

Release Summary and Impact

Product Family: Base Stations
Product: Flexi Multiradio BTS LTE
Release: FL16 2.0

Approval date: 29-Apr-2016



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Contact

Contact your local Nokia Solutions and Networks support.

Summary of changes

29-Apr-2016	1.0	Approved version
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Purpose

The purpose of this document is to summarize the FL16 2.0 SW Delivery content and impact.

1. CORRECTIONS

1.1 List of corrections for FL16 2.0 for FSMF

Pronto ID	Title	Pronto origin	Corrected in	
			Flexi Multiradio BTS FL16 2.0	Flexi Zone BTS FL16 2.0
NA05901593	FL16 Pilot - Increase in RSSI Seen on 4 sites post PCD2.1 upgrade.	Flexi Multiradio BTS	Yes	N/A
NA05870195	(FDD-LTE RL70MP2.0)Tom r160 to r170he base station upgrade fr, TRS disconnection(All Link).	Flexi Multiradio BTS	Yes	N/A
NA05895596 NA05895607	System module failure happened after 'IMS emergency call' plan activation	Flexi Multiradio BTS	Yes	N/A
NA05905211	3rd RET in chain not detected from FRIG after SW Update	Flexi Multiradio BTS	Yes	N/A
NA05885845	High packet drop due to Ingress Rate limiting.	Flexi Multiradio BTS	Yes	Yes
NA05902792	DL RoHC packet damage(CID wrong)	Flexi Multiradio BTS	Yes	Yes
NA05894220	eNB has CMAS issue in RL70 2.2 and FL15A 0.1	Flexi Multiradio BTS	Yes	Yes
NA05906542	FBBC in constant configuring state after upgrade from FL15A to FL16 MP1	Flexi Multiradio BTS	Yes	N/A
NA05906783 NA05909336	PDCP RoHC misconfigured during Rrc-Reestablishment	Flexi Multiradio BTS	Yes	Yes
NA05905464 PR140569	Site with FL15 0.1 doesn't recognize RET modules after upgrade from FL7.0 (LN7.0_ENB_1407_572_04). In this case rollback solves problem	Flexi Multiradio BTS	Yes	N/A
NA05907336 PR138722	Unit autonomous reset of FSPD while running MP1- L2 crash due to MAC assertion failure	Flexi Multiradio BTS	Yes	Yes
NA05907551	Unit autonomous reset alarm with Fault ID 4019- UEC crash	Flexi Multiradio BTS	Yes	Yes
NA05907736	Failure in replaceable BB unit while running FL16 MP1	Flexi Multiradio BTS	Yes	Yes
NA05907804 NA05907904	LTE_5670A RACH Cont based Stp SR degraded after upgrade from FL15A PD2.1 to FL16 MP1.0	Flexi Multiradio BTS	Yes	Yes
NA05908665	Degradation in VoLTE DCR and AFR post MP1.0.	Flexi Multiradio BTS	Yes	Yes
NA05891425	High memory consumption	Flexi Multiradio BTS	Yes	Yes

NA05909912	FL15A - Wrong SICAD sent during E-RAB release followed by intra-eNB HO	Flexi Multiradio BTS	Yes	Yes
NA05897372 NA05909496 NA05911729	TRS losing configuration after upgrading to LN7.0 2.2	Flexi Multiradio BTS	Yes	N/A
NA05911955*	MOAM crash of eNB while running MP1 software	Flexi Multiradio BTS	Yes	N/A
PR125296	FL16_CRL7676_maxNumCsfTargets can be set via NetAct to a lower value than the existing LNRELWs with csfbPsHoAllowed=true within a LNCEL	Flexi Multiradio BTS	Yes	Yes
PR129401	[FL16][FSMr3] After recommissioning several parameters, FBBC2 auto resets.	Flexi Multiradio BTS	Yes	N/A
PR131173	Not correct "fileLoadCompleted" response from eNB to NetAct after fileLoadPrepare (LBT2692-A- /validatePlanAgainstDetectedHW = true)	Flexi Multiradio BTS	Yes	N/A
PR137109	SRAN][FL15A][3G-4G RF Sharing][FSMr2][WL0120]: FRGP unblock with failure in optical interface (10) at LTE-BTS	Flexi Multiradio BTS	Yes	N/A
PR138362	the DKK ATCV-1-D RET firmware download failed.	Flexi Multiradio BTS	Yes	N/A
PR132082	[LTE2026] Harq Ack for SRB1 not excluded from Link Adaptation	Flexi Multiradio BTS	Yes	Yes
PR132467	LTE1140 LB started with blacklistHoL to neighbor eNB cell	Flexi Multiradio BTS	Yes	Yes
PR133990	[SRAN][FL16a][LTE2387] FRMC radio is not visible on Slave side. ETH message received with error status.	Flexi Multiradio BTS	Yes	N/A
PR135967*	[FL16A][LTE-GSM RF Sharing][LTE447]: Front End Gain calculation does not work properly with P-type configuration	Flexi Multiradio BTS	Yes	N/A
PR137176	[FL16 PILOT]Increased BER detected on the optical connection to Radio Module (1955)	Flexi Multiradio BTS	Yes	N/A
PR139722	[LTE1905][LTE490] Incorrect parameter error occurred on FL16 BTS SM after moPrMappingList is created	Flexi Multiradio BTS	Yes	Yes
PR139805	[FL16 2.0] BTS wrongly raises warning 'Maximum number of WCDMA neighbor cells is exceeded' (fault id 6268) with an LNADJW moc instance as source	Flexi Multiradio BTS	Yes	N/A
PR136465	[FL16A] [LTE2316] Both Pcell and Scell DL TPUT to low due to too many logs ΓÇ£WRN/TDDPS/FID_DL_CA/6243/CPucch Overbook::AllocateSCellPucchRes failed, actFlexScellSelect=1, pucchRes=255ΓÇ£	Flexi Multiradio BTS	Yes	Yes
PR141228	BTS autonomous reset occurs when eNB receive X2Setup	Flexi Multiradio BTS	Yes	Yes

PR141352*	WMHB and WMHC commissioning not work	Flexi Multiradio BTS	Yes	N/A
PR140579	[FL16A][AirScale][LTE2098-A] Wrong counter updated after 2A transition	Flexi Multiradio BTS	Yes	Yes
PR141380	[LTE1092] CellC Assertion error when LTE1092 and LTE2557 enabled together.	Flexi Multiradio BTS	Yes	Yes
PR141881	[FL16_LTE2379] No BER increased in SFP Monitoring	Flexi Multiradio BTS	Yes	N/A
PR142145	[SRAN][3G-4G RFS] Parameter activation is finished after while eNB is rebooted without any alarm	Flexi Multiradio BTS	Yes	N/A
PR142758	[LTE1804] SCell's MCS is not increased and kept almost ΓÇ£0ΓÇ¥ value even though SCell's CQI is high value	Flexi Multiradio BTS	Yes	Yes
PR140968	[FL16A][LTE433] LTE Cell Trace not containing SIB13 (LTE1117 eMBMS)	Flexi Multiradio BTS	Yes	Yes
PR136379	LTE2006: Operator configurable parameter sCellMeasCycle is not taken into use.	Flexi Multiradio BTS	Yes	Yes
PR144120	[FL16 FSMF][LTE2316]FDD Pcell Tput=0 after online chagne rcenabledl=true	Flexi Multiradio BTS	Yes	Yes
PR144986	[FSMr3] Commissioning fails for detected RF if validatePlanAgainstDetectedHW is "true"	Flexi Multiradio BTS	Yes	N/A
PR143568	[FL16A][LTE1899] QCI1 partial HO counters not incremented properly when e-RAB-ID != drbld	Flexi Multiradio BTS	Yes	Yes
NA05897814	[FL16 PILOT] Connection Unstable At 6Gbps alarm after eNB restart	Flexi Multiradio BTS	Yes	N/A
NA05897291	FlexiBTS TRS submodule reconfiguration from FTLB to FTIF is not possible from NetAct	Flexi Multiradio BTS	Yes	N/A
NA05909460	VoLTE call forwarding fail due to E-RAB modification failure (160411nishino01)	Flexi Multiradio BTS	Yes	N/A
NA05909317 PR141192	No RTP in DownLink	Flexi Multiradio BTS	Yes	Yes
PR145075	LTE CELL OUT OF USE not occurred after change the "BTS Reset needed parameter"	Flexi Multiradio BTS	Yes	N/A
PR136070	[LTE1997] cellType parmeter should not be allowed to be set to "small" for a pico indoor - for ZSON RF discovery	Flexi Zone Micro	N/A	Yes
PR142844	[FLF16 2.0][FWHA]: OMS alarm upload fails from eNB	Flexi Zone Micro	N/A	Yes
NA05909084	"M51137C4 topFreqSyncSLS" is not counted correctly.	Flexi Zone Micro	Yes	Yes

Legend:

YES – correction is needed and is available for particular product in this SW release,
 NO – correction is needed but is NOT available for particular product in this SW release,
 N/A – correction is not needed for particular product.
 *-Change Note Form is missing for this problem

1.2 List of corrections for FL16 2.0 for FSME

FL16 2.0 SW contains FSME corrections listed in FL15A 1.1 Release documentation and additionally following fixes:

Pronto ID	Title
NA05895596 NA05895607	System module failure happened after 'IMS emergency call' plan activation
NA05894220	eNB has CMAS issue in RL70 2.2 and FL15A 0.1
NA05906783 NA05909336	PDCP RoHC misconfigured during Rrc-Reestablishment
NA05897875	RL70 MP2.2 upgrade FSME: remote: NE O&M CONNECTION FAILURE local: many GTP-U Path Failures (6150), T
NA05897909	BFD 1 down alarm. After remote Reset outage of site and cells
PR140689	External alarms are not working in FSME after upgrade from RL70 to FL15A
PR140876	[FL15A 1.1] BTS SM allows to commission invalid value for 'Cell power reduce'
NA05901765	[RL70_enodeB] Reference clock missing in startup and cell down
NA05907551	Unit autonomous reset alarm with Fault ID 4019- UEC crash
NA05908954	NE O&M Alarm occurred cause by software failure on FTIB
PR142758	[LTE1804] SCell's MCS is not increased and kept almost "0" value even though SCell's CQI is high value
NA05891425	Internal REF:207646 -- High memory consumption
PR144255	[FL16] [FSMr2 FSMr3]- ipsek ikev1 Pluto daemon modification
NA05909912	FL15A - Wrong SICAD sent during E-RAB release followed by intra-eNB HO
NA05901160	(Flexi Multiradio BTS LTE) when open the 15 minutes particle size measurement, but it is only one upload 2 in one hour.
NA05909460	VoLTE call forwarding fail due to E-RAB modification failure

2. NEW / CHANGED FUNCTIONALITY

2.1 Released Features (FSMF only)

ID	Feature Name	Remark
LTERLCR-12346	Optimization of PBR/MCS Selection in LTE2098	<p>This change provides a transmission parameters improvements for cases where:</p> <ul style="list-style-type: none"> -IPv6 is used for VoLTE calls -the S1AP UL GBR bitrate is set to 44kbps <p>Related feature: <i>LTE2098: VoLTE Uplink Coverage Boosting</i></p> <p>For information about additional impact of this feature please refer to chapter 6.1.1.8 <i>Changes in counters: M8001C22 and M8001C24</i> in this document</p>

ID	Feature Name	Remark
CRL-9647	SIB9 support for open and hybrid cells	<p>With this change SIB9 can be broadcasted only when the cell type is set to 'CSG' (LTE2465). The restriction to the cell type CSG shall be removed, so it shall be possible to broadcast SIB9 in any type of cells when configured.</p> <p>Related feature: <i>LTE2465: CSG Cell Support</i></p>
CNI-9504	Additional 1920 alarm filtering time in cold temperatures for RF HW2.1	<p>In low temperature Rel2.1 Radio Frequency Module is occasionally rising "RF module failure, 1920" alarm. This improvement extends filtering time (to 360 seconds) and cancellation method (for temperature below +5oC) for this alarm and thus reduces unnecessary service work and unit replacements.</p> <p>CNI provides an improvement related to: <i>NA05877425 - Several FRMA units in our LTE networks is alarming "RF module failure, 1920"</i></p> <p><i>NA05882205 - RF module failure(FID1920) from several FRGQs</i></p> <p>This feature is included in FSME and FSMF software.</p>
LTE1203	Load-based Power Saving with Tx Path Switching Off	<p>Please refer to CuDo: <i>LTE1203: Load-based Power Saving with Tx Path Switching Off</i></p>
CRL-12536	Reduce minimum Tx power for Graceful Shutdown	<p>This change reduces value rfmMinOutputPwr for radio units. Previous level of rfmMinOutputPwr threshold was causing that lowest level of power during Gracefull shutdown was too high for some UE close to Antenna are they are dropped without HO to another cells.</p> <p>Please refer to the chapter: <i>3.2.6 Range of 'Cell power reduce' parameter</i></p>
LTERLCR-10896	UL 64QAM support indication enhancement with 3GPP CR	<p>This change provides a full functionality for feature: LTE44</p> <p>For the details please refer to CuDo: <i>LTE44: 64QAM in UL</i></p>

3. RESTRICTIONS

3.1 Restricted Released Features

N/A

3.2 Other restrictions

3.2.1 TTI Bundling is not activated after crossing *ttiBundling* thresholds

It was discovered that for bearer with QCI 1 established and UL data transfer started after crossing thresholds *ttiBundlingSinrThreshold* or *ttiBundlingBlerThreshold* TTI bundling is not activated. As a

result extended number of dropped VoLTE calls may occur. Problem is observed more frequently (in 60% attempts) with less number of users in cell, i.e. 1-2 in lab environment. Probability of occurrence of this issue in field environment is very low, what was confirmed during internal Field Verification tests.

Case can happen if following settings are applied:

```
ttibOperMode=sinrBasedTtibOnOffAllowed
actTtiBundling=true
```

Before the upgrade it is strongly recommended the check the values of following counters:

M8011C62: Average number of UEs configured for TTI Bundling mode

M8011C63: Number of UL grants for TT Bundling

If after the upgrade these counters shows similar values as before, this feature works correctly and further action is not needed.

If after the upgrade these counters shows lower values than before (less UEs is entering TTIbundling mode) it is recommended to set following parameters to the given values:

```
ttibSinrThresholdIn = 10db
ttibSinrThresholdOut = 19dB
```

This Release Documentation will be updated according to the progress of investigation.

If further investigation shows that SW correction is needed for this case this case it will be delivered with next worldwide software delivery.

Related feature: *LTE907 TTI bundling*

3.2.2 Remote syslog server

Remote syslog server functionality should not be used as this may lead to the Cplane overload. During the impacted period high RACH, RRC attempts (unsuccessful, as those are getting rejected due to c-plane overload) can be observed. If such situation occurs, affected site should recovered by reset.

Related fault:

NA05911164: Accessibility went to 0% due to Cplane OL, recovered with site reset

Related feature:

LTE1047 Control plane overload handling

4. RELEASED OBJECTS

4.1 Flexi Multiradio BTS LTE

SW update delivery	Delivery date	Software Item	Software File Name
FL16 P8/C5	14-Mar-2016	BTS Site Manager FL16/FSMF	FL16_BTSSM_0000_000178_000002.zip
		BTS Site Manager FL15A/FSME	FL15A_BTSSM_0000_000145_000002.zip
		Golden SCF	Golden Config FL16_2016-01-25-FL16-ENB-790-onwards.zip
		eNB	FL16_ENB_0000_001035_100080_release_BTSSM_downloadable.zip
		WA certShrink	certShrink_1.0.0.14.zip

SW update delivery	Delivery date	Software Item	Software File Name
		WA Passive FileDirectory Recovery	PassiveFileDirectoryRecovery.zip
FL16 1.0	24-Mar-2016	BTS Site Manager FL15A/FSME	BTS Site Manager (Itesdkroot)_FL15A_BTSSM_0000_000155_000000.zip
		BTS Site Manager FL16/FSMF	BTS Site Manager (Itesdkroot)_FL16_BTSSM_0000_000186_000000.zip
		Golden SCF	Golden Config FL16_2016-01-25-FL16-ENB-790-onwards.zip
		eNB	FL16_ENB_0000_001169_000000_release_BTSSM_downloadable.zip
		WA Passive FileDirectory Recovery	PassiveFileDirectoryRecovery.zip
		WA certShrink	certShrink_1.0.0.14.zip
FL16 2.0	28-Apr-2016	BTS Site Manager FL15A/FSME	BTS Site Manager (Itesdkroot)_FL15A_BTSSM_0000_000164_000000.zip
		BTS Site Manager FL16/FSMF	BTS Site Manager (Itesdkroot)_FL16_BTSSM_0000_000191_000000.zip
		Golden SCF	Golden Config 2016-04-26-FL16-ENB-1288-onwards.zip
		eNB	FL16_ENB_0000_001308_000000_release_BTSSM_downloadable.zip

4.2 NetAct

SW update delivery	Delivery date	Software Item	Software File Name
FL16 1.0	24-Mar-2016	NetAct 16.2+SP381	netact-SP381-1-disc1.iso
FL16 2.0	28-Apr-2016	NetAct 16.2 + SP381 + PPValidator059_2	netact-PPValidator059-2-disc1.iso

5. SW DOWNLOAD AND ACTIVATION TIMES

Note: There is limited number of simultaneous SW Management operations over the southbound interface on LTE iOMS:

- max 100 eNB SW downloads at a time (in one batch),
- if the 2 hour duration of one batch is exceeded, then issues might appear and to avoid them, the Customer need to decrease the number of simultaneous downloads accordingly.

5.1 Flexi Multiradio BTS LTE

FL16 2.0 can be background downloaded to the FCM prior to activation. Activation of the eNB software will cause momentary loss of service in the serving cells as the FCM will be reset. The rough SW download and activation times are:

The rough SW download and activation times	
SW download to eNB with FSMF	~ 9 min
SW download to eNB with FSME	~17 min
SW activation (including eNB reset), causing temporary loss of service	~ 7 min

6. EFFECTS ON OPERATOR

6.1 Phase out of FSME system modules

FSME system modules are now under phase out process. The FL15A is the last release handling FSME corrections.

Fault corrections included in this release are inherited from FL15A 1.1 with additional corrections listed in chapter 1.2 *List of corrections for FL16 2.0 for FSME*.

6.1.1 KPI changes

For changes in KPI handling, see below Customer Documentation:

- [LTE Performance Measurements and Key Performance Indicators](#)

6.1.1.1 Decrease in counter: M8010C56 - MIMO Open Loop Spatial Multiplexing

Release where the change will be introduced:

Correction delivery is open

NE SW version:

FL16

Relation to features or corrections:

NA05896566 - decrease in M8010C56 (MIMO Open Loop Spatial Multiplexing) is seen on 5 sites out of 20 sites upgraded to PCD2.0 from FL15A

Short description / Expected impact:

Several sites are showing decrease in MIMO usage (M8010C56 MIMO Open Loop Spatial Multiplexing) post PCD2.0 upgrade.

Reasoning why the change was made:

Case is under investigation

Type of change: generic in the SW, license-based or activated by PROFILE:

-

UE dependency:

-

Impacted counters/KPIs:

M8010C56 - MIMO Open Loop Spatial Multiplexing

6.1.1.2 RSSI increase

Release where the change will be introduced:
FL16 2.0

NE SW version:
FL16

Relation to features or corrections:
NA05901593 - FL16 Pilot - Increase in RSSI seen on 4 sites post PCD2.1 upgrade

Short description / Expected impact:
On some cells increase on RSSI up to 13dB after upgrade from FL15A to FL16 was seen. After rollback sites to FL15A they went back to previously RSSI level as before in FL15A.

Reasoning why the change was made:
Two cablnks connected to the same portNo of RMOD_A caused error in class AntennaLinesInformator which results in error in AntennaRoundTripDelayFinder. Correction is to allow cablnk only when LinkMode is enabled with Data in AntennaLinesInformator's Graph to avoid this issue.

Type of change: generic in the SW, license-based or activated by PRFILE:
-

UE dependency:
-

Impacted counters/KPIs:
-

6.1.1.3 Correction for counter: M51126C0

Release where the change will be introduced:
FL16 2.0 (FSME and FSMF)

NE SW version:
FL16

Relation to features or corrections:
NA05885845: High packet drop due to Ingress Rate limiting.

Short description / Expected impact:
EGRESS_ICMP_RATE_LIMIT is being considered for calculating ipRmDroppedPacketsRateLimiting which is against specs and documentation.

Reasoning why the change was made:
EGRESS count will not be calculated in total rate limiting counters.

Type of change: generic in the SW, license-based or activated by PRFILE:
Generic in the SW

UE dependency:
-

Impacted counters/KPIs:
M51126C0 - The number of dropped packets due to ingress rate limiting.

6.1.1.4 Correction for counters: M8011C174 and M8011C173

Release where the change will be introduced:

FL16 2.0

NE SW version:
FL16

Relation to features or corrections:
PR140579: [FL16A][AirScale][LTE2098-A] Wrong counter updated after 2A transition

Short description / Expected impact:
Counter M8011C174 is updated instead of M8011C173.

Reasoning why the change was made:
When TTI Bundling is possible for the UE and is enabled in the cell UE switches into wrong state (sensitiveRegularTxRA instead of sensitiveTtiBundlingRA1).

Type of change: generic in the SW, license-based or activated by PROFILE:
Generic in the SW

UE dependency:
-

Impacted counters/KPIs:
M8011C174 - Average Number of UEs in Sensitivity based scheduling mode without TTI Bundling
M8011C173 - Average Number of UEs in Sensitivity based scheduling mode with TTI Bundling

6.1.1.5 Correction for KPI: LTE_5670a

Release where the change will be introduced:
FL16 2.0

NE SW version:
FL16

Relation to features or corrections:
NA05907804: LTE_5670A RACH Cont based Stp SR degraded after upgrade from FL15A PD2.1 to FL16 MP1.0
NA05907904: FL16 pilot : RACH SR shows degradation after upgrade to FL16 MP from FL15A

Short description / Expected impact:
In case 3x20MHz cells are connected with UL CoMP, ULPHY has to handle data from 6 antennas in each cell. Incoming IQ data is received with AIF descriptors and then copied to memory for further ULPHY processing. There were too few AIF descriptors available to handle all 6 cells and it could happen that newer IQ data overwrites descriptor from which we have not yet copied the old data. Such mixed up data caused increase of PRACH detection errors. We detected 3 preambles almost every time when just one preamble was sent. All falsely detected preambles later failed. This caused ~3x more detected preambles with the same number of successful attach attempts, leading to attach SR drop from ~90% to ~30%.
Full support of LTE2060 added in FL16_MP1, has raised the number of necessary AIF descriptors in ULPHY. Due to LTE2060 ULPHY needs to support all possible optic link length and in effect sometimes wait longer until all data is delivered, that requires using more AIF descriptors.

Reasoning why the change was made:
Turn OFF UL CoMP or use UL COMP but only with 5/10MHz cells

Type of change: generic in the SW, license-based or activated by PROFILE:
Generic in the SW

UE dependency:
-

Impacted counters/KPIs:

LTE_5670a - E-UTRAN Complete Contention Based RACH Setup Success Rate

6.1.1.6 Correction for counters: M8006C89, M8006C6, M8006C277 and M8006C278.

Release where the change will be introduced:

FL16 2.0

NE SW version:

FL16 1.0

Relation to features or corrections:

NA05908665: FL16 : Degradation in VoLTE DCR and AFR post MP1.0.

Short description / Expected impact:

It has been found out that if partial path switch call scenario E-RAB is released during handover by core counter M8006C278 is triggered in case of 'normal release' and 'abnormal release'. But M8006C278 should only be triggered in case of abnormal release.

Reasoning why the change was made:

After correction M8006C89 and M8006C6 should be triggered in case of NAS: Normal Release". M8006C277 and M8006C278 should be triggered for any cause except "NAS: Normal Release

Type of change: generic in the SW, license-based or activated by PROFILE:

Generic in the SW

UE dependency:

-

Impacted counters/KPIs:

M8006C89 - EPC initiated EPS Bearer Release requests for QCI1 due to Normal release by UE
M8006C6 - EPC initiated EPS Bearer Release requests due to Normal release by UE
M8006C277 - EPC initiated E-RAB releases due to Path Switch
M8006C278 - EPC initiated QCI1 E-RAB releases due to Path Switch

6.1.1.7 Correction for partial HO counters

Release where the change will be introduced:

FL16 2.0 (FSME and FSMF)

NE SW version:

FL16

Relation to features or corrections:

PR143568: [FL16A][LTE1899] QCI1 partial HO counters not incremented properly when e-RAB-ID != drbld

Short description / Expected impact:

Degraded KPI statistics for VoLTE calls during handover X2. Wrong counter are incremented.

Reasoning why the change was made:

Correct method should be used in code in order to look for the proper Bearer Index.

Type of change: generic in the SW, license-based or activated by PROFILE:

Generic in the SW

UE dependency:

-

Impacted counters/KPIs:

M8006C261 - E-RABs released due to partial Handover regardless of the bearers QCI
 M8006C262 - E-RABs attempted to release due to outgoing Handover regardless of the bearers QCI
 M8006C263 - E-RABs released due to successful outgoing Handover regardless of the bearers QCI
 M8006C273 - QCI1 E-RABs released due to partial Handover
 M8006C274 - QCI1 E-RABs attempted to release due to outgoing Handover
 M8006C275 - QCI1 E-RABs released due to successful outgoing Handover

6.1.1.8 Changes in counters: M8001C22 and M8001C24

Release where the change will be introduced:

Correction delivery is open

NE SW version:

FL16 2.0

Relation to features or corrections:

-

Short description / Expected impact:

After FL16 2.0 upgrade, no. of PUSCH transmissions using MCS6 has reduced and using MCS8 has increased. There is no other negative impact with the change.

Reasoning why the change was made:

Case is under investigation

Type of change: generic in the SW, license-based or activated by PROFILE:

-

UE dependency:

-

Impacted counters/KPIs:

M8001C22 - The number of transmissions on PUSCH over the measurement period using MCS6
 M8001C24 - The number of transmissions on PUSCH over the measurement period using MCS8

6.1.1.9 Changes in counter: M51137C4

Release where the change will be introduced:

FL16 2.0

NE SW version:

LN 7.0

Relation to features or corrections:

NA05909084: "M51137C4 topFreqSyncSLS" is not counted correctly.

Short description / Expected impact:

The ToP Frequency counter M51137C4 topFreqSyncSLS is not aligned and updated properly. Sometimes counter value is displayed as 0 and sometimes the counter values is displayed less than 900 whereas ToP was locked for the complete time of 900 seconds.

Reasoning why the change was made:

Counter calculation by TRSW was improper. It was considering previously stored counter in its map for calculating the difference.

Type of change: generic in the SW, license-based or activated by PROFILE:

Generic in the SW

UE dependency:

-

Impacted counters/KPIs:

M51137C4 - topFreqSyncSLS

6.1.2 Alarm changes

For changes in Alarm and Fault handling in Flexi Multiradio BTS see below Customer Documentation:

- [Flexi Multiradio BTS LTE Alarms and Faults](#)

6.1.2.1 Corrected alarm: "LTE CELL OUT OF USE(9400)"

This problem still occur for FSME sites in RF-Sharing configuration.

Release where the change will be introduced:

FL16 2.0 (FSMF and FSME)

NE SW version:

FL16

Relation to features or corrections:

PR145075: LTE CELL OUT OF USE not occurred after change the "BTS Reset needed parameter"

Short description / Expected impact:

Correction for fault report *PR046337: [SRAN][WCDMA-LTE RF Sharing]LTE does not change ip after FDSW and FL15A software download*, as a side effect caused that "LTE CELL OUT OF USE(9400)" alarm was not shown in NetAct after Change "BTS Reset needed parameter" in commissioning. Such functionality is essential to monitor cell outage.

Reasoning why the change was made:

No alarm is raised when the cell is out of use.

Type of change: generic in the SW, license-based or activated by PROFILE:

Generic in the SW

Impacted counters/KPIs:

9400 - LTE CELL OUT OF USE

7. PILOTING

N/A

8. APPENDICES / REFERENCES

The software for the released products is available in [NOLS](#).

The newly released software can be downloaded from the direct links:

- **Flexi Multiradio BTS LTE for FL16 2.0:**
https://online.networks.nokia.com/SWD/?access_key=MTE5MzEx
- **SEM Validator for FL16 2.0:**
https://online.networks.nokia.com/SWD/?access_key=MTE5MzEx

After downloading the software it is important to generate SHA1 checksum for files and compare it with the one provided in the Installation Instructions document, this will ensure that the files were not corrupted during downloading.

[1] LTE Customer Documentation: [Nokia Long Term Evolution Product Information Center](#)

[2] Product Information Center (PIC): <https://online.networks.nokia.com/pic/>

[3] LTE internet web page: <http://networks.nokia.com/portfolio/products/mobile-broadband/long-term-evolution-lte>

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