:

-

3.9.13 Serial number of the second power supply is not shown in BTS Manager

Problem report: P2723716

Exists in: CX3.0-2

Target for solving: CX3.3

Applies to:

Description:

Serial number of the second power supply is not shown in BTS Manager

Workaround:

-

3.9.14 BB2A cards seem to perform better than BB2E cards

Problem report: P2806616

Exists in: CX3.0

Target for solving: CX3.3

Applies to:

Description:

BB2A cards seem to perform better than BB2E cards.

Workaround:

-

3.9.15 T-1 failures can cause VSWR alarms

Problem report: P2806816

Exists in: CX3.0

Target for solving: CX3.3

Applies to:

Description:

T-1 failures can cause VSWR alarms.

Workaround:

-

3.9.16 Non-BCCH TRX in IDD configuration goes to BL-RSL when TRXs are straight connected to BB2Es

Problem report: P813073

Exists in: CX3.0

Target for solving: CX3.3

Applies to:

Description:

The non-BCCH TRX in IDD configuration goes to BL-RSL, when TRXs are straight connected to BB2Es.

Workaround:

-

3.9.17 After the transmission recovery some TRXs stay in BL- TRX state

Problem report: P2796616

Exists in: CX3.0

Target for solving: CX3.3

Applies to:

Description:

Alarms 0154-0153 T1 path alarms.

Workaround:

Sector lock/unlock.

3.10 Problems solved without changes in the BTS SW or problems not corrected

3.10.1 Increase in peak distance between the mobile phone and BTS

Problem report: 14229ES09P

Exists in: CX4.0

Target for solving: N/A

Applies to:

Description:

An increase in the peak distance between the mobile and the BTS (Peak MS - BS Distance) reported by the BSC has been noticed when using CX4.0 or later BTS SW when compared to CX3.3-2. The root cause of the Peak distance reporting increase is the BSC not filtering out invalid measurement report. This has been introduced with the implementation of the EMR feature.

A deep investigation has revealed that the first two measurement reports may contain incomplete Layer 3 information, and high TA values. This happens with both CX3.3-2 and CX4.0 software. These reports are forwarded to the BSC, which should filter them out due to the incomplete Layer 3 information. With the BTS SW earlier than CX4.0 this is the case, but with CX4.0 and newer, because of the EMR changes the high TA values are not filtered out, which results in abnormally high peak MS - BS Distance values reported.

The problem will be corrected in BSC SW.

Workaround:

-

System impact:

The high TA values in the first two measurement reports do not have any impact on major KPIs and network performance.

The problem is seen as abnormally high values in PEAK_MS_BS_DIST counters at the BSC.

3.10.2 A new configuration is created without BB units

Problem report: 3-2748716

Exists in: CX4.0

Target for solving:

Applies to:

Description:

The possibility to manually create or modify TSxx - Baseband unit cross-connections has been removed in CX4.0 BTS SW. However, when new TSxx units are added or removed from the HW Configuration equipment view, the BB units are not automatically added or removed from the HW Configuration equipment view.

During the planning stages of implementation, Nokia made a final estimation of the work required to implement this feature. Because of the large implementation work required, Nokia has decided not to implement this feature in the UltraSite EDGE BTS.

Workaround:

Add or remove the BB units manually into the HW Configuration.

System Impact:

No effect on end-user services.

3.10.3 After transmission breaks, the BTS sector may enter a sleeping mode with alarm 7738

Problem report: 1-16426436

Exists in: CX3.3-1

Target for solving:

Applies to:

Description:

After transmission breaks, the BTS sector may enter a sleeping mode with alarm 7738.

Correction to the problem has been made to BSC S10.5 ED CD5.0 and S11 CD1.2 GEN.

Workaround:

-

3.10.4 Q1IA adapter does not generate alarm 7995

Problem report: 1-26848601

Exists in: PSM3.0

Target for solving: -

Applies to:

Description:

When the Q1IA adapter is being used in the Battery Back-Up systems, no 7995 alarm is being generated.

The problem will be corrected in the Nokia Auxiliary Systems PSM3.3-1 SW release.

Workaround:

Use the UltraSite EDGE BTS External alarms input for the Mains Break input for the BTS.

3.10.5 BTS External input (EAC) alarm polarity reversed

Problem report: 6753ES09P

Exists in: PU1.0

Target for solving: -

Applies to:

Description:

The text for the External inputs at the BSC says that this alarm should be ACTIVE WHEN CLOSED.

However, if there is no connection to the BTS EAC input, the alarm is OPEN and therefore there should be no alarm. However, an alarm is raised at the BTS Manager and BSC.

Putting a connection across the EA contacts will cancel the alarm.

When reversing the polarity, that is ACTIVE WHEN OPEN will cause an alarm if the contacts are closed.

Workaround:

-

3.10.6 OMUSIG channel may get blocked after transmission breaks

Problem report: 1-33303601

Exists in: ITNC2.0

Target for solving: ITNC2.1-2

Applies to: FXC boards HW 102

Description:

Sometimes during transmission breaks, the OMUSIG channel may get blocked.

This is possible with FXC board HW version 102/103, where the original SW ITNC1.2 has been upgraded to ITNC2.0 or ITNC2.1.

The fault does not occur if the SW in the FXC board HW version 102/103 has not been upgraded in the field.

Workaround:

A power reset on site is required.

System impact

The problem is rare, but may affect customers using old FXC HW 102/103 upgraded to support EDGE with ITNC2.0 or ITNC2.1 SW.

3.10.7 Possible sleeping TSxx after blocking and unblocking the TRX with BTS Manager

Problem report: 1-44951223

Exists in: CX4.0

Target for solving: N/A

Applies to:

Description:

When the TSxx unit is blocked and unblocked using the BTS Manager, it may happen that the TSxx unit is unable to take any calls. A TSxx or sector reset is required to recover the service.

A deep BTS R&D investigation has concluded that this is a BSC problem. The problem has been transferred to the BSC for correction.

Workaround:

Lock/Unlock the TRX or sector at the BSC. Make test calls on the TRX unit before leaving the BTS site.

System impact:

Degradation of service for one TSxx unit.

3.10.8 During the Intelligent Shutdown, when in NONE shutdown mode, the TRX unit fans continue to operate although all the TRX units associated with the fans are in BL-PWR state

Problem report: 6442ES09P

Exists in: CX4.0

Target for solving: N/A

Applies to:

Description:

During the Intelligent Shutdown, in NONE shutdown mode, the BCCH TRX unit fans continue to operate although all the TRX units associated with the fans are shut down (BL-PWR state).

No correction is required for this problem report. It has been tested to be working correctly with BTS SW CX4.0-2.

Workaround:

-

System impact:

No effect on end-user services.

3.10.9 Unexpected Abis loop test results in commissioning report when TCH timeslot allocation at BTS Traffic Manager does not match that at BSC

Problem report: 1-20644204, 3-2742416, 1-19996945

Exists in: CX3.3

Target for solving: N/A

Applies to:

Description:

Commissioning is done to the BTS, where the TCH timeslot allocation at the BSC does not match the TCH timeslot allocation at the BTS Traffic Manager. However, the commissioning report shows that some timeslots have passed the TRX Abis loop test.

No correction is required for these problem reports. Some sub-timeslots in the TRX always fail the test indicating that a mismatch might exist.

Workaround:

-

System impact:

No effect on end-user services.

3.10.10 Remote BTS Manager does not work with Windows 98

Problem report: 1-41550707

Exists in: CX4.0 (BTS Manager 4.0)

Target for solving: N/A

Applies to:

Description:

The Remote BTS Manager does not work with Windows 98.

Further investigation has shown that the reason for the fault is that some security checks, added in CX4.0, fail for Windows 98 because they are only valid for Windows 2000 or later versions. Windows 2000 supports multiple users, so in order to ascertain that only one user is connected to one BTS, these security checks have been added.

Windows 98 is a single-user operating system, so these security checks do not work for Windows 98.

The SiteWizard documentation will be modified to inform the user about this limitation .

Workaround:

Use Windows XP or Windows 2000 for remote connection.

System impact:

No effect on end-user services.

3.10.11 Transparent data calls do not work with handovers

Problem report: P509053, 4213ES09P

Exists in: CX3.0

Target for solving: N/A

Applies to:

Description:

Because of limitations in fax protocols, transparent data handovers are not supported by the BTS.

- Fax protocols were originally designed for fixed network data transfer, and do not tolerate any major line disruptions very well.
- Fax protocol timing requirements are very strict, and any disruptions introduced by the wireless environment will cause problems (for example, unsuccessful fax). The fax protocol is unchanged for the wireless environment.
- Fax over GSM uses transparent service. No error correction is provided.
- GSM transparent transmission causes problems when a handover takes place during phase 4 (Feedback from page transfer). In this case, the call probably drops because the fax protocol has tight response time restrictions.
- In the Fax protocol, renegotiation between the sender and receiver occurs after every page transfer. The chances of handover disruption (for example a dropped call) increase as the number of fax pages to be transmitted increases, particularly at short handover time intervals.**Workaround:**

-

System impact:

No effect on end-user services.